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Globalization 2.0: China and the World Market

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Proceedings of 2019 China Marketing International Conference

Globalization 2.0: China and the World Market

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Preface and Acknowledgments

The Seventh Annual China Marketing International Conference (CMIC 2019), co-organized by the Chinese Scholar Marketing Association and Guangdong Enterprise Brand Construction Promotion Association, was successfully held from July 22 to 25, 2019 in Guangzhou, China.

The CMIC conference has gained great momentum since its inception in 2013. This year, more than 300 scholarly papers and 20 industrial reports were accepted and presented to address various marketing issues. This represents the highest number of submissions in the history of CMIC conferences. Scholars and practitioners from North America, Oceania, Europe and Asia were at the conference to share their latest research or managerial knowledge. CMIC has become the largest and most versatile international marketing conference in China.

The theme of the 2019 conference was “Globalization 2.0: China and the World Market”. In recent years, both the Chinese market and the global market have undergone remarkable changes, and the era of globalization 2.0 is here. With the continuous implementation of the “Belt and Road” strategy, the unremitting development of the Guangdong-Hong Kong-Macao Greater Bay Area, and the constant advancement of China’s national branding strategy, Chinese companies are facing unprecedented challenges as well as opportunities. At the same time, Globalization 2.0 has brought new directions, new resources and new platforms for the study of marketing theory and practice. Scholars around the world are playing an ever-expanding role in telling ‘The China Story’ and in assisting Chinese companies acclimate to the new era.

Besides the traditional programs such as the Doctoral Consortium, The Editors’ Session, Government & Education & Business Forum, Special Interest Group, and the Teaching Forum, several important reforms were implemented during CMIC 2019. Firstly, we set up 33 sessions that are totally controlled by the session chairs. We established opportunities for enterprises to share their wisdom in these sessions and to stimulate intellectual exchange between scholars and practitioners. Secondly, Communiqué Certificates were conferred to authors who presented their papers at the conference to encourage high-quality submissions and presentations. Thirdly, an academic job fair was specially structured and arranged with the purpose of building a platform to facilitate talent exchanges at both domestic and overseas levels.

We are genuinely honored to have had the opportunity to organize this conference, and we are deeply indebted to the sponsors for their valuable contributions to the conference. Thanks are also extended to:

Our Keynote Speakers, Professors Christine Moorman, and Lichung Jen, who shared their insightful and thought-provoking ideas on marketing research.
Our session chairs who actively organized their sessions and reviewed papers, including Professors Shibo Li, Ying Xie, Jing Wang, Junhong Chu, Alice Li, Xiaojing Dong, Natasha Zhang Foutz, Qi Sun, Fang Wu, Jian Ni, Weining Bao, Yong Liu, Yubo Chen, Lin Tian, Ruby Lee, Qimei Chen, Qiang Liu, Weiping Yu, Andrew Ching, Qing Wang, Weiling Ye, Liangyan Wang, Xinchun Wang, Xiaoyu Yu, Meng Li, Ping He, Yuanguang Zhong, Xu Zhang, Hai Che, Ye Hu, Jia Li, Yunchuan Liu, Xiaoling Zhang, Shaoming Zou, Qin Sun, Peng Cui, Yuwei Jiang, Yajin Wang, Jiaxun He, Meng Zhu, Ke Zhang, Jianqinqi Chen, Chuang Wang, Qing Liu, Lichung Jen, Song Lin, Yi Zhu, Zibin Xu, Xiaoyan Deng, Yi Zhao, Hongju Liu, Yongdong Liu, Hong Yuan, Min Zhao, Fengyan Cai, Jie Chen, Xiuli He, Amy Pan, Lidan Xu, Ravi Mehta, Yonggui Wang, Jie Meng, Sara Shuang Ma, Dongling Huang, Lan Luo, Xiang Li, Kevin Kam Fung So, Ye Chen, Qionglei Yu, Yequng Bao, Yi Zhang, Sijun Wang, Thomas Kramer, and Guicheng Shi.

Guangdong Enterprise Brand Construction Promotion Association, Secretary General Mr. Manping Wang and his colleagues who spent tremendous effort in planning the conference and recruiting sponsors.

Volunteers from the College of Business Administration, South China University of Technology who volunteered their time to support the conference. Without their effort, the conference would have been a logistics nightmare.

Special thanks are extended to the CMIC 2019 Conference Chairs and the Organizing Committee members (Professors Zhilin Yang, Yunchuan Liu, Yequng Bao, and Thomas Kramer), and to all the helpers who served during the conference. Without all of your efforts, this conference would not have been so successful.

The China Marketing International Conference is establishing itself as an important annual international academic conference, and has been gradually developing into a large-scale worldwide academic event. With such a diversified spectrum of participants and such an impressive audience, we certainly hope that you attended CMIC 2019 and will continue to attend in the future. The 2020 China Marketing International Conference will be held late July 2020 in Shenzhen, China. We look forward to seeing you there!

Sincerely,

Forrest Zhilin YANG, Ph.D.
Professor of Marketing
City University of Hong Kong

Yeqing BAO, Ph.D.
Professor of Marketing
University of Alabama in Huntsville
CMIC 2019 Best Doctoral Consortium Paper Awards

First Prize

Do Ads Harm News Consumption?
Authors: Shunyao Yan(Goethe-University Frankfurt), Klaus Miller(Goethe-University Frankfurt), Bernd Skiera(Goethe-University Frankfurt)

Second Prize

How Does Co-FGC Affect the Marketing Effects of Microblog Alliances
Authors: Lu Wang(Zhongnan University of Economics and Law), Songping Mao(Zhongnan University of Economics and Law)

CMIC 2019 Best Session Paper Awards

Individual Fundraising in Online Charity Giving
Authors: Yitian(Sky) Liang(Tsinghua University), Xinlei (Jack) Chen (Shanghai Advanced Institute of Finance), Rui(Juliet) Zhu(Cheung Kong Graduate School of Business), Jianbin Chai(Peking University)

Differences between E-mail and Mobile SMS on the Lasting Reactivation of Dormant Customers: Evidence from a Field Experiment
Authors: Chenxi Li(Beihang University), Jinsong Huang(Beihang University)

Evaluating a Variable Messaging Sign (VMS) Campaign: An Infield Controlled Experiment
Authors: Bo Pang(Griffith University), Patricia David(Griffith University), Amy Blacker (Griffith University), Sharyn Rundle-Thiele(Griffith University)

Effects of Visual Cuteness on Post-Purchase Decisions
Authors: He (Michael) Jia (The University of Hong Kong), GratianaPol(United Talent Agency), C. Whan Park (University of Southern California)
The Mere Inequality Effect
Authors: Fengyan Cai(Shanghai Jiao Tong University), Jieru Xie (Virginia Tech), Christopher K. Hsee (Chicago University)

Paying to Brag? A Structural Model of Cheap Talk in Online Crowd
Authors: Weining Bao (University of Connecticut and University of Technology Sydney), Jian Ni (Johns Hopkins University)

Middle Resource Trap? Slack Resources, Entrepreneurial Bricolage and Temporary Competitive Advantage
Authors: Xiaoyu Yu(Shanghai University), Yingying Chen(Shanghai University of Finance and Economics)

Inventory Sharing under Service Quality Competition
Authors: Xiaomeng Guo(Hong Kong Polytechnic University), Baojun Jiang(Washington University in St. Louis)

Inroad into Omni-Channel Retailing: Physical Showroom Deployment of an Online Retailer
Authors: Gang Li(Xi'an Jiaotong University), Tao Zhang(University of Electronic Science and Technology of China), Giri Kumar Tayi(State University of New York at Albany)

Cross-cultural Perspective of Situated Learning and Coping: Understanding Psychological Closeness as Mediator
Authors: Lily Ye(Frostburg State University)

Regular or Irregular: An Investigation of Medicine Consumption Pattern with Poisson Mixture Model
Authors: Lichung Jen(National Taiwan University), YiChun Liu(National Taiwan University), Kuan-Wei Lee(National Taiwan University)

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Authors: Liang Huang(University of Arizona), Anastasiya Pocheptsova Ghosh(University of Arizona)

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Authors: Lianlian Song(Nanjing University of Aeronautics and Astronautics), Yang Shi(Shenzhen University), Kwok Fai Geoffrey Tso(City University of Hong Kong), Hing-Po Lo(City University of Hong Kong)
Effects of Cooperative and Competitive Gamification on Fitness App Use: A Field Experiment
Authors: Jun Zhang(University of Science and Technology of China)

When Seeing the Face of Need Backfires: The Effect of Self-Construal on Donations to Identified Victims
Authors: Tatianna M. Fajardo(Florida State University), Jiao Zhang(University of Oregon)

What is the Color Scheme Saying? Effects of Logo Colorfulness on Consumer Judgments
Authors: Jiaqi Song(Hong Kong Polytechnic University), Yuwei Jiang(Hong Kong Polytechnic University), Gerald J. Gorn(Hong Kong Polytechnic University)

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Liking Less but Wanting More: Intentional Versus Incidental Brand-Related User-Generated Content
Authors: Miao Hu(University of Hawaii at Manoa), Jie Chen(Shanghai Jiao Tong University), Qimei Chen(University of Hawaii at Manoa)

Effects of International Release Gap on U.S. and Foreign Movies: Evidence from China
Authors: Qi Sun(Shanghai University of Finance and Economics)
The Study of Influencing Factors of Social Support
Under Social Commerce to User’s Behavior

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Abstract
Social commerce is a new branch of current e-commerce. The emergence of social commerce makes consumers to share their own user experience in real time become daily activities. The relationship between social support and social commerce users’ behavior has become a valuable research topic. This paper studies social support from informative and emotional aspects, introducing the mediator of trust in social commerce, exploring the specific impact of social support on users’ behaviors, and finding out that social support in social commerce can positively influence users’ behaviors through trust.

Keywords: Social commerce; Social support; Trust transfer; Social commerce user’s behavior

1. Introduction
At present, with the change of people’s lifestyle and the upgrading of consumption, the progress of Web2.0 technology (interactivity, user-generated content, etc.) and the vigorous development of e-commerce, social commerce emerges at the historic moment under the combination of the two. This model takes social media as the
medium of communication to help users make purchase decisions by user-generated information and network interaction.

Social commerce model has become a common practice. Oversea social commerce websites such as Instagram, Facebook and Tumblr have made great achievements, and domestic merchants have begun to imitate and learn from them. Social commerce platforms such as Mogu and Red have sprung up. Socialization, personalization, content and mobility are the new directions of e-commerce development. Since the exploration of social commerce in 2011, China has developed vigorously and formed three main models as shown in table 1.

Table 1. Three Main Models of Social Commerce in China

<table>
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<th>Social commerce models</th>
<th>Example</th>
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<tr>
<td>1. Build the community based on e-commerce.</td>
<td>Taojianghu, JDlexiang, JMEI.</td>
</tr>
<tr>
<td>3. Third-party social commerce platform.</td>
<td>Red, Meilishuo, Mogu.</td>
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Social commerce users in the network can sense to the concrete information and accept his friend’s help that perceived social support for the user. Meanwhile, users use social networking platform to share information about goods, services and shopping experience, and they can also communicate with other network users to share high quality information effectively which will help the user to make purchase decision and ask for preferential policies from the seller. This is also a social commerce own
characteristic. Therefore, it is extremely necessary to analyze the relationship between social users and social support, which can bring profound influence for enterprises to conform to the trend of social commerce and subsequent development.

On December 27, 2017, the China Internet Network Information Center (CNNIC) released ‘2016 China social application user behavior research report’ pointing out that social network users with 39.4% of people will buy products recommended by others, although this number has increased by 7.1% compared with 2015, there are still 60% of users won’t buy. This report disclosed that the virtuality and potential trust issue of internet are still big obstacles. The basis of business transactions in social commerce are social relations and social network platform, and the core is user-generated content (UCG). Users used to passively accept massive information from the media, but now they can actively filter the needed information and share their own views and effective information at the same time. In the interactive environment of virtual liberalization, enterprises establish stronger dependence and trust, so users can consume under trust.

Social commerce is now in its prime and has huge potential. As a major force of Internet platform, it has overlapping business with social media and network shopping. Based on the above problems, it focuses on the analysis of the relationship among the three elements which are business trust, social support and user behavior to provide new social commerce marketing ideas for merchants.

2. Theoretical Research and Hypotheses

2.1 Theoretical Research on Social Support

(1) Definition of social support
In the 1970s, some scholars began to introduce the concept of social support into psychological research to study the relationship between individual body and mind and life stress. Cobb (1976) and Weinfield (2008) proposed that social support can be regarded as a way of information transmission, which enables individuals to form a correct understanding of their own abilities and feel that they are recognized. Hajli and Sims (2015) proposed that social support refers to the sense of belonging that individuals feel when they get support and help from others in social commerce websites.

Through a large number of literature review, and combined the definition of previous scholars, this study makes the following definition for social support under social commerce environment: By using internet channels as the media, social friends use text, images and other ways to support consumer to make social commerce shopping decisions. The perceived social support has very strong subjectivity and virtuality, so in this case social support mainly comes from the help of social commerce friends.

(2) Dimension Division and Hypothesis of Social Support

Stephen and Toubia (2008) believed that social commerce is a platform for consumers not only to listen to and trust the information shared by others online but also find and buy products or services, so social commerce has strong economic value for merchants. Liang and Turban (2011) pointed out that social support can be presented in affective and supportive way. From the perspective of information, it means that effective information can be obtained in social commerce to solve problems. Emotional support refers to emotional care and so on. According to the research, if the social network users
increase friendship and trust through information sharing, then the purchase intention of users can be increased.

When analyzing information support issues, this study take quantity and quality. As reference, social support is subdivided into two dimensions: perceived information and perceived usefulness. Accordingly, the following hypotheses are proposed:

H1a: Perceived informativeness of social commerce users has a positive influence on social commerce trust.

H1b: Perceived usefulness of social commerce users has a positive influence on social commerce trust.

Ng (2013) proposed on the basis of analysing the problem of interactivity that the intimacy and familiarity generated between social network friends would promote consumers’ trust in social commerce and their willingness to purchase. Gefen and Straub (2004) carried out that perceived similarity refers to the fact that consumers feel similar with their friends or have similar experiences with each other when conducting social commerce. Gefen (2000) pointed out that perceived intimacy is consumers gradually get to know each other with their social network friends in the process of social commerce. Long-term accumulation of interaction enables both parties to have a deeper understanding of each other and enhance trust.

Consumers have social relationship with friends will continue to interact and thus generate emotional support. From the perspective of emotional support, it can be subdivided into three dimensions: perceived similarity, perceived intimacy and perceived benefits. Accordingly, the following hypotheses are proposed:
H1c: Perceived similarity of social commerce users has a positive influence on social commerce trust.

H1d: Perceived intimacy of social commerce users has a positive influence on social commerce trust.

H1e: Perceived benefit of social commerce users has a positive influence on social commerce trust.

2.2 Theoretical Research on Social Commerce Trust

The concept of trust is complex and abstract, which has been defined by scholars from different perspectives in psychology, marketing, sociology and other fields.

In 1985, Mayer and Volanth defined trust as a subjective willingness of both parties to build a relationship so as to achieve risk aversion. Doney (1997) analysed the trust between the two parties of transaction from the perspective of individual perception and proposed that trust is the perception of the reliability of the buyer towards the seller. Kim (2008) constructed a consumer decision model from the perspective of trust and proposed that when consumers have full trust in sellers, they can remove their doubts and promote their buying behaviours. Stewart (2003) proposed that under the environment of e-commerce, hyperlinks shared from friends can increase consumers’ perception and their trust in unknown merchants and websites.

This paper divides social commerce trust into trust in social commerce and trust in sellers, among which trust can be transferred by each other. Based on previous studies, this paper defines social commerce trust as consumers’ perception of the ability, integrity, goodwill and predictability of the objects of trust (including social business
users and merchants) in the business market under the social commerce environment.

According to this, the following hypotheses are proposed:

H2: Users’ trust in social commerce has a positive influence on their trust in sellers.

2.3 Research on Social Commerce Users’ Behaviours

(1) Research on the Purchase Intention of Social Commerce Users

Consumer purchase intention is an important concept in the attitude theory of consumer behaviour, which includes cognition, emotion and action. Fishbein and Ajzen (1975) believed that the purchase intention of consumers is the main determinant of purchase behaviour and other factors will also indirectly affect individual purchase. Spears and Singh (2004) proposed that consumers’ purchase intention is an individual’s conscious effort and there is a positive relationship between consumers’ satisfaction with services or goods and consumers’ purchase intention. Tang (2006) proposed that when consumers have a clear attitude of trust in e-commerce sellers and e-commerce platforms also have security guarantee, consumer will have deeper degree of trust and more significant purchase intention. Due to the change of consumption environment, social commerce users are more dependent on sharing from social friends. In combination with previous studies, this study defines the purchase intention of social commerce users as follows: the subjective intention of individual consumers in social commerce to purchase services or products on the social commerce platform with the internet as the medium. Accordingly, the following hypotheses are carried out:

H3a: Trust in social commerce has a positive influence on the purchase intention of social commerce users.
H4a: Trust in sellers has a positive influence on the purchase intention of social commerce users.

(2) Research on the Share Intention of Social Commerce Users

In previous studies on social commerce, domestic and foreign scholars focused on consumers’ purchase and sharing intention. Information sharing intention of social commerce mainly focuses on the information receiving habits, sharing modes and sharing motivations of internet users. Lechner and Hummel (2002) argued that the continuous sharing of information among users in social networks is based on social relationships with their own social network. Talboom & Pierson (2013) found that trust has a positive impact on online users’ behaviours when they studied online users’ behaviours.

Combined with previous studies of scholars, this study believes that the sharing intention of social commerce users is to release information of services or products on social commerce platforms by means of texts, pictures and videos. At the same time, users will also share their experience which promotes the information transmission and emotional communication between users. Accordingly, the following hypotheses are carried out:

H3b: Trust in social commerce has a positive influence on the share intention of social commerce users.

H4b: Trust in sellers has a positive influence on the share intention of social commerce users.
3. Theoretical Model and Design of Study

3.1 Theoretical Model

Based on the above theoretical analysis and research hypothesis, this study proposes a theoretical model with trust as the intermediary for the influence of social support on the behaviour of social commerce users in social commerce. The model is shown in figure 1 below.

![Theoretical Model Diagram]

Figure 1. A Theoretical Model of the Influencing Factors of Social Support on Users’ behaviors in Social Commerce

Table 2. Construct Measurement of Social Support

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Items</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Informativeness (INF)</td>
<td>INF1. The product/service information shared by social commerce friends covers a wide range of areas. INF2. I learned about the product/service from my social commerce friends that I didn’t know before.</td>
<td>King, Jensen, Davis &amp; Carcioppolo(2014)</td>
</tr>
</tbody>
</table>
INF3. Comments from friends in social commerce can make me feel the effect of using the product/service.

<table>
<thead>
<tr>
<th>Perceived Usefulness (PU)</th>
<th>Comments</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>PU1.</td>
<td>I can get accurate information by communicating with my social commerce friends.</td>
<td>King, Jensen, Davis &amp; Carcioppolo (2014); Wamba(2014)</td>
</tr>
<tr>
<td>PU2.</td>
<td>I can get objective information about goods/services through my social commerce friends.</td>
<td></td>
</tr>
<tr>
<td>PU3.</td>
<td>Through browsing the sharing times of goods, let me feel that the quality of goods is good.</td>
<td></td>
</tr>
<tr>
<td>PU4.</td>
<td>The information on social commerce websites let me know the usage of goods.</td>
<td></td>
</tr>
<tr>
<td>PU5.</td>
<td>The information on the social commerce website answers my questions about goods/services.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Perceived Similarity (PS)</th>
<th>Comments</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>INT1.</td>
<td>When interacting with social commerce friends, I feel that our interests and hobbies are similar.</td>
<td>Lu &amp; Wang(2010)</td>
</tr>
<tr>
<td>INT2.</td>
<td>When interacting with social commerce friends, I feel that our needs for products are similar.</td>
<td></td>
</tr>
<tr>
<td>INT3.</td>
<td>When interacting with social commerce friends, I feel our consumption habits are similar.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Perceived Intimacy (INT)</th>
<th>Comments</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>PS1.</td>
<td>I keep close contact with social commerce friends.</td>
<td>Gefen, Karahanna &amp; Straub(2003)</td>
</tr>
<tr>
<td>PS2.</td>
<td>I understand the consumption habits of social commerce friends.</td>
<td></td>
</tr>
<tr>
<td>PS3.</td>
<td>I will listen to and take advice from my social commerce friends</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Perceived Benefit (PB)</th>
<th>Comments</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>PB1.</td>
<td>The sharing from social commerce friends enables me to select the goods/services I need.</td>
<td>Wasko &amp; Faraj(2005)</td>
</tr>
<tr>
<td>PB2.</td>
<td>Sharing from social commerce friends have saved me the time for searching online.</td>
<td></td>
</tr>
<tr>
<td>PB3.</td>
<td>When I need to consult others’ opinions, my social commerce friends can provide me with effective suggestions.</td>
<td></td>
</tr>
</tbody>
</table>

### 3.2 Measurement of Questionnaire Variables

Variables are measured by using Likert five-point scale with scores ranging from 1 to 5 and data analysis are based on the scores.

(1) **Measurement of Independent Variable - Social Support**
The measurement of social support is shown in table 2.

(2) Measurement of dependent Variable - Social Commerce Users’ Behaviors

The measurement of users’ behaviors is shown in table 3, The Measurement of trust in social commerce and sellers are shown in table 4.

<table>
<thead>
<tr>
<th>Table 3. Construct Measurement of Users’ Behaviors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constructs</td>
</tr>
<tr>
<td>Purchase Intention (PI)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Share Intention (SI)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 4. Construct Measurement of Trust in Social Commerce and Sellers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constructs</td>
</tr>
<tr>
<td>Trust in social commerce (SocT)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
ScoT 4. My social commerce friends will help me when I am in trouble.

<table>
<thead>
<tr>
<th>Trust in sellers (SelT)</th>
<th>SelT 1. Sellers in social commerce can be trusted.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SelT 2. Sellers in social commerce will treat consumers sincerely.</td>
<td></td>
</tr>
<tr>
<td>SelT 3 Sellers in social commerce can make deals with me.</td>
<td></td>
</tr>
</tbody>
</table>

Gefen et al. (2004)

4. Data Analysis and Model Validation

4.1 Reliability Analysis

450 questionnaires were distributed in this study, among which 422 valid questionnaires were collected and analyzed.

<table>
<thead>
<tr>
<th>Table 5. Reliability Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variables</td>
</tr>
<tr>
<td>--------------------------------</td>
</tr>
<tr>
<td>Perceived Informativeness</td>
</tr>
<tr>
<td>Perceived Usefulness</td>
</tr>
<tr>
<td>Perceived Similarity</td>
</tr>
<tr>
<td>Perceived Intimacy</td>
</tr>
<tr>
<td>Perceived Benefit</td>
</tr>
<tr>
<td>Trust in Social Commerce</td>
</tr>
<tr>
<td>Trust in Sellers</td>
</tr>
<tr>
<td>Users’ Purchase Intention</td>
</tr>
<tr>
<td>Users’ Share Intention</td>
</tr>
</tbody>
</table>

According to the test results in table 5, the Alpha coefficients of the nine variables in the scale are all greater than 0.7 and all of them reach an acceptable level. When the final result reaches above 0.7, it indicates that the test has a strong internal consistency, which proves that the data of this survey has a strong credibility.
4.2 Content Validity Analysis

Content validity test is mainly established by qualified experts and scholars who carried out detailed and systematic evaluation on the test. The variables in this paper are all from mature literature. Through literature integration, the designed items can represent the content to be measured and can be judged to pass the content validity test.

4.3 Confirmatory Factor Analysis

9 variables are selected in this paper for confirmatory factor analysis, as shown in figure 2 below.

![Figure 2. Confirmatory Factor Analysis](image)

Table 6. CFA Model Goodness-of-Fit Properties

<table>
<thead>
<tr>
<th>Index</th>
<th>CMIN</th>
<th>GFI</th>
<th>AGFI</th>
<th>NFI</th>
<th>IFI</th>
<th>TLI</th>
<th>CFI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>2.758</td>
<td>0.862</td>
<td>0.828</td>
<td>0.855</td>
<td>0.902</td>
<td>0.885</td>
<td>0.901</td>
<td>0.065</td>
</tr>
</tbody>
</table>
According to table 6, the CMIN/DF of the model is 2.758, which greater than 1 and less than 3, indicating that the model has a good fitting degree. GFI index, AGFI index and other indicators are all greater than 0.8, which verifies the suitability of the model. RMSEA is 0.065, and the value is small, which proves the fitting degree of the model.

Table 7. Factor Loading Coefficient Table

<table>
<thead>
<tr>
<th>Items</th>
<th>CR</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Informativeness</td>
<td>0.8275</td>
<td>0.6166</td>
</tr>
<tr>
<td>Perceived Usefulness</td>
<td>0.8836</td>
<td>0.603</td>
</tr>
<tr>
<td>Perceived Similarity</td>
<td>0.7533</td>
<td>0.5048</td>
</tr>
<tr>
<td>Perceived Intimacy</td>
<td>0.8547</td>
<td>0.663</td>
</tr>
<tr>
<td>Perceived Benefit</td>
<td>0.8335</td>
<td>0.6254</td>
</tr>
<tr>
<td>Trust in Social Commerce</td>
<td>0.8783</td>
<td>0.6438</td>
</tr>
<tr>
<td>Trust in Sellers</td>
<td>0.7739</td>
<td>0.5333</td>
</tr>
<tr>
<td>Users’ Purchase Intention</td>
<td>0.8887</td>
<td>0.727</td>
</tr>
<tr>
<td>Users’ Share Intention</td>
<td>0.8873</td>
<td>0.6633</td>
</tr>
</tbody>
</table>

4.4 Factors Loading Quantity

Through analysis, it can be found that the factor loading amounts are all greater than 0.7, therefore, the measurement variables under the same potential variable have a strong correlation.

4.5 Combination Reliability

As can be seen from table 7, the combined reliability of all 9 variables is greater than 0.7, indicating that the overall scale has good internal consistency.
4.6 Structural Equation Model

Based on the theory and hypothesis, this study established the structural equation model by AMOS21.0, as shown in figure 3 below.

Figure 3. Structural Equation Model

Table 8. Goodness-of-Fit Properties of Structural Equation Model

<table>
<thead>
<tr>
<th>Index</th>
<th>CMIN/DF</th>
<th>GFI</th>
<th>AGFI</th>
<th>NFI</th>
<th>IFI</th>
<th>TLI</th>
<th>CFI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>2.972</td>
<td>0.845</td>
<td>0.814</td>
<td>0.837</td>
<td>0.886</td>
<td>0.871</td>
<td>0.885</td>
<td>0.068</td>
</tr>
</tbody>
</table>

According to the model fitting results in table 8, the CMIN/DF of the model is 2.972, which greater than 1 and less than 3. GFI index, AGFI index and other related indicators are greater than 0.8 while RMSEA is 0.068, less than 0.08, indicating that the model has a good overall fitting degree.

From table 9, the p value of factor loading is less than 0.001 or 0.01, indicating that the interpretation of potential variables on the observed variables is meaningful. Otherwise, the hypothesis is not true. The results of hypothesis verification are shown in table 10.
<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
<th>S.E.</th>
<th>C.R.</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust in Social Commerce --&gt; Perceived Informativeness</td>
<td>0.193</td>
<td>0.048</td>
<td>4.173</td>
<td>***</td>
</tr>
<tr>
<td>Trust in Social Commerce --&gt; Perceived Usefulness</td>
<td>0.336</td>
<td>0.053</td>
<td>6.944</td>
<td>***</td>
</tr>
<tr>
<td>Trust in Social Commerce --&gt; Perceived Similarity</td>
<td>-0.072</td>
<td>0.053</td>
<td>-1.562</td>
<td>0.118</td>
</tr>
<tr>
<td>Trust in Social Commerce --&gt; Perceived Intimacy</td>
<td>0.304</td>
<td>0.058</td>
<td>6.288</td>
<td>***</td>
</tr>
<tr>
<td>Trust in Social Commerce --&gt; Perceived Benefit</td>
<td>0.257</td>
<td>0.062</td>
<td>5.178</td>
<td>***</td>
</tr>
<tr>
<td>Trust in Sellers --&gt; Trust in Social Commerce</td>
<td>0.596</td>
<td>0.049</td>
<td>9.839</td>
<td>***</td>
</tr>
<tr>
<td>Users’ Purchase --&gt; Trust in Social Commerce</td>
<td>0.484</td>
<td>0.060</td>
<td>7.432</td>
<td>***</td>
</tr>
<tr>
<td>Users’ Share Intention --&gt; Trust in Social Commerce</td>
<td>0.578</td>
<td>0.061</td>
<td>8.062</td>
<td>***</td>
</tr>
<tr>
<td>Users’ Purchase --&gt; Trust in Sellers</td>
<td>0.179</td>
<td>0.077</td>
<td>2.666</td>
<td>**</td>
</tr>
<tr>
<td>Users’ Share Intention --&gt; Trust in Sellers</td>
<td>-0.065</td>
<td>0.075</td>
<td>-0.931</td>
<td>0.352</td>
</tr>
</tbody>
</table>

Note: *** means significant at the level of 0.001; ** means significant at the level of 0.01; * means significant at the level of 0.05.
<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Contents</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1a</td>
<td>Perceived informativeness of social commerce users has a positive influence on social commerce trust.</td>
<td>Supported</td>
</tr>
<tr>
<td>H1b</td>
<td>Perceived usefulness of social commerce users has a positive influence on social commerce trust.</td>
<td>Supported</td>
</tr>
<tr>
<td>H1c</td>
<td>Perceived similarity of social commerce users has a positive influence on social commerce trust.</td>
<td>Not Supported</td>
</tr>
<tr>
<td>H1d</td>
<td>Perceived intimacy of social commerce users has a positive influence on social commerce trust.</td>
<td>Supported</td>
</tr>
<tr>
<td>H1e</td>
<td>Perceived benefit of social commerce users has a positive influence on social commerce trust.</td>
<td>Supported</td>
</tr>
<tr>
<td>H2</td>
<td>Trust in social commerce has a positive influence on their trust in sellers.</td>
<td>Supported</td>
</tr>
<tr>
<td>H3a</td>
<td>Trust in social commerce has a positive influence on the purchase intention of social commerce users.</td>
<td>Supported</td>
</tr>
<tr>
<td>H3b</td>
<td>Trust in social commerce has a positive influence on the share intention of social commerce users.</td>
<td>Supported</td>
</tr>
<tr>
<td>H4a</td>
<td>Trust in sellers has a positive influence on the purchase intention of social commerce users.</td>
<td>Supported</td>
</tr>
<tr>
<td>H4b</td>
<td>Trust in sellers has a positive influence on the share intention of social commerce users.</td>
<td>Not Supported</td>
</tr>
</tbody>
</table>
5. Research Conclusions and Practical Value

5.1 Conclusion Analysis

(1) The Influence of Social Support on Social Trust

Data results show that social support in social commerce can positively influence trust in social commerce. Chang (2015) and Cheung (2012) also believed that both informative and emotional support can improve consumers’ trust and satisfaction. H1c cannot not verified in the research hypothesis, and there is no significant correlation between perceived similarity of social commerce users and social commerce trust. The reasons for this outcome are complex. In addition to sharing their favorite things, social commerce friends often complain about their bad experiences, etc. The driving effect of users’ similar perception is not played out, which may be due to different emotions and cognition of the interviewees. Therefore, the trust of social commerce users needs to be decided by rational judgment.

(2) Trust in Social Commerce and Its Impact on Trust in Sellers

Based on the evaluation of structural equation model, it can be concluded that trust in social commerce can promote trust in sellers, and there is a significant positive relationship between them, so hypothesis H2 is valid. Semuel & Chandra (2014) also verified the rationality of this hypothesis. Findings about the positive impact of social commerce trust on trust in sellers not only confirms the trust transfer mechanism, but also improves the structure of social commerce trust.
(3) The Influence of Trust in Social Commerce on Users’ Behaviors

Hypothesis H3a, H3b and H4a have been verified, that is, trust in social commerce can positively promote users’ purchase intention and sharing intention, and trust in sellers can positively promote users’ purchase intention. Users’ trust in social commerce and their trust in sellers can both actively promote users’ participation in social commerce, which has been confirmed by the research on social commerce from the perspective of relationship by Chen & Shen (2014). The hypothesis H4b ‘trust in sellers can promote the sharing intention of social commerce users’, which fails to be verified due to the combined effect of factors. Walczunck & Lundgren (2004) found that online consumer trust includes not only perceived value, but also situational stimuli and other factors, and the influencing factors on trust are complex. However, the main effect of this study is still desirable, and the explanatory degree of this study has certain practical value in the field of social commerce.

5.2 Theoretical Contribution

This study mainly focusses on the perspective of social support, analyzing the specific impact from social support to social commerce user’s behavior. In addition, this study provides a new angle for the research of relationship between social support, trust in social commerce and users’ behaviors. Also, it provides a theory support for social commerce sellers how to use social support to develop the user trust and to influence buying behavior.

(1) From the new perspective of social support, it constructs the model that social support will affect user behavior through the effect of social trust. It also constructs the
model that will affect social commerce user behavior which provides a theory support for future study.

(2) Rare previous studies have subdivided social support, so this paper introduce social support in social commerce. This study divides social support into five dimensions, which is conducive to the in-depth understanding of social commerce user behavior and enriches the cognitive and theoretical framework of social support.

(3) This study improves social commerce trust, pointing out that there is a trust transfer relationship between trust in social commerce friends and trust in sellers, which broadens the research perspective of trust in the field of social commerce.

(4) The study on the social commerce users’ behaviors in this paper combines the two dimensions of purchase intention and sharing intention to study the users’ behaviors, closely following the development trend of the current era, and deeply studying the social commerce users’ behaviors.

5.3 Practical Value

The relevant research conclusions of this paper have certain practical guiding value for social commerce enterprises. Attaching importance to social support can help social commerce enterprises better understand consumers’ behaviors, find their own development direction, and adjust their marketing strategies.

(1) Social support can effectively and positively affect social commerce trust, which should be paid attention to by social commerce enterprises. In informative support, sellers need to ensure the quality of information provided by social commerce platforms and shared by users is guaranteed. Information needs to be real, valuable and timely,
which can meet the needs of consumers and enable users to obtain high-quality experience, thus increasing their trust in social commerce.

(2) Pay attention to emotional support in social support and promote the emotional connection between users. The platform should attach importance to social support in social commerce websites, and focus on improving the quality of effective information and user relationship which will help enterprises to retain customers.

(3) This paper also examines the effect of social commerce trust as an intermediary variable. Social commerce trust can also be transferred in different situations. When shopping is added into social network, users will transfer the trust of social commerce friends to sellers. Sellers can make use of social business friend sharing and other ways to build their own beautiful image, product promotion or direct introduction of shopping link and other relationship marketing.

5.4 Limitations of the Study

(1) The survey samples have limitations. The number of valid questionnaires collected in this paper is only 422, which indicates the number of samples is not high. Moreover, most of the respondents of this study comes from Guangdong province so, whether the research conclusions are applicable in the whole domestic market remains to be further tested.

(2) Limitations of variable setting. There are limitations in the division of independent variables and the selection of mediating variables. It is not necessary to divide social support from five dimensions. Besides social trust, there may also be other mediating variables. This paper just constructs an ideal model. Therefore, this paper only provides
a kind of reference for the discussion on the research factors of user behavior in social commerce, which still has some limitations.

(3) Limitations of variable measurement. The behavior of social commerce users can be further subdivided, and the formation of consumer behavior is also interwoven with complex rational and emotional factors. Under different consumption scenarios, consumer behavior will also change, such as impulse consumption and habit consumption.

5.5 Prospects of Study

(1) In future, the research on the influence of social support on users’ behaviors in social commerce can be carried out through various investigation methods, such as group interview or in-depth interview to increase the number of samples and control the quality of samples.

(2) In future study, more dimensions can be measured and considered, and the mechanism of each variable can be comprehensively examined to improve the mechanism of this study.

(3) Pay more attention to different angles and the particularity of social commerce in the follow-up measurement of variables, and commit to proposing more accurate measurement variables, so that the research framework will be more comprehensive and valuable.
Reference


Appendix 1: Introduction of Corresponding Authors

Yongdong Shi (1974--), Male, Wuhan, Hubei province. Associate professor, School of Business, University of Science and Technology of Macau (Macau 999078), PhD supervisor. Research interests include customer relationship management, strategic management, consumer behavior and psychology, market research.
Research on Online Customer Purchase Stickiness

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Abstract

Through analysis of the priority in activity mechanism and new customers dynamic growth in customer purchase behavior and deduce of customer repeat purchase according to the mean field theory, this paper discovers regularity that the customer purchase frequency obeys the power law distribution. Empirical data shows that this model can represent the real repeat purchase process well. Based on the model and the purchase behavior mechanism this paper advances the concept of purchase stickiness and relative calculation methods, moreover, with the help of the characteristics of power law distribution this paper analyzes the change regularity of purchase stickiness. This study shows that the concept of purchase stickiness will provide new ideas and methods for online customer management.

Keywords: Repeat Purchase Behavior; Power Law Distribution; Priority in Activity; Purchase Stickiness
1. Introduction

With the development of the online market and the intensification of competition, customers are increasingly becoming the most competitive precious resources for the e-commerce enterprises, whose key to determine success is trying their best to attract and keep customers [1]. All the enterprise focuses seriously on the customers’ repeat visit and repeat purchase. The concept of “customers’ repeat purchase” under the e-commerce background is called “stickiness” by Martin [2]. In many literatures, The influence factors of stickiness is analyzed [3] and stickiness is measured by such specifics as visit time, frequency and the number of browed pages [4,5], furthermore, the relation between the influence factors of stickiness and customers’ purchase intentions is built in accordance with the concept model [6-8], some specific strategies for strengthening stickiness in both short and long terms are proposed [2]. Compared with the research on customer stickiness to focus on repeat purchase directly is more intuitive. To a certain extent, the high-frequency repeat purchase can be regarded as the external behavior embodiment about customer satisfaction and loyalty [9]. The research on customer behavior is an everlasting subject. In the 1970s the influential Repeat Buying Theory (RBT) was proposed, and the NBD (Negative Binomial Distribution) is basic model [10]. Then Pareto/NBD model laid a good foundation for the study of customer behavior [11]. Especially after Fader et al. [12] proposed the GB/NBD model, the formula derivation and data processing have become more simple and convenient within the accuracy range of similar predicted results, so it is highly accepted by the scientific research and practice and widely used soon [13,14].
To the traditional concrete model, Ye [15] challenged the basic hypothesis that “the customer purchase event is independent of time, and the purchase probability is a constant”, and by empirical analysis he found that the repeat purchase distribution to one online vendor is neither NBD nor LSD (Logarithmic series distribution), but the PLD (power-law distribution) in C2C transactions. The PLD is always called long-tail distribution, Barabási et al. [16,17] explained the mechanism of the PLD from the two aspects of growth and preferential attachment features, which is called BA model. In the last decade, the BA model was valued in many areas (such as social, biological, technological and informational, etc.) and tested by a large number of empirical data [18-20]. Up to now more and more researchers have developed and expanded the model richly [21,22], especially, described and explained effectively many of the long-tail phenomenon on the Internet.

Based on the mechanism of the BA model and the mean field theory this paper studies and explains the distribution law of online customers’ repeat purchase frequency, puts forward the concept of purchase stickiness, constructs calculation method to purchase stickiness, and from dynamic perspective assesses stickiness for different customer groups, thus to benefit e-commerce vendor to identify effectively customers and perform classification management.

The paper is organized as follows. Section 2 presents customer purchase behavior model and solving. Section 3 describes the empirical process and model parameters determine. Section 4 provides the concept of purchase stickiness and calculation method on purchase stickiness. Section 5 analyzes customers purchase stickiness and
section 6 concludes and gives some management implications.

2. Customer Purchase Behavior Model and Solution

Customers on the e-commerce platform possess growth nature, while it develops the platform that attracts the new customers unceasingly, the on-line customer groups expend gradually. The amount of the customers and the value of purchase frequency grow dynamically with time, meanwhile, the regular customers possess effect of priority in activity while repeating purchase, i.e., the higher the customer’s purchase frequency is, the more the active purchase will be, and the bigger the probability of repeat purchase turns to be. Therefore, the contribution to “once more purchase” comes from the customers whose activity is high. The value of the purchase frequency is positively related to the customers’ activity. Therefore, the new customer’s growth and regular customer’s priority in activity are two basic mechanisms accounting for customers’ repeat purchase behavior.

2.1 Symbol Description

1) \( k_i \) denotes purchase frequency of customer \( u_i \).

2) \( \mu \) is a proportionality constant.

3) \( P(k_i(t)) \) denotes the probability that purchase frequency of a customer \( u_i \) is \( k_i \) at \( t \) moment.

4) \( t_i \) is the moment that the customer \( u_i \) visits the vendor at first time.

5) \( \alpha \) is a probability that a new customer comes at every purchase moment, so \( 1 - \alpha \) is the probability that an old customer purchases at this moment.

6) \( P(t_i) \) is a probability at \( t_i \).
2.2 Basic Model of Customer Repeat Purchase

As the following we will analyze the change of the customer purchase frequency along with time under the guidance of the mean-field theory. Assuming that $k_i$ is a continuous time-dependent real variable, the change rate of $k_i$ follows $\frac{dk_i}{dt} \propto k_i$ with the mechanism of the prior customer activity [16]. If $\mu$ is introduced as proportional constant, then

$$\frac{dk_i}{dt} = \mu(1-\alpha) \sum_j k_j$$  \hspace{1cm} (1)

If the initial frequency is 0, and the addition of a new purchase corresponds to a new time step, so at any moment the total purchase frequency equals to the number of time steps, then after $t$ time steps we can assume $\sum_j k_j = t$ [22], substitute it into the above equation

$$\frac{dk_i}{dt} = \frac{\mu(1-\alpha)k_i}{t}$$  \hspace{1cm} (2)

Solve it to yield

$$Ln k_i(t) = C + \mu(1-\alpha)Lnt$$  \hspace{1cm} (3)

As the initial condition, the customer $u_i$ go to the shopping platform at moment $t$, which gives

$$C = Ln \frac{1}{\mu(1-\alpha)}$$  \hspace{1cm} (4)

Then we can obtain

$$k_i(t) = \left(\frac{t}{t_i}\right)^{\mu(1-\alpha)}$$  \hspace{1cm} (5)

The empirical data of Literature 【15】 show that when the transactions volume reach a certain size, the frequency of new customers into the platform becomes stable. Assuming that after some time steps, the initial customers in the system is $u_o$, and then
new customer increases uniformly in equal time intervals at shopping platform, so \( t_i \)
as a random variable has a constant probability density

\[
P(t_i) = \frac{\alpha}{u_0 + t} \quad (6)
\]

Then we can obtain the cumulative distribution

\[
P(k(t) < k) = P(t_i > \frac{t}{k^{(1 - \mu / \alpha)}}) = 1 - P(t_i \leq \frac{t}{k^{(1 - \mu / \alpha)}}) = 1 - \sum_{i=0}^{t} P(t_i) = 1 - \frac{t}{k^{(1 - \mu / \alpha)}} \frac{\alpha}{u_0 + t} \quad (7)
\]

Then the distribution of customer purchase is found to be

\[
P(k) = \frac{P(k_i(t) < k)}{dk} = \frac{t}{u_0 + t} \frac{\alpha}{\mu(1 - \alpha)} k^{-\left(\frac{1}{\mu(1 - \alpha)}\right)} \quad (8)
\]

For large \( t \) the term \( u_0 \) can be neglected in the denominator, so

\[
P(k) = \frac{\alpha}{\mu(1 - \alpha)} k^{-\left(\frac{1}{\mu(1 - \alpha)}\right)} \quad (9)
\]

This observes the power law distribution (PLD).

**2.3 Analysis on Coefficient and Index of Model**

In power law distribution, the power index reflects difference degree of the purchase frequency, the greater the index is, the steeper the function curve changes, and the more uneven the distribution appears. Considering this model, the power index is connected to \( \mu(1 - \alpha) \), the smaller \( \mu(1 - \alpha) \) is, the greater the index is, \( \mu \) and \( 1 - \alpha \) all reflect the possibility of repeat purchase. So the lower the degree of repeat purchase is, the greater the index of the model is, and the larger variability the purchase frequency has.

The coefficient of model denotes proportion that the customer purchase only once occupies total customers. The greater the coefficient is in the model, the greater \( \alpha / \mu(1 - \alpha) \) is, and the greater repeat purchase possibility the new customers will
have than the old customers.

Simply \((9)\) to \(P(k) = \lambda k^{-\theta}\). From above analysis, we learn that \(\lambda\) denotes the probability of the customer purchase only once \((P(k=1) = \lambda)\), the larger the index \(\theta\) is, the smaller the probability that the old customer will repeat purchase.

3. The Empirical Study and the Model Parameters Determination

All the data used in this empirical study are the real transaction data from Taobao (http://www.taobao.com), the largest C2C e-commerce platform in China. We get power law distributions with indexes varying from 1.4 to 3.8 by test 50 vendors on Taobao platform. The results of the three vendors’ data and fitness were shown in figure 1. It shows that the model fits well with the empirical curve fitting \((R^2 >0.999)\), at the same time SSE (the sum of squares due to error) and RMSE (root mean squared error) are small.

Figure 1. Curve fitting of the repeat purchase distribution to three vendors

To determine the parameters for the model of \(P(k) = \frac{\alpha}{\mu(1-\alpha)} k^{-(1+\frac{1}{\mu(1-\alpha)})}\). First, we fit real data by “curve fitness tool” in Matlab, we can get the value of the coefficient and index, then we can calculate the parameters using the above equations. For an example, there are 5231 purchase frequency from 2166 customers in a vendor, the result of curve fitting is \(P(k) = 0.6414k^{-2.105}\) by Matlab, so \(\mu=2.1566\) ,
\( \alpha = 0.5804 \). Table 1 gives the comparison analysis of the result of the modeling and the empirical data for repeat purchase.

Table 1. Comparison analysis of the modeling and the empirical data for repeat purchase frequency distribution for a vendor

<table>
<thead>
<tr>
<th>Purchase frequency</th>
<th>P(k)</th>
<th></th>
<th>Purchase frequency</th>
<th>P(k)</th>
<th></th>
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<tbody>
<tr>
<td></td>
<td>Modeling</td>
<td>Empirical</td>
<td></td>
<td>Modeling</td>
<td>Empirical</td>
</tr>
<tr>
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<td>0.6413</td>
<td>0.6417</td>
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<td>0.0019</td>
<td>0.0028</td>
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<td>2</td>
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<tr>
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<td>0.0011</td>
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<td>0.0148</td>
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<td>0.0166</td>
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<td>28</td>
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<td>0.0046</td>
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<tr>
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<td>0.0028</td>
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<td>0.0002</td>
<td>0.0005</td>
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<tr>
<td>15</td>
<td>0.0021</td>
<td>0.0037</td>
<td>51</td>
<td>0.0002</td>
<td>0.0005</td>
</tr>
</tbody>
</table>

From these test values of fitting, such as \( R^2 = 0.99998 \), SSE \( \approx 9.784 \times 10^{-5} \), RMSE \( \approx 0.001869 \), we think that the model is ideal to predict the output; i.e., it fits well with the fact. The parameters determined by the model are consistent with the empirical data. Further, we calculate the purchase frequency (the nearest integer) of model value and empirical value, the results of comparison analysis are shown in table 2.
Table 2. Comparison analysis of the modeling results and the empirical data of the repeat purchase frequency for a vendor

<table>
<thead>
<tr>
<th>Purchase frequency</th>
<th>The Number of Customer</th>
<th>Modeling</th>
<th>Empirical</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1389</td>
<td>1390</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>323</td>
<td>316</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>138</td>
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<td></td>
</tr>
<tr>
<td>4</td>
<td>75</td>
<td>81</td>
<td></td>
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<tr>
<td>5</td>
<td>47</td>
<td>38</td>
<td></td>
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<tr>
<td>6</td>
<td>32</td>
<td>32</td>
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<tr>
<td>7</td>
<td>23</td>
<td>36</td>
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<td>8</td>
<td>17</td>
<td>17</td>
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<td>9</td>
<td>14</td>
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<td>51</td>
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</table>

We use the $\chi^2$ goodness-of-fit test to check the performance of the model. Since the $k$ values have been partitioned into 30 categories and our model has two unknown parameters, the degree of freedom should be 27. Let’s set $\alpha = 0.01$, then we have that $\chi^2_{0.01(27)} = 46.96$, calculating using the above table, that is
\[ \sum_{i=1}^{n} \frac{(\text{Empirical Value}_i - \text{Model Value}_i)^2}{\text{Model Value}_i} = 28, \] it shows that the model results fit the empirical data well.

4. **Study on Purchase Stickiness**

4.1 **The Concept of Purchase Stickiness**

As all things have their different perspectives or emphasis, the existent literatures expound the definition of the stickiness from two aspects such as website and visitors to the site. Holland et al. [23] used the stickiness as the sum of all the quality of website, which encourages visitors prefer to stay at one site rather than to another web sites. Li et al. [24] has argued that stickiness is a strong preference and a commitment to revisit a certain website because of visitors’ insisting on repeating visit and using favorite site in the future. Liu et al. [25] has showed the significant correlation between stickiness and purchase volume from such three aspects as visit frequency, visit duration and visit depth by the empirical approach for studying the cellular network consumption. But now these kinds of definition and measures of stickiness can only predict the revisit intention emphatically for relative comparison of the website or a visitor, they lack the reflection of the actual repurchase behavior.

To observe the customers’ full perspective, based on the foundation of stickiness and combined with the purchase behavior we can research stickiness concept which can reflect the real repeat purchase behavior and the shopping results, so that we can provide theoretical basis for further research on the customer characteristics. Thus we define purchase stickiness as repurchase intention or commitment for e-commerce customers at different shopping stages. There are the following basically meanings:
1. Purchase stickiness embodies customer’s likes and loyalty to the website, it reflects the possibility of repurchase; This is logically similar to the existent literature on stickiness definition.

2. Purchase stickiness focuses on the result of purchase, it embodies customer’s contribution to sales growth, the greater the purchase stickiness is, the greater the likelihood of repurchase is.

3. Purchase stickiness is a dynamic concept, the customers with different purchase frequency make up the different customer groups which may have different corresponding stickiness, therefore it will be further expressed as the following “what is the possibility that a customer group purchase \( i \) times will purchase again”.

4.2 Calculation method on Purchase Stickiness

The concept of purchase stickiness reflects the possibilities that customer group with different purchase frequency will purchase again from above definition. Assuming there is total number of \( f(i) \) customers who have bought at least \( i \) times in the shopping system, and there are \( f(i+1) \) customers who have bought at least \( i+1 \) times, then customer purchase stickiness can be expressed with \( B(i) = \frac{f(i+1)}{f(i)} \). We can calculate purchase stickiness more conveniently based on the form of probability distribution that has given in the previous model and empirical. If \( P(k) \) denotes the probability that the purchase frequency is equal to \( k \) at \( t \) moment, then calculation formula of purchase stickiness is \( B(i) = \sum_{k=i+1}^{\infty} P(k) / \sum_{k=i}^{\infty} P(k) \).
According to this, we can calculate stickiness \( B(i) \) as follows:

1. When \( i = 1 \), \[
B(1) = \frac{\sum P(k) P(k)}{\sum P(k)} = \frac{1-1-P(k=1)=1-\lambda} = \lambda.
\]

\( B(1) \) denotes the probability of repeat purchase (more than purchase once), i.e., purchase twice or more that accounts for the proportion of all customers. It reflects initial purchase stickiness of a vendor, we call this value as the base stickiness. The value is based on the results of the actual shopping, it embodies the maintenance degree of a vendor to new customers absorbed. The higher the base stickiness is, the stronger the ability of turning new customers into old customers of this vendor’s will be.

2. When \( i \neq 1 \), \[
B(i) = \sum_{k=0}^{\infty} P(k) = \frac{\lambda((i+1) \theta + (i+2) \theta + ... + M \theta)}{\lambda((i+1) \theta + (i+2) \theta + ... + M \theta)} = \frac{1}{g_p(i)+1},
\]

Here, \( g_p(i) = ((1+\frac{1}{i})^{-\theta} + (1+\frac{2}{i})^{-\theta} + ... + (1+\frac{M-i}{i})^{-\theta})^{-1} \), \( M \) denotes the largest customers’ purchase frequency at \( t \) moment.

From numerical example analysis, for a given \( \theta \), it shows that \( B(i) \) is an increasing function of \( i \) in the beginning stage, then the value \( B(i) \) becomes more stable and slightly fluctuating, when \( i \) closes to \( M \), that is only in the end of the curve there are several \( B(i) \) values dropping. These indicate that with the purchase frequency increasing, the customers’ group purchase stickiness gradually increases and then remains stable, however, the curve turns down in the end because of the restricted observation time, which we can ignore. At the same time, we can see that for fixed \( M \), the greater the \( \theta \) is, the smaller the \( B(i) \) will be (\( i \neq 1 \)).

Taking the above empirical vendor as an example, we calculated the model theoretical value \( B(i) \) and the empirical specific value respectively according to a curve fitting
model, the results are shown in table 3. The theoretical value \( B(i) \) appears to increase first, then become stable, and go downward in the end, as shown in figure 3.

Table 3. Comparison analysis of the modeling theoretical value and the empirical value of the customer purchase stickiness for a vendor

<table>
<thead>
<tr>
<th>Purchase frequency</th>
<th>B(i)</th>
<th></th>
<th>Purchase frequency</th>
<th>B(i)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Modeling</td>
<td>Empirical</td>
<td></td>
<td>Modeling</td>
<td>Empirical</td>
</tr>
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<td>3</td>
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5 Analysis of the Customer Purchase Stickiness

5.1 Analysis on Base Stickiness

In the above table 3, we can tell that the base stickiness is low; its theoretical value is 0.3474 and the empirical value is 0.3583. From the observed 50 C2C Taobao vendors in this study, we can see that the proportion of the customer purchase only once is significantly higher than the traditional model business predicted, they are all above 55%, and the base stickiness of C2C vendor is small in general.
If we make a customer sequence to all the customer of the above empirical vendor according to their purchase frequency, as shown in figure 2, we can get two regions. The left and right regions denote the repeat purchase customers and single purchase customers respectively. The figure showed the long tail trend clearly, which is consistent with the common law of long tail characteristics from Internet, and it demonstrates that the majority of customers visiting vendors occasionally, and immediately they are attracted to other sites, as result they transfer frequently between some sites, so that the customers who purchase only once for some special vendors are as large as 80-90%. So online vendors should pay full attention to propaganda to attract web users choose and purchase their own products, having an increased new customer volume is the basis of retaining customers.

**Figure 2. Statistical analysis of the customer purchase frequency**  
**Figure 3. Change trend of the customer purchase stickiness**

### 5.2 Analysis of the Stickiness Trend

Further, figure 3 shows that the law of stickiness changes with the repeat purchase frequency based on the calculated results in table 3. We can see that the values vary between $B(1)$ and $B(6)$, and the purchase stickiness grows rapidly with the increase of purchase frequency when the customer purchase frequency is between 2 and 6 times, after $B(6)$ the purchase stickiness becomes stable obviously, we ignored the decline
trend in the end because of that the customers who purchase more times subject to the statistic deadline are fewer in the end, and the smaller denominators have great influence on the result of stickiness calculation.

5.3 Analysis of the Stickiness Partition

Considering the base stickiness and the trend change of \( B(i) \), the customers will be divided into three regions to be managed efficiently by the vendor adopting different management strategies, as shown in figure 4.

Region I : Cultivation area of purchase stickiness. Customers buy only once in this region. At this time the customer choose a vendor randomly, the probability to purchase again is small, and the cultivation of stickiness is difficult to these customers, but the vendor should pay attention to their proportion and understand their shopping experience effect by combining with the corresponding shopping comments to analysis the reasons of the customers losing, and then make targeted improvement to attract and cultivate further sticky customers. If the proportion of purchase only once is higher, the area of regional I will be greater, and the vendor base stickiness is smaller.

Region II : Promotion area of purchase stickiness. The customers purchase frequency are between 2 and 6 times in this area, they have formed a good impression and evaluation about quality, service, price as well as other factors of the vendor, for each increasing purchase, the result of experience affect not only the next shopping decisions, but also it is more important to boost the stickiness of next purchase, so the vendor operators, in particular, should focus on the customers in this area to promote customers from promotion area to stable stickiness area through tilting policy.
Region III: Stable area of purchase stickiness. The customers in this region already have high trust to the vendor by 6 times and above purchase behavior, and they formed some inertia and even dependence to some extent, so that they don’t want to change buying habits easily [5], at this time it will not obviously increase stickiness to next purchase with purchase frequency increasing, stickiness is nearly stable, so customers in this region is relatively easy to maintain, the vendor don’t need spend too much energy to them.

Figure 4. Regional analysis on customer purchase stickiness

5.4 Analysis of the Stickiness Combining with the Model Characteristic

Considering the main characteristic of repeat purchase frequency distribution model, the coefficient \( \lambda \) of denotes probability to buy once only, index \( \theta \) reflects the size of the probability of new customers to buy. So the total region will be divided into four areas by the level of \( \lambda \) and \( \theta \), the change of purchase stickiness and regional characteristics in each area are described as shown in figure 5.

(1) Considering the influence of value \( \lambda \).

From the above knowledge, \( B(1) = 1 - \lambda \), so when value \( \lambda \) is lower, \( B(1) \) is bigger. This denotes that the probability of purchase once only is small, and probability of customer repeat purchase is relatively high. Namely that: when value \( \lambda \) is lower, area I is lesser,
and base stickiness value is bigger; Similarly when value $\lambda$ is higher, area I is larger, and base stickiness value is smaller.

(2) Considering the influence of value $\theta$.

Still by the preceding calculation, when value $\theta$ is lower, $B(i)$ is bigger ($i \neq 1$). So the smaller value $\theta$ is, the greater the stickiness of region II and III is; Similarly when the value $\theta$ is bigger, the stickiness of region II and III is smaller.

(3) Considering the influence of value $\lambda$ and value $\theta$ together.

When value $\lambda$ is low, base stickiness is big, when value $\theta$ is high, stable stickiness of region III is small, so when value $\lambda$ is low and value $\theta$ is high, the gap between high base stickiness and low sable stickiness is small, also namely that the space is lesser for stickiness of region II to be increased, so the speed be promoted is relatively fast from base stickiness to stable stickiness value; By the same token, the value $\lambda$ is high and value $\theta$ is low, the space is large for stickiness of region II to be promoted, the speed is relatively slow.

Figure 5. Customer region purchase stickiness with the changing of repeat purchase characteristics
6. Conclusions and Management Implications

In the online market, there are huge potential customers, switching costs is lower. With experience’s being accumulated and the habit’s being acquired of shopping online the new customers emerge constantly. Meanwhile, each event of the regular customers’ purchase is no longer independent; the customer purchase probability is not constant but increasing with the purchase frequency. This paper breaks through traditional research methods about consumer repeat purchase behavior to build a power law distribution model of consumer repeat purchase frequency under the guidance of the mean-field theory. It presents the regularity of consumer purchase frequency distribution with a more simple derivation, and the same time it provides the theoretical basis for the vendor managing regionally by introduction of the concept of stickiness, all these will be good for further exploring the online market about consumer purchase behavior in new ideas and methods.

It will give the following management enlightenments to e-commerce vendor by modeling analysis about the distribution law of customer purchase frequency and stickiness partition process.

（1）Attract

The vendor should fully recognize that online customers form power-law distribution from two fundamental mechanisms: the first, customer is sustained growth. Second, the customer’s purchase probability shows characteristics of the priority in activity. So on the one hand the enterprise must pay attention to attract new customers; On the other hand they should analyze tactically the characteristics of repeat purchase customers.
After all it is foundations that attracting more visitors enter the vendor and successfully turn visitors into new customers. So the vendor may attempt the following steps, such as designing unique style page, recommending new products, special promotions, experience reward activities, these are helpful to attract customers for the first time to try.

（2）Follow up

Since the customer switching cost and searching cost are low in e-commerce environment, the degree of customer repeat purchase is lower than traditional store, analyzing customer area and implementing of targeted regional management strategy will be more effective to maintain existing customers and promote more potential customer loyalty. To the customers of region I, the vendor can make some measures, such as following up new customers as soon as possible, responding to their information or questions in time, improving the customer service experience, compensation award, recommendation system, increasing promotions and other ways to reduce the proportion of purchase only once to strive narrowing the area of the region I, improving base stickiness and increasing the proportion of repeat purchase.

（3）Promotion

The vendor should carefully analyze the repeat purchase information database formed by the customers who bought between 2 and 6 times to understand comprehensively the customers’ demand and consumption psychology, and further the vendor can provide personalized products and services to make customers get more consumption value, at this time the vendor should consider increasing investment and with very
patiently for customers in the region \( \text{II} \) to promote their purchases again and again. Of course virtual community is a good way to get the customers into stable region by opinion leader guide and suggestion.

(4) Stabilization

Into the stable region, the customers’ herd mentality is reduced and their consumption has gradually become rational. They highly regard the vendor’s brand, quality and management and form a certain shopping inertia and the dependence on shops. During this period, the vendors don’t need spend too much energy to please customers, but should notice to maintain their own characteristics and form advantages of innovation to seek development sustainably. These are useful long-term sustainable development strategies such as members’ integral rewards program, stable after-sales system, and the optimization of navigation technology, rapid transaction speed, as well as payment and personal information security, and so on.

Generally, e-commerce is still developing fast and facing pressure coming from various online modes, the traditional sales and even the omni-channel marketing. It is useful to vendor management to analyze the formation mechanism of the repeat purchase characteristic, and grasp the laws and characteristics of customer growth.

Conflict of Interests

The authors declare that there is no conflict of interests regarding the publication of this paper.

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References


Inheritance and Promotion of Brand Culture of “Chinese Time-honored Brand”

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Abstract

“China Time-honored Brand” has a long history, excellent quality and excellent reputation. It has the characteristics of Chinese culture. However, with the intensification of competition, foreign brands market' impact, it puts forward a new challenge to the time-honored. New environment is forcing the Chinese time-honored innovative management concepts, effective brand protection and brand promotion. The inheritance and development of Chinese time-honored brand is not only to enhance national economic competitiveness, strengthen the construction of modern business enterprise reality but also carry forward the fine traditional culture of the Chinese nation, inevitable requirement to enhance the cultural self-confidence.

Keywords: China Time-honored Brand; Brand Culture; Inheritance; Promotion and Innovation

1. Chinese old brand overview

1.1 The connotation of the old Chinese brand

China Time-honored Brand refers to a long-established product, craftsmanship or service that has been passed down from generation to generation. It has a distinctive Chinese cultural background and profound cultural heritage, and has won wide
recognition from the society and formed a brand with good reputation.

Figure 1-1: Chinese old brand logo

The logo of the Chinese time-honored logo (shown in Figure 1-1) is the shape of the Chinese seal and has been artistically designed. The writing method is a long-standing historical sense of the old Chinese brand, “word”and “ No.” The clever connection between the two Chinese characters reflects the mutual influence and common development of the old Chinese brand and commercial circulation.

The first batch of enterprises in China that won the “China Time-honored Brand” was in December 2006, when the Ministry of Commerce held a seminar on the innovation and development of the old brand, and announced the first batch of 434 “China Time-honored” enterprises authorized by China. Brand [1] covers a wide range of industries including food processing, medical and health, folk crafts, and condiments. Among these famous old brands, the company has won the title of “China Famous Brand” in the national Chinese medicine industry in the 8th year of Emperor Kangxi of the Qing Dynasty (1669). It was founded in the Qing Dynasty (1853 AD). The "Chinese first shoes" in the boots are inline, and the “Chinese first eat"food brand, Quanjude, which was founded in the 3rd year of Tongzhi in the Qing Dynasty (1864), was built in the Qing Dynasty 21 years (1895). The first factory in Beijing that
produces and sells Nanwei food, Daoxiang Village... These old brands are part of Chinese history and culture. They are traditions and quality and services that are unchanged for a hundred years.

1.2 Characteristics of Chinese old brands

Many old brands originated in the Ming and Qing Dynasties. During the Ming and Qing Dynasties, the social atmosphere of heavy literary and light business was strong. Merchants had to work hard in culture to improve the cultural level of the store. Therefore, the company used Confucianism to emphasize the virtues of benevolence, morality and faith. At the same time, the owner of the business also attaches importance to making cultural celebrities and creating a strong cultural atmosphere.

The old name has a long history and the business people have long been familiar with it, such as Beijing’s “Quanjude”, Tianjin’s “dogs”, and Guizhou’s “Moutai”. The reason why people can remember the names of these brands, so the old name must have the following characteristics:

(1) The name must be old and the business must be old. Only when these two characteristics are available at the same time can we call it the old Chinese brand.

(2) Products and services must have characteristics, and other companies can not replace them, with remarkable features.

(3) There is a large popularity within a certain range.

(4) Product quality must withstand the test, only the quality keeps up, the product’s visibility can be guaranteed.

1.3 The cultural content of the Chinese old brand
1.3.1 Brand assets

Brand equity is linked to brand logos and brand names, reducing the value of the company’s services and increasing the range of liabilities and assets that the company sells. The brand assets of Chinese time-honored brands mainly include four aspects, namely brand loyalty, brand awareness, brand association and brand reputation.

In fact, the so-called brand equity is the consumer’s understanding of the brand. For the Moutai wine in Guizhou, the brand equity of Maotai is the consumer’s perception of the brand of Maotai. First, brand equity is intangible. Brand equity affects consumers’ purchasing intentions. Finally, brand equity depends on consumers, not on products.

For example, in 1864, Quanjude Roast Duck Restaurant was born in Beijing Qianmen. It has a history of 152 years. In 1993, Quanjude Group was established. At that time, the intangible assets of the Quanjude brand were worth 2.6949 billion yuan, which was announced on May 12, 2016. In the 10th China Brand Value 500, the 152th year of Quanjude was born. The value of “Zhujude” is more than 16.3 billion yuan, making it one of the most valuable brands in the Chinese catering industry.

1.3.2 Brand association

Brand association is very important for the brand itself. These associations refer to what consumers think of when they think of a brand. For the old-fashioned merchants, what they need to master is to let consumers think of the products they produce, and to have a specific and convincing reason for purchase. This reason is a brand that can survive and survive.
For example, the Tongrentang brand, which was founded in 1669 (Qingxi Emperor Kangxi eight years), reminds consumers of royal medicine. Tongrentang people always abide by the ancient training that “there is no need to save labor, but the taste is expensive, but it will not reduce the material resources”. The self-discipline consciousness of “repairing unseen, knowing what is known”, and the spirit of excellence in pharmaceuticals, and the product with the “unique formula, superior materials, exquisite workmanship, remarkable effect”.

1.3.3 Brand awareness

For the Chinese time-honored brand, brand awareness is not a big problem. What is important is that people can see the products or labels they produce, so it is obvious that the company has a logo that is closely linked with the brand. important.

At the same time, the promotion of the brand can not be dropped. It can publish the planned news on the portal website, government website, local industry website, newspaper, etc., and raise the popularity in the form of news. It is not only highly authoritative, but also has a wide spread. The concepts of news innovation, news source, and news ranking optimization are also in the leading position in the industry. Be good at mining corporate news events, writing press releases, and then letting the news cover national newspapers and networks through its vast media resources.

1.3.3 Brand reputation

The old Chinese brand has a strong Chinese national cultural characteristics, and the business enterprise pursues product quality, pays attention to integrity and reputation, has a good business philosophy, and incorporates many folk customs, values and
unique traditional Chinese production techniques. The good product quality and corporate image formed by these cultural connotations have formed a good reputation in the hearts of ordinary people, and also formed a huge commercial value.

2. Analysis of the status of the development of Chinese old brand

2.1 National Distribution of Chinese Time-honored Brands

The old Chinese brand covers a wide range of industries, including food, catering, brewing, etc., including Beijing Tongrentang, Tsingtao Beer, Maotai, Wuliangye, Haitian, Yanghe, Laofengxiang, Yunnan Baiyao, Hengyuanxiang, Wang Laoji, Zhangyu CHANGYU, Quanjude, Bright Dairy, Luzhou Laojiao, Liqun Liqun, Beijing Daoxiang Village, Guanshengyuan, Jiannanchun, Jiuzhitang, Pien Tze Huang Pharmaceutical, etc., but the old brand distribution area is relatively concentrated, most of the top 100 old brands are more developed in Chinese economy. The area includes 87 in Beijing, 63 in Jiangsu, 37 in Zhejiang, 36 in Shandong, 20 in Shanghai, and 1 in the border provinces of Inner Mongolia and Ningxia. So far in Tibet and Ningxia, the distribution maps of specific provinces are shown.

Figure 2-1: Distribution of Chinese old brand provinces
2.2 Business Benefits

With the intensification of market competition, the “old brand” was contested by other enterprises from abroad. In 2006, the first batch of “China Time-honored Brands” reviewed and publicized by the Ministry of Commerce of China was only 434. Among these old brands, 70% are barely maintaining the status quo; 20% are in poor management; only 10% are good in efficiency, and most of the old brands have become "yellow flowers." Due to frequent business crises, the Chinese old-fashioned group has seriously “shrinked”. The old-fashioned concept of satisfying the status quo, outdated packaging, and lack of active marketing has become a stumbling block to the development of the old brand. The old-fashioned enterprises have problems such as backward production management and management concepts, lack of brand maintenance and publicity awareness and traditional single sales channels.

2.3 Trademark maintenance status

The old Chinese brand is an intangible asset, and the protection of the trademark itself is the protection of Chinese culture. The reality is not optimistic. There are a large number of old-fashioned counterfeit enterprises in China, and the frequent squatting of trademarks abroad has led to the phenomenon that Chinese old brands have developed into the international market. According to the statistics of the Trademark Office of the State Administration for Industry and Commerce, since the 1980s, there have been more than 2,000 cases in which the famous trademarks of Chinese old-fashioned enterprises have been squatted abroad, resulting in the loss of nearly 1 billion yuan of intangible assets in China each year.
As early as 1990, Wang Zhihe Company took a company in Beijing to the court on the grounds of trademark infringement, and launched the "China Intellectual Property First Case" and only claimed 1 yuan, the purpose is to shock the infringers. In 2009, the old Chinese brand “Wang Zhihe” was maliciously squatted in Germany by a German company called OKAI.

In addition, the classic Tsingtao beer was maliciously squatted in the United States, Laoganma was pre-registered in the German market, the Chinese medicine brand Tong Ren Tang, Tianjin Baozi brand dog ignored, Yunnan wine brand Du Kang was squatted in Japan, Gui Faxiang 18th Street, Wuliangye, Liubiju, and Guanshengyuan were squatted in Canada, and these Chinese old-fashioned trademarks, which are well-known in China, were squatted overseas. The authentic Chinese old name can’t enter these markets. It is really outrageous. It is really wrong to buy a trademark at a high price.

According to the incomplete statistics of the State Administration for Industry and Commerce, as of May 2016, 15% of domestic well-known trademarks have been squatted abroad, of which more than 80 trademarks have been squatted in Indonesia, and nearly 100 trademarks have been squatted in Japan. 200 trademarks were squatted in Australia, with more than 100 trademark cybersquatting cases each year.

2.4 Brand publicity situation

Brand promotion plays a key role in promoting the spirit of the company and practicing core values. It will help to further deepen the construction of socialist core values, explore the spirit of refining the enterprise, promote the inheritance of
corporate culture, and enhance the soft power of enterprises. By promoting and promoting the core value of the “old brand” enterprise, we can better shape the soul of the enterprise and better transmit the mainstream value of the society.

Beijing Integral Shoes Co., Ltd. uses ERP system for information management in the enterprise, and realizes resource sharing through the company website. It opens the B2C Shangshang Mall, and the internal communication of the company also uses Weibo or WeChat to become the old Chinese brand. Internet information technology has achieved a relatively successful leading brand in brand promotion. However, more old-name merchants have not fully utilized the new media platforms such as WeChat, Weibo, and the Internet for extensive publicity. Their consumer groups tend to still occupy a large proportion of old customers, unable to attract new consumer groups after 90s, and have not used the fan economy. To broaden the customer base and not to pay attention to international propaganda in the development of the international market, the Chinese old-fashioned brand with Chinese cultural characteristics cannot effectively enter the international market.


3.1 Old business concept

At present, the number of Chinese old names recognized by the Ministry of Commerce is 1,128, and most of the old-fashioned enterprises are in poor condition. Many old brands are even in a “zombie” state, and there are no brands in the empty brand. In the list of the world’s top 100 most valuable brands, more than half of the brands in Europe and the United States, and only Guizhou Moutai list on the list\(^2\).
The development of Chinese old-fashioned enterprises has been subject to the lag of concepts and systems. Many old enterprises are obsolete, redundant, and satisfied with the status quo. They lack a management system that is compatible with the modern market economy and lack the motivation to innovate. Outdated products and technologies, restricting the value of the old brands; in the face of rapid changes in the market, some products have not changed in the production process and packaging for decades, which is insufficient to meet the needs of the market, which has led to the market shrinking.

In addition, Chinese old brands rely on pure manual operation and unique craftsmanship to ensure “traditional features”. The business philosophy is “only one, no branch”, and believes that “the ancestral secret recipe” can guarantee the quality of products and become an expansion of the brand management market. The idea of imprisonment, but the continuous expansion of the business scale of the Chinese old-fashioned brand and the strength of the corporate brand can continuously improve the reputation and popularity of the old Chinese brand, in order to better transfer the Chinese characteristics.

3.2 Unclear the property rights system

Many “old-fashioned” enterprises have problems in the process of property rights unclear. Some of the "old-name" enterprises have realized equity diversification after the company’s shareholding system reform, but due to the large proportion of state-owned shares, the administrative intervention has interfered with the management; In another part of the old-fashioned enterprises, in the process of
nationalization to privatization, the equity is too scattered, everyone holds shares, and the employees and shareholders are highly overlapping. There is a gap between the new employees of employees, causing unnecessary internal friction and wasting the enterprise resources of “old brands”.

3.3 Lack of talent funds

Due to the loss of talents and the shortage of funds, the vitality of the old brands has been reduced; most of the old-fashioned enterprises in China have smaller scales and narrow financing channels. The long-term technical means and facilities are backward, which leads to the brain drain of enterprises and the personnel of the society. It is also difficult to be competent, which has led to the aging of many old brands, the low level of education, the loss of vitality within the enterprise, and the serious impact on development. Nowadays, the traditional concept of sticking to "this one alone, no branch" has not kept pace with the advancement of the market, and efforts to improve technology are the right direction for development.

3.4 Unsubstantial brand maintenance

The brand belongs to the core intangible assets of the enterprise, but the fierce competition in the market and the mixed market participants require the old Chinese brand to pay attention to the brand’s trademark maintenance. Due to its lack of emphasis on expanding its business and chain operations, many of the infringing enterprises in the market have carried out illegal business operations under the brand name of the old brand, seriously affecting the brand image of the real old brand, resulting in consumers losing their trust in the brand. Decline
The "China Time-honored Brand" not only counterfeited in China, but also was heavily squatted in many countries abroad. For example, Wang Zhihe was squatted in Germany. Tsingtao Brewery was squatted in the United States. Dogs, Tong Ren Tang, Dukang, and Daughter Red were squatted in Japan. As of January 2017, there were more than 2,000 Chinese brands. Different countries in the world have been squatted, causing economic losses of more than 1 billion yuan each year. It is urgent for the old brand to attach importance to trademark registration and trademark protection. At the same time, it is necessary to strengthen the protection measures for the old Chinese brands.

In addition, some old-fashioned enterprises have failed to uphold the good management philosophy, relaxed the quality control of the products, resulting in the decline of the quality of the products, reducing the brand image of the old brand and ignoring the reputation of their famous trademarks. For example, in 2005, Nanjing Guanshengyuan Food Factory Co., Ltd. produced “old Nanjing Mawuren Mooncake” with a total number of colonies exceeding 25,000/g, far exceeding the national regulations of 1500/g, which was classified as unqualified products; In March 2017, the Laoganma series products were found to have high levels of plasticizer (DIBP/DBP).

3.5 Insufficient promotion of new media

Successful brands not only need to have a prepared brand positioning, but also need to effectively promote brand promotion. Although the old brand has a long history and good brand reputation, the lack of brand promotion is an urgent problem in the face of
the old brand. Some old-fashioned merchants are immersed in the splendid period of the traditional management period. The idea that “the wine is not afraid of the alleys” is widespread. It is only using the propaganda methods of traditional media such as newspapers, word of mouth, and sipping, and the propaganda is not enough, and there are fewer ways. Today, with the rapid development of society and science and technology, the network is developing rapidly and the old name.

4. The inheritance of the brand culture of China

4.1 Brand Culture Story

Every old Chinese brand is a witness of Chinese culture and a witness to history. As an important carrier carrying Chinese civilization, inheriting the ingenuity, concentrating the wisdom of the ancestors, continuing the process technology and embodying the integrity management, the old brand not only has more market value. Historical and cultural values. Today, the old brand is not just a brand, it is more of a culture, and it is more reminiscent of the familiar brand stories.

With a history of 600 years, the founder of Dingniantang, the founder of Ding Henian, is proficient in health education, and he is determined to "do not be a good doctor for Hongyan". He enjoys a high reputation in the medical world, is proficient in poetry and poetry, and has "Ding He "The Year", the most praised is Ding Henian’s great filial character, “Ding Xiaozi Biography” and “Ding Xiaozi’s Poetry” included in “Siku Quanshu” is the story of Ding Henian, which praised Ding Henian sincerely The heart has reached nine days, and Ding Henian’s heart has reached the nine springs. The legendary health master has become the endorsement of the brand. In addition, the
brand stories of Qi Jiguang, Zheng He, Tan Wei and Ren Nian Tang are circulating in the folk [3].

Juvenile Kangxi had a strange disease, and the palace doctors were helpless. The folk Langzhong was able to heal. Kangxi wrote the “Tongzhi Rende, the world to support the health” and gave the Da Yao Tang, the name “Tong Ren Tang”. This is the story of the birth of the old Chinese brand Tong Ren Tang. More stories about Tong Ren Tang have been passed down by folks. Guo Baochang has written a TV series “Da Zhai Men”, which has a high audience rating. This TV series is the story of Tong Ren Tang culture and brand.

Every old brand is telling a story about Chinese culture with history. Each brand story is the essence of Chinese culture.

4.2 Chinese National Spirit

The old Chinese brand should shoulder the historical mission of the new era, become the glory of the country and the business card of China and contribute to the rise of the Chinese brand. As the representative of the Chinese image, Beijing Tongrentang led the employees of the company to study the pharmaceuticals, and finally achieved the standard of “Pills accurate to three grams”, which explained the common tradition of Tongrentang’s morality, discipline and credibility. A people always adhere to the "artisan spirit" and "smart spirit" and unremittingly pursue the spirit of excellence.

4.3 Traditional crafts

The reason why Chinese old brands can be developed so far is mainly because of its unique production process. For Cantonese people, “food in Guangzhou, kitchen out of
Fengcheng.” Fengcheng is located next to Guangzhou, Shunde, and this has The old name of Wu Cuiji, whose history is over forty years old, is the founder of Shunde Wu Zhan. After several generations of meticulous cooking, Wu Zhanji and the first porridge were changed from the original pork balls, beef bladder and pig intestine powder to the current Yaogui, Yuba and Pork bones, but they did not lose the first porridge. the taste of. In addition, the salty pancakes here are also a must, all by hand, crisp outside, chewy inside, very delicious!

4.4 Product Quality and Trademark

Most of Chinese old brands are local business cards with special features. The quality of products can be guaranteed, and consumers can continue to purchase so that the brand can develop.

“Chinese Time-honored Brand” refers to the products and skills or services that have inherited and inherited the outstanding cultural traditions of the Chinese nation in the long-term production and operation, have distinct regional cultural characteristics and historical traces, have unique craftsmanship and management characteristics, and have gained wide recognition from the society. The name of the company that has won a good business reputation, as well as the old brand name "China Timeline" can be the name of the company, or it can be a trademark for successful business registration. Trademark squatting has become a crucial issue.

5. Cultural Promotion and Innovation Suggestions for Chinese Time-honored Brands

5.1 Innovation of Chinese Material Brand Culture
Old-fashioned merchants can no longer hold the traditional idea that “the wine is not afraid of the deep alley”. With the advancement of technology, it is necessary to keep up with the needs of market development. Efforts to improve the quality of products to ensure the development of enterprises. The old brand is the result of long-term development of the company. It has a high degree of brand recognition in the minds of consumers and must be passed down. However, with the constant changes in the market, the old-fashioned enterprises should attach great importance to innovations in products and processes, increase investment in science and technology research and development, improve technical equipment, and use scientific process management to solve the problems of traditional process inheritance.

Old-fashioned brands need to inherit and innovate traditional skills. They can also cooperate with universities to build a “artisan innovation studio”. The old-fashioned masters pass on the craftsmanship and skills to the school to train future professionals and heirs of craftsmanship. Old-fashioned enterprises need to constantly keep up with the times to innovate traditional technological processes, and thus improve the technological level and product quality of the old-fashioned products [4].

Establish a set of service specification system that belongs to the enterprise itself. Selling the product is only half of the success, and the subsequent service must be guaranteed. The use of supervision and control methods to strengthen on-site supervision and management of services, and comprehensively improve customer satisfaction.

5.2 Innovation of Chinese Brand-name Brand Behavior Culture
5.2.1 Brand promotion and communication

As a non-material cultural heritage and a special industry with legendary and profound historical and cultural heritage, the old-fashioned enterprises are attracting more and more attention from the society and people, and their brand value is also constantly improving. In the era of digital marketing, the use of “Internet + old name”, the effective combination of online and offline, the development of old-fashioned e-commerce new media form, a new carrier platform, to inject new vitality into the spread of “old brand”, at the same time, relying on the “Belt and Road” “Strategic platform”, actively promote the internationalization of the old brand, in order to better expand brand awareness, drive the new development of corporate marketing, promote the local economic development of the old name and create a faster publicity channel.

5.2.2 Brand Culture Tourism

The brand of old brands not only carries commercial value, but also carries profound historical and cultural connotations and historical and cultural values. It actively seeks assistance from relevant ministries and commissions of the Ministry of Commerce, etc., and intensifies efforts to support the development of the old brands and increase financial support for the old brands. Strength. Create a government-led brand-old display platform for old brands, amplify the aggregation effect, and strengthen the integration of old brands and cultural tourism, such as encouraging the construction of “National Chinese Brand-name Brand Culture Demonstration Zone” in the more concentrated areas of the old-name enterprises to promote the old brand Cultural tourism industry.
5.3 Innovation of brand system culture

5.3.1 Brand R&D System Innovation

The system innovation system is the soul of an enterprise. In this innovation, the enterprise is the main body, and the driving force for innovation is the enterprise’s demand for the technical system. As far as the current situation of Chinese old brands is concerned, to solve the problem of institutional innovation, it is necessary to guide government policies, to arouse the enthusiasm of enterprises and to create a better environment for enterprise system innovation in the coming year.

5.3.2 Brand Promotion System Innovation

Led by the business sector, the company will formulate an old-fashioned promotion policy, joint development and reform, education, human resources and social security, intellectual property rights, tourism, and other relevant departments. Through the consolidation of various resources, we will establish a solid and effective brand-name construction and promotion mechanism. To form a strong synergy for the development of the old brand name, the establishment of the “China Time-honored Brand Association”, promote the “Chinese old-fashioned brand network platform”, and create the "China Time-honored Brand Culture Museum" to showcase the history, brand culture and brand story of the old Chinese brand, and effectively launch All kinds of social forces work together to do a good job in protecting the new era and promoting the development of the old brand. Encourage the literary and art departments to produce old-fashioned TV feature films, micro-movies, publish old-name books, issue Chinese old-fashioned consumption guides, manuals and maps,
form a comprehensive promotion system from the whole society, create a good consumer environment and social atmosphere, and As an integral part of the national “Belt and Road” regulation, the old brand has formed a new idea of promoting the Chinese culture to the international community.

5.4 Innovation in brand concept

5.4.1 Brand positioning

Brand positioning refers to the market position that the enterprise stipulates different from the competitors according to the characteristics and style of the brand and the characteristics of the customers in the target market. Many old brands already exist, but with the changes in the market environment, the old brands are getting farther away from the “brand” [5]. In order to further position the brand, one is to enhance the core competitiveness of the company and strengthen the cooperation of domestic enterprises. The second is to launch dual mergers and acquisitions at home and abroad, so that consumers can identify the personality of their brands and let consumers build good brands. Relationships enhance the value of the brand.

5.4.2 Brand spirit

In the two sessions of 2017, the “artisan spirit” once again became a hot topic. The meeting proposed to support the inheritance of old brands and innovative traditional techniques, the integration of online and offline development, innovative management mode, strengthen the protection of the original site, promote the development of old brands, deepen the reform of the property rights of the old-fashioned enterprises, pay attention to the value of the old brand, and promote the active matching of the old
capital market. If the old name wants to rejuvenate the youth, it needs the national level to make the overall layout, deepen the understanding of the old-fashioned enterprises in the minds of consumers, and make the old name not become a synonym for backwardness in the ever-changing consumer market.

5.4.3 Brand Mission

Old-fashioned enterprises can’t rely on the old and the old, and must carry forward the mission and responsibility of the first righteousness, the morality first, keep pace with the times, and constantly innovate and develop; strengthen the sensational guidance, create a rational consumption environment, and let the high-quality national brands and products be respected and trust. The government should speed up the implementation of the reform measures for state-owned and old-fashioned brands, promote the inheritance of the old-fashioned inheritance relationship, and achieve the sustained and healthy development of the old brand.

References

1. Ministry of commerce of the People’s Republic of China.
The Research on the Loyalty of Personal Car Insurance Service

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Abstract

The car insurance business is the most important cash flow resource for insurance companies, it is also the nucleus to maintain the scale effect and keep the organization to operate smoothly. Due to the characteristics of personal car insurance business which include diversified customers background and sustainable development potential, it is the most profitable part of car insurance industry. This paper tried to examine the relationship between personal car insurance service quality and customer loyalty and to explore the mediating effect of customer satisfaction.

A questionnaire was designed and distributed to 221 personal car insurance clients in Zhuhai area of Guangdong Province, China. Among them, 208 copies returned and 202 of them were valid. The collected data were then analyzed using Amos 22.0.

The results show that both service quality and customer satisfaction have significant positive impact on the customer loyalty, and the customer satisfaction have partial mediating effect on the relationship of service quality and customer loyalty of personal car insurance.

Key words: Car Insurance; Service quality; Customer satisfaction, Customer loyalty
1. Introduction

With the improvement of people’s living standard, the insurance industry in China has rapid development during the past years. The data in “The table of the statement in the property insurance companies’ original insurance premium income in 2018” and “The report of the insurance statistics in 2018” which released by China Bank Insurance Regulatory Commission show that the original premium income of 88 property insurance companies in 2018 was 1175.569 billion yuan, an increase of 11.52% over the same period last year. In property insurance business, the premium income of the original insurance of compulsory traffic insurance was 203.438 billion yuan, an increase of 8.85% over the same period last year. From the insurance amount, the insurance amount of car insurance is 211.26 trillion yuan, an increase of 24.92% over the same period last year; from the number of new insurance policies, 448 million car insurance items, an increase of 12.09%. In the type of insurance, China's car insurance market is composed of compulsory car insurance and car commercial insurance. Compulsory car insurance is a compulsory type of insurance in China's car insurance. The commercial car insurance is divided into basic risks and additional risks. Therefore, the increasing of car ownership has laid a solid foundation for the rapid development of car insurance.

According to the relative researches before, most scholars pay their attentions to the mature industry. In China, only a few of scholars has some researches on personal car insurance, which is the industry just rising and has a high level of market segmentation. The paper holds the opinion that during the process of the transition from price competition-oriented to service competition-oriented in Chinese car insurance market, It is necessary to apply the mature research results of service quality to car insurance market in China. Then the
paper will amend and perfect the existing service quality measurement scale according to the characteristics of car insurance market which has the strong fluidity of insurance subjects, the short duration of insurance and the large volume of business. It will also formulate the exclusive service quality measurement scale of Chinese personal car insurance industry and measure the degree of customers’ perception to the service quality of car insurance. Finally, the paper will have a research on the relative relationships among service quality, customer satisfaction and customer loyalty to give a theoretical foundation and provide the empirical support to the transition of future competitive mode in Chinese car insurance industry and also contribute to enriching the existing theoretical research on service quality.

2. Literature review

2.1 Service quality

The research on service quality is later than the research of product quality. The judgement of service quality is not only assessed by the service results, but also pay more attention to the process of the service, especially the subject feeling of customers (Brown, Churchill&Peter, 1993; Holbrook&Corfman, 1985). This is related to the important features of the intangibility, inseparability, perishability and non-storability of service (Regan, 1963; Parasuraman, Zeithaml&Berry, 1985). Lehtinen&Lehtinen(1991) hold the opinion that service quality has two split ways because of the different types of services. The one is divided them into three parts: entity quality, interaction quality and result quality. The other is process quality and result quality. There are two popular ways of measuring the service quality (Parasuraman, Zeithaml&Berry ,1988). This model first covered 10 dimensions and 97 measurement indicators, as it is reduced to 5 dimensions and 22
indicators through continuous empirical study later. These five dimensions are tangibility, reliability, assurance, responsiveness and empathy. SERVQUAL follows the two-dimensional theory proposed by Grönroos which emphasized each dimension should measure customers’ expectations before they’re served and their feelings after the service respectively. The second model is SERVPERF (Cronin&Taylor, 1994) which has the same measure dimensionality and indicators as SERVQUAL. However, the researcher only needs to measure customers’ perception of service for each dimension. In the study of Roy (2018) showed that the service quality was the most important factor of customer engagement behaviors and service firms (especially banks and mobile service providers) were becoming convenience-oriented as this acts a source of sustainable competitive advantage.

2.2 Customer satisfaction

The existing definition of customer satisfaction is mainly based on two ways of thinking. The first one emphasizes that customer satisfaction is the feeling afterwards about their purchasing behavior, that is, whether the service is satisfied or not is formed after the service is completed (Oliver, 1997; Philip, 1994); the other emphasizes that customer satisfaction is the post-service evaluation of part of the service process, emphasizing cognition. It has been generated in the service process (Anderson, Fornell & Lehmann, 1994; Engel, Blackwell & Miniard, 1995). The service quality affected the customers satisfaction and correctly identifying key SQ attributed that customers value the most was also crucial to increasing CS. (Ju, Back & Choi, 2019). We must notice that customer satisfaction is not only related to service quality but also related to other factors, such as, service price and customer loyalty (Cronin, Brady&Hult, 2000; Sureshchandar, Rajendran
C&Anantharaman, 2002). Nevertheless, Singh(1991) thought that the formation of customer satisfaction can be studied from several dimensions, and the assessment of dimension is related to the features of service, as different industries need to design different gradient assessments. Although academia lacks the unified scale to measure customer satisfaction, ACSI(American Customer Satisfaction Index) which in widespread use measures customer satisfaction through different dimensions. Therefore, this thesis will also give an assessment with multi-dimensional way.

2.3 Customer loyalty

The research of customer loyalty started with customer behavior loyalty which means whether customers will continue to purchase the service and some related ancillary service or not after purchasing the service, as they will not collect the information of service providers of similar businesses (Fornell,1992; Oliver,1997). However, the definition is limited, because the frequency of many services is not high, as it is not reasonable to present customers’ behavior of starting spending again as the criterion. Therefore, some scholars gradually explore customer attitude loyalty on the basis of behavior loyalty. Jones&Sasser (1995) hold the opinion that the important reflections of customer loyalty are the their feelings of dependence and the sense of belongings which produced by the service of company, staff, and stores, etc. Cronin, Brady M K& Hult (2000) proposed that customer loyalty includes customers’ willingness which they are willing to recommend this service to others. Kumar, Scheer&Kotler（2000）thought that customers’ sensitivity of price can be lowered by their loyalty, so that the profit space of service providers can be enhanced.

The paper will measure customer behavior loyalty and attitude loyalty at the same time, because customer loyalty is one of the ultimate goals of service. Car insurance has a good
adaptation for the two dimensions, not only because it is the high frequency consumption which they need to purchase every year, but also the typical service which the performance is behind the payment, as customers need to refer to the experience and suggestions of others before purchase.

2.4 Service quality and customer satisfaction

As indicated by Swar and Sahoo (2012), customers are satisfied when firms are able to deliver services that meet the expectations of the customers. High perceived quality therefore, leads to a more satisfied customer. Scholars generally agree that service quality plays a prepositive role in customer satisfaction, that is, the improvement of service quality contributes to the improvement of customer satisfaction, which has been confirmed by numerous empirical studies (Tam, 2004; Caruana, 2002; Levesque & McDougall, 1996). Researchers like Tax and Brown (1998) have pointed out that customer satisfaction is highly dependent on service quality. Zeithaml & Bitner (1996) pointed out that customer satisfaction is affected by a variety of factors, and service quality is only one of them. Other variables include price, personal factor, scene factor, etc. Service quality is a very influential variable in customer satisfaction, and thus very crucial for banking sector to maintain and improve their market share (Muyeed, 2012). Based on the evidence from the literature review, the hypotheses are formalized as follows:

H1: The tangibility of the service quality of personal car insurance has a positive effect on customer satisfaction.

H2: The reliability of the service quality of personal car insurance has a positive effect on customer satisfaction.

H3: The assurance of the service quality of personal car insurance has a positive effect on
customer satisfaction.

H4: The responsiveness of the service quality of personal car insurance has a positive effect on customer satisfaction.

H5: The empathy of the service quality of personal car insurance has a positive effect on customer satisfaction.

2.5 Service quality and customer loyalty

Parasuraman, Zeithaml & Berry (1985) emphasized the important role of service quality in customer loyalty for many times in their research. Excellent service will generate positive behavioral intention for customers, thus forming their loyalty to merchants. Harris & Goode (2004) found that the quality of web services has a remarkable influence on the customers’ trust and satisfaction of suppliers, and then affects their loyalty. Studies like Muyeed (2012) showed that service quality has a positive and direct relationship with customer loyalty. However, this relationship is further strengthened by a high level of customer satisfaction. Petrick & Backman (2002) believe that service quality will have a positive effect on customer satisfaction, and it is the improvement of customer satisfaction that will stimulate customers' repurchase behavior. Customer satisfaction is an important intermediate variable of service quality on customer loyalty. In today’s dynamic and competitive business environment, customer loyalty has become a very difficult task for many firms. Word-of-Mouth recommendation and repurchase intention are the two broad dimensions of customer loyalty (Roberts-Lombard, 2011), and researches have established a strong relationship between service quality and these customer loyalty dimension (Karatepe, 2011; Wieseke, Geigenmuller, & Kraus, 2012). We found that reliability and responsiveness impact patients’ satisfaction. Patient's satisfaction was directly related to patients’ loyalty
to the hospital (Meesala & Paul, 2018). Based on the evidence from the literature review, the hypotheses are formalized as follows:

H6: The tangibility of the service quality of personal car insurance has a positive effect on customer loyalty.

H7: The reliability of the service quality of personal car insurance has a positive effect on customer loyalty.

H8: The assurance of the service quality of personal car insurance has a positive effect on customer loyalty.

H9: The responsiveness of the service quality of personal car insurance has a positive effect on customer loyalty.

H10: The empathy of the service quality of personal car insurance has a positive effect on customer loyalty.

2.6 Customer satisfaction and Customer loyalty

Many scholars believe that customer loyalty is the direct result of customer satisfaction, which has been verified by a large number of empirical analyses. Ngobo (1999) showed that customer satisfaction can enhance customer loyalty, but it is not cost-effective to provide customers with services beyond the scope of satisfaction, that is, services beyond 100% satisfaction. Russell-Bennett and Rundle-Thiele (2004), a more satisfied customer is likely to recommend the product or organization to others. Other studies also added that, more satisfied customers are likely not just to engage in word of mouth, but to also repurchase the product (for example, Kandampully & Suhartanto, 2000; Roberts-Lombard, 2011). Jones & Sasser (1995) conducted empirical analysis on automobile, communication, transportation and other fields and found that all variables of customer satisfaction have a
positive impact on customer loyalty. In the advertising industry, Aspizain (2016) found that customer satisfaction had a significant effect on customer loyalty. Ampadu et al. (2015) still found a significant effect on customer satisfaction on customer loyalty in the telecommunication industry. Based on the evidence from the literature review, the hypotheses is formalized as follows:

H11: Customer satisfaction has a positive effect on customer loyalty.

Based on the theoretical analysis and literature review, the research model as follows:

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**3. Research methods**

3.1 Scale selections

The service quality, we use the scale put forward by Cronin & Taylor(1994). Customer
satisfaction, we mainly use the ACSI(American Customer Satisfaction Index). The customer loyalty, we use the scale put forward by Anderson and Srinivasan(2003).

3.2 Sampling design

According to Gorsuch (1983) and Hinkin, Tracey & Enz (1997) think that the number of subjects involved in the study and the number of participants in the survey should be at least 1: 5. so the number of sample should be 155-310. This study mainly use judgment sampling, it is a kind of nonprobability sampling method, which is choose by the market researcher according to the experience judgment.

3.3 Questionnaire distribution

A questionnaire was distributed through Internet and field to 221 personal car insurance clients in Zhuhai area of Guangdong Province, China. Among them, 208 copies returned and 202 of them were valid.

4. Data analysis

4.1 Descriptive Analysis

In the 202 valid data, there are 80 women and men 122. Proportion, women accounted for about 39.6% and men accounts for about 60.4%. From the age level, it can be seen that 30-39 is the most important age accounts for 54%, followed by the age under 30 (32.2%). It indicates that the overall user is younger in this survey. In terms of education, the proportion of those with bachelor's degree or above reached 73.8%. This shows that the respondents have a higher degree of education. From the perspective of monthly income, those whose monthly income is more than 20,000 yuan account for the largest proportion, accounting for 32.7 percent, followed by 5,000 -10,000 yuan of respondents, accounting for 23.3 percent. In terms of income, the interviewees have a higher income and are able
to afford car maintenance. This is also in line with the purpose of this investigation.

4.2 Reliability analysis

This research adopted Cronbach's Alpha coefficient to verify the reliability of internal consistency in the scale. The minimum value of reliability in the research has researched 0.910 which is greater than 0.9. So, the structure of the questionnaire is good and the data has high reliable.

4.3 Validity analysis

The validity is used to measure whether the research tools used can really study what we need. This paper mainly use the content validity. Content validity, also known as logical validity, refers to the degree to which the item is appropriate for the content and scope of the item to measurement. In this study the scales comes from the mature questionnaire, that many scholars are have used. So, the design of the questionnaire items in this research has a fair degree of content validity.

4.4 Correlation analysis

The results of correlation analysis as shown in table 1.

<table>
<thead>
<tr>
<th></th>
<th>Mean value</th>
<th>Standard deviation</th>
<th>Tangibility</th>
<th>Reliability</th>
<th>Assurance</th>
<th>Responsiveness</th>
<th>Empathy</th>
<th>Customer satisfaction</th>
<th>Customer loyalty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tangibility</td>
<td>4.072</td>
<td>0.854</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reliability</td>
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<td>0.796</td>
<td>.832**</td>
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</tr>
</tbody>
</table>

Table 1 correlation analysis
4.5 Measurement Model Results

The research adopted SEM using AMOS22.0 to give the assessment and test to the parameter in this model. As the data has shown in table 2, the results of the model of confirmatory factor analysis agreed with the actual data, the adaptive effects are perfect and the target variable can reflect the constructs trait which needs to be measured effectively.

Table 2: The Table of the Construct Validity in Factor Model

<table>
<thead>
<tr>
<th>Latent Variable</th>
<th>Measured Variable</th>
<th>Factor Loading</th>
<th>C.R.</th>
<th>P</th>
<th>Composite reliability</th>
<th>AVE</th>
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</thead>
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<td>Assurance</td>
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<tr>
<td>Customer loyalty</td>
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<td></td>
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<td></td>
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<td></td>
<td>yxx1</td>
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<td></td>
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<td></td>
<td>zcd6</td>
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<td>17.920</td>
<td>***</td>
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<td></td>
</tr>
</tbody>
</table>

### 4.6 SEM Analysis

The results have shown in table 3 after with SEM Analysis.

#### Table 3 Initial analysis of the model revised

<table>
<thead>
<tr>
<th>Model</th>
<th>( P )</th>
<th>CMIN/DF</th>
<th>GFI</th>
<th>AGFI</th>
<th>NFI</th>
<th>TLI</th>
<th>CFI</th>
<th>IFI</th>
<th>RFI</th>
<th>RMSEA</th>
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</thead>
<tbody>
<tr>
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<td>( &gt;0.90 ) ,&lt;0.90</td>
<td>( &gt;0.90 ) ,&lt;0.90</td>
<td>( &gt;0.90 ) ,&lt;0.90</td>
<td>( &gt;0.90 ) ,&lt;0.90</td>
<td>( &gt;0.90 ) ,&lt;0.90</td>
<td>( &gt;0.90 ) ,&lt;0.90</td>
<td>( \leq 0.08 )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model fitting values</td>
<td>0.000</td>
<td>4.605</td>
<td>0.600</td>
<td>0.530</td>
<td>0.764</td>
<td>0.785</td>
<td>0.804</td>
<td>0.805</td>
<td>0.741</td>
<td>0.135</td>
</tr>
</tbody>
</table>

According to the degree of model fit results in table 3, it can be concluded that the degree of model fit is not good. The initial model is revised step by step according to the modified index and referring to the specific situation to form the modified model, as shown in figure 2.

#### Figure 2 Modified Model
Modified model adaptation analysis:
If the chi-square degree of freedom ratio is less than 3, the model is acceptable; if the chi-square degree of freedom ratio is >3, the model needs to be modified, and the significance probability P>0.05. GFI, AGFI, NFI, TLI, CFI, IFI and RFI>0.90 indicate that the model fits well. RMSEA 0.06 indicates that the model fitting degree is good, and RMSEA 0.08 indicates that the model fitting degree is acceptable. The chi-square degree of freedom ratio of the fitting results of this model =1.916<3, GFI, AGFI, NFI, TLI, CFI, IFI and RFI are all greater than 0.90, RMSEA<0.06, indicating that this model has a good adaptability (see table 4).

Table 4 Adaptation analysis of the model revised

<table>
<thead>
<tr>
<th>Model</th>
<th>$P$</th>
<th>CMIN/DF</th>
<th>GFI</th>
<th>AGFI</th>
<th>NFI</th>
<th>TLI</th>
<th>CFI</th>
<th>IFI</th>
<th>RFI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference Value</td>
<td>&gt;0.05</td>
<td>&lt;3</td>
<td>&gt;0.90</td>
<td>&gt;0.90</td>
<td>&gt;0.90</td>
<td>&gt;0.90</td>
<td>&gt;0.90</td>
<td>&gt;0.90</td>
<td>&gt;0.90</td>
<td>≤0.08</td>
</tr>
<tr>
<td>Model fitting values</td>
<td>0.068</td>
<td>1.916</td>
<td>0.936</td>
<td>0.904</td>
<td>0.918</td>
<td>0.952</td>
<td>0.959</td>
<td>0.959</td>
<td>0.905</td>
<td>0.038</td>
</tr>
</tbody>
</table>

Table 5 SEM Path Coefficient
<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Independent Variable</th>
<th>Standard Path Coefficient</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Satisfaction</td>
<td>Tangibility</td>
<td>-0.82</td>
<td>0.007</td>
</tr>
<tr>
<td>Customer Satisfaction</td>
<td>Reliability</td>
<td>-0.83</td>
<td>0.004</td>
</tr>
<tr>
<td>Customer Satisfaction</td>
<td>Empathy</td>
<td>-0.68</td>
<td>***</td>
</tr>
<tr>
<td>Customer Satisfaction</td>
<td>Assurance</td>
<td>-0.76</td>
<td>0.006</td>
</tr>
<tr>
<td>Customer Satisfaction</td>
<td>Responsiveness</td>
<td>0.67</td>
<td>0.008</td>
</tr>
<tr>
<td>Customer Loyalty</td>
<td>Customer Satisfaction</td>
<td>0.70</td>
<td>***</td>
</tr>
<tr>
<td>Customer Loyalty</td>
<td>Empathy</td>
<td>0.81</td>
<td>***</td>
</tr>
<tr>
<td>Customer Loyalty</td>
<td>Reliability</td>
<td>0.69</td>
<td>0.012</td>
</tr>
<tr>
<td>Customer Loyalty</td>
<td>Assurance</td>
<td>0.75</td>
<td>0.027</td>
</tr>
</tbody>
</table>

*Note: ***P<0.001*

**Table 6** Decomposing results of SEM Path Coefficient

<table>
<thead>
<tr>
<th>Influence Path</th>
<th>Standardized Direct Effects</th>
<th>Standardized Indirect Effects</th>
<th>Standardized Total Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tangibility----&gt;Customer Satisfaction</td>
<td>0.82</td>
<td>——</td>
<td>0.82</td>
</tr>
<tr>
<td>Reliability----&gt;Customer Satisfaction</td>
<td>0.83</td>
<td>——</td>
<td>0.83</td>
</tr>
<tr>
<td>Reliability----&gt;Customer Loyalty</td>
<td>0.69</td>
<td>0.58</td>
<td>1.27</td>
</tr>
</tbody>
</table>
According to table 5 and table 6, combined with figure 2, it is concluded that the tangibility, reliability, assurance, responsiveness and empathy of service quality have a positive effect on customer satisfaction. The figures are 0.82, 0.83, 0.76, 0.67, 0.68 respectively. The reliability, assurance and empathy of service quality have an effect on customer loyalty. The figures are 0.69, 0.75, 0.81 respectively. There is a positive correlation between customer satisfaction and customer loyalty. The figures is 0.70. At the same time, it is found that the tangibility and responsiveness of service quality have no effect on customer loyalty.

The results of hypothesis testing is shown in table 7 according to the above analysis.

<table>
<thead>
<tr>
<th></th>
<th>Customer Satisfaction</th>
<th>Customer Loyalty</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Assurance----&gt;Customer</td>
<td>0.76</td>
<td>0.53</td>
<td>1.28</td>
</tr>
<tr>
<td>Satisfaction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assurance----&gt;Customer</td>
<td>0.75</td>
<td>0.76</td>
<td>0.67</td>
</tr>
<tr>
<td>Loyalty</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Responsiveness----&gt;</td>
<td>0.67</td>
<td>0.67</td>
<td></td>
</tr>
<tr>
<td>Customer Satisfaction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Empathy----&gt;Customer</td>
<td>0.68</td>
<td>0.81</td>
<td>1.29</td>
</tr>
<tr>
<td>Satisfaction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Empathy----&gt;Customer</td>
<td>0.81</td>
<td>0.48</td>
<td></td>
</tr>
<tr>
<td>Loyalty</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 7: The results of hypothesis testing
<table>
<thead>
<tr>
<th>Item</th>
<th>Research Hypothesis</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>The tangibility of the service quality of personal car insurance has a positive effect on customer satisfaction.</td>
<td>supported</td>
</tr>
<tr>
<td>H2</td>
<td>The reliability of the service quality of personal car insurance has a positive effect on customer satisfaction.</td>
<td>supported</td>
</tr>
<tr>
<td>H3</td>
<td>The assurance of the service quality of personal car insurance has a positive effect on customer satisfaction.</td>
<td>supported</td>
</tr>
<tr>
<td>H4</td>
<td>The responsiveness of the service quality of personal car insurance has a positive effect on customer satisfaction.</td>
<td>supported</td>
</tr>
<tr>
<td>H5</td>
<td>The empathy of the service quality of personal car insurance has a positive effect on customer satisfaction.</td>
<td>supported</td>
</tr>
<tr>
<td>H6</td>
<td>The tangibility of the service quality of personal car insurance has a positive effect on customer loyalty.</td>
<td>Not supported</td>
</tr>
<tr>
<td>H7</td>
<td>The reliability of the service quality of personal car insurance has a positive effect on customer loyalty.</td>
<td>supported</td>
</tr>
<tr>
<td>H8</td>
<td>The assurance of the service quality of personal car insurance has a positive effect on customer loyalty.</td>
<td>supported</td>
</tr>
<tr>
<td>H9</td>
<td>The responsiveness of the service quality of personal car insurance has a positive effect on customer loyalty.</td>
<td>Not supported</td>
</tr>
<tr>
<td>H10</td>
<td>The empathy of the service quality of personal car insurance has a positive effect on customer loyalty.</td>
<td>supported</td>
</tr>
<tr>
<td>H11</td>
<td>Customer satisfaction has a positive effect on customer loyalty.</td>
<td>supported</td>
</tr>
</tbody>
</table>

5. Conclusion

5.1 Research results and significance

This study explores the relationship between service quality, customer satisfaction and customer loyalty of personal car insurance business. A survey is conducted on individual
car insurance users. Through hypothesis testing and analysis, it is concluded that the tangibility, reliability, assurance, responsiveness and empathy of service quality have a positive effect on customer satisfaction. The reliability, assurance and empathy of service quality have an effect on customer loyalty. There is a positive correlation between customer satisfaction and customer loyalty. At the same time, it is found that the tangibility and responsiveness of service quality have no effect on customer loyalty, and further research and analysis can be carried out in a more detailed manner, which provides some academic reference and lays a foundation for subsequent assumptions. The enterprises and their managers pay more attentions to customer loyalty all the time. Under the circumstances of fierce competition in today’s car insurance, managers can base on the relationships among service quality, customer satisfaction and customer loyalty which was found in this paper to conduct practice and improve the service quality. Thus, customer satisfaction and loyalty can be improved. Here are the measures suggested below which based on the research:

1) The environment of the office lobbies should be comfortable and the service function area should be perfect. Uniformed employees should have good appearance. Also, the distribution of companies’ sales network should be reasonable and their business processing should be convenient, as the garage which cooperated with the insurance company should have advanced facilities and good environment.

2) The personal skill and the service attitude of salesmen and claim personnel should be improved. The companies should provide regular knowledge training for professional insurance and claim settlement, as improve the professional qualities of salesmen, customer services and claim personnel. It also requires that employees
should give general and exact introductions and explanations in the process of sales. The whole process design of the service which from insuring to claim settlement should be convenient, speedy and not redundant. The phenomena of underpayment which means the decreasing of compensation amount cannot be exist.

3) The claim settlement service which is fast and accurate should be created and employees should get the information of customers in time, track and guide the process of loss assessment. Also, they should also arrange the repair for customers as soon as possible. After the loss assessment of the case, they should also track the processing speed of case in claim system. After the claim settlement, they should collect the opinions of customers for it and give the feedback to the department concerned.

4) The company should keep the constant contact with their customers and focus on their special needs. Companies should have their own complaint channels which can accept and handle the complaints sincerely. The things which they have promised to the customers can be handled in time. Finally, they also provide some distinguished products and services, such as succor, commission for annual vehicle inspection, designated drivers and the secretary of the car owner, etc.

5.2 Research limitations and prospects

On the basis of previous studies, this paper studies the relationship between service quality, customer satisfaction and customer loyalty in personal auto insurance business in the insurance industry. But there are still many shortcomings. First of all, it is necessary to expand the research sample. Although most of the interviewees this time are interviewees with insurance experience, the sample cannot fully represent the consumers' insurance
intention, because the selected consumers are in the same city, so the selected consumers are not representative to a large extent. In the future, the research scope can be expanded to analyze consumers in different regions and master more comprehensive data.

6. Acknowledgments

First, thanks to Macau University of Science and Technology for giving me the opportunity to further my study. Second, thanks to Professor Tingyang Liu and professor Yongdong Shi. Without them may not have this paper. Last thanks to my family and classmates, I am very appreciate for their support and trust.

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Research on Perception Image of Hubei Tourism Destination

Based on Content Analysis

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² Beijing University of Posts and Telecommunications
³ Hubei Provincial Industrial Policy and Management Research Center

Abstract

The image of a tourist destination is the life of a destination, and its accurate grasp is the premise of effective strategic positioning and marketing for the destination. Based on ROST Content Mining 6 software, this study analyzes the online texts (Travels and comments) and pictures in Hubei travel destination travels, and extracts the attributes and characteristics of tourists’ perceptions of Hubei tourism destinations. The results show that: (1) The image of Hubei tourism destination can be classified into six major themes: tourism attraction, tourism environment atmosphere, history and culture, tourism service and facilities, tourism experience and tourism resource evaluation; (2) tourists The recognition of Hubei tourism destinations mainly comes from tourism attractions, followed by tourism environment atmosphere, tourism services and facilities; (3) Wuhan is the most important location environmental factor in the perception image of Hubei tourism destinations; (4) Cultural history Tourists have a lower proportion of the perception image of Hubei tourism destinations, and tourists have no particularly obvious characteristics in the perception of tourism experience; (5) Tourists with tourist attractions and tourism accommodations have higher photo index; (6) Tourists have the highest positive emotions and less negative emotions in Hubei’s
destination image. Finally, it also puts forward suggestions for improving the image of Hubei tourism destinations, and provides decision-making reference for Hubei tourism related policy formulation.

Keywords: tourism destination; perceived image; content analysis; destination branding

1. Introduction

The image of a tourist destination is the life of the destination, and its accurate grasp is the premise of effective strategic positioning and marketing for the destination. In recent years, the slogans and logos proposed by tourist destinations across China have been everywhere. Regrettably, however, the use of these meaningless slogans and logos is often a waste of millions of dollars (Morrison and Li Feifei, 2013)[1]. At the same time, China’s tourism image planning still lacks the awareness of image measurement and scientific measurement methods and procedures, and the subjective tendency is serious (Ding Chenjuan et al., 2007)[2]. The image of the tourist destination largely reflects the preferences of real tourists and potential tourists. To accurately grasp the image of a tourist destination, it is necessary to carry out quantitative empirical research on the reality and potential tourists.

As an important province in central China, Hubei Province has developed rapidly in recent years with its rich tourism resources. As of the end of 2017, Hubei Province had 11 5A scenic spots, 124 4A scenic spots, 177 3A scenic spots, and 368 A-level scenic spots. According to the “Statistical Communiqué on National Economic and Social Development of Hubei Province in 2018”, in 2018, the number of domestic
tourists in Hubei Province was 727 million, an increase of 13.8%; the domestic tourism income was 634.433 billion yuan, an increase of 15.0%. Hubei Province is leaping from “a province with a large tourism resource” to a “strong province for tourism economy” and strengthening the image of Hubei tourism destination is undoubtedly the key. Since the slogan of “Lingxiu Hubei” tourism image theme was put forward in Hubei Province in 2010, the “Lingxiu Hubei Tourism Image Enhancement Project” has been continuously implemented, and the two brands of “Zhiyin Hubei, Chuchu Moving” and “Lingxiu Hubei, Extremely Eyes” have been proposed. However, for a long time, Hubei tourism lacks accurate positioning, and tourists’ perception of the image of Hubei tourism destination is rather vague. “Thirteenth Five-Year Plan for Tourism Development in Hubei Province” (2016) pointed out that one of the urgent problems in the development of tourism in Hubei Province is that “the external image still needs improvement.”

This study uses content analysis method to empirically study the attributes and characteristics of Hubei tourism destinations, extract the attributes and characteristics of tourists’ perception of Hubei tourism destinations, and propose suggestions for improving the image of Hubei tourism destinations. Relevant policy development provides a basis for decision making.

2. Research review

The study of the image of foreign tourist destinations began with the study of John Hunt (1971). It was officially introduced into China in the 1990s and has become one of the most popular topics in the field of tourism research. Destination image for tourists’
expectations (Wang Chunyang, Qu Hailin, 2013)[3], tourism destination selection decision (Wang Wei, Wang Xuejun, 2011)[4], tourist satisfaction (she shengxiang, etc., 2106)[5], willingness to revisit and The importance of word-of-mouth effects (Bai Kai, Guo Shengwei, 2010)[6] and other tourism decisions and behaviors has been widely recognized (Prayag and Ryan, 2012)[7].

2.1 Definition of tourist destination image

Scholars have never been able to form a consistent view of the definition of destination image. According to Fakeye and Crompton (1991), the destination image is the sum of the views and impressions of a series of beliefs held by a place. This definition is widely recognized. Echtner and Ritchie (1993) summarize the destination image as a tourist’s personal impression and a perception of the overall characteristics[8]. Baloglu and McCleary (1999) suggest that the destination image is the psychological expression of the tourists’ perceptions, perceptions, emotions and comprehensive perceptions of specific destinations[9]. Bai Kai (2018) believes that the destination image is the impression and understanding of potential or realistic tourists on the destination, and this understanding is constantly changing due to the influence of individual cultural values and the external environment[10]. However, Gallarza et al. (2002) pointed out that the concept of destination image has both subjectivity and comparative characteristics, that is, there are differences in destination images held by different individuals, and the destination image held by the same individual will also change according to the change of the object it perceives[11]. It can be seen that scholars’ definition of the image of tourism destinations is based on the perspective of tourists.
This study defines it as the perception of tourists’ various attributes of specific destinations.

2.2 The dimension of the perceived image of the tourist destination

The perceived image dimension of tourism destinations is the main way to measure and evaluate destination images. Scholars have proposed different sensory image dimensions of tourism destinations. Among them, Beerli and Martin (2004) have the most influence on the division of perceived image dimensions of tourism destinations: natural resources, public infrastructure, tourism infrastructure, tourism and leisure, cultural/historical and artistic, political and economic factors, nature environment, social environment and local atmosphere[12]. Wu Jinfeng (2014) divides the destination perception image into five categories: tourism attraction, infrastructure, leisure and entertainment, tourism environment and local atmosphere[13]. Xu Feifei et al. (2018) divided the destination perception image dimensions into six categories: tourism attractions, public infrastructure, tourism infrastructure, leisure and entertainment, tourism environment and local atmosphere[14]. Zhang Wenting and Luo Peicong (2017) summarized the perception image of Yongding Tulou tourism into seven themes of tourism attraction, tourism environment atmosphere, history and culture, tourism service and facilities, tourism experience, tourism promotion and protection and tourism resource evaluation[15].

In summary, the scholars’ division of the perceived image of tourism destinations is mostly based on the research basis of Beerli and Martin (2004), and has been appropriately adjusted. Based on the research of Beerli and Martin (2004), Zhang
Wenting and Luo Peicong (2017), this study divides the perceived image dimensions of tourism destinations into six dimensions such as tourism attractions, tourism services and facilities, tourism experience, history and culture, tourism environment atmosphere and tourism resource evaluation.

2.3 Composition of the image of the tourist destination

The concept of attribute-based destination image was originally proposed by Gartner (1989), who believed that the destination image contained three components, namely cognitive image, emotional image and intentional image\textsuperscript{[16]}. Cognitive image refers to the belief and knowledge of tourists on the material attributes of tourism destinations\textsuperscript{[17]}, reflecting the tourists’ evaluation of the perceived destination attributes\textsuperscript{[18]}, such as a pleasant climate in a certain place, a unique lifestyle and place in a tourist destination. Emotional image refers to the emotional response or evaluation of a tourist to a destination\textsuperscript{[19]}, such as happy, happy, exciting, etc. The image of the move refers to the fact that the tourist actively considers a place as a potential travel destination, describing the state of the future that the visitor wants to perform\textsuperscript{[20][21]}, if you want to go, recommend, etc. The above three components are related to each other in a hierarchical manner. Echtner et al. (1993) proposed the concept of the overall image, thinking that the overall image is an important concept defined for a particular destination. The overall image is the sum of the three components of cognition, emotion and intention\textsuperscript{[22]}. Baloglu and McCleary (1999)\textsuperscript{[23]} and Beerli and Martin (2004)\textsuperscript{[24]} divide the destination image into three parts: cognitive image, emotional image and overall image. According to the research of Beerli and Martin...
(2004), this study analyzes the perception image of tourist destinations from three aspects: cognitive image, emotional image and overall image.

### 2.4 Research methods for the perception image of tourist destinations

The study of the image of foreign tourist destinations is the image of the tourist destination held by the demand side. The research methods used are mainly quantitative analysis (such as questionnaire survey), supplemented by qualitative analysis. The domestic related research is influenced by the local image positioning theory. The research is mainly the image of the tourist destination held by the supplier. The research method is mainly qualitative analysis, supplemented by quantitative analysis.

With the rapid development of Internet technology, more and more tourists are willing to share pictures, short videos, travel notes, comment comments, recommended route routes and other information on social networks, and this information is widely spread through the network platform. This provides new research data for the use of online texts for the study of tourist destination images. Content analysis is a qualitative research method that objectively, systematically and quantitatively describes the amount of information and its changes contained in the content. Compared with the questionnaire survey method, the analysis of online text content can be more open and subjectively reflect the perception of tourists. In this study, the research on the tourism destinations by domestic scholars using content analysis in recent years is shown in Table1.

**Table 1. Domestic scholars use content analysis method to study tourism destinations**

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>-----------------</td>
<td>-------------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Differences in image perception between domestic and foreign tourists</td>
<td>Compare the image of tourists with the image of official website</td>
<td>Gulangyu researches tourism image for destination</td>
<td>South Korea Jeju Island tourist attraction</td>
<td>Tourist information demand characteristics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Destination</td>
<td>Xi'an Huimin Street</td>
<td>Fujian Yongding Earth Building</td>
<td>Gulangyu</td>
<td>Jeju Island, South Korea</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data Sources</td>
<td>Ant Cell, Trip Advisor</td>
<td>Top 5 online travel sites</td>
<td>Ctrip.com</td>
<td>Ctrip.com</td>
<td></td>
<td></td>
</tr>
<tr>
<td>analyzing tool</td>
<td>KH coder</td>
<td>ROST Content Mining</td>
<td>ROST Content Mining</td>
<td>ROST Content Mining</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sample selection condition</td>
<td>Exclude images, ignore comments with too few words</td>
<td>Classify synonyms, remove irrelevant expressions, pictures, etc.</td>
<td>Comments for the past 3 years, neglecting inconsistent with the topic, repeating, introducing invalid comments</td>
<td>Random sampling and stratified sampling principle, time span of 6 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sample and quantity</td>
<td>1000 comments in both English and Chinese</td>
<td>120 travel notes and online reviews 700</td>
<td>176 reviews</td>
<td>100 travel notes</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>800 Q&amp;A texts on each platform</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaluation</td>
<td>Channels should be diversified, pay attention to the screening of samples</td>
<td>Choose a more contemporary and popular information sharing platform</td>
<td>Sample size is too small, single channel</td>
<td>Samples should be time-sensitive and universal</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Time span is too short, universality is difficult to guarantee</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It can be seen from Table 1 that the existing research on the perceived image of the destination using the content analysis method mostly focuses on the popular scenic spots or scenic spots, and less on the regional tourist destinations. Moreover, the existing domestic research mostly analyzes the single network text information in the
form of travel notes and comments, while in the new media environment, unstructured
data such as web travel, online reviews, and travel pictures are more abundant. Among
them, the pictures in the travel notes convey the tourists’ perception of the destination
image and reflect their psychological attention to a certain attraction or thing. These
unstructured data provide more data sources for the study of destination tourism images.
This study will analyze the content of the network text (web travel and commentary)
and travel pictures by combining qualitative and quantitative analysis, and enrich the
research method of destination perception image.

3. Research design

3.1 Research methods

ROST Content Mining 6 is a large free social computing platform to assist humanities
and social science research. The software can be used for weibos, microblogs, forums,
blogs and other network information sources to perform a series of text analysis such
as word segmentation, word frequency statistics, social semantic network analysis,
sentiment analysis, cluster analysis, etc., to achieve content mining, text analysis and
knowledge processing and so on\(^{25}\).

This study will take the travel information of Hubei tourism destination from the online
travel website, and use ROST Content Mining 6 software to analyze the online text and
pictures in the travel notes, and extract the tourists’ perceptions and characteristics of
Hubei tourism destinations.

3.2 Sample selection

This study selected the top 3 online travel websites in 2017 - Ctrip.com, Tuniu.com,
travel notes on the cellular, reviews and other online texts and photo information (January 2014-20 May) Study the data of the content analysis.

The steps of sample screening are as follows: First, search on the above three online travel websites with “Hubei” as the key words, and sort by “popular”, “recommended travel” and “the hottest travel”, and select the top 80 in each. Travel notes, get a total of 240 travel notes. Secondly, search for comments on the Tuniu Tourism website with “Hubei” as the key word. After sorting according to the “useful number”, select the first 350 comments. Thirdly, the preliminary selection of travel notes and comments is further screened according to the following three criteria: (1) excluding comments and travel notes earlier than 2014; (2) ignoring content that is not the only destination of “Hubei”; (3) Remove travel notes with fewer than 500 words. Through the above steps, a total of 126 valid travel notes were obtained, and 273 valid comments were obtained. Finally, the pictures in the 126 travels are archived, the duplicate pictures in the same travel note are eliminated, the pictures unrelated to the travel destination are removed, and 258 valid pictures are finally obtained.

3.3 Sample Pretreatment

In order to ensure the availability of samples, this study performs the following preprocessing on the selected final samples: (1) Delete the popular texts, pictures, link tags, etc. in the travel notes, comments, and organize the pictures in a picture document for later use. (2) In the principle of not changing the original intention of the tourists, synonymously replace similar texts, for example, unifying “the subway” into “the subway”; “drying” as the “hot dry noodle”; “Wuhan University “Unified as “Wu Da.”
(3) Deletion of the description of the travel of some tourists.

The processed travels are attributed to one document, the comments are stored in another document, and the combined content is attributed to one document. The revised documents are saved in txt format for easy content analysis using ROST Content Mining 6 software.

4. Analysis of Perceptive Image of Hubei Tourism Destinations

4.1 Statistical analysis of high frequency words

In general, the word frequency can reflect the importance of certain words in the whole material, and the word frequency is positively correlated with the importance of the word. After segmentation of the document combined with the commentary, the ROST Content Mining 6 software is used to perform word frequency statistics and extract high frequency feature words. Filtering the high-frequency words unrelated to the study, the top 90 high-frequency vocabularies obtained from the perception image of Hubei tourism destinations are shown in Table 2.

According to Table 2, the characteristics of the top 90 high-frequency words extracted from the three websites are summarized into six themes: (1) Tourist attraction (Yellow Crane Tower, Bridge, Museum, Hubu Lane ,ancient city, cableway, and pedestrian street, and the Yangtze River, cherry blossoms, Wudang Mountain, scenery, Three Gorges, Taizi Lake, nature, East Lake, Rhododendron, landscape, natural, cloud, Grand Canyon, forest, Tianchi, High Mountain , Huahai, Gallery, tea and other natural

Table 2 High-frequency vocabulary of Hubei tourism destination perception image
<table>
<thead>
<tr>
<th>number</th>
<th>number</th>
<th>y</th>
<th>er</th>
<th>ncy</th>
<th>number</th>
<th>ne</th>
<th>number</th>
<th>number</th>
<th>number</th>
<th>ne</th>
<th>number</th>
<th>number</th>
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</tr>
</thead>
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<td>Xiangyang</td>
<td>37</td>
<td>61</td>
<td>beauty</td>
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<td></td>
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<td>forest</td>
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<td>67</td>
<td>Mulan</td>
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<td></td>
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<td>39</td>
<td>landscape</td>
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<td>Performance</td>
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<td>Convenience</td>
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<td>52</td>
<td>55</td>
<td>Han culture</td>
<td>17</td>
<td>85</td>
<td>gallery</td>
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<td>traffic</td>
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<td>train station</td>
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<td>Flower sea</td>
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<tr>
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<td>rich</td>
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<td></td>
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<td>natural</td>
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<td>58</td>
<td>Grand Canyon</td>
<td>17</td>
<td>88</td>
<td>style</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>Bamboo creek</td>
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<td>tea</td>
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<td></td>
<td></td>
<td></td>
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<td>30</td>
<td>Hankou</td>
<td>42</td>
<td>60</td>
<td>Taoism</td>
<td>16</td>
<td>90</td>
<td>look forward to</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

landscapes; (2) Tourism environment atmosphere (Wuhan, Enshi, Center, Shennongjia, Hubei, Hankou, Fuyang, Wuda, Zaoyang, Zhuxi, Yichang, Hanyang, Macheng, etc.) (3) History and culture (culture, Chinese culture, Taoism, legend, history, Chibi, Mulan);
(4) Tourism services and facilities (hotels, snacks, hot dry noodles, Zhou Black Duck, Cailinji, food and other tourist accommodations; subway, transportation, rides, train stations, public transport and other tourist transportation; tickets, enthusiasm and other travel services); (5) travel experience (feeling, Experience, worth quite good, looking forward, easy style); (6) evaluation of tourism resources (magical, special, majestic, beautiful, spectacular, Happy, magnificent, strange, beautiful, famous, wonderland, abundant). According to the above analysis, the high frequency words of Table 2 are classified into six main categories and eleven subcategories, as shown in Table 3.

According to Table 3, it can be seen that: (1) Tourists’ perception of Hubei tourism destinations mainly comes from tourism attractions (natural landscape and human landscape), followed by tourism environment atmosphere, tourism services and facilities. (2) Tourists’ perception of natural landscape is higher than that of human landscape, indicating that Hubei’s natural tourism resources are more attractive to tourists than humanistic tourism resources. (3) Tourists’ perception of the location environment is higher than the perception of the social environment, and the perceptions of Wuhan and Enshi are much higher than those of other locational environments. In the social environment, tourists are more than “people”. Perception is higher than other social environmental factors. (4) Tourists’ perception of culture is higher than that of history, indicating that Jingchu culture is more attractive to tourists. (5) Tourists’ perception of tourism service services and travel accommodation is higher than tourism traffic. (6) There is no particularly obvious characteristic of the tourists’ perception of the tourism experience. (7) Tourists’ perception of tourism resources
evaluation is second only to the perception of history and culture, and the frequency of words such as magic, features, majesty, beauty and spectacular is high, which is inseparable from Hubei’s rich tourism resources.

Table 3. Hubei Tourism Destination Image Visitors Perceive High Frequency Word Analysis Category

<table>
<thead>
<tr>
<th>Main category</th>
<th>Subcategory</th>
<th>Part of high frequency words</th>
<th>Visitor perception (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tourist attraction</td>
<td>Cultural attractions</td>
<td>Building, Yellow Crane Tower, Wudang Mountain, Seoul, Bridge, Museum, Hubu Lane, Ancient City, Cableway, Pedestrian Street</td>
<td>16.72</td>
</tr>
<tr>
<td></td>
<td>Natural landscape</td>
<td>Scenic Area, Yangtze River, Sakura, Landscape, Shennongjia, Three Gorges, Taizi Lake, Nature, East Lake, Rhododendron, Landscape, Natural, Cloud, Grand Canyon, Forest, Tianchi, Alpine, Mountain Climbing, Huahai, Gallery, Tea</td>
<td>42.65</td>
</tr>
<tr>
<td>Tourist atmosphere</td>
<td>Location environment</td>
<td>Wuhan, Enshi, Hubei, Hankou, Xiangyang, Wuhan University, Center, Zaoyang, Zhuxi, Yichang, Hanyang, Macheng</td>
<td>25.93</td>
</tr>
<tr>
<td></td>
<td>Social environment</td>
<td>Many People, Queue, Environment, Weather</td>
<td>17.19</td>
</tr>
<tr>
<td>History and culture</td>
<td>Culture</td>
<td>Culture, Han Culture, Taoism, Legend</td>
<td>4.60</td>
</tr>
<tr>
<td></td>
<td>History</td>
<td>History, Chibi, Mulan</td>
<td>5.31</td>
</tr>
<tr>
<td>Travel services and facilities</td>
<td>Travel accommodation</td>
<td>Hot, Snack, Hot Dry Noodles, Zhouhei Duck, Cai Linji, Food</td>
<td>8.4</td>
</tr>
<tr>
<td></td>
<td>Tourist traffic</td>
<td>Subway, Traffic, Ride, Train Station, Bus</td>
<td>15.41</td>
</tr>
<tr>
<td></td>
<td>Travel services</td>
<td>Tickets, Passion, Tour, Show, Appreciation</td>
<td>3.94</td>
</tr>
<tr>
<td>Travel experience</td>
<td>Travel experience</td>
<td>Feeling, Experience, Worth, Quite Good, Expecting, Convenient, Style</td>
<td>3.50</td>
</tr>
<tr>
<td>Tourism resource evaluation</td>
<td>Tourism resource evaluation</td>
<td>Magic, Features, Majestic, Beauty, Spectacular, Happy, Magnificent, Peculiar, Beautiful, Famous, Wonderland, Plenty</td>
<td>3.50</td>
</tr>
</tbody>
</table>

4.2 semantic Network Analysis.

Semantic network analysis can construct a network map reflecting the psychological
perception of text authors through the relationship between words, which has been proved to be a particularly effective text analysis method (Doerfel and Barnett, 1999). The relational graph is composed of high-frequency entries and the connections between the words. The semantic network graph can be used to understand the relationship between complex entries intuitively. This study uses ROST Content Mining 6 software to analyze the semantic network of travel notes and comment documents, and generates diagrams with the help of Net Draw, as shown in figure 1 and figure 2.

As shown in figure 1, the semantic network generated by the text of tourists’ travel notes is based on Wuhan. The related words include tourism attraction (cherry blossoms, household alleys, Yangtze River, Bridge, East Lake) and location environment (China, Hubei, China, location, center). Three groups of nodes far from the core, Representatives of history and culture (Han Dynasty, stories, history, culture, Taoism), tourism services and facilities (tourism, hotels, tickets, tours), tourism attractions (Wudang Mountain, Shennongjia, Wudang, etc.) and scenery, nature, Beauty and other...
natural landscape) three dimensions of perception. This shows that Wuhan as the core city of tourism and transportation hub in Hubei is very obvious.

As shown in Figure 2, the semantic network relationship generated by the traveler’s comment text presents four clusters. The landscape-centered clusters are mainly tourism attractions (nature, landscape, scenery), tourism resources evaluation (rich, mysterious, traditional, classic, beautiful), travel experience (worth, fit) and history (red, revolution). The clusters with Wuhan as the core are mainly tourist attractions (Yangtze River, universities), tourism services and facilities (tasty, delicious). The cluster with the core as the core is mainly tourism attractions (waterfall, underground, dark river, meteorite, Huanglong cave and other natural landscapes), tourism resources evaluation (spectacle, magic, resort) and tourism environment (heat, summer, cool). The clusters centered on the Three Gorges are mainly tourist attractions (engineering, tourism, dams). This shows that tourists are more inclined to perceive the natural landscape tourism resources of Hubei, but have less perception of Hubei human landscape tourism resources and Jingchu history and culture.

4.3 Analysis of emotional image
The destination emotional image is the emotional response of the tourist to the attributes of the destination\textsuperscript{[27]}. The sentiment analysis of the travel notes and comments combined texts was performed using the sentiment analysis section of ROST Content Mining 6 software. The results are shown in Table 3

Table 3 Perceived emotional distribution of tourists in Hubei tourist destinations

<table>
<thead>
<tr>
<th>Emotional type</th>
<th>Positive emotions</th>
<th>Neutral emotions</th>
<th>Negative emotions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Emotional segmentati on(degree)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>General</td>
<td>Moderate</td>
<td>Height</td>
</tr>
<tr>
<td>Number of speeches</td>
<td>27</td>
<td>27</td>
<td>36</td>
</tr>
<tr>
<td>Proportion</td>
<td>14.29%</td>
<td>14.29%</td>
<td>19.05%</td>
</tr>
<tr>
<td>Total</td>
<td>90 (47.62%)</td>
<td>72(38.10%)</td>
<td>27 (14.29%)</td>
</tr>
</tbody>
</table>

According to Table 3, tourists have the highest positive proportion of the image of Hubei destination, reaching 47.62%. Positive emotions are concentrated in the active stage of height, and the proportions of other general and moderate stages are similar. Positive emotions and positive emotions mainly come from the beauty of the scenery, the long history and culture, and the delicious food. For example, “the cultural heritage of Han is profound.”

According to Table 3, neutral emotions accounted for 38.10%. The neutral feelings of tourists on the image of Hubei tourism destinations are mostly due to their actual feelings and expectations are not in line with the expectations of tourists. For example, “there is no special feeling.”

According to Table 3, it can be seen that the negative emotions are only 14.29%. Negative emotions are concentrated in the general stage, indicating that negative
emotions are not very intense. The negative emotions of tourists on the image of Hubei tourism destinations are mainly due to “many people”, “crowding”, “queuing”, “changeable weather”, “local temper is very hot”, “not enough tourist atmosphere”, “consumption” The level is not high, etc.

4.4 Image Content Analysis

The picture content analysis of this study is to measure the photographing index through the sample picture. The travel picture is a form of carrier gaze, and the photograph index is a quantitative representation that reflects the degree of gaze of the tourist. Through the high and low photo index to understand the tourist’s travel motivation and the desire to satisfy the demand, to further understand the characteristics of the tourist experience perception[28]. Get visitors’ perceptions and perceptions of the destination image more realistic and open.

In this study, the picture content is studied by measuring the photographing index. The specific calculation method is as follows: 258 pictures obtained by collating and archiving in the travel record are taken as the sample population, and the proportions of the photographs of the scenic spots, landscapes, food, buildings, facilities, etc. are calculated respectively. Based on the key tourist attractions in the picture, the trend of the photo index is shown in Figure 3.

According to Figure 3, it can be seen that tourist attractions (mountain (cave), Yangtze River, flowers and trees, woods, night scenery and other natural landscapes) and tourist accommodations (gourmet snacks) have left a deep impression on the tourists to produce gaze. The higher photo index of tourists, further illustrates that natural
landscapes and tourism cuisine have an important impact on the formation of the perception image of Hubei tourism destinations.

Figure 3 Photographic index trend

4.5 Overall image analysis

This study analyzes the overall image perception of tourists from Hubei tourism destinations from six aspects: tourism attraction, tourism environment atmosphere, tourism service and facilities, tourism resource evaluation, historical culture and tourism experience.

(1) Tourist attractions. Hubei’s humanities and tourism resources and natural tourism resources are particularly rich. Tourists’ evaluation of natural landscapes such as mountains and waters is mostly “magnificent”, “majestic” and “magical”, full of love and admiration. The human landscape has a profound historical and cultural heritage, and the tourists’ respect for the Han culture and the fantasy of the ancient city have been met.

(2) Tourism environment atmosphere. Hubei tourism environment governance is good, especially in the scenic area, the health environment has not caused tourists to be dissatisfied. Tourists feel that Hubei people are “passionate” and “willing to help.” The
negative evaluation was mainly due to “crowded spots”, “people crowded in the households”, and “local temper is hot”. Although the overall atmosphere is good, management needs to be strengthened to create a better tourist environment and a comfortable tourist atmosphere.

(3) Tourism services and facilities. Hubei food culture (such as specialty snacks) has received attention. However, tourists’ awareness of Hubei cuisine only stays in the famous snacks (such as hot-dry noodles, Zhouhe ducks, etc.), and lacks experience for other special dishes and diets. Tourists believe that Hubei’s transportation is very convenient. The inadequacies are “crash traffic” and “crowding on the train”. Accommodation is rarely mentioned by tourists. The main basis for tourists to choose their accommodation is to see if the transportation requirements of the tourist route are compatible.

(4) Evaluation of tourism resources. Among the tourists’ perceptions of tourism resources, the frequency of magic, features, majesty, beauty, and spectacularness is high. This is inseparable from Hubei’s rich tourism resources, but with the official slogan of Hubei’s tourism image, “Lingxiu Hubei” does not match.

(5) Cultural history. Tourists’ perception of Hubei culture is higher than that of history, indicating that Jingchu culture has certain attraction to tourists. In comparison, cultural history accounts for a lower proportion of tourists’ perception of Hubei tourism destinations. This shows that the development and publicity of the well-established Jingchu historical and cultural tourism products needs to be strengthened.

(6) Travel experience. There is no particularly obvious feature of the traveler’s
perception of the travel experience. To a certain extent, this shows that Hubei tourism destinations have not yet brought unique and impressive experiences to tourists.

5. Research conclusions and recommendations

5.1 Research conclusions

(1) The overall image of Hubei tourism destination can be classified into 6 major themes and 11 sub-categories. The image of Hubei tourism destinations is roughly summarized into six themes: tourism attractions (human landscapes and natural landscapes), tourism environment atmosphere (social environment and location environment), history and culture, tourism services and facilities (tourism, accommodation, tourism and transportation). Travel services), travel experience and evaluation of tourism resources.

(2) Tourists’ perception of Hubei’s tourist destinations is mainly due to tourism attractions (especially natural landscapes), followed by tourism environment, tourism services and facilities.

(3) Wuhan is the most important locational environmental factor in the perception image of Hubei tourism destinations.

(4) Cultural history accounts for a small proportion of tourists’ perception of Hubei tourism destinations, and there is no particularly obvious feature of tourists’ perception of tourism experience.

(5) Tourist attractions (high mountains (caves), Yangtze River, flowers and trees, woods, night scenes and other natural landscapes) and tourist accommodations (gourmet snacks) have higher photo index.

(6) Tourists have the highest positive emotional proportion of Hubei destination image,
and less negative emotions (mainly due to crowds, crowds, queuing, changing weather, local temper, etc.), and the negative emotions are not intense.

5.2 Development Suggestions

(1) Focus on the dissemination of natural landscapes and locational environments

Tourist attraction and tourism environment atmosphere are important dimensions of image perception. Therefore, the image of Hubei tourism destination should focus on excavating and disseminating natural landscape and location environment, and highlighting the promotion of tourism resources evaluation (magical, distinctive, majestic, beautiful, spectacular). Make full use of mobile Internet and social media tools such as WeChat and Weibo to spread destination brand marketing with text, pictures and short videos.

(2) Mining human landscapes and historical culture

In contrast, the human landscape and cultural history account for a lower proportion of the perceived image of Hubei’s tourist destinations. “2017 Hubei Tourism Scenic Area Image Index Rankings” shows that among the top 10 scenic spots, only the Shennongjia and Enshi Grand Canyons are known for their natural scenery. The other 8 scenic spots are beautiful natural scenery and profound humanistic historical allusions. A comprehensive scenic spot\(^{29}\). It can be seen that tourists’ demand for humanistic experience is strong. Therefore, Hubei needs to further explore Jingchu cultural tourism resources, keep up with the trend of the times, realize the integration of history and fashion, develop humanities tourism routes that meet the needs of young tourists (such as research and tourism), extend the tourism industry chain, and strengthen the profound
knowledge. The brand building and propaganda of Jingchu Culture updated its
cognitive image of Hubei.

(3) Improve tourism facilities and services

The key location environment for the perception image of Hubei tourism destinations
is Wuhan. Therefore, Hubei tourism should improve the functions of Wuhan in the six
elements of tourism - eating, living, transportation, traveling, purchasing, entertainment,
etc., to explore the characteristics of tourism accommodation (food snacks), form
Wuhan city tourism business cards, and use The Internet word-of-mouth effect
promotes the development of tourism in Hubei. At the same time, it is necessary to
strengthen the convenience of tourism transportation in Hubei, improve the quality of
tourism services, and complement the shortcomings of tourism development in Hubei.

(4) Improve the negative perception of tourists

The negative perceptions of Hubei’s overall image are mainly crowds, crowds, queuing,
changing weather, and local temper. The tourism department can control the passenger
flow by means of passenger flow monitoring, smart tourism and other means and tools
to improve the tourist experience; pay attention to the environmental governance of the
scenic spot, strengthen the ecological civilization construction of the scenic spot, pay
attention to sustainable development; strengthen the information management of the
network platform, Management of tourism crisis events, timely control of the spread of
negative events, avoiding the adverse effects of event fermentation on the destination
image; strengthening urban civilization education and reducing the negative impact of
negative emotions on tourists.
Tourism destination branding is a series of marketing activities aimed at shaping the image of an active tourist destination, and these activities aim to jointly create a destination image that can positively influence the destination selection behavior of tourists (Blain et al., 2005). Tourism destination branding involves nine aspects such as destination brand identification, destination brand positioning, destination brand communication, destination brand monitoring, evaluation and auditing, branding leadership, continuous communication of destination stakeholders, and cooperation with destination stakeholders. Branding culture of the destination and collaboration between different departments of the destination. It can be seen that the branding and overall image enhancement of tourism destinations in Hubei Province is a systematic project that needs to be jointly invested by the tourism government authorities and tourism destination enterprises. It is necessary to play the synergy of tourism stakeholders and achieve the synergy of spreading and promoting the overall image of Hubei tourism. Purpose.

6. Research Contribution, Research Insufficiency and Prospects

6.1 Research contribution

Research perspective innovation. The research on the image of domestic tourism destinations is influenced by the local image positioning theory. Most of them are based on the perspective of tourism suppliers to explore the image of tourism destinations. Most of the research conclusions provide macroeconomic policy recommendations for tourism government departments. This study studies the specific composition and
characteristics of the perceived image of the tourist destinations held by the demand side from the micro level, and proposes countermeasures for the destination enterprises based on this.

(2) Research method innovation. The research method of domestic destination image is mainly qualitative analysis, supplemented by quantitative analysis. In recent years, content analysis has received increasing attention, but it has focused on the analysis of online text content, ignoring the analysis of travel pictures containing rich information. This study analyzes the content of web text (web travel and commentary) and travel pictures by qualitative and quantitative, and enriches the research method of destination perception image.

6.2 Insufficient research and prospects

This study studies the perception image of tourist destinations from the perspective of tourists, and the network texts and pictures analyzed are mainly young groups who are used to publishing travel notes and comments on online travel websites, and may ignore those who do not post travel notes and comments on the website. Future research may consider collecting data from various perspectives such as Hubei tourism government, local residents, and travel agencies, and further conducting a comparative study using content analysis methods to find differences in the perceived image of multiple parties.

Based on the analysis of network texts, this study adds the content analysis of the travel photo index. The processing method relies on manual classification. Future research can use relevant software or tools to make unstructured data analysis such as pictures
and videos more objective.

6. Acknowledgments

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5. She Shengxiang, Li Gen, Duan Wenjun. (2016) Study on the Influence of Tourism


Research on the Spatial Pattern and Spatial Effect of China's Marine Science and Technology Innovation Capability

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Abstract

Improving the innovation capability of Marine Science and Technology (MS&T) has great significance to speeding up the construction of a powerful marine country and a powerful country in science and technology. Based on the data from 2006 to 2015 and the spatial scale of coastal provinces, it is revealed that the MS&T innovation capacity of China is on the rise, and there are significant imbalances between provinces. The upgrading of marine industrial structure, the improvements of regional marketization level and marine education level are helpful to promote the local MS&T innovation ability, and the regional marketization level has a positive spatial spillover effect. Therefore, it is necessary to optimize the marine industrial structure, enhance the marine education level, and optimize regional business environment and cross-regional marine innovation coordination mechanism to systematically enhance China's MS&T innovation capability.

Keywords: MS&T; innovation capability; spatial pattern; spatial effect

1. Introduction
The report of the Nineteenth National Congress of the Communist Party of China clearly put forward the goal of speeding up the construction of a powerful marine country. It is also an urgent need to cultivate the new momentum of economic development through the ocean economy developing and deep cultivation of "blue land". Under the background of the rapid development of science and technology, promoting the innovation of MS&T and improving the comprehensive level of MS&T constitute the important thrust of marine resources exploration, marine environmental protection, marine product production and other work. It is also an important content of the construction of a powerful marine country and a powerful country in science and technology. For a long time, China's MS&T has been in reverse imitation and integrated innovation because of the economic development policy of "emphasizing land over ocean". There is a big gap between China and developed countries, which is not conducive to the development of marine economy and the protection of rights and interests [1]. The gap between development demands and reality urgently needs to vigorously enhance the innovation capability of MS&T.

In recent years, more and more attention has been paid to MS&T innovation. Scholars focus on the performance evaluation of MS&T innovation and the coordination between MS&T and marine economy. The comprehensive index based on multiple indicators such as marine innovation input and performance shows that the imbalance of MS&T innovation in coastal provinces in China has been prominent in recent years [2-3]. The innovation ability of MS&T in coastal provinces has obvious spatial distribution differences, which is related to the development of marine economy
and marine industrial structure [4]. In terms of the relationship between MS&T and economy, the improvement of MS&T level in coastal provinces can lead to the optimization of marine industry pattern, which is the causal factor of the change of marine economic pattern [5]. However, the strength of interaction between marine economy and MS&T in China is not symmetrical and there are regional differences. The contribution of MS&T to marine economic growth still needs to be strengthened [6-7].

The relevant research on MS&T innovation has provided better inspiration for the follow-up, and has reference significance for identifying the current situation of MS&T innovation and enhancing the competitiveness of MS&T in China, but there is still room for breakthrough: Firstly, there are still some problems in the measurement of MS&T innovation capability, such as too few indicators and subjective weight determination. Secondly, the lack of systematic analysis of the spatial pattern of MS&T innovation capability is not conducive to clarifying the spatial characteristics of China's MS&T innovation capability. Thirdly, it is necessary to further clarify the action mechanism of the influencing factors of China's MS&T innovation level under the state of spatial interaction. In view of this, this study attempts to scientifically measure the level of MS&T innovation on the basis of existing research, clarify the spatial pattern of MS&T innovation level in China's mainland coastal provinces, and use spatial econometric models to measure the spatial effects of factors affecting MS&T innovation, thus to provide inspiration for improving China's MS&T innovation level and comprehensive competitiveness.
2 Research methods and data

2.1 Analysis of spatial patterns and spatial effects

Spatial pattern mostly depicts the spatial distribution characteristics and rules of geographical phenomena by pattern scale and pattern intensity. Pattern scale is measured by the size of the observations of the spatial units. Pattern intensity can be described by the difference of the observed values of the spatial units. This study is determined by Theil index.

Theil index can be expressed as:

\[
\text{Theil} = \sum_{i=1}^{k} p_i \frac{x_i}{u} \ln \left( \frac{x_i}{u} \right)
\]

Where \( x_i \) represents the \( i \)-th provincial MS&T innovation capability, \( k \) is the number of observed provinces, and \( u \) is the weighted mean of all observed provincial MS&T innovation capabilities, \( P_i \) is the \( i \)-th provincial marine economic gross product in the overall proportion.

Spatial effects of economic society emphasize the role of spillovers in geographical space. To explore the spatial effect of MS&T innovation capability in China's mainland coastal provinces is to analyze the spatial interaction and spillover mechanism of MS&T innovation capability. The rise of spatial econometric models has promoted the further study of the spatial effects of economic and social phenomena. Common spatial econometric models include spatial lag model (SAR), spatial error model (SEM) and spatial Durbin model (SDM), among them, as a general form of SAR and SEM, SDM is more helpful in capturing the externalities and spillover effects generated by different sources. The expression is:
\[ y_{it} = \delta \sum_{j=1}^{n} W_{ij} y_{jt} + X_i \beta + \sum_{j=1}^{n} W_{ij} X_j \theta + \mu_i + \lambda_t + c + \epsilon_{it} \]  

(2)

Where \( y_{it} \) is the value of the interpreted variable of space element \( i \) at time \( t \), \( \delta \) is the spatial lag regression coefficient, \( W_{ij} \) is the normalized non-negative space weight matrix \( i \) row \( j \) column element, \( \Sigma W_{ij} y_{jt} \) is the spatial interaction of the interpreted variables, \( X \) is the set of explanatory variables, \( \beta \) and \( \theta \) are the parameter vectors, \( \mu_i \) and \( \lambda_t \) represent the spatial and temporal effects, respectively, and \( c \) and \( \epsilon_{it} \) are the constant term and the error term, respectively. Considering the complexity of the spatial association of MS&T innovation capabilities, this study does not use the traditional adjacent spatial weight matrix, but calculates the linear distance between provincial capital cities based on the latitude and longitude of the provincial capital cities. And on the basis of dimensionless processing, the reciprocal is taken as the weight to form the geographic distance weight matrix.

This study needs to analyze the spatial effects of provincial MS&T innovation capacity under the state of spatial interaction, and measure the direct effects and spatial spillover effects. Direct effect refers to the influence of any given explanatory variables in a region on the Interpreted variable in the region. Spatial spillover effect refers to the influence of explanatory variables on other regions (Interpreted variable) through spatial interaction, which can be obtained by solving partial differential equation\(^9\). Elhorst further extended this method to the study of spatial panel data model\(^10\).

2.2 Indices selection and data source

Considering the representativeness of indicators and the attainability of data, this study
is based on the "input-output-environment" to describe the innovation capability of MS&T in provinces. Among them, the input factors include the number of MS&T employees and funding. The output factors include MS&T papers and projects. The environmental factor covers the literacy and structure of MS&T employees and the performance of MS&T university-industry cooperation. The weights of the indices are computed by entropy method. Table 1 shows the indices and their weights. Among them, the MS&T findings are calculated to be the stock data based on perpetual inventory method, in which the price index is weighted by the consumer price index and the fixed asset price index. Referring to Zhu Pingfang's research on R&D capital, the weights of them are set to 0.45 and 0.55 respectively, and the depreciation rate is set to 15%. The base period stock is determined by dividing the base period flow data by the sum of depreciation rate and annual average growth rate. The literacy of MS&T employees, the structure of MS&T employees, and the performance of MS&T university-industry cooperation are characterized by the proportion of MS&T employees of marine scientific research institutions in all sea-related employees of the region, the proportion of employees with postgraduate degree in marine scientific research institutions, and the proportion of MS&T projects in all science and technology projects of the marine scientific research institutions.

<table>
<thead>
<tr>
<th>Elements</th>
<th>Indices</th>
<th>Weights</th>
</tr>
</thead>
<tbody>
<tr>
<td>input</td>
<td>number of MS&amp;T employees</td>
<td>0.120</td>
</tr>
<tr>
<td></td>
<td>number of MS&amp;T funding</td>
<td>0.196</td>
</tr>
<tr>
<td>output</td>
<td>number of MS&amp;T papers</td>
<td>0.151</td>
</tr>
<tr>
<td></td>
<td>number of MS&amp;T projects</td>
<td>0.181</td>
</tr>
<tr>
<td>environment</td>
<td>literacy of MS&amp;T Employees</td>
<td>0.130</td>
</tr>
</tbody>
</table>
Further, Formula (2) is concretely transformed into the spatial Durbin model as shown below:

$$
OIN_{it} = \delta \sum_{j \neq i} W_{ij} OIN_{jt} + \beta_1 GOP_{it} + \beta_2 OIND_{it} + \beta_3 OPE_{it} + \beta_4 MAR_{it} + \beta_5 OEDU_{it} + \theta_1 \sum_{j \neq i} W_{ij} GOP_{jt} + \theta_2 \sum_{j \neq i} W_{ij} OIND_{jt} + \theta_3 \sum_{j \neq i} W_{ij} OPE_{jt} + \theta_4 \sum_{j \neq i} W_{ij} MAR_{jt} + \theta_5 \sum_{j \neq i} W_{ij} OEDU_{jt} + \mu_t + \lambda_i + \epsilon_{it}
$$

(3)

The interpreted variable $OIN_{it}$ on the left side of equation (3) is the MS&T innovation capability of the $t$-year in the $i$ province. In the explanatory variables on the right side, the scale of marine economy ($GOP$), marine industrial structure ($OIND$), economic opening rate ($OPE$), market degree ($MAR$) and the level of marine education development ($OEDU$) are selected as explanatory variables by referring to the available research [4-7, 12-13] and attainability of panel data. The explanatory variables are depicted by the proportion of gross marine economy to GDP, the proportion of secondary marine industry to gross marine economy, the proportion of FDI (average annual exchange rate) to GDP, the proportion of private individual employment to permanent population at the end of the year, and the proportion of students of marine specialty in general higher education. The growth of total marine economy and the upgrading of marine industrial structure are helpful to bring into play the advantages of scale and provide the market potential for improving the level of MS&T innovation. Opening to the outside world and improving the degree of marketization can improve the regional business environment and optimize the MS&T innovation ecosystem. The development of marine education provides the basis of talents and intellectual support for the development of MS&T. It should be noted that in the state of spatial interaction, the
capability of MS&T innovation and its explanatory variables in adjacent provinces may have an impact on local MS&T innovation through demonstration or siphon effect. The direction and intensity of action need to be further revealed through spatial econometric models. The original data of this study is collected from China Statistical Yearbook, China Ocean Yearbook, China Ocean Statistical Yearbook and annual statistical bulletins of coastal provinces and regions. Individual missing values are filled by interpolation method, and relevant economic data are processed to reduce inflation.

3 Spatial pattern analysis of MS&T innovation ability of China's mainland coastal provinces

3.1 Scale of MS&T innovation ability of China's mainland coastal provinces

Table 2 reports the calculation results of MS&T innovation capacity of coastal provinces from 2006 to 2015 based on the measurement of entropy method (percentage processing). Mean values show that Shanghai, Guangdong and Shandong are among the top MS&T innovation capabilities, constituting China's MS&T innovation highlands. It is necessary to play a leading role in promoting the MS&T innovation capabilities of the three major marine economic circles around the Bohai Sea (Tianjin, Hebei, Liaoning, Shandong), the Pan-Yangtze River Delta (Jiangsu, Shanghai, Zhejiang) and the Pan-Pearl River Delta (Fujian, Guangdong, Guangxi, Hainan), and to form a positive linkage between provinces and regions. Compared with the initial and final values, except for Hebei, the technological innovation capacity of other coastal provinces increased in varying degrees during the survey period, with Guangxi, Jiangsu
and Zhejiang ranking the top.

Table 2. MS&T innovation ability of coastal provinces: 2006-2015

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tianjin</td>
<td>45.93</td>
<td>45.74</td>
<td>46.26</td>
<td>56.63</td>
<td>56.28</td>
<td>57.93</td>
<td>61.00</td>
<td>62.43</td>
<td>68.53</td>
<td>69.174</td>
<td>56.993</td>
</tr>
<tr>
<td>Hebei</td>
<td>33.10</td>
<td>35.48</td>
<td>24.33</td>
<td>26.54</td>
<td>21.89</td>
<td>25.88</td>
<td>21.06</td>
<td>15.34</td>
<td>16.78</td>
<td>16.514</td>
<td>23.696</td>
</tr>
<tr>
<td>Liaoning</td>
<td>23.00</td>
<td>21.46</td>
<td>23.39</td>
<td>20.91</td>
<td>23.09</td>
<td>28.37</td>
<td>29.87</td>
<td>30.79</td>
<td>32.39</td>
<td>38.547</td>
<td>27.886</td>
</tr>
<tr>
<td>Shanghai</td>
<td>49.28</td>
<td>53.12</td>
<td>59.29</td>
<td>64.62</td>
<td>67.83</td>
<td>75.91</td>
<td>77.74</td>
<td>83.58</td>
<td>83.67</td>
<td>86.513</td>
<td>70.160</td>
</tr>
<tr>
<td>Jiangsu</td>
<td>27.00</td>
<td>42.52</td>
<td>35.16</td>
<td>54.30</td>
<td>60.86</td>
<td>59.80</td>
<td>60.01</td>
<td>62.21</td>
<td>73.10</td>
<td>73.546</td>
<td>54.855</td>
</tr>
<tr>
<td>Zhejiang</td>
<td>24.70</td>
<td>28.50</td>
<td>33.10</td>
<td>40.20</td>
<td>33.38</td>
<td>41.40</td>
<td>38.82</td>
<td>45.46</td>
<td>46.86</td>
<td>49.452</td>
<td>38.192</td>
</tr>
<tr>
<td>Shandong</td>
<td>45.08</td>
<td>46.08</td>
<td>49.50</td>
<td>56.65</td>
<td>58.92</td>
<td>67.03</td>
<td>72.49</td>
<td>76.21</td>
<td>82.10</td>
<td>83.375</td>
<td>63.748</td>
</tr>
<tr>
<td>Guangdong</td>
<td>46.77</td>
<td>48.44</td>
<td>52.66</td>
<td>55.55</td>
<td>59.62</td>
<td>65.62</td>
<td>74.52</td>
<td>67.97</td>
<td>76.51</td>
<td>100.00</td>
<td>64.771</td>
</tr>
<tr>
<td>Hainan</td>
<td>4.977</td>
<td>3.966</td>
<td>6</td>
<td>5.469</td>
<td>1.000</td>
<td>4.878</td>
<td>1.860</td>
<td>4.102</td>
<td>4.793</td>
<td>6.599</td>
<td>5.096</td>
</tr>
</tbody>
</table>

3.2 Strength of MS&T innovation ability in China's mainland coastal provinces

The Theil index calculation results in Table 3 show that the gap of MS&T innovation in all coastal provinces shows a fluctuating upward trend during the survey year, and the degree of imbalance in the late stage is higher than that in the initial stage. The internal gap of MS&T innovation capacity in Bohai Rim region shows an upward trend over time. The polarization status of Shandong and other provinces has been strengthened at the beginning of the period, but the gap has decreased at the end of the
period. The internal disparity in the Pan-Yangtze River Delta region shows a trend of fluctuation and narrowing, and the degree of imbalance in the late stage is smaller than that in the early stage. The difference of MS&T innovation ability in the Pan-Pearl River Delta region shows an upward trend, which is related to the strengthening of Guangdong's position in MS&T innovation in the Pan-Yangtze River Delta region.

### Table 3 Theil index of MS&T innovation capability

<table>
<thead>
<tr>
<th>Year</th>
<th>Thei Bohai Pan Yangtze River Pan Pearl River</th>
<th>rim Delta Delta</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>0.05</td>
<td>0.029</td>
</tr>
<tr>
<td>2007</td>
<td>0.05</td>
<td>0.033</td>
</tr>
<tr>
<td>2008</td>
<td>0.06</td>
<td>0.046</td>
</tr>
<tr>
<td>2009</td>
<td>0.06</td>
<td>0.063</td>
</tr>
<tr>
<td>2010</td>
<td>0.08</td>
<td>0.062</td>
</tr>
<tr>
<td>2011</td>
<td>0.07</td>
<td>0.057</td>
</tr>
<tr>
<td>2012</td>
<td>0.08</td>
<td>0.067</td>
</tr>
<tr>
<td>2013</td>
<td>0.08</td>
<td>0.080</td>
</tr>
<tr>
<td>2014</td>
<td>0.09</td>
<td>0.081</td>
</tr>
<tr>
<td>2015</td>
<td>0.09</td>
<td>0.060</td>
</tr>
</tbody>
</table>

4 Spatial effect analysis of MS&T innovation ability of China's mainland coastal provinces

The above spatial pattern analysis shows that there is spatial heterogeneity in MS&T innovation capability of coastal provinces in mainland China, and it is biased to regard
provincial units as independent observation units. LM test for regression analysis of non-spatial panel also further shows the existence of spatial autocorrelation. The estimation results based on the spatial Durbin model are shown in Table 4, while the Hausman test results support the fixed effect. Spatial fixed effect estimation results show that the innovation level of MS&T in specific provincial unit is not only affected by provincial related explanatory variables, but also by the innovation level of MS&T and its explanatory variables in surrounding provinces. The spatial lag coefficient of MS&T innovation ability is -0.551, and it passes 1% significant level test, which further confirms that provincial MS&T innovation level has spatial correlation characteristics. The local effect of the marine industry structure, marketization level and the level of development of marine education passed the 5% significant level test, and the spatial lag of the degree of marketization was also tested by the 1% significant level. Because the spatial lag coefficient of the interpreted variable is not zero, the spatial spillover effect of the explanatory variables to the interpreted variable can not be measured directly by regression coefficient. Table 5 further gives the direct, indirect (spillover) and total effects of explanatory variables on the interpreted variable.

Table 4 Spatial Durbin model estimation results

<table>
<thead>
<tr>
<th>Variables</th>
<th>Estimated values of no fixed effect model</th>
<th>Estimated values of spatial fixed effect model</th>
<th>Estimated values of spatial random and time fixed effect model</th>
</tr>
</thead>
<tbody>
<tr>
<td>GOP</td>
<td>-0.920**</td>
<td>0.283</td>
<td>-0.459</td>
</tr>
<tr>
<td>OIND</td>
<td>1.304***</td>
<td>0.647***</td>
<td>1.031***</td>
</tr>
<tr>
<td>OPE</td>
<td>-0.027</td>
<td>0.015</td>
<td>0.024**</td>
</tr>
<tr>
<td>MAR</td>
<td>1.615***</td>
<td>0.666**</td>
<td>0.937**</td>
</tr>
<tr>
<td>OEDU</td>
<td>1.853</td>
<td>12.648***</td>
<td>18.352***</td>
</tr>
<tr>
<td>W*GOP</td>
<td>-5.319***</td>
<td>-2.193</td>
<td>-2.386</td>
</tr>
<tr>
<td>W*OIND</td>
<td>0.683</td>
<td>-0.433</td>
<td>0.634</td>
</tr>
</tbody>
</table>
Table 5 Direct, indirect and total effect

<table>
<thead>
<tr>
<th>Variables</th>
<th>Direct effect</th>
<th>Indirect effect</th>
<th>Total effect</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Estimated value</td>
<td>T value</td>
<td>Estimated value</td>
</tr>
<tr>
<td>GOP</td>
<td>0.450</td>
<td>0.852</td>
<td>-1.675</td>
</tr>
<tr>
<td>OIND</td>
<td>0.704***</td>
<td>2.710</td>
<td>-0.584</td>
</tr>
<tr>
<td>OPE</td>
<td>0.015</td>
<td>1.333</td>
<td>-0.004</td>
</tr>
<tr>
<td>MAR</td>
<td>0.582*</td>
<td>1.652</td>
<td>1.062**</td>
</tr>
</tbody>
</table>

Table 5 shows that, after controlling for other factors, the direct and indirect effects of marine economic scale on MS&T innovation capacity have not passed the significant test. Although the growth of marine economy scale can help to expand and enhance the application prospects of MS&T innovation and provide potential for intensive utilization of MS&T innovation resources, at present, China's marine economy scale is still relatively small, and it is a long way to go to enhance the contribution share of marine economy. The direct effect of marine industry structure on MS&T innovation ability is significantly positive (P<0.05), and the indirect effect is not significant (P>0.10). This study characterizes the marine industry structure through the proportion of marine secondary industry. At present, China's marine equipment manufacturing industry is developing rapidly. MS&T innovation and the upgrading of marine industrial structure can form a two-way interaction. However, the spatial polarization...
effect of MS&T development to a certain extent inhibits the spatial spillover effect of MS&T innovation on the upgrading of marine industrial structure. The direct and indirect effects of openness on MS&T innovation capacity are not significant (P > 0.10). The response mechanism between openness and MS&T innovation needs to be improved. Coastal provinces need to further strengthen foreign cooperation in the field of MS&T innovation and further promote the progress of MS&T. The indirect and total effects of the degree of marketization are significantly positive (P < 0.10). The promotion of the degree of marketization in a specific region will help to integrate marine innovation resources in a larger space and increase the level of MS&T innovation in local and adjacent regions. The direct effect of the development level of marine education is significantly positive (P < 0.01), while the indirect effect is significantly negative (P < 0.05). Marine education development is the human resource base of MS&T innovation reserve. The university-industry cooperation promoted by marine education can directly enhance regional marine innovation ability. However, at present, the scale of China's marine education is still relatively small, which inhibits the spatial spillover effect of marine education on MS&T innovation. Therefore, from accelerating the construction of a strong ocean country, it is necessary to appropriately expand the enrollment scale of various marine professions and provide potential for the development of MS&T.

5 Conclusion and discussion

Improving MS&T innovation capability is of great significance to China's promoting science and technology and accelerating the construction of a powerful marine country.
To clarify the spatial pattern and effect of MS&T innovation capability can provide reference for optimizing MS&T development according to local conditions. Based on the data of coastal provinces from 2006 to 2015, the research shows that the MS&T innovation capacity of China is increasing steadily, but there is still a significant unbalanced pattern among provinces. The internal disparity shows an upward trend. The variety of internal disparities in the areas around Bohai Sea, Pan-Yangtze River Delta and Pan-Pearl River Delta vary distinctly. The upgrading of marine industrial structure, the degree of Regional Marketization and the level of marine education development are helpful to improve the local MS&T innovation ability, and the degree of regional marketization has a positive spatial spillover effect.

Based on the conclusions of this study, optimizing the spatial structure of MS&T innovation and enhancing the capacity of MS&T innovation can be comprehensively promoted from the following aspects: First, government should expand the scale of the marine economy and promote the optimization and upgrading of the marine industrial structure. The scale growth of marine economy and the upgrading of industrial structure can provide industry and market support for the promotion of MS&T innovation. Therefore, it is necessary to take the new economic momentum as the guide, develop marine economic potential, vigorously develop marine secondary and tertiary industries, expand the contribution share of innovation factors to marine economic growth, and realize the effective connection between innovation factors and market. Second, properly improve the level of marine education development. Marine education, especially the development of high-level marine education, helps to enrich the talent
and intellectual base for the development of MS&T. At present, the proportion of students majoring in Marine Science in Chinese universities does not match the relative scale of marine economy. Therefore, it is necessary to expand the scale of marine higher education according to the needs of regional marine economic development, adjust the content of teaching according to the needs of national development strategies and the actual dynamics of the region, and promote the effective connection between marine education, technological innovation and marine economic growth. Third, government should build a highland for MS&T talents and improve the incentive mechanism for MS&T innovation. MS&T talents are the core factor of promoting MS&T innovation ability. On the one hand, it is necessary to strengthen the training and introduction of MS&T talents, promote the construction of marine talents highland through the improvement of working, learning and living environment, increase the degree of convergence of MS&T innovation elements, on the other hand, construct a distribution policy oriented by increasing the value of knowledge, accelerate the reform of the right to exploitation, disposition and earnings of MS&T achievements, and stimulate the creativity of MS&T employees. Fourth, government should promote the cross-regional coordination mechanism of MS&T innovation, promote the cross-regional flow of MS&T production factors, build a cross-regional platform for MS&T innovation and a collaborative network for MS&T innovation, strengthen the basic role of the market in the allocation of MS&T resources, promote the positive spillover effect of MS&T innovation plateau, and jointly promote the key technological innovation of MS&T development.
Taking coastal provinces as spatial scales, this study analyzes the spatial structure and spatial effects of mainland China's MS&T innovation capacity from 2006 to 2015. Future research directions: Firstly, extending the spatial scale from provincial to municipal, and analyzing the spatial pattern of MS&T innovation capability within provincial level. Secondly, researcher can introduce policy simulation research to investigate the spatial structure changes of China's MS&T innovation capabilities under different virtual strategies, and provide reference for optimizing the allocation of MS&T innovation resources and increasing the output efficiency of science and technology resources.

6. Acknowledgments

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3. Du Linan, Luan Weixin, Sun Zhanxiu, Pianfeng. Measurement of Dynamic


Research on the Tourism Enterprises’ Service Innovation Mechanism in the Background of Mobile Internet: A Case Study Based on Plateno Hotel Group

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Abstract

Tourism enterprises’ service innovation by using mobile internet is the trend of the times. Taking Plateno hotel group as the research object, this paper constructed a theoretical analyzing framework of tourism enterprises’ service innovation mechanism, and testified the relationship among service innovation driving factors, service innovation dimensions and tourism service innovation performance through the method of case study. It can enlighten the other tourism enterprises of service innovation. The results show that: (1) The tourism service innovation behaviors are more driven by the enterprises strategy, executive innovation spirit and the external environments; the roles of internal incentive mechanism, organizational culture and the relationship of the suppliers are not obvious; (2) Tourism service innovation includes service concept innovation, service interface innovation, transfer and technology innovation; (3) The tourism service innovation performance is reflected by the sales growth, market share increasing, new product development, customer satisfaction and enterprise image.
improvement.

**Key words:** mobile internet, tourism enterprise, service innovation, case study

1. Introduction
In recent years, China's tourism industry has developed rapidly. According to the data of the former National Tourism Administration, the number of domestic tourists in 2017 was 5.01 billion, an increase of 12.8%; the total tourism revenue was 5.40 trillion yuan, an increase of 15.1%. With the popularization of mobile Internet, mobile information service technology, mobile location service technology, mobile payment service technology and mobile marketing service technology have better met the tourist service demand of tourists. According to the Apperian research report, 61% of IT decision makers believe that enterprise-class mobile applications will bring huge returns in 2016, and as many as 87% of IT decision makers believe that enterprise-class mobile applications are critical to the company's profitability\(^{[1]}\). In 2015, China's online travel mobile users exceeded PC users for the first time, accounting for 64%. According to the "Statistical Report on the Development of China's Internet Network", as of the end of 2017, the number of online travel booking users in China reached 376 million, an increase of 25.6% compared with 2016. Domestic scholars pointed out that service innovation, especially service innovation based on information technology, has increasingly become an important source for enterprises to gain competitive advantage (Zhen Lei, Wu Guisheng, 2003\(^{[2]}\); Yuan Jianhong, 1999\(^{[3]}\)). Therefore, the research on tourism enterprise service innovation theory is very important in the context of mobile internet. It is especially urgent to explore the practical ability of tourism enterprises to enhance the competitiveness of tourism enterprises.

Based on a review of research on tourism service innovation drivers, tourism service
innovation dimensions, and tourism service innovation performance, this study constructs a theoretical analysis framework for tourism enterprise service innovation mechanism, using case study methods to the Platinum Hotel (The following is referred to as “Platinum”) as the research object, verifying the relationship between service innovation drivers, tourism service innovation dimension and tourism service innovation performance, and correcting the theoretical analysis framework of tourism enterprise service innovation mechanism, in order to enrich China's tourism enterprise services. Innovative theory provides practical guidance for tourism enterprises to carry out service innovation in the context of mobile internet.

2. Literature review

2.1 Concept definition of tourism service innovation
Service innovation research can be traced back to the innovative concepts proposed by Schumpeter (1932). Tidd (1997) points out that innovation is a change that occurs in the way things are created by the organization (products or services) and how they are created and delivered[4]. The concept of service innovation stems from Betz (1987), who argues that service innovation is not a process innovation that introduces new technologies into production processes, nor product innovation, but introduces new technology-based services in competitive markets[5]. Verma et al. (2008) defined hotel service innovation as: through the use of new methods, new service concepts and new business models, to achieve continuous improvement in operations, technology, and employee performance, and thus to improve customer experience management[6]. Yan Lei and Wu Guisheng (2007) pointed out that general service innovation refers to all service-related or service-oriented innovation behaviors and activities. Narrow sense
service innovation refers to innovation behaviors and activities that occur in the service industry\(^7\). Zhang Jinghao (2010) believes that tourism service innovation belongs to the service innovation in the narrow sense, that is, heterogeneity, diversification and transformation in satisfying the level of tourists enjoying tourism services\(^8\). Song Huilin and Song Haiyan (2013) believe that tourism innovation refers to all innovative behaviors and activities that occur in the tourism industry\(^9\). Gu Huimin and Guo Fan (2013) define hotel service innovation based on information technology\(^{10}\).

This study defines tourism enterprise service innovation as: changes in tourism service factors created by tourism enterprises in order to improve the quality of tourism services and create new market values, in order to achieve continuous improvement in operations, technology and employee performance, and thus achieve the improvement of customer experience management.

### 2.2 The dimension of tourism service innovation

In the research of service innovation dimension, the most representative is the “service innovation dimension model” proposed by Bilderbeek et al. (1998), including four dimensions: service concept innovation, customer interaction interface innovation, service delivery system innovation and technology innovation\(^{11}\). Moreover, the four dimensions are related to each other. Different combinations represent different service innovation models, which provide a theoretical framework for enterprise service innovation. Weiermair (2004) conducted an empirical study on the innovative dimensions of tourism service products\(^{12}\). Hertog (2011) pointed out that hotel enterprise innovation must be innovative in terms of service concepts, service content and types, core service processes and support systems\(^{13}\). Based on the research of Bilderbeek et al. (1998), domestic scholars have carried out a series of studies on the dimension of tourism enterprise service innovation. Zhang Hong and Wang Fang (2008)
pointed out that the key path of tourism enterprise service innovation is to implement
the service profit chain as the main line, and implement comprehensive in the four
dimensions of tourism service concept, tourism service interaction interface, tourism
service delivery system and technology. Service innovation[14]. Wang Junzheng and Wu
Guisheng (2007) empirical research on domestic travel agencies found that the service
concept and technology in the service innovation dimension model is not an important
dimension of the current travel agency innovation. The delivery system and interface
are the more likely choices for travel agency innovation[15]. Gu Huimin and Guo Fan
(2013) also added a fifth dimension based on the four-dimensional model of service
innovation - the "external innovation platform" dimension[8]. This study still uses the
“service innovation dimension model” proposed by Bilderbeek et al. (1998) to divide
the service innovation dimension of tourism enterprises.

(1) Service concept innovation. Chen Fuyi and Sheng Yanchao (2005) believe that
service concept innovation needs to be tested from the perspective of tourism service
demanders, that is, the customer perspective[16]. Even if a concept has been known to
customers in other industries, it is also a service concept innovation that draws on
tourism services[17]. The innovation of this service concept is intangible, usually derived
from the market, including the innovators themselves observing market behavior and
gaining inspiration from other market behaviors, thus proposing new service concepts.
This study analyzes the service concept innovation of tourism enterprises from three
aspects: existing service brand optimization, new service brand launch and service
innovation other three-dimensional related new concept innovation.

(2) Interactive interface innovation. Yan Lei and Wu Guisheng (2007) pointed out that
customer interface innovation refers to the innovation of the way the service is provided
to customers and the way of communication and cooperation with customers[7]. That is,
the service delivery method and interpersonal communication method between the service enterprise and the customer. Chen huifen and Li Qianrong (2012) believe that the new customer interface usually uses IT technology to improve the existing service interface and make close connections between existing and potential customers[18]. Interactive interface innovation can be divided into two types: association mode and interface mode. The association mode interaction interface innovation and service delivery system innovation partially overlap, so this study defines interactive interface innovation as: Innovation of interactive platform composed of software system and hardware facilities based on IT technology. This is distinguished from the interaction process between the service personnel and the customer in the service delivery system. That is, the interactive interface innovation of this study refers to the interface form of interaction with the customer without including the association method.

(3) Service delivery innovation. Chen Yufen and Li Qianrong (2012) pointed out that the new service delivery system focuses on transforming the internal organization of service providers and the potential of employees through various educational trainings to stimulate new services and make services more professional[18]. Yan Lei and Wu Guisheng (2004) pointed out that in the service delivery system dimension, the organization's authorization of employees is particularly important, especially in professional services (such as advertising services, computer services, design services, etc.)[19]. New service delivery innovations require new organizational forms and employee skills that inevitably lead to changes in management practices or changes in the way employees serve customers. This study divides the main forms of service delivery innovation into changing internal organizational forms, various types of education and training, employee incentives, appropriate authorization, and innovation in service delivery processes.
(4) Service technology innovation. Chen Fuyi and Sheng Yanchao (2005) pointed out that the technological innovation of tourism services can be a combination of high-tech and tourism companies' specific operational environments, as well as innovations in employee service technologies. Many of the innovations in the service industry are driven by downstream service departments and are mostly dominated by customers. Although some technologies of service companies come from suppliers, users play a vital role in the development and promotion of new services. This study divides the main forms of service technology innovation into four aspects: the introduction of high-tech, employee technology innovation, downstream service departments (such as distributors, partners) and customer promotion.

2.3 Drivers of tourism service innovation

The driving factor of service innovation is an important determinant of the innovation process and the basis for the formation of an innovation model. The service innovation driving model proposed by Sundbo and Gallouj (1998) is by far the most famous driving force model\[20\]. They identify internal and external motivational factors that influence service companies' innovation activities, the former includes corporate strategy and management, employees, R & D and innovation departments, while the latter includes actors and tracks. Wang Tian and Zhong Xianwen (2005) pointed out that technology, demand, competition and policy are the key drivers of service innovation\[21\]. Domestic and foreign scholars have studied the driving factors of tourism service innovation. Bergin-Seers et al. (2008) increased the three factors of government system, entrepreneurship and industrial agglomeration in the research of tourism service innovation\[22\]. Lashley and Morrison (2000) pointed out that information technology (ICT) plays an important role in hotel business innovation\[23\]. Orfila-Sintes et al (2005) shows that the innovation activities of hotel enterprises are more derived from the
introduction of technology as the carrier of research and development from the outside. Moreover, hotel type, chain operation, supplier, enterprise scale, market competition and human capital are the factors that affect its service innovation \cite{23}. Meng-Lei Monica Hu et al. (2009) found that knowledge sharing in the hotel team can promote service innovation, and team culture has a significant role in regulating the relationship between knowledge sharing and service innovation \cite{25}. Paget et al. (2010) found that entrepreneurs and innovation networks are the main influencing factors of tourism innovation \cite{26}. Wang Junzheng (2007) promoted the market to the research of tourism service innovation drive \cite{15}. Wang Xia and Guo Yubin (2010) show that entrepreneurship, technology promotion, demand pull, and regional innovation system are the four main driving forces for tourism service innovation \cite{27}. Lu Xiao (2012) used the case study method to reveal the five decisive factors for the success of luxury hotel service innovation: enterprise innovation strategy, senior management team, reasonable support system and organizational structure, communication channels and employee family \cite{28}. Song Huilin and Song Haiyan (2013) included enterprise scale, enterprise management model, human capital and entrepreneurship, system and policy, enterprise cooperation and agglomeration, and market demand as drivers of tourism service innovation \cite{9}.

This study adopts the service innovation driving model of Sundbo and Gallouj (1998), and combines the characteristics of tourism enterprises to summarize the driving factors of tourism enterprise service innovation: external driving factors and internal driving factors. The former includes customer trends, competitive environment, technological advancement, etc., while the latter includes corporate strategic planning, senior management innovation spirit, incentive mechanism, organizational culture and so on.

2.4 Tourism Service Innovation Performance
Service innovation performance is the fundamental purpose of enterprise innovation. Cooper and Kleinschmidt (1987) derived three independent service innovation performance indicators through factor analysis: financial performance (margin and return on investment); opportunity window (a new product provides new opportunities for products or markets); market impact (domestic and international market share)\(^{29}\). Yan Lei and Wu Guisheng (2003) believe that innovation performance should include both product and enterprise benefits. Product benefits include sales performance and profitability performance. Corporate benefits include attracting new customers, improving corporate image, improving customer satisfaction, and improving competitiveness. Etc.\(^{2}\). Thakur and Hale (2013) divide service innovation performance into financial output performance and non-financial output performance. Financial output performance includes market share objectives, sales targets, new service profitability, and overall sales capabilities of new services; non-financial output performance includes customer loyalty, corporate perception, profitability of other products, and attracting new customers\(^{30}\).

Tourism service innovation performance is the result of the introduction of new concepts, technological improvements, changes in systems and processes, and interface design. Orfila-Sintes and Mattsson (2009) specifically decompose hotel industry service innovation performance into market performance, economic performance and employee-customer relationship improvement\(^{31}\). Nicolau and Santa-Maria (2013) measure the market value of service innovation in the hospitality industry using future sales performance, and propose indirect benefits\(^{32}\). Wang Junzheng and Wu Guisheng (2007) divided tourism enterprise performance into two dimensions: profitability and growth\(^{15}\). Lv Yihua and Xu Yangqian (2008) took the food and beverage industry as the background and obtained four factors to measure the innovation performance of the
hotel: whether the financial indicators, strategic objectives are consistent with long-term planning, the degree of conformity between innovative services/products and hotel image, and the consistency of the hotel budget. According to this, there are 16 indicators that measure the innovation performance of hotels. Based on Thakur and Hale (2013), Liu Huafeng (2013) measures the service innovation performance of tourism enterprises from the aspects of new service sales, market share, profitability, customer loyalty and corporate image brought by innovation.

This study refers to the research of Thakur and Hale (2013), Yan Lei and Wu Guisheng (2003), Liu Huafeng (2013), and summarizes the measurement standards of tourism service innovation performance into two aspects: financial performance and strategic performance. Among them, financial performance is mainly the profitability of the company, including sales, cost, profit, etc., and strategic performance mainly includes market share, return on investment, customer satisfaction, new product market, corporate image change.

2.5 Tourism Service Innovation in the Background of Mobile Internet

In recent years, research on tourism service innovation in the context of mobile Internet has gradually become a hot spot, and some exploratory work has been done. The theory of transformation and upgrading of tourism services in the context of mobile internet has become a new research topic. Peng Min et al. (2014) pointed out that for tourism managers, how to grasp the development opportunities of mobile Internet and provide guidance for tourism business model innovation has become an urgent issue.

The research on tourism service innovation in the domestic mobile Internet background mainly focuses on two aspects: (1) qualitative countermeasure research. Xiang Lan et al. (2011) analyzed the problems and strategies of the use of Internet innovative tourism products by travel agencies in China. Li Jianzhou et al. (2011) proposed an
innovative application of mobile Internet in the tourism industry chain for tourism service providers. Huang Meng and Shu Boyang (2015) explored the future direction of the tourism supply chain in the mobile Internet environment. Dai Fanghui and Zhang Wenjian (2015) proposed the innovative path of tourism service for online travel e-commerce on the mobile side. (2) Quantitative influence mechanism research. Li Xiaofei (2015) analyzed the influencing factors of online travel service quality. Lu Junliang et al. (2013) studied the influencing factors and their relationship between tourists' willingness to continue using mobile Internet. Zhang Hongmei et al. (2015) studied the influence of customer innovation and motivation on the integration of mobile tourism services. Yu Wei (2015) empirical research shows that mobile Internet has a great impact on customer satisfaction of high-touch travel service companies.

2.6 Review of existing research
Through the above literature review, the existing research has the following limitations:
(1) From the perspective of the industry, in comparison, the existing service innovation research results based on the tourism industry are less, and even the research results of product innovation are directly transplanted to the field of travel services. Moreover, the existing tourism service innovation research results are relatively scattered, lacking systematic research on the tourism service innovation process. (2) The existing research results are mostly based on the background of western developed countries. For China, which is developing rapidly, the path of tourism service innovation may be different and there is certain particularity. (3) Whether it is the development of mobile Internet travel services or the research of mobile Internet travel services, it is still in the stage of primary exploration (Lu Junliang et al., 2013). At present, domestic research on the application of social media in tourism is relatively lagging, and some research fields
are still blank, and it is urgent for the tourism academic community to pay attention (Peng Min et al., 2013).

Therefore, through the method of case study, this study deeply studies the relationship mechanism between the driving factors of service innovation, the dimension of service innovation and the performance of service innovation in tourism enterprises under the background of mobile Internet, so as to enrich the research results of tourism service innovation. It also provides practical guidance for tourism enterprises to carry out service innovation in the context of mobile Internet.

3. Analysis framework and research methods

3.1 Analysis framework

This study constructs a theoretical analysis framework for the service innovation mechanism of tourism enterprises (Figure 1).

Figure 1 Theoretical analysis framework of this study

This study answers the following three questions: (1) What are the main drivers of tourism service innovation? (2) What are the main dimensions of tourism service
innovation? (3) What are the main performances of tourism service innovation performance? The purpose of this study is to specifically answer the eight questions and eight questions on these three levels.

Table 1 Specific analysis of service innovation in tourism enterprises

<table>
<thead>
<tr>
<th>3 levels</th>
<th>8 questions in all aspects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service innovation dimension</td>
<td>(3) Concept innovation: ① Is there an existing brand optimization upgrade? ② Is there a new brand? ③ Is there any new concept innovation related to service innovation and other three-dimensionality? (4) Interface innovation: ① What means and methods are used to innovate the service interface? (5) Passing innovation: ① Does it change the internal organization? ② Do you conduct various education and training? ③ Is there employee incentives? ④ Is it properly authorized? ⑤ Is there a service delivery process innovation? (6) Technological innovation: ① Is there a high-tech launch? ② Is there any employee technical innovation? ③ Is there a downstream service department (such as distributors, partners) to promote? ④ Is there a customer push?</td>
</tr>
<tr>
<td>Service innovation performance</td>
<td>(7) Corporate performance: ① Does the company’s profitability (sales) increase? (8) Strategic performance: ① Does the market share increase? ② Is the new product market expanding? ③ Is customer satisfaction improved? ④ Has the corporate image changed?</td>
</tr>
</tbody>
</table>

3.2 Case study method

Case study methods are suitable for exploring hypothetical events without specific limitations, which can be used to validate theory, critical theory, and to construct theory that specifically answer questions about “what”, “why” and “how” (Lee, 1999[44]; Yin, 2004[45]; Ouyang Taohua, 2004[46]; Zhou Changhui, 2005[47]; Pan Mianzhen, Mao Jiye, 2009[48]). This study selects a single case study method because: (1) Single case study is the basis of multi-case research. Based on the basis of a single case study, after discovering the preliminary framework of the service innovation process mechanism of
tourism enterprises, it can be carried out through multiple case studies. (2) Single case studies can conduct case studies and analysis in more depth (Zhou Changhui, 2005), making it easier to clarify what is and how.

(1) Case selection

This study selected Platinum as the research object. Platinum is one of the fastest growing hotel groups in China, and it is also the hotel group with the most brands and the largest number of members in the Chinese hotel industry. Innovative initiatives continue to be introduced in service management. According to official data, from the 7th day of the hotel in 2005 (the predecessor of Platinum), Platinum was officially established in 2013. In 2016, Platinum official data shows that there are 22 brands, more than 3,700 stores, more than 300 cities across the country, more than 80 million members, and actively expand to Southeast Asia, Europe, Africa and other overseas markets. Platinum "focus on the consumer field, deepen the real needs of customers, from the unique travel and leisure life experience and value complaints, is committed to providing customers with a rich experience life circle." This study selected Platinum as the research object, mainly based on Platinum's leading service concept and rich service innovation practice in the industry. These service practices have great research value and are well suited to the theory of tourism enterprise service innovation process mechanism constructed in this study. Therefore, researching the relationship between service innovation drivers, service innovation dimensions and service innovation performance is not only conducive to enriching the theoretical results of service innovation, but also providing reference and reference for service innovation of tourism enterprises in the context of mobile internet.

(2) Data source

This study uses a variety of methods and methods to collect secondary data, including
corporate official websites, in-house publications, China Knowledge Network (CNKI) electronic journal database and newspaper database, online media and so on. In addition, three store managers and six employees from three 7-day hotel chains in Wuhan were selected for in-depth interviews to collect first-hand data.

(3) Data analysis

This study uses data coding and classification methods to collate and analyze the collected primary and secondary data. The purpose is to refine the theme from a large number of qualitative data, and then verify the theoretical analysis framework and the proposed problems. Lee, 1999; Yan et al., 2004[49]; Wu Xiaobo et al., 2009[50].

First, the data is initially encoded and classified in a gradual manner. Data are analyzed based on the main issues of research—service innovation drivers, service innovation dimensions, and service innovation performance. Referring to the 8 aspects in Table 1, the examples mentioned are coded into corresponding entries, and a library of 433 entries is obtained, which is divided into innovation driver class, innovation dimension class and innovation performance class. Secondly, further classification and coding of 433 items in the item library, the basis of this code is the 26 questions studied in this paper. In the coding, I borrowed the practice of Yan et al. (2004), and the two individuals independently coded them, then discussed the coded entries with differences, and strived to reach a consensus on the differences. Subsequent entries that are still inconsistent are considered ambiguous and therefore not suitable for further analysis. Thus, 40 out of 433 entries are removed, leaving 393 valid entries. Finally, there are quite a few duplicates in the 393 valid entries that are not removed, because the higher the frequency of an item being mentioned, the more general the behavior described by the item (Fan Jingli et al., 2004). However, the same entry in the same data source in the second-hand data is excluded, because the repetition of the same data source of the
second-hand data is actually a mutual reference, and cannot be used as the frequency mentioned (Li Fei et al., 2010[51]). Eventually, 126 innovation driver entries, 185 service innovation dimension entries, and 82 service innovation performance entries were obtained.

4. Research findings

4.1 Drivers of Service Innovation

The driving factor of service innovation is an important determinant of the innovation process. This study summarizes the driving factors of Platinum service innovation from two aspects of internal driving factors and external driving factors (Table 2).

It can be seen from Table 2 that Platinum continuously carries out service innovation under the internal and external driving factors, thus achieving the satisfaction of customer demand and the rapid development of the enterprise. Platinum's strategic planning objectives and the innovative spirit of senior management team members are the main factors driving the innovation of Platinum service, and the impact of hotel incentives on its service innovation is not obvious. Customer consumption trends, changes in the hotel's competitive environment, and technological advances are the main external drivers driving Platinum's service innovation. Among them, technological progress not only affects the characteristics of customer tourism consumption, but also provides the power and means of service innovation for Platinum and its competitors. Although there are innovative expressions in Platinum's strategic planning, no entry has been found in Platinum's corporate culture that directly involves “innovation”.

<table>
<thead>
<tr>
<th>Driver</th>
<th>Segmentation</th>
<th>Number</th>
<th>Related data examples</th>
</tr>
</thead>
</table>

Table 2 Platinum service innovation drivers
<table>
<thead>
<tr>
<th>Driver</th>
<th>Of entries</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Internal Strategic Planning</strong></td>
<td>27</td>
<td>Always aiming at providing customers with a rich experience life circle, focusing on experiencing innovation in the consumer field</td>
</tr>
<tr>
<td><strong>Top Management Innovation</strong></td>
<td>29</td>
<td>Chairman Zheng Nanyan frequently innovates in hotel management with his unique thinking and innovative business philosophy.</td>
</tr>
<tr>
<td><strong>Incentives</strong></td>
<td>5</td>
<td>Employee sales package can extract 15% of the high commission</td>
</tr>
<tr>
<td><strong>Customer Trend</strong></td>
<td>31</td>
<td>The hotel chain audience is mainly younger generation, the pursuit of fashion trends and quality business travel experience is the trend of the times</td>
</tr>
<tr>
<td><strong>The Competitive Environment</strong></td>
<td>13</td>
<td>Jinjiang acquires 81% stake in Platinum, achieving strong alliance and becoming the fifth largest hotel group in the world</td>
</tr>
<tr>
<td><strong>Skill Improved</strong></td>
<td>34</td>
<td>Rapid development of information and communication technology, network technology, online payment technology and GPS positioning technology</td>
</tr>
</tbody>
</table>

**4.2 Service Innovation Drivers and Service Innovation Dimensions**

(1) Service innovation drivers and service concept innovation

Platinum focuses on the field of experience consumption, advocating that "the hotel can also be the end point of tourism", starting from the unique travel and leisure life experience and value demands, to create two strategic platforms for members and brands.

This study summarizes Platinum's service concept innovations from the existing brand
optimization and upgrading, the continuous introduction of new brands and new three-dimensional concepts related to service innovation. The data compilation results are shown in Table 3. As can be seen from Table 3, Platinum has continuously proposed new service concepts through analysis of market changes and customer requirements, and not only optimizes existing brands, but also continuously introduces new hotel brands (as of October 2016, Platinum has With 22 brands), each new brand has a unique personality, representing a fashion consumption scene, which is more in line with the value proposition of "young people's choice". In addition, new service concepts such as “vertical incubators” and “credits” are proposed in relation to other three-dimensional aspects of service innovation. These initiatives are the result of a combination of external drivers of service innovation (such as customer consumption trends, market competitive environment, technological advances, etc.) and internal drivers such as group strategy and managerial vision and capabilities.

(2) Service innovation driver and service interaction interface innovation
In addition to the interaction with customers through e-mail, telephone and internet, Platinum also adopts the following main forms to carry out service interaction interface innovation: optimize the web version of “Platinum Club”, launch the WeChat platform “Platinum Club”, release The mobile app "Platinum Travel" changed the official Weibo from "Platinum Official Bo" to "Platinum Travel". Among them, the web version of “Platinum Club” has a friendly interface and simple operation. The WeChat public number supports information push and online booking. The mobile APP “Platinum Travel” is booked around the hotel to provide customers with integrated travel solutions. Bo changed its name to reflect Platinum's determination to innovate customer interaction interfaces.

It can be seen that Platinum's interaction in the context of mobile Internet is more driven
by technological advancement. At the same time, it is also the trend of customer consumption, especially the driving habits of customers' mobile Internet. The improvement of competitors' interface is also accelerated Platinum's innovation process. Service interface innovation enables enterprises not only to quickly understand the needs and cost characteristics of existing customers and potential customers, but also to achieve more efficient interaction between customers and enterprises.

<table>
<thead>
<tr>
<th>New service concept classification</th>
<th>Number of entries</th>
<th>Related data examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing brand optimization</td>
<td>13</td>
<td>The Group adheres to its core value proposition and upgrades the “7 Days Hotel Chain” to “7 Days Premium”.</td>
</tr>
<tr>
<td>New brand launch</td>
<td>43</td>
<td>Platinum teamed up with Althoff Hotel Group to launch Ameron, a high-end hotel brand in Asia</td>
</tr>
<tr>
<td>Other three-dimensional related new concepts</td>
<td>10</td>
<td>Platinum Travel and Ali Travel Launched “Credit Stay” Function</td>
</tr>
</tbody>
</table>

(3) Service innovation drivers and service delivery innovation

Platinum service delivery innovation initiatives are mainly reflected in Table 4. ① service delivery process innovation—O2O membership. The APP function is reflected in: scan code to register new members; view personal sales performance at any time; view sales rankings of national and city branches. Platinum's APP for employees has improved employee productivity and enhanced employee service capabilities by streamlining business processes, and has gained a large competitive advantage in the same industry. ② Appropriate authorization - authorized by the store. The authorization of such a special store for the store helps each store to maximize the profit based on its own cost control. ③ Employee incentives. Platinum deeply understands that only by continuously improving employee productivity and job satisfaction can it lead to better customer satisfaction and customer loyalty.
It can be seen that technological advancement, market competition and other factors provide an external driving force for Platinum's service delivery innovation, and the incentive mechanism also provides an internal driving force for Platinum's service delivery innovation.

(4) Drivers of service innovation and technological innovation

This study summarizes Platinum's technological innovations as shown in Table 5. It can be seen from Table 5 that Platinum is constantly innovating in terms of technology, using technology innovation to bring new interactive interfaces to customers, and

<table>
<thead>
<tr>
<th>New service delivery system classification</th>
<th>Number of entries</th>
<th>Related data examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service delivery process innovation</td>
<td>15</td>
<td>O2O Member Pass is a mobile app launched by Platinum for corporate employees, which increases the mobility of the work. The store can help customers register members anytime and anywhere, and improve the operating efficiency of the store.</td>
</tr>
<tr>
<td>Appropriate authorization</td>
<td>5</td>
<td>Each store has the qualification to open a special room for customers. The store manager can decide whether to open the special room and the number of special rooms according to the data of “last year and today” and the recent “opening rate”.</td>
</tr>
<tr>
<td>Employee incentive</td>
<td>9</td>
<td>The total employee income is not a fixed amount, and the employee sales package can draw a high commission of 15%. The employee development member stays at the hotel in Platinum, and the employee gets a commission, and the performance of the irregularly specified indicators is high.</td>
</tr>
</tbody>
</table>

brings customers a “higher quality” business travel life. Platinum's technological innovation in technology innovation, technology innovation driven by downstream service departments and technological innovations introduced by high-tech are largely driven by external technological advancement and competitive situation, while customer-driven service innovation is more due to customer spending. The impact of trends such as mobile internet usage preferences . At the same time, technological
innovation is also importantly linked to drivers such as corporate strategic planning (such as Platinum's “future strategy”) and senior management vision.

Table 5 Platinum Technology Innovation

<table>
<thead>
<tr>
<th>New technology classification</th>
<th>Number of entries</th>
<th>Related data examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>The launch of high technology</td>
<td>19</td>
<td>Use VR technology to release panoramic video of its featured hotels for customers to choose online to bring new experiences to customers</td>
</tr>
<tr>
<td>Employee technology innovation</td>
<td>36</td>
<td>Hosting a vertical incubator competition, inviting entrepreneurs, programmers, and designers to conduct mobile application (App, WeChat public account, tools) development contest</td>
</tr>
<tr>
<td>Promoted by the downstream service department</td>
<td>9</td>
<td>Cooperate with Ali Travel to launch “Credit Live” function on each platform</td>
</tr>
<tr>
<td>Customer push</td>
<td>26</td>
<td>Based on hotel reservations, we provide integrated travel solutions for our customers and launch a new version of the “Platinum Travel” mobile app (one-click hotel reservation, travel route recommendation, travel sharing, etc.)</td>
</tr>
</tbody>
</table>

4.3 Service Innovation Dimensions and Service Innovation Performance

Service innovation performance is a measure of whether service innovation can bring benefits to the enterprise. This study uses financial performance and strategic performance to analyze Platinum's service innovation performance. The data collation results are shown in Table 6.

Table 6 Platinum service innovation performance

<table>
<thead>
<tr>
<th>Performance classification</th>
<th>Secondary indicators</th>
<th>Number of entries</th>
<th>Related data examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Performance</td>
<td>Sales</td>
<td>9</td>
<td>The innovation in the interface with the customer enables the customer to complete the hotel reservation at the mobile terminal, saving the customer's consumption cost and increasing the sales of the company.</td>
</tr>
<tr>
<td>Strategic performance</td>
<td>market share</td>
<td>21</td>
<td>It owns 22 brands, 80 million members, and over 3,700 stores, covering more than 300 cities across the country, expanding its business to Southeast Asia, Europe, Africa and other overseas markets.</td>
</tr>
<tr>
<td></td>
<td>New product</td>
<td>26</td>
<td>The newly opened limited service hotel chain has added 102 “Lvfeng” hotel chains and 43 “Qianyi”</td>
</tr>
</tbody>
</table>
As can be seen from Table 6, Platinum's service innovation performance is reflected in the sales growth of financial performance, as well as the increase in market share in strategic performance, the development of new product markets, the improvement of customer satisfaction and the improvement of corporate image. The above data shows that among the four dimensions of service innovation, service concept innovation affects market share and new product market development by optimizing existing brands and launching new brands. Customer interaction interface innovation and technological innovation affect sales growth. Customer satisfaction and corporate image improvement. Service Delivery System Innovation reduces customer costs and improves customer satisfaction by improving employee service efficiency.

### 3.4 Case Analysis Results

In this study, Platinum was used as the research object, and the case study method was used to sort and classify the in-depth interviews and second-hand data. The framework of the impact mechanism of tourism service innovation, tourism service innovation and tourism service innovation performance was analyzed. Among the 26 questions that need to be proved and 26 of the 8 aspects, 21 problems in 8 aspects have been verified, and 3 aspects and 5 questions have not been verified (as shown in Table 7, the verification uses "√" Indicated, otherwise indicated by "X").

<table>
<thead>
<tr>
<th>Service</th>
<th>(1) Internal driving factors: ① is driven by corporate strategic planning? ② is</th>
<th>3 levels</th>
<th>8 questions in all aspects</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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<td></td>
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</tbody>
</table>
### Innovation Drivers

<table>
<thead>
<tr>
<th>Innovation Drivers (✓)</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>driven by the innovation spirit of top management? ③ is driven by an incentive mechanism? Is driven by organizational culture?</td>
</tr>
<tr>
<td></td>
<td>(2) External driving factors: ① is driven by customer consumption trends? ② is driven by a competitive environment? ③ is driven by technological advancement? ④ is driven by supplier relationships?</td>
</tr>
</tbody>
</table>

### Service Innovation Dimensions (✓)

<table>
<thead>
<tr>
<th>Service Innovation Dimensions (✓)</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(3) Concept innovation: ① is there an existing brand optimization upgrade? ② Is there a new brand? ③ is there any new three-dimensional concept innovation related to service innovation?</td>
</tr>
<tr>
<td></td>
<td>(4) Interface innovation: ① what means and ways to innovate the service interface?</td>
</tr>
<tr>
<td></td>
<td>(5) transfer innovation: ① does change the internal organizational form? ② is there any kind of education and training? ③ is there any incentive for employees? ④ is it properly authorized? ⑤ is there innovation in the service delivery process?</td>
</tr>
<tr>
<td></td>
<td>(6) technological innovation: ① is there a launch of high and new technology? ② are there any employee technological innovations? ③ is there a downstream service department (such as distributors, partners) driving it? ④ is there any customer impetus?</td>
</tr>
</tbody>
</table>

### Service Innovation Performance (✓)

<table>
<thead>
<tr>
<th>Service Innovation Performance (✓)</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(7) Enterprise performance: ① has the profitability (sales) of the enterprise improved?</td>
</tr>
<tr>
<td></td>
<td>(8) Strategic performance: ① has the market share increased? ② has the market for new products expanded? ③ is there any improvement in customer satisfaction? ④ has there been any change in the corporate image?</td>
</tr>
</tbody>
</table>

### 5. Research conclusions, management implications and research prospects

#### 5.1 Research conclusions

An in-depth study of Platinum's service innovation mechanism led to the following conclusions:

(1) The driving factor of service innovation is the foundation of service innovation. The driving factors of tourism service innovation include internal drivers and external drivers. The former mainly includes corporate strategic planning and the innovation spirit of senior managers; the latter mainly includes customer trends, competitive environment and technological progress. It can be seen that the tourism service innovation behavior is more driven by the corporate strategy and the spirit of executive innovation and the external environment, while the internal driving factors such as...
incentive mechanism and organizational culture and the drivers of supplier relations are not obvious.

(2) The content of tourism service innovation includes four aspects: service concept innovation, interactive interface innovation, transmission innovation and technological innovation. The characteristics of tourism services determine that tourism services need to carry out conceptual innovation from multiple angles, and the innovation of mobile Internet-based service interaction interface is more beneficial to technological progress, and is also inseparable from customer consumption habits (trends) in the context of mobile internet. Factors such as technological advancement and market competition provide an external driving force for tourism service delivery innovation. Technological innovation by employees, technological innovation driven by downstream service departments, and technological innovations introduced by high-tech are largely driven by external technological advancement and competitive posture, while customer-driven service innovation is more driven by consumer trends (such as mobile Internet usage preferences). Use preferences) to influence the results.

(3) Tourism service innovation performance is reflected in the sales growth of financial performance, as well as the increase in market share of strategic performance, the development of new product markets, the improvement of customer satisfaction and the improvement of corporate image. Service concept innovation affects the increase of market share and new product market development by optimizing existing brands and launching new brands. Customer interaction interface innovation and technological innovation affect sales growth, customer satisfaction and corporate image improvement. Service Delivery System Innovation reduces customer costs and improves customer satisfaction by improving employee service efficiency.

(4) This study has revised the theoretical analysis framework of the service innovation mechanism
(as shown in Figure 2). The theoretical analysis framework of this tourism enterprise service innovation mechanism can provide guidance for tourism enterprises to carry out service innovation practice under the background of mobile internet.

5.2 Management Implications

(1) The internal driving factors of tourism service innovation are mainly reflected in the two aspects of enterprise strategic planning and the innovation spirit of senior managers. External factors are mainly concentrated in three aspects: customer consumption trends, competitive environment and technological progress. This is bound to provide a direction for tourism companies to carry out service innovation. However, tourism companies still need to intensify their efforts in innovation organization culture and innovation incentives. In addition to promoting tourism service innovation from the top down and from the outside, it is also necessary to form a bottom-up innovation driving force within the organization. This requires changing the current wage structure of the tourism enterprise and the slow promotion of posts, and establishing innovation, oriented corporate culture.

![Flowchart showing the relationship between service innovation dimensions and performance metrics.](173)
(2) The intangibility and difference of tourism services determine that the service concept needs constant innovation. Platinum optimizes and upgrades existing brands and continuously introduces new hotel brands to meet the diverse needs of customers. New concept innovations related to the other three dimensions of service innovation can also achieve conceptual innovation.

(3) Customers are increasingly playing the role of cooperative producers in services, and interactive interface optimization has become an important dimension of tourism service innovation. The innovation of the interactive interface of tourism services is driven by the advancement of technology based on mobile internet, and is also inseparable from the consumer spending habits (trends) in the context of mobile internet. This requires tourism companies to make full use of the traditional consumer means such as e-mail, telephone and Internet to achieve interaction with customers, and also to use WeChat, APP, Weibo, etc. A kind of social media tool realizes the innovation of service interaction interface and realizes more efficient interaction of Gu-enterprise relationship.

(4) Tourism service delivery innovation focuses on employee incentives, appropriate authorization and innovation in service delivery process, mainly influenced by factors such as technological progress and market competition. However, there is a lack of education and training on employee service innovation, as well as changes in the internal structure of the organization to carry out service delivery innovation. Therefore, it is necessary for tourism enterprises to simplify the service process by means of mobile internet technology to improve service delivery efficiency and gain competitive advantage. It is also necessary to enhance service innovation training and education,
which can stimulate front-line staff service innovation capability.

(5) Technological advancement provides a guarantee for the service technology innovation of tourism enterprises. Technological innovation driven by employee technology innovation, downstream service departments (such as distributors, partners) and technological innovations introduced by high-tech are largely driven by external technological advancements, while customer-driven technological innovation is consumer trends (Such as customer mobile Internet usage preferences, etc.). Therefore, tourism companies should actively explore the integration of science and technology into their service innovation practices in the context of mobile Internet. At the same time, they should pay close attention to customer needs and provide customers with higher quality tourism experiences through technological innovation.

(6) The standard for measuring the innovation performance of tourism services In addition to the profitability of financial performance, the indicators reflecting the strategic performance of service innovation—enterprise market share, new product market, customer satisfaction and corporate image change can not be ignored. Especially in the context of mobile internet, the travel mobile Internet platform provides a good reference indicator for tourism enterprises to evaluate service innovation performance, such as the number of fans, online comments, praise, and forwarding volume. Tourism companies should pay attention to the evaluation of these non-financial performance indicators on corporate innovation behavior, in order to further adjust the implementation of corporate innovation strategy planning and strategy.

5.3 Insufficient research and prospects

(1) The case study is mainly based on second-hand information. Although in-depth interviews were conducted with the store managers and store staff of the case enterprises, there is still a lack of first-hand interview data support for more middle and
senior managers. Future research can consider in-depth interviews with employees at different levels of the case to obtain more informative first-hand data, especially first-hand data on the performance of enterprise service innovation.

(2) This study used a single case study to analyze only hotel companies in tourism enterprises. Therefore, the application and promotion value of its research conclusions may be limited. Future research can consider the use of multiple case studies, with tourism companies such as tourist attractions and travel agencies as research objects, and expand the universality of research conclusions.

6. Acknowledgments

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References


Research on Brand Value Enhancement Strategies of Retail Enterprises Under the Background of Mobile Internet--Take Inzone Group as an Example

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1Shandong Yingcai University

Abstract

The rapid development of mobile internet has brought a strong impact on the traditional retail industry. What companies need to do is use the mobile internet to increase their brand value continuously. Taking the Inzone Group as an example, our research found that the main factors constraining the improvement of brand value are the poor product performance-price ratio and poor tangible display, poor public praise recommendation effect, and poor advertisement efforts. Then, we put forward APP upgrade innovations, online retail channel expansion, the full coverage of WIFI and multi-platform cooperation strategy, etc. We hope this paper have certain reference value for the promotion of brand value of retail industry.

Keywords: Mobile Internet; Brand Value; Brand Communication

1. Research Background

The report on internet development of China from China Internet Network Information
Center (CNNIC) shows that as of December 2017, the number of internet users in China reached 772 million, including about 40.74 million new internet users. The internet penetration rate was 55.8%, which was 2.6 percentage points higher than the end of 2016. As of December 2017, China's mobile Internet users reached 753 million, including 57.34 million new users than 2016. The proportion of internet users using mobile phones increased from 95.1% in 2016 to 97.5%, and mobile internet users continues to rise.

With the continuous upgrading of mobile internet, We entered the mobile internet era. With the rise of the new 80's and 90's consumer classes, the accelerated pace of life, changes in consumption habits, and lifestyles are gradually changing. Mobile electronic products such as mobile phones and PCs are gradually flooding people’s lives. The operating mode of online consumption offline experience is gradually being respected to a greater extent, so mobile terminals will become an important way for companies to interact with consumers. The marketing model based on mobile terminals will become the major trend of future marketing planning, and will also become an important way for brand creation and dissemination.

Since joined the WTO, China has gradually lowered the threshold for foreign investment in the retail and service industries, and foreign-funded retail chains have increased their efforts in China. Most of the local branded retailers occupy the regional market with standard supermarkets, hypermarkets, and convenience stores. The foreign retailer's market share in the market has risen steadily with its mature business model. In addition,
the local retail industry's lack of awareness of brand value and the lag in brand building have all caused an impact on the local retail industry.

2. Significance of Research

With the rapid development of China’s economy and the continuous improvement of living standards in recent years, people’s demand for products has constantly changed. In recent years, the flourishing development of the Internet has caused a great impact on the traditional industries, and people's choice of products has become more selective.

2.1 Increased Brand Value Helps Inzone Increase Market Competitiveness

When people choose products or services, the main considerations are quality, price, and after-sales service. Therefore, when these three aspects of different companies tend to be consistent, a company with a good brand image, a high quality brand culture, and a high brand value will show its core advantages. Currently, Inzone has a relatively high market share in the Shandong market, but it has been slow to develop in recent years and its competitors have continued to increase. The higher the value of the Inzone brand, the stronger its market competitiveness will be, the more consumers will have, and the higher the profit will be. On the contrary, the lower the brand value, the lower the market competitiveness of Inzone will be, the fewer consumers will be, and the less profit will be, the company will Can't survive.
2.2 Higher Brand Value Is Spiritual Need After People's Living Standards Improve

The continuous development of the economy has made the life of the Chinese people better and better. People are no longer just satisfied with the use value of the products, but are paying more attention to the characteristics and quality of the products, such as beauty, comfort and luxury. With the gradual improvement of people's consumption levels, the demand for uniqueness and universality has changed to a complex, multi-level, diversified, and differentiated consumption. Therefore, consumers will gradually move toward quality brands when choosing products. In this case, the value of Inzone brand is becoming increasingly important.

2.3 Enhance the Overall Image of Shandong Province

The improvement of local image depends on the support of a large number of famous enterprises. The prominent mark of a famous company is its higher brand value. Raising the brand value, increasing the market recognition of the brand and the market awareness has a positive effect on the economic and social reputation of the brand. Inzone is a famous local company in Shandong, and the brand promotion of Inzone will enhance the overall image of Shandong.

3. Analysis on the Influencing Factors of Brand Value of Retail Chain Enterprises Under the Background of Mobile Internet--Take Inzone as an Example
3.1 Influencing Factor Model Construction

According to the research data, the brand value of an enterprise is mainly composed of three aspects: business form, brand power, and brand communication. The brand power consists of popularity, reputation and loyalty; brand communication consists of advertising, public relations and personnel communication. Based on this, we built the model, as shown in the figure 1, and designed questionnaire to conduct a market survey.

![Brand value influencing factor model](image)

**Figure 1. Brand value influencing factor model**

3.2 Data Collation and Analysis

During the research process, according to research on related documents and interviews with enterprises, We issued questionnaires in each major business district, collected and analyzed the questionnaire data, and obtained the model that affected the influence of the Inzone Group’s brand value, as shown in the following Figure 2.
(1) Functional Benefits Drive Retail Brand Power

From the collected data, Inzone Group's popularity in Shandong Province is very high. This time we collected 104 valid questionnaires. The data shows that 93.27% of consumers know the Inzone brand and 90.38% of consumers can correctly identify the Inzone logo. This is inseparable from the products sold by the Inzone Group, the publicity at the current stage and the mall itself. Products bring consumers a higher functional experience, and customer trust in the company will increase. The core of functional benefits is the product display and product strategy. The tangible product display includes the display of goods, the shopping environment of the shopping mall, and the clothing of the staff. The data shows that Inzone 's work in these two areas is not satisfactory.

The survey shows that the main consumer groups of the Inzone Group are those who are
over 25 years of age and have certain income, and our survey found that more than 80% of customers who go to Inzone consume spend more than 1,000 Yuan. The survey found that nearly 30% of customers think that the Inzone Group’s product display or shopping environment is relatively common. From the perspective of tangible display of personnel, 81.34% of customers believe that the clothing of Inzone staff is uniform. However, the degree of compliance with the high-end positioning of Inzone is generally not the same as the style of apparel and clothing selected by it, which does not highlight the high-end positioning of Inzone. Consumers' overall satisfaction with Inzone products is around 70%, and 80% of respondents believe that their product quality is relatively good, but only about 60% of consumers think that their product cost performance meets their expectations. The consumer environment created by the enterprise and the functional feelings the product itself brings to the customer will influence the customer's evaluation of the enterprise, and it will also affect their loyalty to the enterprise.

(2) Emotional Benefits Affect Brand Communication in Retail Enterprises

With the development of mobile Internet, competition is no longer limited to geographical restrictions, and online retailing will provide consumers with more choices, which makes the retail trade more competitive. The consequence of intensifying competition is the reduction of consumer transfer costs, and companies are paying more and more attention to customer loyalty. In order to win customer loyalty and obtain loyalty value, enterprises need stronger emotional support. The most intuitive influencing
factor is enterprise service. The improvement of enterprise service quality can not only maintain the old customers, but also bring new customers through the old customers. This has expanded the customer base to some extent. According to our data analysis, 77.31% of the consumers in Inzone are more satisfied with the service provided by the staff. This shows that Inzone Group's services have room for improvement.

Second, corporate advertising and public relations will also affect the customer's perception of the company's emotional interests. The Inzone Group mainly uses advertising methods such as promotional color pages, car TV ads, and consumer terminals in its advertisements, but the use of online advertising is less. The survey found that 34.62% of the respondents believe that they have not seen relevant advertisements related to retail sales. Even if most of the customers who have seen promotional advertisements think that their advertisements are ordinary, the advertisements cannot leave a deep impression on the customers. This shows that its advertising creativity and promotion efforts are not enough and need to be strengthened. In terms of public relations, the information returned by 61.54% of respondents shows that the public rarely or even has not seen Inzone Group's relevant information in the media. Those who read the relevant information indicated that reports appearing in the media were mostly not positive reports for Inzone, but respondents also expressed satisfaction with the response to Inzone and the solutions provided.

Comprehensive statistics show that the negative factors of Inzone brand value are shown
Table 2. Negative influence factors of Inzone brand value

<table>
<thead>
<tr>
<th>Negative influence</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor ability to handle crisis public relations</td>
<td>35.92%</td>
</tr>
<tr>
<td>More negative news</td>
<td>66.02%</td>
</tr>
<tr>
<td>Less information is reported in the media</td>
<td>79.61%</td>
</tr>
<tr>
<td>Working language is not professional enough</td>
<td>36.89%</td>
</tr>
<tr>
<td>Staff clothing style does not match brand image</td>
<td>53.4%</td>
</tr>
<tr>
<td>Advertising is not attractive</td>
<td>88.23%</td>
</tr>
<tr>
<td>Less advertising</td>
<td>67.96%</td>
</tr>
<tr>
<td>Word-of-mouth recommendation rate is low</td>
<td>38.84%</td>
</tr>
<tr>
<td>Poor visible display of products</td>
<td>28.16%</td>
</tr>
<tr>
<td>Low performance-price ratio of products</td>
<td>36.89%</td>
</tr>
</tbody>
</table>

3.3 Reason Analysis

Based on the data analysis, we can see that the main reasons for the decline in brand value are the following:

(1) Low Reputation

Reputation is the degree to which a company gains public trust, goodwill, acceptance, and popularity. It is a social indicator that evaluates the reputation of an organization and focuses on “quality” evaluation. In the survey, it was found that the public believes that the Inzone Group's products have a relatively low price/performance ratio and the product has a poor tangible display, which directly affects the reputation of the Inzone Group. Through analysis, the reason why consumers think that the product's cost performance is
low is related to its high-end positioning. In terms of retail sales, consumers think that
Inzone Group's products have little difference with ordinary retailers' products, but
their prices are relatively high. The tangible display of products is not highly
evaluated because the display of products is not convenient for consumers to shop.

(2) Inadequate Advertising

Advertising spreads information and communicates the links between production and
production, production and circulation, production and consumption, circulation and
consumption, becoming an indispensable information channel for companies. The survey
revealed that the consumer's perception of the Inzone Group’s advertising is:
less advertising, less attractive content, and almost no brand advertising.
When communicating with corporate personnel, the information provided by
corporate personnel also considers that the overall advertising campaign of the group is
relatively small, and it will only be put in when major shopping malls are doing
promotional activities. And according to the information we have collected, it is very
rare for the group to systematically plan the placement of advertisements. It can
be seen that companies do not attach much importance to their advertisements
and their brand awareness is poor. There is also the inaccurate positioning of
advertisements. The creative expression of advertisements is nothing new. As a result,
the content of advertisements cannot be impressed. This is not conducive to the
shaping of brand image and the increase of brand value.
(3) Decline in Loyalty

The continuation of product profits lies in the improvement of customer loyalty. Customer loyalty represents the consumer's long-term consumer preference for a certain brand or company's products. According to our survey data analysis, Inzone Group's customer loyalty has declined. One of the reasons for the survey is that consumers' word-of-mouth referrals are low, and the final reason is attributed to the low cost-to-price ratio of the products. Therefore, it can be concluded that the Inzone Group is far from enough to allow consumers to recognize their company's positioning.

(4) Less People Spread

The data shows that more than half of consumers believe that the clothing styles of Inzone workers do not match the corporate brand positioning and do not demonstrate the brand personality of the company well. They also believe that the marketing language of the staff is not professional enough and the product presentation is vague. The inconsistency between the staff’s clothing style and the brand positioning is related to the upper management personnel, and it is also related to the imperfection of the enterprise CIS system. The staff’s marketing language is not professional enough, and the main reason is that the staff’s implementation is not in place, except that the management has not trained the staff in time. As a result, it has given consumers a bad experience.

(5) PR Communication Is Not Valued
Public relations communication is the process of information exchange, and it is also an important means for enterprises to carry out public relations work. Without the dissemination, consumers have no way to understand the company, and companies cannot understand consumers. A company must not only have clear objectives, policies and measures that are in line with the interests of consumers, but also make full use of communication means to carry out public relations activities to win public favor and public opinion support, and obtain good economic and social benefits. The Inzone Group does not pay enough attention in this respect. The media has relatively few reports about it, and some of the news reported is negative news, and companies are mostly cold in their responses. The choice of purchase channels directly affects the Inzone Group's loyalty and reputation, and these aspects directly affect the Inzone Group's brand building and slow down the promotion of brand value.

4. Mobile Internet + Retail Enterprise Brand Value Enhancement Strategy

4.1 Upgrade, Innovation APP

Traditional retailers usually only develop the buyer's version of the APP when they develop the APP, and provide buyers with basic services such as basic product information and remaining inventory through the buyer's version of the APP. However, some buyers still have doubts about online shopping. They will choose to go to the store to view the selected products. However, chain retailers have many stores, but consumers
cannot check whether the selected items in the store they go to are stocked. Once the goods are out of stock, it will lead to a loss of customer loyalty and customer loyalty. In serious cases, it will lead to loss of customers.

4.2 Increase Loyalty

The predecessor of Inzone Group's existing APP "Inzone Network" is the "Little Red Riding Hood Mall." We learned from relevant people in the group that APP's earnings are not optimistic. It is recommended that Inzone Group can upgrade its existing APP, build an online and offline integrated membership platform, design an appointment segment, and promote it. In this way, the buyer can contact the seller in advance to view the desired product, and then the merchant pushes the store address according to the buyer's member information according to the distance, and achieves an integrated online-offline combination shopping. Consumers can enjoy better services while enjoying the same products, and they also increase the cost-effectiveness of their products, thus enabling consumers to reconsider Inzone. This will not only increase sales but also increase customer loyalty.

4.3 Improve Reputation

Through its own APP, Inzone can collect a series of suggestions on the customers' favorite shopping environment, product display methods, work clothes styles and clothing colors of the service staff, and indicate the preferential policies available to all
participating members. Followed by the consumer's suggestions to improve the tangible display of the Inzone Group, improve the CIS system, and enhance the Inzone Group's reputation.

In addition, Inzone Group can collect these records through its own APP, analyze it through large data, and then place the product information of the products they need when the customer logs into the APP to provide customized services to consumers. Improve the service level on the basis of the existing ones.

4.4 Expanding Online Retail Channels

In addition to upgrading its own app, Inzone Group can also set up its own retail product platform to other online channels, such as marketing in WeChat. More and more brands choose to set up existing platforms to other network channels. In this way, companies usually only need to do regular network maintenance, do not need to invest more manpower, financial resources, material resources, and effectively save corporate resources. Inzone Group can allow existing or potential upstream suppliers and downstream customers and potential customers to follow their own WeChat platforms. In this way, for suppliers, suppliers can see the sales of goods in a timely manner, and contact Inzone in time to contact the supply of goods; for customers, customers are more convenient to use and more flexible to pay; For the enterprise itself, it can not only make profits in many aspects, but also optimize suppliers and effectively achieve resource
integration.

4.5 Full Coverage of Inzone WIFI

Many large-scale integrated shopping malls or shopping centers have their own wireless network coverage, but generally require consumers to enter their own mobile phone number when logging in. For some sensitive consumers, they think that this will reveal personal information and they will no longer be connected to WIFI. This is a loss of data traffic for consumers, and for the enterprise, it is also a waste of resources.

Inzone can take advantage of this, by replacing the mobile phone number requested when connecting to the mall's WIFI with membership card number. For consumers, as long as they have a Inzone membership card, they can permanently enjoy the use of the Inzone free network, and membership information has been archived in the Inzone group, do not have to worry about leaking other information. For enterprises, they can expand a group of potential customers and expand their customer base. In addition, LBS (location-based service) can also be used to locate customer locations when customers connect to the Inzone wireless network, then launch relevant discount information for customers at the storefront in real time, and allow customers to view real-time inventory of the store. This will not only save advertising costs, but also achieve better results.

4.6 Seeking Multi-Platform Cooperation
The Inzone Group can seek multi-platform cooperation, which not only taps potential customers, but also has an advantage in public relations. For example, Baidu map mobile client, today's headline mobile client, Tencent news mobile client, Weibo and other social platforms. First of all, Inzone can cooperate with Baidu maps. When users search keywords such as “shopping mall” or “shopping center”, Baidu maps will put Inzone on the preferred location of search results in order to obtain more consumers. Secondly, Inzone can strengthen cooperation with major news platforms and social platforms, publish Inzone positive news, and publish relevant measures on these platforms in the first instance after the public relations crisis emerges, respond to consumers, and establish a good brand Image.

In his “brand competitive advantage” theory, Michael Porter pointed out that brand equity is mainly reflected in the brand's core value, or that brand core value is also the essence of the brand. In today's fierce competition in the retail industry, creating a strong brand that allows consumers to like and support the retail industry has become the key to occupying the market. After the creation of the brand, the company can only gain a place in the market only if it continuously enhances its brand value and makes its brand become a brand name.

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References


Gamification in Marketing: A Bibliometric Review

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Abstract
This paper reviews 120 articles on gamification in the marketing field. The current research situations are described, through publication distributions by year, journals and productive authors. Based on co-word analysis, co-citation analysis and bibliographic coupling, main research themes, knowledge structure and future research trend of gamification in marketing are identified respectively.

Keywords: Gamification; Marketing; Bibliometric analysis;

1. Introduction
In recent years, it is not uncommon that marketers apply game mechanisms, game design elements, or even embed games in their non-game product/service offerings or marketing programs. Foursquare, the first company that applied game design elements into non-game context, successfully arose the interests of markets. The social Q&A website, StackOverflow, increases users’ engagement by applying game design elements such as points, badges and leaderboards. AliPay, a mobile payment service provider, embeds its cause related marketing initiatives into mini game apps such as
Ant Forest and Ant Garden. These practices are called gamification, i.e., applying game design elements to non-game contexts (Harwood, 2012; Huotari & Hamari, 2017).

As a response to the new phenomenon, scholars began to study gamification with marketing focus in 2012 (Chorney, 2012; Downes-Le Guin, Baker, Mechling, & Ruyle, 2012; Harwood, 2012). Till now, though hundreds of articles have emerged, no comprehensive review of gamification studies with marketing focus have been published. This article attempts to provide a comprehensive and system literature review on gamification in marketing and related fields by using bibliometric techniques. Specifically, this review aims to:

• To describe the extant gamification articles with marketing focus in terms of distribution by year of publication, journals, productive authors, most cited articles, and as well as frequently used key words.

• To uncover the current knowledge structures of gamification literature with marketing focus.

• To conclude research trends and future research opportunities for gamification in marketing.

2. Methodology

The sampled articles were collected from Web of Science database. We conducted full
text search with keywords of “gamification” and “gamified” in subject areas of business, economics, communication and psychology. The review period was from 2010 to March 2019. The initial search generated 402 articles. We focused on articles related to marketing; 282 articles such as articles related to technical aspects of gamification design were excluded. At last, 120 articles were collected as the final samples.

Bibliometrics is a set of literature reviewing techniques that help researcher to quantitatively analyse extant literature and uncover the underlying research topics and future research opportunities (Vogel & Guttel, 2013). Compared to other literature review approaches, bibliometrics is more objective and reliable, because it depends less on the reviewers’ subjective judgement (Bricker, 1989).

We applied various bibliometric techniques such as co-citation analysis and bibliographic coupling to analyse extant gamification literature in marketing and related fields to reduce bias and enhance objectivity (Chang, Huang, & Lin, 2015). Co-citation analysis and bibliographic coupling are both citation-based bibliometric techniques that allow reviewers to classify papers and cited references into groups, but they differ a little bit in the underlying logic. Co-citation analysis classifies literature into clusters based on the number of co-cited times of the papers, the rationale behind this approach is that the more papers are cited together, the more they are similar to each other and thus represent similar research themes (Boyack & Klavans, 2010). On
the contrary, bibliographic coupling classifies papers into groups according to the numbers of citing the same articles, because citing the same articles is an indication of paper similarity (Boyack & Klavans, 2010; S. L. Yang, Han, Wolfram, & Zhao, 2016). We rely on co-citation analysis to uncover the current knowledge structures because this method clusters older papers together but not the recent papers; we rely on bibliographic coupling to describe the future trends and research opportunities because this method is able to cluster the recent papers together (Boyack & Klavans, 2010). All the analyses and results visualization were conducted using R package “bibliometrix” developed by Aria and Cuccurullo (2017).

3. Descriptive statistics

3.1 Distribution of articles by year

Figure 1 shows the distribution of articles by year of publication. Though the review period was from 2010, gamification as a research topic in marketing and related fields only emerged in 2012, which shows that gamification is a relatively new research area. Overall, the number of publications is increasing steadily, which indicates gamification with marketing focus is a promising topic.
3.2 Distribution of articles by journal

The sample articles are from more than 70 different sources across various disciplines. Figure 2 shows the top five journals ranked by the number of gamification articles published from 2012 till March 2019. Figure 3 shows the cumulative number of articles by the five journals. Computers in Human Behavior (CHB, 16 articles) ranks the number one, followed by Journal of Interactive Marketing (JIM, 8 articles), International Journal of Market Research (IJMR, 5 articles), Business Horizon (BH, 3 articles), and, Creativity and Innovation Management (CIM, 3 articles). This indicates that, the concept of gamification was originated from human computer interactions, and at least until now, it has been mainly applied in research on interactive marketing in E-commerce and mobile marketing.
3.3 Productive authors and top cited papers

Figure 4 presents the top five productive authors; table 1 and table 2 show the most cited articles. Hamari has published 8 articles, in which Hamari (2013) is the most cited paper in terms of both times cited in Web of Science database (global citation score) and times cited within the sample articles (local citation score). Hamari (2013, 2017) illustrated by field experiments that implementation of game mechanism even in non-
hedonic service increases service usage for some consumers. By reviewing game design
literature, Terlutter and Capella (2013) conceptually proposed several gamification
principles for creating gamified experience in non-game context. Grewal and
colleagues (2016) advocated implementing game elements in mobile advertising.

![Figure 4. Top 5 productive authors](image)

Table 1. Top cited papers ranked by global citation score

<table>
<thead>
<tr>
<th>Paper</th>
<th>Journal</th>
<th>Global citation score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hamari (2013)</td>
<td>Electronic Commerce Research and Applications</td>
<td>150</td>
</tr>
<tr>
<td>Terlutter and Capella (2013)</td>
<td>Journal of Advertising</td>
<td>95</td>
</tr>
<tr>
<td>Robson, Plangger, Kietzmann,</td>
<td>Business Horizons</td>
<td>63</td>
</tr>
<tr>
<td>McCarthy, and Pitt (2015)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grewal et al. (2016)</td>
<td>Journal of Interactive Marketing</td>
<td>46</td>
</tr>
<tr>
<td>Hamari (2017)</td>
<td>Computers in Human Behavior</td>
<td>41</td>
</tr>
</tbody>
</table>
Table 2. Top cited papers ranked by local citation score

<table>
<thead>
<tr>
<th>Paper</th>
<th>Journal</th>
<th>Local citation score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hamari (2013)</td>
<td>Electronic Commerce Research and Applications</td>
<td>24</td>
</tr>
<tr>
<td>Robson et al. (2015)</td>
<td>Business Horizons</td>
<td>12</td>
</tr>
<tr>
<td>Hofacker, de Ruyter, Lurie,</td>
<td>Journal of Interactive Marketing</td>
<td>11</td>
</tr>
<tr>
<td>Manchanda, and Donaldson</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2016)</td>
<td></td>
<td></td>
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</table>

3.4 Frequently used keywords

Figure 5 shows the frequently used keywords in the sample gamification articles, and table 2 shows the frequencies. The co-occurrence of the keywords and the frequencies seems to suggest that gamification is a strategy supposed to enhance customer engagement through increasing customer intrinsic motivation by using game design elements such as badges.

Table 3. Co-occurrence frequencies of keywords

<table>
<thead>
<tr>
<th>Keywords</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>gamification</td>
<td>79</td>
</tr>
<tr>
<td>engagement/customer engagement/consumer engagement</td>
<td>18</td>
</tr>
<tr>
<td>motivation/intrinsic motivation</td>
<td>13</td>
</tr>
<tr>
<td>serious games</td>
<td>6</td>
</tr>
<tr>
<td>self-determination theory</td>
<td>4</td>
</tr>
<tr>
<td>user experience</td>
<td>4</td>
</tr>
<tr>
<td>badges</td>
<td>4</td>
</tr>
<tr>
<td>game design</td>
<td>4</td>
</tr>
</tbody>
</table>
4. Co-citation analysis

To explore the knowledge structure of gamification in the marketing field, co-citation analysis with Walktrap algorithm was adopted. The sample articles and cited references were classified into 4 clusters. By examining the content of the papers, we named the clusters as gamification concepts (Cluster 1), theory cornerstone (Cluster 2), gamification design in the marketing field (Cluster 3) and outcomes of gamification in marketing (Cluster 4).

Figure 6 shows the co-citation clustering results. The distance in the network between clusters reflects their extent of closeness. Cluster 1 and Cluster 3 have the shortest distance and are partially overlapped, whereas Cluster 2 is partially related to Cluster 3, and Cluster 4 is partially connected with Cluster 1. It can be estimated as followed. First, concepts of gamification and its design are interdependent and are always mentioned together; second, part of designs adopt the theory in Cluster 2; third, the
hypotheses of gamification outcomes vary from different views of gamification concepts.

Figure 6. Co-Citation Networks

4.1 Cluster 1: Gamification Concepts

Articles in Cluster 1 mainly discuss the concepts of gamification. The representative references in this cluster are McGonigal (2011), Deterding, Dixon, Khaled, and Nacke (2011), Nacke and Deterding (2017) and Zichermann and Cunningham (2011).

Before investigating what is gamification, it is necessary to understand what is game, as gamification originates from the digital media industry and inherits the nature of games. Deterding et al. (2011) suggested that the concept of game in gamification should be distinguished with play and serious game, since play without rules denotes a more free expression and improvisational behaviors and serious game is used for
serious purposes. Emphasizing on the game rules (game design elements), Deterding et al. (2011, p10) defined gamification as “the use of game design elements in non-game contexts”.

However, some researchers pay more attention to the emotional outcomes of games when defining gamification. McGonigal (2011) indicates that the defining features of a game are the goal, the rules, the feedback system, and voluntary participation, and that the core service of the game is to provide gameful experiences, which brings positive emotion, strong social relationship, a sense of accomplishment and a chance to build a shared purpose. Base on this, Huotari and Hamari (2012, p17) pointed out that gamification is “a process of enhancing a service with affordances for gameful experiences in order to support the user's overall value creation”.

From a more holistically perspective, Zichermann and Cunningham (2011) took both game mechanics and game impacts at the same place, and indicated gamification is the use of game thinking and game mechanics to engage users and solve problems. Robson, Plangger, Kietzmann, McCarthy, and Pitt (2014, p352) further extended the definition of gamification as “the application of lessons from the gaming domain in order to change stakeholder behaviors and outcomes in non-game situations." Moreover, they proposed the Mechanics, Dynamics, and Emotions (MDE) Framework to posit the game-design principles in gamification, specifying that mechanics are the instructions
of a game, consisting of goals and rules, dynamics is the interactive process involved by participants and emotions are people’s affection.

As a conclusion, the definition of gamification has not reached an agreement. However, it is highly related to the direction of one paper. Therefore, discussing the definition is of importance. Moreover, in the marketing field, the concept of “gamification marketing” has not been put forward formally, which is waiting to be built.

4.2 Cluster 2: Theory Cornerstone

Papers in Cluster 2 mainly describe the theory adopted in gamification marketing research. Theory is the cornerstone of hypotheses. According to co-citation analysis to these papers, the most commonly used theory is technology acceptance model. The representative references in this cluster are van der Heijden (2004), Davis (1989) and Hsu and Lu (2004).

Technology acceptance model (TAM), developed by Davis (1989), develops and validates that when presented with one new technology, two specific variables, perceived usefulness and perceived ease of use, are hypothesized to be fundamental determinants of user acceptance. For further research, van der Heijden (2004) studied the differences of user acceptance models in productivity-oriented (or utilitarian) and pleasure-oriented (or hedonic) information systems, and concluded that the hedonic nature of an information system is an important boundary condition to the validity of
the TAM, as hedonic information systems, strongly connected to home and leisure activities, is aimed to realize self-fulfilling and focus on the fun-aspect of using information systems.

Gamification in the marketing field can be recognized as new information systems and services (Hamari, 2013). TAM is suitable for predicting variables. Hsu and Lu (2004) applied the TAM that incorporates social influences and flow experience as belief-related constructs to predict users' acceptance of online games. What is more, gamification with the features of gameful experience and hedonic patterns/activities can be viewed as hedonically oriented information systems (Hamari, 2013). Aydin (2015), based on an extended TAM, posited the intrinsic motivations of enjoyment and playfulness are the elements to affect attitudes and continuous use intention towards a gamified system. Yang, Asaad, and Dwivedi (2017), presented a model that examines the effects of gamification on customers' intention to engage in the gamification process and their attitudes toward the brand.

Theory can help researchers identify the hypotheses and give practitioners a form of knowledge (Nacke & Deterding, 2017). In gamification marketing context TAM is well utilized, however, as some phenomena lack of rational explanation, other research theories should be explored.

4.3 Cluster 3: Gamification Design in Marketing
Cluster 3 mainly elaborate on gamification design in the marketing context. Researches on gamification design related to marketing practice identify whether a particular design is effective or not. The representative papers in this cluster are Hamari (2013), Hamari, Koivisto, and Sarsa (2014) and Jung, Schneider, and Valacich (2010).

An effective gamification design not only depends on game mechanism but also on users’ perception. Hamari (2013) indicated that the game mechanism itself does not actively work in increasing users’ activities. To verify, he conducted a field experiment with a gamified trading service, ruling that users can earn badges from a variety of tasks. The results showed that gamification mechanisms increase use activity in utilitarian service only when the users actively monitor their own badges. Similarly, Jung et al. (2010) found game design elements such as points, levels and leaderboards yield performance gains, because these elements satisfy people’s intrinsic need for competence. Hamari et al. (2014) also posited that gamification provides positive effects, however, the effects are greatly dependent on the context in which the gamification is being implemented, as well as on the users who are using it.

As the effectiveness of gamification is conditional, it remains a challenge to explore the implementation contexts of gamification and elements able to inspire people.

4.4 Cluster 4: Outcomes of Gamification in Marketing.

Cluster 4 illustrates the gamification impacts in marketing. The representative papers
are Hofacker et al. (2016), Robson et al. (2015) and Insley and Nunan (2014).

Gamification is capable to impact various aspects of marketing. Hofacker et al. (2016) focused on mobile markets and through a systematic overview of game design suggested that gamification executed on the mobile platform has the potentials to affect retailing outcomes, specifying entertaining customers, accelerating repurchase, retaining customers and increasing in-store engagement. Robson et al. (2015) utilized a case study of one gamified TV program to show that all organizations need to motivate and engage stakeholders, and that gamification is a useful approach to achieving this. Meanwhile, Insley and Nunan (2014) explored the gamification in online retailing context. Adopting a qualitative methodology of in-depth interviews with 16 individuals who were frequent online shoppers, the study supported the idea that involving game elements not only can enhance the retail experience, but also reduce incidences of undesirable customer behaviours.

As summarized above, gamification leads to numerous positive outcomes, especially enhancing engagement. However, the specific effects gamification brings still have potentials to be discovered, especially under the considerations of various context conditions.

5. Bibliographic coupling

Because of being able to cluster more recent references, bibliographic coupling can be
used to predict future research trend (Boyack & Klavans, 2010). Author bibliographic coupling analysis, proposed by Zhao and Strotmann (2008) is used to provide a realistic picture of current active research, to help researchers identify internal structures within a research field and to be supplementary information for co-citation analysis. Compared to document bibliographic coupling, author bibliographic coupling can reflect dynamic relationships among nodes over time.

Figure 7 shows the author bibliographic coupling results. The results reveal five groups of authors. By examining the full text of articles by the authors, the clusters are named as working principles behind gamification (Cluster 1), consumer engagement (Cluster 2), motivations fostering (Cluster 3), servitization (Cluster 4) and E-banking (Cluster 5).

5.1 Cluster 1: Working Principles behind Gamification

Cluster 1 illustrates the active theme on how gamification works, considering both antecedents and outcomes of gamification. The representative authors are Hamari, J., Hsu, C. L., and Chen, M. C.. As the focal author, Hamari, J. devotes to explore how gamification works and explain which factor brings which outcome in gamification context, varying the perspectives from game mechanics to utilitarian, hedonic and social motivations, e.g. Hamari (2017), Hamari and Koivisto (2015), Hamari et al. (2017) and Morschheuser, Riar, Hamari, and Maedche (2017). However, in an adverse
thinking path, Hsu and Chen (2018a, 2018b) first aim to find out the factors that increase desirable customer behaviors and then test if those factors, or rather, gamification mechanics can work.

Figure 7. Bibliographic Coupling Networks

5.2 Cluster 2: Gamification on Consumer Engagement

Cluster 2 suggests that consumer engagement, as an outcome variable, is one current active theme in the gamification marketing field. The representative authors in this cluster are Leclercq, T., Hammedi, W., Poncin, I, Gautautis, R., Piligrimiene, Z. and Vitkauskaite, E.. They all care about the influences on emotional, cognitive (experiential) and behavior engagement by gamification, however, the former three authors more focus on product engagement, e.g. Leclercq, Hammedi, and Poncin (2018) and Poncin, Garnier, Ben Mimoun, and Leclercq (2017), while, the latter three authors pay more attention to brand engagement.
5.3 Cluster 3: Gamification on Motivations Fostering

Cluster 3 shows concerns on inherent mechanism under gamification marketing. The representative author is Sailer, M. Gamification is taken as an innovative approach to foster motivations (Sailer, Hense, Mandl, & Klevers, 2013). Based on self-determination theory, Sailer, Hense, Mayr, and Mandl (2017) summarized the relationships between some game design elements and intrinsic needs and indicated that motivations can be fostered through different elements. However, due to limitations of study designs and analysis strategies, more empirical researches to examine the effectiveness of gamification on fostering motivations are still lacking.

5.4 Cluster 4: Gamification on Servitization

Cluster 4 displays an active theme of servitization in marketing practice. The representative authors are Andrews, D. and Shi, V. G.. As increasingly compete by developing product-service systems rather than offering products alone (Shi et al., 2017) manufacturers are more likely to adopt servitization (Andrews, Dmitrijeva, Bigdeli, & Baines, 2018). By offering services, manufacturers can “enjoy stable revenues and offset the risks of economic instability in a competitive marketplace” (Andrews et al., 2017, p196). During servitization, emotional mechanics of gamification are recommended to solve hurdles behind the development and provision of advanced services (Shi et al., 2017), and currently, a series of software applications have been
designed to engage users with servitization were created in collaboration with game developers, with different degrees of gamification (Andrews et al., 2017). However, the existed literature provides little information about the misuse of gamification, therefore game scenarios and their impacts need further empirical tests (Shi et al., 2017).

5.5 Cluster 5: Gamification in E-Banking

Cluster 5 displays another practice theme of e-banking, which is also an active theme in gamification marketing research. The representative authors are Rodrigues, L. F., Costa, C. J. and Oliveira, A.. The truths that growing number of Internet users and innovation in software designs, change customers’ performance in banking activities, thus e-banking becomes popular (Eriksson, Kerem, & Nilsson, 2008). Gamification is recognized as an approach to motivate customers to use e-banking, to improve financial literacy and to facilitate online processes and transactions (Rodrigues, Costa, & Oliveira, 2016, 2017; Rodrigues, Oliveira, & Costa, 2016). However, in the context of e-banking, the effectiveness of software design involved gamification on users’ intention and behaviors still welcomes more empirical examinations (Rodrigues et al., 2017).

6. Conclusions and limitations

This article systematically reviews 120 gamification literature in the marketing field. Main research themes are identified by co-word analysis, which are gamification, game
design, user experience, customer/consumer engagement, and motivations. Knowledge structure is built by co-citation analysis, consisting of (1) gamification concepts, however not reaching an agreement; (2) theory cornerstone, which still waiting for extension; (3) gamification design, which can be various and dynamic, with huge potentials for exploring; and (4) outcomes of gamification in marketing field, mainly on purchasing behavior and engagement. Moreover, future research directions are predicted by bibliographic coupling as (1) working principles behind gamification, which actually suggest more researches can focus on the whole gamification process; (2) gamification impacts on engagement, as engagement involve various types, which highlights the popular outcome variable of gamification; (3) gamification on motivations, which embodies the trend for exploration on psychological mechanism of gamification; and finally (4) gamification on servitization and (5) e-banking, which suggest two potential domains in practice. Overall, gamification marketing is a relatively new topic and exists large gaps to be fulfilled.

This paper has several limitations. Firstly, the journals collected may not be complete, since marketing is not easy to be defined by keywords or subject area. Secondly, despite co-citation analysis and bibliographic coupling are comparably objective, the themes defined are partially subjective. Furthermore, the edges in networks developed in this paper are treated as equal. Future study may assign values to each reference according
to its impact or other criteria.

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The Impact of Situational Social Identity Cognitive Dissonance on Irrational Buying

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Abstract

Social identity theory suggests social identity affects consumer behavior. Individuals usually buy products signaling their social identity. People might acquire new social identities during their lifetimes, and the new social identity sometimes might lead to cognitive dissonance. They might hold conflicting attitudes toward their new social identity, or their expectations from their new social identity is quite different from what they initially have perceived from their actual new social identity. This paper is focused on the impact on irrational buying of situational social identity cognitive dissonance. By reviewing the literature on constructs of social identity, anomie, and social capital, and the theory of cognitive dissonance, we developed our conceptual framework. We conducted two studies to test the impact on irrational buying of situational social identity cognitive dissonance. The results of Study 1 suggested that situational social identity cognitive dissonance positively affected irrational buying. That is, the higher level that situational social identity cognitive dissonance is, the higher the level that irrational buying is, and vice versa. In Study 1 we also found that social capital moderated the effect of situational social identity cognitive dissonance on irrational buying. Under the same level of situational social identity cognitive dissonance, subjects with higher levels of social capital had...
lower levels of irrational buying than those with lower levels of social capital, and vice versa. In Study 2, we confirmed the research results of Study 1 once again. Study 2 also suggested that anomia partially mediated the impact of situational social identity cognitive dissonance on irrational buying. Situational social identity cognitive dissonance positively affected anomia. Higher levels of situational social cognitive dissonance led to higher levels of anomia, and vice versa. Anomia positively affected irrational buying. Higher levels of anomia led to higher levels of irrational buying, and vice versa. The results of Study 2 also suggested that social capital not only moderated the impact of situational social identity cognitive dissonance on irrational buying, but it also moderated the impact of situational social identity cognitive dissonance on anomia. Under the same level of situational social identity cognitive dissonance, subjects with higher levels of social capital had lower levels of anomia than those with lower levels of social capital, and vice versa. Based on our research results, theoretic and managerial implications are discussed. Limitations and future research suggestions are provided.

**Keywords:** situational social identity cognitive dissonance; irrational buying; anomia; social capital

1. Introduction

Social identity is a person’s knowledge about their belonging to a social category or group (Stets & Burke, 2000). And the definition of Tajfel (1978) is `. . . that part of an individual's self-concept which derives from his knowledge of his membership of a social group (or groups) together with the value and emotional significance attached to that membership' (p. 63). A social group is a set of individuals who hold a common social identification or view themselves as members of the same social category (Stets & Burke, 2000). Because social groups might form or dissolve all the time, we suggest that individuals might acquire new social identities over their lifetime.
According to an article on the website of International Labour Organization, China experiences the most extensive internal migration today. After its transformation and opening up policy over a 30 year period, China's urban population had increased by about 440 million to 622 million in 2009, with most of the increase attributed to migration and urbanization (Kam Wing & Bellwood, 2011). During the past four decades, mass human migration has been a common phenomenon in China. Millions of people migrated from the rural areas to the cities, from the inland areas to the coastal areas, and from the less developed areas to the more developed areas. According to the China Labour Bulletin (2019), an estimated 288 million rural migrant workers in China in 2018 accounted for more than one third of the whole working population. Migrant workers have contributed to China’s astounding economic growth over the past three decades, but they have suffered marginalization and institutionalized discrimination (China Labour Bulletin, 2019).

There could be many issues and new realities related to migrants. During the process of migration, those migrants might have acquired a one or more new social identities. For example, they became a new citizen in a city and became a worker in a factory. However, these migrant people might have very complicated attitudes toward their new social identities. For example, many migrants from rural areas longed for city life and even held very unrealistic expectations of urban life. But their personal experience in cities might tell quite a different story and might be quite unappealing. Or they might be satisfied with some aspects and dissatisfied with other aspects at the same time.

The gap between their perceived actual social identity and their idealized social identity may also cause cognitive dissonance. We term this social identity cognitive dissonance. In the long term, individuals may develop strategies to cope with such cognitive dissonance so they can regain their balance. But in the short run, individuals might be in a state of imbalance and have difficulties thinking or behaving rationally. We coined the term situational social identity.
cognitive dissonance to refer to a kind of transient state when an individual’s idealized or expected new social identity doesn’t match their perceived one, or individual holds conflicting attitudes toward their new social identity. In fact, situational social identity cognitive dissonance might be very common and pervasive. For example, millions of migrant workers in the cities gave up their familiar lifestyle in their rural hometowns to work and live in a new city where they might become marginalized or discriminated against. This in turn might trigger situational social identity cognitive dissonance. These migrant people might become very vulnerable in the short period and experience irrational behavior, including irrational consumer behavior, because individuals often expressed themselves with consumption (Bamossy & Solomon, 2016). Until now few studies have focused on this topic. This paper will examine the impact of situational social identity cognitive dissonance on irrational buying. We will also test the mediating effect of anomia and the moderating effect of social capital in order to reveal the mechanism of the impact of situational social identity cognitive dissonance on irrational buying.

2. Theoretical Background

2.1 Situational Social Identity Cognitive Dissonance

Social identity has been a useful construct in marketing because it can predict consumer behavior (Reed, 2002; Kleine III & Kleine et al., 1993; Oyserman, 2009; Kauppinen-Räisänen & Björk et al., 2018). Research in marketing suggests that consumers choose products congruent to their social identity both offline and online. For example, Pegg & O'Donnell et al. (2018) examined the moderating effect of online social identity in the relationship between adolescent exposure to alcohol-related content posted by peers on SNSs and their alcohol use in Australia. They found significant moderating effects of online social identity, which confirmed the social identity literature that individuals align their behavior in accordance with their social identity. The research of Hackel & Coppin et al. (2018) showed that social identity affected evaluations of food pleasantness and that identity salience had impact on the
anticipated tastiness of identity-relevant foods. Koni & Moradi et al. (2019) investigated the relationship between providing adolescents with a new group (i.e., a new social identity) and psychological resilience. They found a new social identity had positive effects on psychological resilience.

We suggest that individuals might acquire new social identities during their lifetime but that they might not be identified with their new social identity without difficulties. Cognitive dissonance theory explains the relationship between attitudes and behavior (Robbins & Coulter, 2017). Any incompatibility or inconsistency between attitudes or between behavior and attitudes triggers cognitive dissonance (Robbins & Coulter, 2017). It is transient and doesn’t last forever because individuals with cognitive dissonance will develop strategies to deal with it. According cognitive dissonance theory, inconsistency is uncomfortable, and individuals will try to reduce the discomfort and, thus, the dissonance. Although in the long run, individuals may find solutions to deal with such dissonance and regain a new balance, in the short run, we suggest individuals might have the sense of losing direction and feel out of control, thus leading to irrational behavior or intention especially if the cognitive dissonance is related to some very important thing. We suggest that it’s very natural for individuals to sense a gap between their perceived new social identity and their expectations on the new social identity. Or they might have conflicted attitudes toward their new social identity. When this happens, individuals might be in a state of imbalance. We term it situational social identity cognitive dissonance consumption because individuals often express themselves via consumption. Situational social identity cognitive dissonance should influence consumer behavior or it might contribute to irrational buying behavior. Until now, no research has shed light on this topic.

2.2 Anomia

French sociologist Emile Durkheim employed the word anomie, which referred to a societal condition of normlessness in his 1897 study (Babbie, 2015). Successive researchers found it is
a useful concept and endowed it with more meanings. According to Merton (1938), anomie results from a disparity between the goals and means prescribed by a society. When individuals couldn’t acquire wealth through normal means, they might get it illegally, and emphasis on the goal itself produced normlessness (Babbie, 2015). Certain social groups might engage in unlawful behavior was because of anomie caused by culturally-induced pressure to be successful (Caruana & Ramaseshan et al., 2000). Later researchers used anomie to refer to a characteristic of societies which was the original, societal meaning, whereas they used the term anomia referring to the individual characteristic (Babbie, 2015). In a given society, then, some individuals experience anomia, and others do not (Babbie, 2015). The conceptualization of anomia by Powell (1958) was as follows: When the ends of action become contradictory, inaccessible or insignificant, a condition of anomia arises. Characterized by a general loss of orientation and accompanied by feelings of “emptiness” and apathy, anomie can be simply conceived as meaninglessness (Powell, 1958).

2.3 Social Capital

Some researchers classified capital into four types -- social, economic, cultural, and economic capital – and suggested that together they contribute toward social life trajectories (Aldrich & Meyer, 2015). Other researchers classified capital into three types: physical and financial capital; human or cultural capital; and social capital (Dodd, 2016). Both the academics and policy-makers have been energized by the concept of social capital (Boix & Posner, 1998). Scholars further classify social capital into three types: bonding, bridging, and linking. Social capital is often defined as the capital accumulated by individuals and groups through their social interactions that can be used to smooth cooperation among people to foster collective action (Ferragina & Arrigoni, 2017). According to Nahapiet & Ghoshal (1998), the term social capital initially appeared in community studies, and it emphasized the networks of personal relationships that provided the basis for trust, cooperation, and collective action in such
communities. Social capital theory proposed that networks of relationships constitute a valuable resource for the conduct of social affairs (Nahapiet & Ghoshal, 1998). Social capital inheres in the relations between persons and among persons and they facilitate the actions of individuals within the structure (Nahapiet & Ghoshal, 1998).

3. Conceptual Framework and Hypotheses Formation

We suggest that individuals might have some difficult time to identify with their newly acquired social identity. This leads to situational social identity cognitive dissonance. When situational social identity cognitive dissonance happens, it might influence individuals’ irrational buying. Through a review of the literature, we integrate constructs of situational social identity cognitive dissonance, anomia, social capital, and irrational buying to develop a conceptual framework. Our conceptual framework suggests situational social identity cognitive dissonance affects irrational buying behavior. Anomia mediates the impact of situational social identity cognitive dissonance on irrational buying and social capital moderates the impact of situational social identity cognitive dissonance on irrational buying and anomia (see Figure 1 Conceptual Framework).

3.1 Situational Social Identity Cognitive Dissonance and Irrational Buying

Many studies have examined irrational buying, which includes impulse buying and compulsive buying. Researchers have examined empirically factors that influence irrational buying like
impulse buying. For example, Zhang & Xu et al. (2018) found that browsing positively affects consumers’ urge to buy impulsively and finally affects their impulse buying behavior. The findings from the research results of Dodoo & Wu (2019) indicated a positive influence of perceived personalization of social media ads on perceived relevance, which subsequently predicted customers’ online impulse buying tendencies. Akram & Hui et al. (2018) demonstrated that the use of credit cards enhances the relationship between website quality and online impulse buying. Zheng & Men et al. (2019) showed in their research that hedonic browsing directly and positively influences consumers’ urge to buy impulsively, whereas utilitarian browsing indirectly influences consumers’ urge to buy impulsively through hedonic browsing. Pradhan & Israel et al. (2018) found that materialism influenced credit card use and increased the propensity for impulse buying, which then precipitated compulsive buying habits. We suggest that situational social identity cognitive dissonance might affect an individual’s emotions, cognition, and conation. Under high levels of cognitive dissonance, individuals might not be able to manage their emotions, cognition, and conation appropriately in the short term. Thus, they might engage in irrational behavior and very likely engage in irrational buying. Based on this we formulate our hypothesis as following:

H1: In the context of consumption, situational social identity cognitive dissonance might cause individual’s irrational buying. The higher the level of cognitive dissonance, the greater the probability of irrational buying, and vice versa.

3.2 The Mediating Effect of Anomia on the Impact of Situational Social Identity Cognitive Dissonance on Irrational Buying

The research results of Ryan (1981) found a moderately strong negative relationship between education and anomia and a weak negative relationship between overall life satisfaction and anomia. Their research results indicated that socio-economic status remained the primary determinant of anomia for most Americans. Caruana & Ramaseshan et al. (2000) demonstrated
in their research that anomie affected academic dishonesty among university students. Hays & Regoli et al. (2007) revealed in their research that there were significant negative relationships between anomia and education, merit selection, and years in law enforcement. When situational social identity cognitive dissonance happens, individuals might have a sense of a loss of orientation accompanied by feelings of emptiness and apathy, or they might experience a kind of meaninglessness. In other words, situational social identity cognitive dissonance might affect anomia positively. We also suggest that when social identity cognitive dissonance happens, people with high levels of anomia might lose the compass pointing into the future in the short run. They might give up goals and pursue means instead. This might lead to irrational behavior, which includes irrational buying. Based on our analyses, we have developed hypotheses as following:

H2: In the context of consumption, anomia mediates the effect of situational social identity cognitive dissonance on irrational buying.

H2a: In the context of consumption, situational social identity cognitive dissonance affects anomia positively. Higher levels of situational social identity cognitive dissonance cause higher levels of anomia, and vice versa.

H2b: In the context of consumption, anomia affects irrational buying positively. Higher levels of anomia cause higher levels of irrational buying, and vice versa.

3.3 The Moderating Effect of Social Capital on the Relationship between Situational Social Identity Dissonance on Irrational Buying and Anomia

Social capital is a popular concept among social science disciplines, and a growing number of researchers in social science tapped it in their research fields (Adler & Kwon, 2002). Tsai & Ghoshal (1998) demonstrated in their research that one dimension of social capital, namely social interaction, and trust were related to product innovation indirectly. The research results of Huang (2016) showed that social capital has significant effects on common bonds. The
empirical findings of Dinda (2018) suggested that strong social capital reduces fiscal deficits. Glanville & Story (2018) researched social capital and health, and found the two factors were dependent on one another. Hoi & Wu et al. (2018) analyzed longitudinal data and showed that community social capital affected CSR activities. Van Den Bulte & Bayer et al. (2018) indicated that through matching and social enrichment, firms could leverage their customers' networks to gain new customers with higher customer lifetime value and converted social capital into economic capital.

In marketing contexts, social capital is also a widely used construct. For example, Hung & Li (2007) investigated the influence of electronic word-of-mouth on virtual consumer communities and found it was a source of social capital. We suggest that when an individual experiences situational social identity cognitive dissonance, those with high levels of social capital can seek help from their networks and thus better cope with their difficulties. Under such conditions, they might less likely engage in irrational buying and anomia. Parks (1977) examined anomia and close friendship communication networks, and found that perceived similarity among members of close friendship networks and the level of interpersonal communication skills were negatively related to anomia. Friendship networks are an important dimension of social capital, so the research results of Parks (1977) provided a persuasive argument. Based on our analyses above, we have formulated the following hypotheses:

H3: In the context of consumption, social capital moderates the impact of situational social identity cognitive dissonance on irrational buying. Under the same situational social identity cognitive dissonance, individuals with higher levels of social capital have lower levels of irrational buying than those with lower levels of social capital, and vice versa.

H4: In the context of consumption, social capital moderates the impact of situational social identity cognitive dissonance on anomia. Under the same situational social
identity cognitive dissonance, individuals with higher levels of social capital have lower level of anomia than those with lower levels of social capital, and vice versa.

4. Study 1
4.1 Overview

Study 1 aims to examine the impact of situational social identity cognitive dissonance on irrational buying and the moderating effect of social capital on the relationship between situational social identity cognitive dissonance and irrational buying. We used the scale developed by Sweeney & Hausknecht et al. (2000) to measure situational social identity cognitive dissonance. We adopted four items and adapted them in accordance with our research: *I felt scared about my new social identity; I felt hollow about my new social identity; I felt uneasy about my new social identity; and I felt depressed about my new social identity.* We used the scale created by Ridgway & Kukar-Kinney et al. (2008) to measure irrational buying. We adopted three items: *I buy things I don’t need; I buy things I did not plan to buy; and I consider myself an impulse purchaser.* We adopted the scale created by Williams (2006) to measure social capital. We used five items: *there are several people whom I trust to help solve my problems; there is someone whom I can turn to for advice about making very important decisions; when I feel lonely, there are several people whom I can talk to; the people I interact with would share their last dollar with me; and the people I interact with would help me fight an injustice.* All items are measured on a seven-point Likert scale. For example, a score of 1 means *very much agree* and a score of 7 means *very much disagree.* We modified these scales to some extent to make them suitable for our research.

4.2 Procedure

Although we should have conducted surveys among migrants in cities, we couldn’t readily access that population, so instead we conducted surveys among undergraduates at a four-year university in Nanning, China. In China, it’s very competitive to go to a prestigious university
partly because it is the only way for children from ordinary families to change their fate (Liu & Wu, 2006) and partly because it is a Chinese tradition historically (Yu & Suen, 2005). Both students and their parents have to devote a lot of time and energy in order to get enrolled at an ideal university. Those who go to a top tier university are regarded with pride by core and extended family because these students are regarded as having a very promising future. Students who don’t get good scores in the college entrance examinations have no choice but go to an ordinary university or vocational college. As a result, these students might have very complicated feeling toward their newly gained social identity. They might have very positive attitude toward the fact that they become a college student, but they might have very negative attitude toward their university because it’s not a prestigious one. Because of this they might experience situational social identity cognitive dissonance at the beginning of their undergraduate program, though they can develop some strategies to cope with their social identity cognitive dissonance with the passing of time.

Based on our analysis above, we chose a four-year public university whose ranking is between 400 to 500 among 700 four-year public universities in China. In the first part of our questionnaire, we asked respondents to recall their attitudes toward their new social identity when they first came to study at the current university. Then, they answered questions related to items of situational social identity cognitive dissonance, irrational buying, and social capital. Finally, subjects gave their personal information related to demographic characteristics and then submitted their questionnaire.

We collected 35 valid questionnaires in total. Males accounted for 31.4% with 11 responses and females accounted for 68.6% with 24 responses. According to an independent-samples t test we conducted in IBM SPSS Statistics 22, the mean values differences of situational social identity cognitive dissonance, social capital, and irrational buying between male and female were not statistically significant, so we pooled all the data together to conduct data analysis.
(see Table 1, Table 2, and Table 3 for more information).

Table 1 Gender

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
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<tr>
<td>Male</td>
<td>11</td>
<td>31.4</td>
<td>31.4</td>
<td>31.4</td>
</tr>
<tr>
<td>Female</td>
<td>24</td>
<td>68.6</td>
<td>68.6</td>
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</tr>
<tr>
<td>Total</td>
<td>35</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Table 2 Group Statistics

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<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
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<td><strong>Social Identity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>11</td>
<td>4.1136</td>
<td>2.09870</td>
<td>.63278</td>
</tr>
<tr>
<td>Female</td>
<td>24</td>
<td>4.0313</td>
<td>2.33163</td>
<td>.47594</td>
</tr>
<tr>
<td><strong>Social Capital</strong></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Male</td>
<td>11</td>
<td>3.7500</td>
<td>2.49499</td>
<td>.75227</td>
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<tr>
<td>Female</td>
<td>24</td>
<td>4.2813</td>
<td>2.27619</td>
<td>.46463</td>
</tr>
<tr>
<td><strong>Irrational Buying</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
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<td>3.9697</td>
<td>2.14193</td>
<td>.64582</td>
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<tr>
<td>Female</td>
<td>24</td>
<td>4.0139</td>
<td>2.20118</td>
<td>.44931</td>
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Table 3 Independent Samples Test

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<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
<th>95% Confidence Interval of the Difference</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
<td>t</td>
</tr>
<tr>
<td>Social Identity</td>
<td>.993</td>
<td>.326</td>
<td>.100</td>
</tr>
<tr>
<td></td>
<td>.104</td>
<td>21.520</td>
<td>.918</td>
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<tr>
<td>Social Capital</td>
<td>.781</td>
<td>.383</td>
<td>-.622</td>
</tr>
<tr>
<td></td>
<td>-.601</td>
<td>17.949</td>
<td>.555</td>
</tr>
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</table>
4.3 Results and Discussion

The reliability statistics of the scales of situational social identity cognitive dissonance, social capital, and irrational buying showed Cronbach’s alphas were 0.919, 0.907, and 0.931 respectively. We regressed the dependent variable irrational buying on the independent variable situational social identity cognitive dissonance. The results showed $R^2 = 0.833$, $F = 204.438$ ($p = 0.000$). This indicates that the linear relationship between irrational buying and situational social identity cognitive dissonance is statistically significant. Statistical results showed unstandardized coefficients of situational social identity cognitive dissonance $B = 0.894$ and standardized coefficients $Beta = 0.913$ ($p = 0.000$). Based on these results, H1 is supported. (see Table 4, Table 5, and Table 6 for more information)

Table 4 Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.913</td>
<td>.833</td>
<td>.829</td>
<td>.57879</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Social Identity

Table 5 ANOVAa

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Regression</td>
<td>68.487</td>
<td>1</td>
<td>68.487</td>
<td>204.438</td>
<td>.000b</td>
</tr>
<tr>
<td>Residual</td>
<td>13.735</td>
<td>41</td>
<td>.335</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>82.222</td>
<td>42</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Irrational Buying
b. Predictors: (Constant), Social Identity

Table 6 Coefficientsa

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
</table>
In order to test whether social capital moderates the relationship between situational social identity cognitive dissonance and irrational buying, we standardized the values of all three variables. And then we regressed the dependent variable irrational buying on the independent variables situational social identity cognitive dissonance and moderator social capital. The results showed R square = 0.966, F = 460.699 (p = 0.000). This indicates the linear relationship between irrational buying and situational social identity cognitive dissonance and social capital is statistically significant. Statistical results showed unstandardized coefficients of Social Identity B = 0.973 and standardized coefficients Beta = 0.973 (p = 0.000). Statistical results showed unstandardized coefficients of Social Capital B = -0.394 and standardized coefficients Beta = -0.394 (p= 0.000).

Next, we added the interaction term situational social identity cognitive dissonance * social capital to the previous model and the R square change was 0.005 (p = 0.029). Statistical results showed unstandardized coefficients of the interaction term B = 0.073 and standardized coefficients Beta = 0.070 (p = 0.029). Statistical results showed unstandardized coefficients of situational social identity cognitive dissonance B = 0.976 and standardized coefficients Beta = 0.976 (p = 0.000). Statistical results showed unstandardized coefficients of social capital B = -0.396 and standardized coefficients Beta = -0.396 (p=0.000). This demonstrated that social capital moderated the relationship between situational social identity cognitive dissonance and irrational buying, but it didn’t fully moderate the relationship. Based on the data analysis above, H3 was supported (see Table 7, Table 8, and Table 9 for more information).

Table 7 Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>Change Statistics</th>
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</thead>
<tbody>
<tr>
<td>1 (Constant)</td>
<td>8.069</td>
<td>.170</td>
</tr>
<tr>
<td>Social Identity</td>
<td>.894</td>
<td>.063</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Irrational Buying
Table 8 ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>32.859</td>
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<td>16.429</td>
<td>460.699</td>
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<tr>
<td></td>
<td>Residual</td>
<td>1.141</td>
<td>32</td>
<td>.036</td>
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<tr>
<td></td>
<td>Total</td>
<td>34.000</td>
<td>34</td>
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</tr>
<tr>
<td>2</td>
<td>Regression</td>
<td>33.023</td>
<td>3</td>
<td>11.008</td>
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<tr>
<td></td>
<td>Residual</td>
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<td>.032</td>
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<tr>
<td></td>
<td>Total</td>
<td>34.000</td>
<td>34</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Zscore (Irrational Buying)
b. Predictors: (Constant), Zscore (Social Capital), Zscore (Social Identity)
c. Predictors: (Constant), Zscore (Social Capital), Zscore (Social Identity), Zscore (Social Identity)* Zscore (Social Capital)

Table 9 Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>-1.769</td>
<td>.068</td>
<td>-26.084</td>
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<tr>
<td></td>
<td>Zscore (Social Identity)</td>
<td>.973</td>
<td>.015</td>
<td>.973</td>
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<tr>
<td></td>
<td>Zscore(Social Capital)</td>
<td>-.394</td>
<td>.033</td>
<td>-.394</td>
</tr>
<tr>
<td>2</td>
<td>(Constant)</td>
<td>-1.788</td>
<td>.064</td>
<td>-27.820</td>
</tr>
<tr>
<td></td>
<td>Zscore (Social Identity)</td>
<td>.976</td>
<td>.014</td>
<td>.976</td>
</tr>
<tr>
<td></td>
<td>Zscore(Social Capital)</td>
<td>-.396</td>
<td>.031</td>
<td>-.396</td>
</tr>
<tr>
<td></td>
<td>Zscore (Social Identity)* Zscore (Social Capital)</td>
<td>.073</td>
<td>.032</td>
<td>.070</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Zscore (Irrational Buying)

5. Study 2
5.1 Overview

Study 2 aims to replicate Study 1 and confirm the results of Study 1. Furthermore, Study 2 aims to examine whether anomia mediates the impact of situational social identity cognitive dissonance on irrational buying. In the second study, we also tested the moderating effects of social capital on the relationship between situational social identity cognitive dissonance and anomia. We used a scale developed by Srole (1956) to measure anomia. We adopted three of five original items: *in spite of what some people say, the lot of the average man is getting worse; nowadays a person has to live pretty much for today and let tomorrow take care of itself; these days a person doesn’t really know who he can count on.* In Study 2, we used the same scales to measure situational social identity cognitive dissonance, social capital, and irrational buying. All items were measured on a seven-point Likert scale.

5.2 Procedure

Except that we included questions related to anomia, the content of the remaining parts of questionnaire we used in Study 2 were the same to Study 1. And we followed the same procedures as those in Study 1. We collected 51 valid questionnaires altogether. Males accounted for 33.3% with 17 responses, and females accounted for 66.7% with 34 responses. According to independent-samples t-test we conducted in IBM SPSS Statistics 22, the mean values differences of situational social identity cognitive dissonance, social capital, anomia, and irrational buying between males and females were not statistically significant, so we pooled all the data together to conduct data analysis (see Table 10, Table 11, and Table 12 for more information).

| Table 10 Gender |
|-----------------|-----------------|-----------------|-----------------|-----------------|
|                 | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid           | Male       | 17       | 33.3           | 33.3             |
|                 | Female     | 34       | 66.7           | 100.0            |
| Total           | 51        | 100.0    | 100.0          |                  |
Table 11 Group Statistics

<table>
<thead>
<tr>
<th></th>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Social Identity</strong></td>
<td>Male</td>
<td>17</td>
<td>3.5000</td>
<td>2.00000</td>
<td>.48507</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>34</td>
<td>3.7059</td>
<td>1.89444</td>
<td>.32489</td>
</tr>
<tr>
<td><strong>Irrational Buying</strong></td>
<td>Male</td>
<td>17</td>
<td>3.6471</td>
<td>2.03603</td>
<td>.49381</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>34</td>
<td>4.2549</td>
<td>2.20507</td>
<td>.37817</td>
</tr>
<tr>
<td><strong>Anomia</strong></td>
<td>Male</td>
<td>17</td>
<td>3.1569</td>
<td>1.73653</td>
<td>.42117</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>34</td>
<td>3.6569</td>
<td>1.88291</td>
<td>.32292</td>
</tr>
<tr>
<td><strong>Social Capital</strong></td>
<td>Male</td>
<td>17</td>
<td>4.1176</td>
<td>1.83098</td>
<td>.44408</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>34</td>
<td>3.5515</td>
<td>1.82448</td>
<td>.31289</td>
</tr>
</tbody>
</table>

Table 12 Independent Samples Test

<table>
<thead>
<tr>
<th></th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
<td>t</td>
</tr>
<tr>
<td><strong>Social Identity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>.092</td>
<td>.763</td>
<td>- .359</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- .353</td>
</tr>
<tr>
<td><strong>Irrational Buying</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>1.363</td>
<td>.249</td>
<td>- .951</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- .977</td>
</tr>
<tr>
<td><strong>Anomia</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>.555</td>
<td>.460</td>
<td>- .917</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- .942</td>
</tr>
<tr>
<td><strong>Social Capital</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>.066</td>
<td>.799</td>
<td>1.043</td>
</tr>
</tbody>
</table>
Equal variances not assumed

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.042</td>
<td>32.005</td>
<td>.305</td>
<td>.56618</td>
<td>.54324</td>
<td>-.54036</td>
<td>1.67271</td>
</tr>
</tbody>
</table>

5.3 Results and Discussion

The reliability statistics of the scale of situational social identity cognitive dissonance, social capital, anomia, and irrational buying showed that Cronbach’s alphas were 0.902, 0.899, 0.921, and 0.917 separately. In order to test whether anomia mediates the impact of situational social identity cognitive dissonance on irrational buying, we conducted several regression analyses. We first regressed the dependent variable irrational buying on the independent variable situational social identity cognitive dissonance. The results showed $R^2 = 0.770$, $F = 164.086$ ($p = 0.000$). This indicates that the linear relationship between irrational buying and situational social identity cognitive dissonance is statistically significant. Statistical results showed unstandardized coefficients of situational social identity cognitive dissonance of $B = 0.883$ and standardized coefficients Beta = 0.878 ($p=0.000$). Based on the results above, H1 was supported once again (see Table 13, Table 14, and Table 15 for more information).

Table 13 Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.878</td>
<td>.770</td>
<td>.765</td>
<td>.93182</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Social Identity

Table 14 ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Regression</td>
<td>142.475</td>
<td>1</td>
<td>142.475</td>
<td>164.086</td>
<td>.000b</td>
</tr>
<tr>
<td>Residual</td>
<td>42.546</td>
<td>49</td>
<td>.868</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>185.021</td>
<td>50</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Irrational Buying
b. Predictors: (Constant), Social Identity

Table 15 Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
</table>
Next, we regressed the mediator anomia on independent variable situational social identity cognitive dissonance. The results showed R square = 0.741, F = 140.553, p = 0.000. This indicates that the linear relationship between anomia and situational social identity cognitive dissonance is statistically significant. Statistical results showed unstandardized coefficients of situational social identity cognitive dissonance B = 0.825 and standardized coefficients Beta = 0.861 (p=0.000) (see Table 16, Table 17, and Table 18 for more information).

### Table 16 Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.861&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.741</td>
<td>.736</td>
<td>.94165</td>
</tr>
</tbody>
</table>

<sup>a</sup> Predictors: (Constant), Social Identity

### Table 17 ANOVA<sup>a</sup>

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Regression</td>
<td>124.630</td>
<td>1</td>
<td>124.630</td>
<td>140.553</td>
<td>.000&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Residual</td>
<td>43.449</td>
<td>49</td>
<td>.887</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>168.078</td>
<td>50</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup> Dependent Variable: Anomia

<sup>b</sup> Predictors: (Constant), Social Identity

### Table 18 Coefficients<sup>a</sup>

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>.488</td>
<td>.286</td>
<td></td>
<td>1.709</td>
</tr>
<tr>
<td>Social Identity</td>
<td>.825</td>
<td>.070</td>
<td>.861</td>
<td>11.856</td>
</tr>
</tbody>
</table>

<sup>a</sup> Dependent Variable: Anomia

Then, we regressed the dependent variable irrational buying on the independent variable irrational buying and mediator anomia. We found a significant relationship between anomia and irrational buying in the presence of situational social identity cognitive dissonance. The
unstandardized coefficients of anomia $B = 0.889$ and standardized coefficients $Beta = 0.875$ ($p=0.000$). In the presence of the mediator anomia, the effect of situational social identity cognitive dissonance on irrational buying reduced greatly. The change of $F$ was $285.192$ ($p = 0.000$). Without the presence of mediator anomia, results showed the unstandardized coefficients of situational social identity cognitive dissonance $B = 0.883$ and standardized coefficients $Beta = 0.878$ ($p = 0.000$). With the presence of the mediator anomia, results showed the unstandardized coefficients of situational social identity cognitive dissonance $B = 0.124$ ($p = 0.000$) and standardized coefficients is $Beta= 0.123$ ($p = 0.000$).

Based on the results of the data analysis above, we can say with confidence that anomia mediated the impact of situational social identity cognitive dissonance on irrational buying. Thus, H2a and H2b were supported (see Table 19, Table 20, Table 21, and Table 22 for more information).

Table 19 Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>$R$</th>
<th>$R^2$</th>
<th>Adjusted $R^2$</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>R Square Change</td>
</tr>
<tr>
<td>1</td>
<td>.878$^a$</td>
<td>.770</td>
<td>.765</td>
<td>.93182</td>
<td>.770</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$F$ Change</td>
</tr>
<tr>
<td>2</td>
<td>.983$^b$</td>
<td>.967</td>
<td>.965</td>
<td>.35734</td>
<td>.197</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>df1, df2, Sig. $F$ Change</td>
</tr>
</tbody>
</table>

|       |      |       |                |                           | $F$ Change       |
|       |       |       |                |                           | df1, df2, Sig. $F$ Change |

a. Predictors: (Constant), Social Identity  

b. Predictors: (Constant), Social Identity, Anomia

Table 20 ANOVA$^a$

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>$df$</th>
<th>Mean Square</th>
<th>$F$</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Regression</td>
<td>142.475</td>
<td>1</td>
<td>142.475</td>
<td>164.086</td>
<td>.000$^b$</td>
</tr>
<tr>
<td>Residual</td>
<td>42.546</td>
<td>49</td>
<td>.868</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>185.021</td>
<td>50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Regression</td>
<td>178.891</td>
<td>2</td>
<td>89.446</td>
<td>700.477</td>
<td>.000$^c$</td>
</tr>
<tr>
<td>Residual</td>
<td>6.129</td>
<td>48</td>
<td>.128</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>185.021</td>
<td>50</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 19 Model Summary**

**Table 20 ANOVA**

a. Dependent Variable: Irrational Buying  

b. Predictors: (Constant), Social Identity
c. Predictors: (Constant), Social Identity, Anomia

Table 21 Coefficients\(^a\)

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>.430</td>
<td>.283</td>
<td>1.523</td>
</tr>
<tr>
<td></td>
<td>Social Identity</td>
<td>.883</td>
<td>.069</td>
<td>12.810</td>
</tr>
<tr>
<td>2</td>
<td>(Constant)</td>
<td>.182</td>
<td>.109</td>
<td>1.661</td>
</tr>
<tr>
<td></td>
<td>Social Identity</td>
<td>.124</td>
<td>.052</td>
<td>2.375</td>
</tr>
<tr>
<td></td>
<td>Anomia</td>
<td>.889</td>
<td>.053</td>
<td>16.888</td>
</tr>
</tbody>
</table>

\(^a\) Dependent Variable: Irrational Buying

Table 22 Excluded Variables\(^a\)

<table>
<thead>
<tr>
<th>Model</th>
<th>Beta In</th>
<th>t</th>
<th>Sig.</th>
<th>Partial Correlation</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Anomia</td>
<td>.875</td>
<td>16.888</td>
<td>.000</td>
<td>.925</td>
</tr>
</tbody>
</table>

\(^a\) Dependent Variable: Irrational Buying

\(^b\) Predictors in the Model: (Constant), Social Identity

In order to confirm the moderating effect of social capital on the relationship between situational social identity cognitive dissonance and irrational buying, and also between situational social identity cognitive dissonance and anomia, we standardized the values of all four variables. Then we regressed the dependent variable irrational buying on the independent variables situational social identity cognitive dissonance and social capital. The results showed R square = 0.966, F = 460.699 (p = 0.000). This indicates that the linear relationship between irrational buying and situational social identity cognitive dissonance and social capital is statistically significant. Statistical results showed unstandardized coefficients of social identity B = 0.819 and standardized coefficients Beta = 0.819 (p = 0.000). Statistical results showed unstandardized coefficients of Social Capital B = -0.377 and standardized coefficients Beta = -0.377 (p=0.000).

Next, we added the interaction term situational social identity cognitive dissonance * social capital to the previous model, and the R square change was 0.005 (p = 0.029). Statistical results
showed unstandardized coefficients of interaction term $B = -0.119$ and standardized coefficients is $\beta = -0.115$ ($p = 0.007$). Statistical results showed unstandardized coefficients of situational social identity cognitive dissonance $B = 0.816$ and standardized coefficients $\beta = 0.816$ ($p=0.000$). Statistical results showed unstandardized coefficients of social capital $B = -0.377$ and standardized coefficients $\beta = -0.377$ ($p = 0.000$). This demonstrated that social capital moderated the relationship between situational social identity cognitive dissonance and irrational buying. But it was not a full moderation. Once again, H3 was supported (see Table 23, Table 24, Table 25, and Table 26 for more information).

Table 23 Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>R Square Change</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>F Change</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>df1  df2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Sig. F Change</td>
</tr>
<tr>
<td>1</td>
<td>.953a</td>
<td>.909</td>
<td>.905</td>
<td>.30761399</td>
<td>.909</td>
</tr>
<tr>
<td>2</td>
<td>.960b</td>
<td>.922</td>
<td>.917</td>
<td>.28744948</td>
<td>.013</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Zscore (Social Capital), Zscore (Social Identity)
b. Predictors: (Constant), Zscore (Social Capital), Zscore (Social Identity), Zscore (Social Identity)* Zscore (Social Capital)

Table 24 ANOVA^a

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>45.458</td>
<td>2</td>
<td>22.729</td>
<td>240.197</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>4.542</td>
<td>48</td>
<td>.095</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>50.000</td>
<td>50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Regression</td>
<td>46.117</td>
<td>3</td>
<td>15.372</td>
<td>186.043</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>3.883</td>
<td>47</td>
<td>.083</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>50.000</td>
<td>50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Zscore(Irrational Buying)
b. Predictors: (Constant), Zscore(Social Capital), Zscore(Social Identity)
c. Predictors: (Constant), Zscore(Social Capital), Zscore(Social Identity), Zscore (Social Identity)* Zscore (Social Capital)

Table 25 Coefficients^a

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
</table>
In order to examine whether social capital moderates the relationship between situational social identity cognitive dissonance and anomia, we regressed dependent variable anomia on the independent variables situational social identity cognitive dissonance and social capital. The results showed $R^2 = 0.861$, $F = 148.804$ ($p = 0.000$). This indicates the linear relationship between anomia and situational social identity cognitive dissonance and social capital is statistically significant. Statistical results showed unstandardized coefficients of situational social identity cognitive dissonance $B = 0.808$ and standardized coefficients Beta = 0.808 ($p = 0.000$). Statistical results showed unstandardized coefficients of social capital $B = -0.304$ and standardized coefficients Beta = -0.304 ($p = 0.000$).

Next, we added the interaction term situational social identity cognitive dissonance * social capital to the previous model, and the R square change was 0.027 ($p = 0.001$). Statistical results showed unstandardized coefficients of interaction term $B = -0.176$ and standardized coefficients
Beta = -0.166 (p = 0.001). Statistical results showed unstandardized coefficients of situational social identity cognitive dissonance B = 0.804 and standardized coefficients Beta = 0.804 (p = 0.000). Statistical results showed unstandardized coefficients of social capital B = -0.348 and standardized coefficients Beta = -0.348 (p = 0.000). This demonstrated that social capital moderated the relationship between situational social identity cognitive dissonance and anomia, but it was not a full moderation. Based on the results of data analyses above, H4 was supported (see Table 27, Table 28, Table 29, and Table 30 for more information).

**Table 27 Model Summary**

<table>
<thead>
<tr>
<th>Model</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>R Square Change</th>
<th>F Change</th>
<th>df1</th>
<th>df2</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.928a</td>
<td>.861</td>
<td>.855</td>
<td>.7193</td>
<td>.861</td>
<td>2</td>
<td>48</td>
<td>.000</td>
</tr>
<tr>
<td>2</td>
<td>.943b</td>
<td>.889</td>
<td>.881</td>
<td>.65165</td>
<td>.027</td>
<td>1</td>
<td>47</td>
<td>.001</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Zscore (Social Capital), Zscore (Social Identity)
b. Predictors: (Constant), Zscore (Social Capital1), Zscore (Social Identity), Zscore (Social Identity)*Zscore (Social Capital)

**Table 28 ANOVAa**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig. F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Regression</td>
<td>154.249</td>
<td>2</td>
<td>77.125</td>
<td>148.804</td>
<td>.000b</td>
</tr>
<tr>
<td>Residual</td>
<td>24.878</td>
<td>48</td>
<td>.518</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>179.127</td>
<td>50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Regression</td>
<td>159.169</td>
<td>3</td>
<td>53.056</td>
<td>124.942</td>
<td>.000c</td>
</tr>
<tr>
<td>Residual</td>
<td>19.959</td>
<td>47</td>
<td>.425</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>179.127</td>
<td>50</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Anomia
b. Predictors: (Constant), Zscore(Social Capital1), Zscore(Social Identity)
c. Predictors: (Constant), Zscore(Social Capital), Zscore (Social Identity), Zscore (Social Identity)* Zscore (Social Capital)

**Table 29 Coefficientsa**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>3.382</td>
<td>.101</td>
<td>33.552</td>
</tr>
<tr>
<td></td>
<td>Zscore(Social Identity)</td>
<td>.808</td>
<td>.103</td>
<td>.808</td>
</tr>
<tr>
<td>Model</td>
<td>Zscore (Social Identity)*Zscore (Social Capital)</td>
<td>Beta</td>
<td>t</td>
<td>Sig.</td>
</tr>
<tr>
<td>-------</td>
<td>-----------------------------------------------</td>
<td>------</td>
<td>-----</td>
<td>------</td>
</tr>
<tr>
<td>1</td>
<td>Zscore (Social Identity)*Zscore (Social Capital)</td>
<td>-.166</td>
<td>-3.404</td>
<td>.001</td>
</tr>
</tbody>
</table>

Table 30 Excluded Variables

<table>
<thead>
<tr>
<th>Model</th>
<th>Beta</th>
<th>t</th>
<th>Sig.</th>
<th>Partial Correlation</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Zscore (Social Capital)</td>
<td>-.348</td>
<td>.103</td>
<td>-.348</td>
<td>-6.388</td>
</tr>
<tr>
<td></td>
<td>(Constant)</td>
<td>3.333</td>
<td>.092</td>
<td>36.079</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Zscore (Social Identity)</td>
<td>.804</td>
<td>.093</td>
<td>.804</td>
<td>16.300</td>
</tr>
<tr>
<td></td>
<td>Zscore (Social Capital)</td>
<td>-.348</td>
<td>.093</td>
<td>-.348</td>
<td>-7.052</td>
</tr>
<tr>
<td></td>
<td>Zscore (Social Identity)*Zscore (Social Capital)</td>
<td>-.176</td>
<td>.096</td>
<td>-.166</td>
<td>-3.404</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Anomia
b. Predictors in the Model: (Constant), Zscore (Social Capital), Zscore (Social Identity)

6. Overall Discussion and Conclusion

This paper was focused on the impact of situational social identity cognitive dissonance on irrational buying and tried to explain why it is so. By reviewing the literature of constructs of social identity, anomie, and social capital, we developed our conceptual framework. We conducted two studies to test the impact mechanism of situational social identity cognitive dissonance on irrational buying. The results of Study 1 suggested that situational social identity cognitive dissonance positively affected irrational buying. That is to say, the higher the level of situational social identity cognitive dissonance, the higher the level of irrational buying, and vice versa. In Study 1, we also found that social capital moderated the impact of situational social identity cognitive dissonance on irrational buying. Under the same level of situational social identity cognitive dissonance, subjects with higher levels of social capital had lower levels of irrational buying than those with lower levels of social capital, and vice versa. In Study 2, we confirmed the results of Study 1. Study 2 also suggested that anomia mediated the impact of situational social identity cognitive dissonance on irrational buying partially. Situational social identity cognitive dissonance positively affected anomia. Higher levels of
situational social identity cognitive dissonance led to higher levels of anomia and vice versa. Anomia positively affected irrational buying. Higher levels of anomia led to higher levels of irrational buying, and vice versa. And the results also suggested that social capital not only moderated the relationship between situational social identity cognitive dissonance and irrational buying but also the relationship between situational social identity cognitive dissonance and anomia. Under the same level of situational social identity cognitive dissonance, subjects with higher levels of social capital had lower levels of anomia than those with lower levels of social capital, and vice versa.

6.1 Theoretical Implications

Many studies have focused on social identity or irrational buying behavior in marketing. Our research first examined the impact of situational social identity cognitive dissonance on irrational buying and explored its mechanism. Our research has contributed new knowledge in several aspects. First, we have proposed a new construct -- situational social identity cognitive dissonance -- and tested it empirically. It enriches both social identity theory and theories related to cognitive dissonance. Second, we have made new contributions to the antecedents of irrational buying. In our research, we found that situational social identity cognitive dissonance affected irrational buying significantly. Finally, this paper also examined the mechanisms of the impact of situational social identity cognitive dissonance on irrational buying. We have found that both mediator anomia and moderator social capital have significant mediating or moderating effects. All these have contributed meaningful new knowledge to the current literature.

6.2 Managerial Implications

After China’s implementation of the transformation and opening up policy, Chinese people could freely move to other regions or areas to find jobs or to live. In almost every major city in China, people can easily encounter other people with different regional accents. Migrants are
everywhere domestically. In some major cities in China, more than half of the total population are from other regions. It’s very important to pay attention to these migrant people’s welfare. Our research suggests that situational social identity cognitive dissonance might cause irrational buying so that individuals as consumer couldn’t maximize their utility. And this is a kind of market failure. Policy makers should recognize this reality. Policies and regulations could ensure that migrants have a smooth transition in a new city. People with situational social identity cognitive dissonance might be susceptible to buying so-called *sin products* (like alcohol, tobacco, gambling, unhealthy foods) so governments at all levels might regulate the selling and distributing of those type of products. Marketers, especially those who market sin products, should also distribute and price their products carefully to make sure their products are not consumed irrationally by people who experience situational social identity cognitive dissonance.

7. Limitations and Future Research

Although the results of our research supported the hypotheses we formulated, our research has limitations. First, we didn’t sample the most suitable populations (migrant people in urban aras) though it is reasonable to use student samples to some extent. Situational social identity cognitive dissonance might be more common among migrant workers. They are the people who might more likely experience situational social identity cognitive dissonance. Second, both samples in our two studies were very small and didn’t have sufficient representativeness. Student samples cannot reflect the composition of the whole population, particularly because of their age cohort and educational attainment. Third, we used surveys to collect data and didn’t conduct experiments. Although our research might have some external validity, we didn’t have a very high level of internal validity as that in experiments.

Researchers in the future can expand our studies in several aspects. First, they should recruit migrant workers as their survey population in order to get more meaningful data and reach
stronger conclusions. They can also conduct experiments to improve the internal validity of research. Researchers in the future should also use larger and more representative samples. They should try to find other variables that might have moderating effects or mediating effects so that they might find other possible alternative mechanism on the relationship between situational social identity cognitive dissonance and irrational buying. Finally, future researchers can also focus on whether or not individuals with situational social identity dissonance buy social identity signaling products irrationally and whether there are some moderators in the process. This kind of research is even more meaningful and exciting.

8. Acknowledgments

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   [Accessed 26th May 2018].


The Comparison of New Confucianism and Conscious Capitalism

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²Capital University of Economics and Business
³University of Illinois Springfield, USA

Abstract

Conscious capitalism is a new concept gaining popularity in the western business world. New Confucianism is the adaptation of thousand years old Chinese philosophy used in modern business practice. After examining closely, the four principles of conscious capitalism, we found its recommendations coincide a lot with the ancient teaching of Confucianism. Thus, we conducted a detailed comparison between these two systems from three aspects: values, developing process, and practices. The conclusion is that the two systems overlap the most in their value propositions. There are differences in practices and methods of implementation. Nonetheless, both concepts have been proven successful in many case studies. It would be beneficial to modern society if the conversation on these two important concepts can continue.

Keywords: Comparison; New Confucianism; Capitalism

1. Introduction

We live in an era of value-based conflict at a global scale. In the business world, globalization has reached a point where protectionism is coming back in a ferocious way. Assuming that global
trading is generally beneficial to all mankind, it would be important to establish better communication and to promote understanding across different cultural and national boundaries. In this paper, we try to critically examine the differences between value-systems in the business world. In particular, we focus our discussion and exploration on the differences between Conscious Capitalism and Neo-Confucianism. This could be an initial effort in the overall process of avoiding the escalation of trade wars and other conflicts across culture and country borders.

In modern China, the emphasis on business ethics has become a national policy in recent years. Academic institutes and government agency have tried to make new interpretation of Confusion teachings. Even though Neo-Confucianism has been evolved for centuries, the application of Neo-Confucianism or more recently New-Confucianism in business is still a new phenomenon. Whether the study of New-Confucianism can bring in new order in the Chinese commerce environment remain a myth. At this junction, it may be beneficial to use the values and practices brought forth by the Conscious Capitalism to shed more light on the New-Confucianism.

2. What is Conscious Capitalism?

The term Conscious Capitalism is coming from an initiative of Kip Tindell (CEO of the Container Store) and John Mackey (co-CEO of Whole Foods Market). Kip and John co-founded a Conscious Capitalism Alliance in 2007. According to the website, http://consciousbusinessconnections.com/, “Conscious Capitalism” is now a trademark of Conscious Capitalism Inc. Both Container Store and Whole Foods Market are very successful business in the US market. Joh and Kip attributed their success to their companies’ high ethical value and practices. Later, Harvard University professor, Dr. Raj Sisodia and John Mackey co-authored a book titled “Conscious Capitalism: Liberating the Heroic Spirit of Business” (Machey, Sisodia, & George, 2014) and published an in
After the publication of book, the term Conscious Capitalism become a popular topic for debating and discussion in the business world. Capitalism is a term used by Karl Marx to describe the free-market social system based on Capital. General perception of capitalism is usually associated with negative feelings such as extortion of labor and unfair distribution. However, the proponents of Conscious Capitalism argue that capitalism should be a neutral terminology. The value-generation capability of capitalism should be appraised. They argued that human society is advancing toward to a higher conscious level. Thus, if a business can operated based on high consciousness, capitalism can do the society a greater good.

According to their book, Conscious Capitalism has four tenets or four pillars: higher purpose and core values, stakeholder integration, conscious leadership, and conscious culture and management (Machey, Sisodia, & George, 2014, p. 58). Among the four tenets, higher purpose describes the value proposition. Stakeholder integration, leadership, and culture/management can be considered as practices or implementation methods. The basic idea is that Higher Purpose should drive the Stakeholder Integration, Leadership, and Culture/Management practices. Conscious Capitalism does try to follow such value driven management style (Cheretis, & Mujtaba, 2014).

What is the higher purpose of Conscious Capitalism? What are the values that drive all the Conscious Capitalism practices? The answer to these question lies in the purpose statement of the Whole Food Company.

“With great courage, integrity and love—we embrace our responsibility to co-create a world where each of us, our communities and our planet can flourish. All the while, celebrating the sheer love and joy of food (Whole Food, 2018).”
Love, Integrity, and Courage are the values proposed by the Conscious Capitalism. Trust is another important element in its value system (Mackey, 2011). Based on Love, Trust, Integrity, and Courage, Conscious Capitalism encourage business to achieve four important purposes: The Good, The True, The Beautiful, and The Heroic. The Good is to do service to others. The True is the pursue of knowledge. The Beautiful is striving to achieve excellence. And, finally, The Heroic is to have the courage to do what is right to the world.

When discussing Conscious Capitalism, the concept of socially responsible enterprise is commonly compared. Socially Responsible Enterprise and Corporate Social Responsibility are different from Conscious Capitalism. The idea of socially responsible company can root back to 1960s (Hanson, 2011). The foci of responsibility in Corporate Social responsibility is viewed as a burden. On the contrary, Conscious Capitalism views the so-called responsibility as an integrated part of its purpose and strategy. Corporate social responsibility implied the sacrifice of stakeholders’ benefit for social good. On the other hand, Conscious Capitalism integrate stakeholder’s benefit with social responsibility.

3. Neo-Confucianism and New-Confucianism in Business

Confucianism is a constantly evolving philosophy. Initially, Confucian’s teaching aim to regulate personal behavior and to recommend how ancient government should function. Over time, the original teaching has been interpreted and re-interpreted. The term, neo-Confucianism, can be seen as early as in the 12th century during the Song dynasty in China. From the 12th century to the early 20th century, Neo-Confucianism had been the dominate curriculum for entering government and civil services. Neo-Confucianism masters focus their teaching in cultivating personal moral.
Entering the 20th century, the entire east Asia had gone through great political turmoil. Confucianism thus entered a new incarnation. The term New-Confucianism was born.

The main moral values promoted by Neo-Confucianism and New Confucianism teaching includes Ren (仁), Li (礼), Cheng(诚), Xin(信), and many others. The list of value can include more than 20 different virtues and behavior guidance. In fact, many western scholars view all cultural element from China belongs to Confucianism (Jochim, 1992). Of course, the above statement is not true. Many values brought forward by Taoism and Buddhism should be excluded from the Confucianism. Undoubtedly, there are certain core values central to Confucianism. Among them, “Ren” is the paramount virtue. It can be literally translated as “Love” people. Coincidentally, this ultimate value is the same as what Conscious Capitalism is trying to promote.

The scope of New-Confucianism can be very wide. Some attributed its origin to the May-Fourth Movement in the early twentieth century in modern China (Jochim, 1992). When the economy growth happened in Hong-Kong, Taiwan, and Singapore, it was natural to relate the success in those regions with Confucian values. More broadly, cultural values from Japan and Korea may also be included in the New-Confucianism. Recently, the explosion of economy in China added more to the interpretation of New-Confucianism. The result is a very broad and big umbrella to cover many aspects of Chinese virtues. Nonetheless, the linking of these aspects of Confucianism to the Business world is vague and complex at large.

One of the criticisms toward whether New-Confucianism can aid to the success of business is to challenge why the economy growth cannot happened in imperial China.

They are diligence and thrift, tendency to save, respect for work, honesty, and harmony (Hou, 1985, p. 35). The stereotype of Chinese culture is control and regulation when it comes to business. However, the early Confucian think was the opposite. As early as late Zhao dynasty, Confucianism
had already stressed free competition, self-interest, private property, and specific economic planning strategies (Jochim, 1992). Confucianism also emphasizes on building relationship among people. People influenced by Confucianism are in general face consciousness (Redding, 1990). Confucian’s view toward profit is another debatable one. Many perceive that Confucianism downplay the role of profit seeking and even treat profit as evil in the lifelong pursue of higher moral values. However, the correct interpretation should be that Confucian was against profit only when profit is obtained from immoral means. The balance between profit and rightness is very important in Confucian’s teaching.

4. Comparison Table

Based on the above discussion, we have constructed the following table to contrast the major similarities and differences between these two schools of thought.

<table>
<thead>
<tr>
<th>Category</th>
<th>Conscious Capitalism</th>
<th>New Confucianism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>Love, Integrity, Courage, Trust</td>
<td>Love, Royalty, Courtesy, Honest, and Harmony</td>
</tr>
<tr>
<td>Developing</td>
<td>Very recent, Initiated by Conscious Entrepreneurs.</td>
<td>From Ancient Philosophy and Public Service Practice evolved into business practice ethics.</td>
</tr>
<tr>
<td>Practices: Structure</td>
<td>Focus on Healthy Organization</td>
<td>Focus on Family and Relationship at large</td>
</tr>
<tr>
<td>---------------------</td>
<td>-------------------------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>1. Organization</td>
<td>Focus on Healthy Organization</td>
<td>Focus on Family and Relationship at large</td>
</tr>
<tr>
<td>2. Structure</td>
<td>Focus on Healthy Organization</td>
<td>Focus on Family and Relationship at large</td>
</tr>
</tbody>
</table>

Interestingly, these values resonant very well with the well-known Confucianism. The central value of Confucianism is “Love.”

5. Conclusion

The comparison done in this paper is a short one. The aim is to raise the awareness toward both Conscious Capitalism and New-Confucianism. If this article can trigger any debate on the validity of the claims, it has achieved its purposes.

Based on our comparison, Conscious Capitalism overlap with New-Confucianism a lot in values. Both appraise “love” as the highest guiding principle. The priority of other values is different but in general, they do not have conflict. New-Confucianism, because of its long history of
development, is a much richer value system. It covers more complex value recommendations. This may pose difficulty for its applications.

Due to the differences in development process, the organization structures suggested by these two schools of thought are different. The Conscious Capitalism is based on the modern organizational structure while New-Confucianism tends to form family business and relying heavily on guanxi or relationship. On the recommendation of leader style, both recommend leaders should generate and believe the values rooted in their business. The major drawback of applying new Confucianism in business is that New-Confucianism does not prescribe any solid recommendation for competitiveness. Conscious Capitalism, on the other hand, started with a profit seeking proposition. Thus, it has a more concrete recommendation to build competitiveness in business. Overall, we believe that learning both Conscious Capitalism and New-Confucianism has synergy effect. We should strive more to learn and understand both philosophies.

6. Acknowledgments

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References


Research on the Moderating Effects on Regional Economic Development Factors of the Shanxi Commercial Culture, Confucian Commercial Culture, Cantonese Commercial Culture and Yangtze River Delta Commercial Culture

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Abstract

The moderating effects of different commercial cultures on regional economic development factors are examined base on China’s mainland provincial panel data (2003-2017). The results show that: the Shanxi commercial culture may serve the economic development more by optimizing human capital, but does not have significant influence in promoting the effect of investment, export and consumption. The Confucian commercial culture significantly improves the positive effect of export, but the moderating effects on investment and consumption are not significant. The Cantonese commercial culture and Yangtze River Delta commercial culture promote the positive effects of investment and export, but significantly reduced the positive effect of consumption on regional economic development. The main countermeasures include: promoting the marketization of industries related to commercial culture, giving full play to geographical advantages, adjusting the industrial layout related to commercial culture, strengthening the moral awareness and integrity awareness of economic entities, strengthening the construction of entrepreneurs in the region, strengthening the culture construction of business people and enterprises, and promoting the materialization of the humanistic spirit.
Keywords: commercial culture; moderating effects; Shanxi commercial culture, Confucian commercial culture; Cantonese commercial culture; Yangtze River Delta commercial culture

1. Introduction

In the past 40 years of reform and opening up, the private economy, which is the benchmark of China's economic development, has experienced a from small to large and weak to strong development. According to statistics, at the end of 2017, the private economy accounted for more than 60% of GDP. The development of the private economy has further spurred the revival of the commercial groups. commercial group is a collection of private enterprises. It is a geographical organization based on geographical relations that is extended by kinship organizations. The commercial groups culture carries the essence of Chinese commercial culture for thousands of years. It is the perfect combination of Chinese traditional culture and modern commercial civilization. As a hidden force, commercial groups culture can effectively produce the cohesion, guidance, inspiration and impetus that promote the comprehensive development of economy, society and people, and then affect the development and growth of regional economy. On this basis, this paper attempts to discuss whether the commercial groups culture in different regions can influence regional economic development by influencing the economic development factors in the region.

2. Literature Review

The research on culture and economic development mainly focuses on the following
three aspects: (1) Does culture have a significant causal relationship to economic development? The Cobb-Douglas production function points out that economic development comes from labor growth, capital accumulation and production efficiency. In terms of production efficiency, the promotion and improvement of culture capital can effectively bring about technological innovation and development cost savings, thus promote regional economic development (Jiang Qi, 2016)[1]; in terms of labor, China's excellent traditional culture can effectively improve the quality of workers and stimulate Entrepreneurship, thereby improving the quality of regional development factors and promoting regional economic development (Pan Jinyun and Fan Min, 2017)[2]; in terms of capital accumulation, culture differences determine the difference in capitalist spirit, and capitalist spiritual differences will bring the difference between per capita capital stock and per capita consumption (Zou, 1994)[3]. (2) What are the channels and mechanisms for culture influence on economic development? Culture as a non-institutional factor, its mechanism of action on economic activities is divided into direct action mechanism and indirect action mechanism. In terms of the direct action mechanism, culture can influence the behavior of economic entities by influencing the beliefs and values of economic entities, then cause corresponding economic or financial consequences (Guiso et al, 2006)[4]. In terms of indirect mechanism, the culture differences between regions and groups brought about by differences in religion and history will lead to barriers and obstacles between regions and groups, which will hinder the diffusion of technology and economic exchanges between regions and groups, and ultimately have indirect effects on regional economic development. (Barro
et al, 2002; Tabellini, 2010; Spolare & Wacziarg, 2009) [5-7]. (3) How can culture better serve economic development under regional differences? The differences of natural and human environments in different regions will form different ideas and values, which will constitute the unique culture connotations of different regions. Due to the special geographical location of China's eastern coastal provinces, their commercial cultures have a clear "capitalist spirit", advocating commodity circulation and individual entrepreneurial spirit, adventurous spirit (Shao Chuanlin and Shao Yongjing, 2015) [8], this "capitalism spirit" will effectively promote regional economic development through capital accumulation and export-led means. Compared with the southeast coastal provinces, Shandong is located in the eastern provinces, but because it is located in the main vein of traditional Chinese culture, its values and morals have been influenced by Confucian culture for a long time. Its unique culture model promotes regional economic development by improving the quality of regional labor force, stimulating entrepreneurship. (Cheng Peng and Cheng Chengping, 2015) [9]. Located in the border of the agricultural and animal husbandry economic zone, Shanxi culture has long been collided and integrated with Han culture and minority culture, forming a Shanxi commercial (loess) culture that is both diligent and daring to fight (Tao Hongwei, 2008) [10]. On the one hand, the typical humanistic thought in the Shanxi commercial culture can effectively improve the marginal contribution of labor capital; on the other hand, the hardworking and brave character embodied in Shanxi commercial culture is an indispensable part of entrepreneurship. The above-mentioned literature is of great significance for clarifying the relationship between culture and economic development.
and how to promote economic development through different regional cultures under regional differences. Based on the above literature, this paper further studies the following two aspects: (1) Does commercial culture directly affect regional economic development from different regional perspectives in China? If so, is there a significant difference in the strength of the role of commercial culture in regional economic development between different regions? (2) Starting from the "Troika" that drives China's economic development, this paper studies whether commercial culture will influence regional economic development through the regulation of "consumption", "investment" and "export" in different geographical perspectives? If so, are there significant differences in the regulatory effects of commercial culture on consumption, investment and export in different regions?

3. Research Methods

3.1 The division of cultural regions and the determination of the intensity of cultural radiation within the domain

By sorting out the existing literature, this paper selected the six most representative commercial groups from the top ten: Shanxi, Anhui, Guangdong, Shandong, Jiangsu and Zhejiang. Because Anhui, Jiangsu and Zhejiang are adjacent to each other and all located in the Yangtze River Delta, they are grouped into one group. According to this, 31 provinces in mainland China are divided into four culture zones: Shanxi-centered Shanxi commercial culture zone (M1), Shandong-centered Confucian commercial culture zone (M2), Guangdong-centered Cantonese commercial culture zone (M3) and Yangtze River Delta commercial culture zone (M4) centered on Jiangsu, Zhejiang and
Anhui [11-12]. The centers of culture areas are Taiyuan (C1), Jinan (C2), Guangzhou (C3) and Nanjing, Hangzhou and Hefei (C4). Let $x_i$ denote the geographical location of the $i$th provincial capital city and $d(x, y)$ be a function of calculating Euclidean distance between $x$ and $y$, then the culture area of the $j$th province is:

$$M_i = \arg \min_k \{d(C_k, x_j)\}, j = 1, 2, \cdots, 31, k = 1, 2, 3, 4$$

(1)

The culture radiation intensity of culture area $i$ to its internal province $j$ is defined as:

$$R_{i,j} = \frac{1}{\text{int}(d(C_j, x_i)/100 + 1)}$$

(2)

Where $\text{int}$ is a function of finding integers downward.

### 3.2 Rationality Test of Regional Division

In order to prove the rationality of the above-mentioned division of culture regions, this paper examines it through the following two steps:

1. Regression analysis was used to identify the residual items that might have culture effects: By taking the per capita GDP ($G$) of all provinces as dependent variable, and taking the investment in fixed assets per capita ($IM$), per capita export trade ($EX$) and household consumption ($CS$) of all provinces as independent variables, OLS regression was carried out. On this basis, the residual term $\varepsilon$ is extracted to approximate the role of commercial culture in economic development in the whole region. The specific analysis is as follows: (3):

$$G_{it} = \beta_1 IM_{it} + \beta_2 CS_{it} + \beta_3 EX_{it} + \varepsilon$$

(3)

In the formula, $i$ is the provincial number, $i = 1, 2, \cdots, 31$, $t$ denotes the year, $t = 2003, 2004, \cdots, 2017$.

2. The variance analysis is used to test whether there are significant differences in the
role of different culture effects in economic development: The residual term $\varepsilon$ extracted from (3) is taken as the reaction variable, and different regional commercial cultures are taken as the group variables for variance analysis, and then the significance of culture effect difference is tested.

3.3 Econometric Model

Considering the heterogeneity of commercial culture in different regions to regional economic development, this paper divides the 31 different provinces into the commercial culture areas of Shanxi, Shandong, Guangdong and Yangtze River Delta, and according to the panel fixed effect regression of different regions to analyze the impact of commercial culture on regional economic development from different regional perspectives. The specific model settings are as shown in equation (4):

$$G_{it}^{(u)} = \beta_1^{(u)} IM_{it}^{(u)} + \beta_2^{(u)} CS_{it}^{(u)} + \beta_3^{(u)} EX_{it}^{(u)} + \beta_4^{(u)} CT_{it}^{(u)} + \varepsilon$$  \hspace{1cm} (4)

In the formula, $u$ is a different commercial culture area, $u=1, 2, 3, 4$, representing Shanxi, Shandong, Guangdong and Yangtze River Delta commercial culture areas respectively; $i$ is the provincial numbering, $i=1, 2, ..., n(u)$, $n(u)$ is the number of provinces in the $u$th group, CT represents the intensity of culture radiation, and $\varepsilon$ is the residual term.

Considering that commercial culture, as a non-institutional factor, has an indirect mechanism for regional economic development, in order to study more accurately the role of commercial culture in regional economic development, this paper adds a multiplication term between commercial culture and explanatory variables on the basis
of formula (2). The concrete model is as follows: (5):

\[
G_{it}^{(u)} = \beta_1^{(u)} IM_{it}^{(u)} + \beta_2^{(u)} CS_{it}^{(u)} + \beta_3^{(u)} EX_{it}^{(u)} + \beta_4^{(u)} CT_{it}^{(u)} + \\
\beta_5^{(u)} IM_{it}^{(u)} \ast CT_{it}^{(u)} + \beta_6^{(u)} CS_{it}^{(u)} \ast CT_{it}^{(u)} + \beta_7^{(u)} EX_{it}^{(u)} \ast CT_{it}^{(u)} + \epsilon
\]

In the formula, \( IM\ast CT \), \( CS\ast CT \), and \( EX\ast CT \) respectively represent the intersection item of commercial culture and "investment", "export", and "consumption", and the significance of the coefficient indicates whether the commercial culture significantly affects the effects of "investment", "export" and "consumption" on regional economic development. In the data of this paper, per capita GDP, investment in fixed assets per capita, total per capita export trade and household consumption were obtained through the China Statistical Yearbook. The geographical distance between provinces was obtained through the National Basic Geographic Information Center.

4. Results of Empirical Analysis

4.1 Descriptive statistical analysis

Table 1 reports descriptive statistics for variables under different samples. There was a significant difference between the mean and standard deviation of each variable under different samples. Specifically, the average value of GDP per capita in Shanxi commercial culture zone is 0.196, which is much smaller than that in Confucian commercial culture zone. This may be due to the fact that the GDP per capita in Beijing and Tianjin in Confucian commercial culture zone is much higher than that in other provinces. Per capita fixed asset investment variables fluctuate less in different samples. It is worth noting that the average value of the per capita export trade in Shanxi commercial culture zone is not only far lower than that in other three culture zones, but
also far from that in the whole sample. Considering that the provinces in the Shanxi commercial culture zone are all in the central and western non-harbor provinces except Hebei, this result is in line with expectations. There is two-level differentiation in the household consumption between the Confucian commercial culture zone, the Yangtze River Delta commercial culture zone and Shanxi commercial culture zone, Cantonese commercial culture zone. Furthermore, the culture radiation intensity variables of Shanxi, Shandong, Guangdong and Yangtze River Deltas and their multiplication term variables of "investment", "export" and "consumption" in their respective commercial culture areas are larger than the average values of the sub-samples in the whole sample. There are also differences in the mean value of culture radiation strength between different culture areas. The difference between Yangtze River Delta commercial culture area and Cantonese commercial culture area is significant. It may be that the connection strength between provinces in Yangtze River Delta commercial culture area is better than that of Cantonese commercial culture area from the geographic terms. Considering the existence of the above differences, this study is very necessary to divide the culture region of the whole commercial culture.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Full sample</th>
<th>Shanxi commercial culture zone</th>
<th>Confucian commercial culture zone</th>
<th>Cantonese commercial culture zone</th>
<th>Yangtze River Delta commercial culture zone</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Standard deviation</td>
<td>Mean</td>
<td>Standard deviation</td>
<td>Mean</td>
</tr>
<tr>
<td>G</td>
<td>0.255</td>
<td>0.189</td>
<td>0.196</td>
<td>0.122</td>
<td>0.365</td>
</tr>
<tr>
<td>IM</td>
<td>0.274</td>
<td>0.209</td>
<td>0.271</td>
<td>0.214</td>
<td>0.334</td>
</tr>
<tr>
<td>EX</td>
<td>0.126</td>
<td>0.186</td>
<td>0.035</td>
<td>0.023</td>
<td>0.153</td>
</tr>
<tr>
<td>CS</td>
<td>0.198</td>
<td>0.169</td>
<td>0.142</td>
<td>0.098</td>
<td>0.268</td>
</tr>
</tbody>
</table>

Table 1. Descriptive statistics of different samples
4.2 Division of the four major cultural regions and the intensity of cultural radiation within the region

According to the division of culture regions in the provinces in formula (1), this paper divides the 31 provinces in mainland China into four different culture regions. The specific results are shown in Table 2:

<table>
<thead>
<tr>
<th>Culture region</th>
<th>Provinces in the region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shanxi commercial culture zone</td>
<td>Hebei, Shanxi, Inner Mongolia, Henan, Sichuan, Gansu, Qinghai, Ningxia, Xinjiang, Xizang</td>
</tr>
<tr>
<td>Yangtze River Delta commercial culture zone</td>
<td>Shanghai, Jiangsu, Zhejiang, Anhui, Jiangxi, Hubei</td>
</tr>
<tr>
<td>Confucian commercial culture zone</td>
<td>Beijing, Tianjin, Liaoning, Jilin, Heilongjiang, Shandong</td>
</tr>
<tr>
<td>Cantonese commercial culture zone</td>
<td>Fujian, Hunan, Guangdong, Guangxi, Hainan, Chongqing, Guizhou, Yunnan</td>
</tr>
</tbody>
</table>

Under the geographical difference, the culture radiation power of different culture regions to the provinces within the region can be calculated according to the formula of the culture radiation intensity in formula (1). Concretely figure 1(a), 1(b), 1(c), and
show the radiation power of the Shanxi commercial culture zone, Confucian commercial culture zone, Cantonese commercial culture zone and the Yangtze River Delta commercial culture zone in different provinces within their region.

Figure 1. The intraterritorial culture radiation intensity of different culture regions

4.3 Test of culture region division

Table 3 reports the results of variance analysis between the response variables of culture to regional economic development and the variables of regional commercial culture group variables: There are significant differences in the role of culture in regional economic development between different regions (P=0.000), and the Bartlett spherical test (Chi2=37.626) rejects the assumption of the same variance. Therefore, it is necessary to divide regions when studying the role of culture in regional economic
development. Further figure 2 visually shows the differences between regions.

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Prob &gt; F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>0.178</td>
<td>3</td>
<td>0.060</td>
<td>50.33</td>
<td>0.000</td>
</tr>
<tr>
<td>Within groups</td>
<td>0.542</td>
<td>461</td>
<td>0.001</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>0.720</td>
<td>464</td>
<td>0.002</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 3. Analysis of variance (ANOVA)

Figure 2. Boxplot of the residuals of each culture region

4.4 Regression analysis results and tests

Studying the indirect effect of commercial culture on regional economic development first needs to determine the role of "investment", "export" and "consumption" on regional economic development. Therefore, in this paper, firstly, panel fixed effect model regression is carried out with G as dependent variable and IM, EX and CS as independent variables in different regions. On this basis, regression analysis of direct and indirect effects of commercial culture in different regions on regional economic development is carried out. Table 4 details the results of three regression models in different regions:

Table 4 Result of regression of different regions
The regression results show that "investment", "export" and "consumption" in different culture regions have a significant positive effect on regional economic growth, that is, it is feasible to study the indirect effects of different commercial cultures on regional economic development. In terms of direct effect, Shanxi commercial culture, Confucian commercial culture and Cantonese commercial culture have a significant positive effect on the economic development of the provinces within the region. The Yangtze River Delta commercial culture has no significant effect on promoting the development of the provincial economy. It may be because the economic development of the provinces in the Yangtze River Delta region mainly depends on the distance from the regional leading Shanghai, which has a geographical influence on the direct impact of commercial culture on regional economic development.

In terms of indirect effects, the moderating effect of Shanxi commercial culture on "investment", "export" and "consumption" is not significant. The possible reasons are that Shanxi commercial culture belongs to China's traditional commercial culture, influenced by feudal traditional ideas and monopoly operations. Culture is lacking in

<table>
<thead>
<tr>
<th>Variable</th>
<th>Shanxi commercial culture zone</th>
<th>Yangtze River Delta commercial culture zone</th>
<th>Confucian commercial culture zone</th>
<th>Cantonese commercial culture zone</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>model1</td>
<td>model2</td>
<td>model3</td>
<td>model1</td>
</tr>
<tr>
<td>IM</td>
<td>0.158</td>
<td>0.183</td>
<td>0.192</td>
<td>0.180</td>
</tr>
<tr>
<td></td>
<td>0.042</td>
<td>0.043</td>
<td>0.067</td>
<td>0.028</td>
</tr>
<tr>
<td>EX</td>
<td>0.962</td>
<td>0.325</td>
<td>0.318</td>
<td>0.143</td>
</tr>
<tr>
<td></td>
<td>0.212</td>
<td>0.181</td>
<td>0.180</td>
<td>0.029</td>
</tr>
<tr>
<td>CS</td>
<td>0.715</td>
<td>0.701</td>
<td>0.674</td>
<td>0.738</td>
</tr>
<tr>
<td></td>
<td>0.092</td>
<td>0.089</td>
<td>0.143</td>
<td>0.053</td>
</tr>
<tr>
<td>CT</td>
<td>0.110</td>
<td>0.104</td>
<td>0.047</td>
<td>0.240</td>
</tr>
<tr>
<td></td>
<td>0.010</td>
<td>0.023</td>
<td>0.009</td>
<td>0.037</td>
</tr>
<tr>
<td>CT*</td>
<td>-0.014</td>
<td>0.261</td>
<td>-0.088</td>
<td>1.583</td>
</tr>
<tr>
<td>IM</td>
<td>0.092</td>
<td>0.136</td>
<td>(0.146)</td>
<td>1.867</td>
</tr>
<tr>
<td>CT*</td>
<td>0.170</td>
<td>0.555</td>
<td>(0.746)</td>
<td>(0.298)</td>
</tr>
<tr>
<td>EX</td>
<td>0.748</td>
<td>0.088</td>
<td>(0.250)</td>
<td></td>
</tr>
<tr>
<td>CT*</td>
<td>0.047</td>
<td>-0.514</td>
<td>-3.330</td>
<td></td>
</tr>
<tr>
<td>CS</td>
<td>(0.137)</td>
<td>(0.143)</td>
<td>(1.184)</td>
<td></td>
</tr>
</tbody>
</table>

Note: *, **, *** respectively means significant at the statistical level of 10%, 5%, and 1%, respectively, and the standard deviation is in brackets.
competition consciousness and innovation consciousness. But on the other hand, the Shanxi commercial culture has a good blend of traditional Chinese Confucian culture, forming a "family country culture" with its own characteristics, which emphasizes "Kindness, Justice, Etiquette, Wisdom and Faith" "Wen, Liang, Gong, Jian, Rang" and pay attention to self-cultivation, moral integrity, filial piety and loyalty. So, the influence of Shanxi commercial culture on the economy may be realized by optimizing human capital and creating spiritual civilization, while the positive impact of increasing "investment", "export" and "consumption" on regional economic development may not be significant. The Yangtze River Delta commercial culture has significantly improved the positive effects of "investment" and "export" on regional economic development, and also significantly reduced the positive effect of "consumption" on regional economic development. The possible reasons are: The Yangtze River Delta commercial culture has an obvious "capitalism spirit", which largely rids the conflict of personal loyalty and interests in the traditional commercial culture. It emphasizes the priority of interests, has a strong sense of competition and innovation, and advocates commodity circulation, which can effectively promote regional capital accumulation and trade exports. However, the beneficial philosophy contained in the spirit of capitalism will make economic subjects always put economic interests in the first place, and its excessive maintenance of personal interests will, to a certain extent, curb the role of consumption in promoting regional economic development. The Confucian commercial culture has significantly improved the positive impact of "export" on regional economic development, but the moderating effect on "investment" and
"consumption" is not significant. The possible reasons are: on the one hand, the birthplace of Confucian commercial culture is located in Shandong. The main thread of Chinese traditional culture has long been influenced by Confucian culture. Its culture characteristics are as follows: attaching importance to righteousness while neglecting profit, stressing honesty and trustworthiness, and attaching importance to mutual friendship. However, the conservative concept of obscurity in Confucianism makes Confucian commercial culture lack market spirit, enterprising spirit and innovation. On the other hand, with the smooth progress of reform and opening up, the idea of "self-denial" in the Confucian commercial culture is well integrated with the location advantage of Shandong Province, which forms a unique "export culture" in Shandong Province. Similar to the Yangtze River Delta commercial culture, Cantonese commercial culture has significantly improved the positive effect of "investment" and "export" on regional economic development, but significantly reduced the positive effect of "consumption" on regional economic development. The possible reasons are: First of all, Guangzhou, the birthplace of Cantonese commercial culture, has a geographical feature that enables Cantonese commercial culture to effectively absorb the culture genes of openness, tolerance and innovation in marine culture. This will undoubtedly strengthen the role of "export" in promoting economic development. Secondly, the Taoist culture originated from Chu area endowed the characteristics of "equality" of Cantonese commercial culture, and largely got rid of the idea of "self-denial and ritual" and "heavy agriculture and light commercial" in traditional Confucian commercial culture. This trait is further integrated with the Western idea of "Everyone
is equal" in an open context, which has had a profound impact on regional business development and capital accumulation. However, similar to the Yangtze River Delta culture, Cantonese commercial culture pays too much attention to actual interests and lacks idealistic. To a certain extent, this may inhibit the promotion of consumption to regional economic development.

5. Research conclusions and discussion

5.1 Research conclusions

① Dividing the whole area into Shanxi commercial culture zone, Confucian commercial culture zone, Cantonese commercial culture zone and Yangtze River Delta commercial culture zone through literature review, and further dividing the 31 provinces in mainland China into different commercial and culture areas, and according to the geographical distance from the center of the culture area, the culture radiation strength of different commercial cultures to the regional unit is calculated. ② It is further verified by analysis of variance that there is a significant difference in the role of commercial culture in regional economic development under regional differences. ③ Through the regression analysis of panel data fixed effect model, it is found that commercial culture in different regions has a significant positive direct effect on economic development. In terms of indirect effects, the Shanxi commercial culture may serve the economic development more by optimizing human capital, but it does not have a significant role in "investment", "export" and "consumption"; Confucian commercial culture significantly improved the positive impact of "export" on regional economic development, but the moderating effect on "investment" and "consumption"
is not significant; the Cantonese commercial culture and Yangtze River Delta commercial culture have significantly improved the positive effects of "investment" and "export" on regional economic development, but at the same time significantly reduced the positive effect of "consumption" on regional economic development.

5.2 Management enlightenment

Geographical differences make the culture characteristics of different commercial groups different. In order to better promote the role of commercial culture in regional economic development and release more commercial culture dividends, the government needs to take more targeted measures for different regions, specifically:

Within the Shanxi commercial culture and Confucian commercial culture Areas: ① To promote the materialization of the humanistic spirit, to concretize and visualize the spiritual wealth in traditional culture, and to strengthen the role of the commercial culture in the optimization of human capital and labor, and to shift the release of the demographic dividend from "quantity" to "quality". ② To strengthen the culture construction of business personnel and enterprises, it is necessary not only to strengthen the ability of labor subjects to work hard, but also to strengthen their professionalism, service and moral awareness, and to strictly supervise and punish fraud and breach of contract. ③ Strengthening the competitive consciousness and innovative spirit of the main body, not only to play the scale effect brought by teamwork, but also to pay attention to the role of individual growth brought about by competition, and to promote the innovative growth of enterprises and regions by collaborating in competition. ④
Confucian commercial culture zone should strengthen their own geographical advantages, integrate the characteristics of "openness" and "externality" in "marine culture" into themselves, and promote the progress of human resources in the region by cultivating the consciousness and confidence of marine culture.

Within the commercial culture area of Cantonese commercial culture and the Yangtze River Delta commercial culture: ① Promoting the marketization of related industries of commercial culture, strengthening the government's functions in social management and service, creating a good environment for the development of culture market, and further improving the competitiveness of related industries to form a large-scale culture industry with innovative consciousness. ② Give full play to the geographical advantages, actively adjust the industrial layout of commercial culture, form a commercial and culture urban agglomeration with regional characteristics, and give full play to the culture radiation of the core cities of the urban agglomeration to the surrounding small and medium-sized cities, thus driving their economic development.③ Under the background of highly marketization, we should strengthen the moral consciousness and honesty consciousness of economic subjects, and at the same time, we should also pay attention to the responsibilities related to customers, society and other stakeholders while pursuing practical interests. ④ Strengthen the construction of entrepreneurs in the region, create a good environment for entrepreneurship, create greater space and dividends for enterprise development and entrepreneur growth, fully mobilize the enthusiasm, initiative and creativity of entrepreneurs, and then create greater contributions for regional economic development.
5.3 Research limitations and future prospects

Based on the division of different commercial culture zones, this paper studies the regulatory effects of commercial culture on regional economic development factors. The shortcomings are: ① Due to the limitation of data acquisition, the division of commercial culture areas only considers geographic factors, but does not consider the influence of industry factors. ② It only considers the moderating effect of commercial culture on "investment", "export" and "consumption", but not on such factors as education and innovation. In view of the shortcomings, future research can comprehensively consider geographical and industry factors to divide commercial culture regions, and further add variables such as education and innovation to deeply study the direct and indirect effects of commercial culture on regional economic development.

6. Acknowledgments

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References


2. Pan Jinyun, Fan Min. Research on the Internal Logic and Realization Path of Excellent Traditional Culture Promoting Regional Economic Development: Based on


The Impact of Group Formation
on Purchase Intention of Social Identity Signaling Products

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Abstract

Group characteristics might affect consumer attitudes and behavior of social identity signaling products. This paper focuses on how and why group formation -- self-selected versus assigned -- affects the purchase intention of social identity signaling products. We utilized survey and experiment research methods to collect data, and performed ANOVA and regression statistical techniques to analyze these data in 3 discrete studies. The results of Study 1 indicate group formation affects purchase intention of social identity signaling products. Compared to subjects in an assigned group, subjects in a self-selected group had higher levels of purchase intention of social identity signaling products. The results also show that demographic characteristic variables, such as education, generation, and sex, don’t moderate the effect of group formation on purchase intention of social identity signaling products. The results of Study 2 demonstrate that when priming deindividuation, compared to subjects in control groups respectively, subjects in both assigned group and a self-selected group in experimental groups had an increased purchase intention of social identity signaling products, with subjects in an assigned group having a larger increase. When priming individuation,
compared to subjects in control groups respectively, subjects in both an assigned group and a self-selected group had a decreased purchase intention of social identity signaling products. And subjects in a self-selected group had a much larger decrease. These indicate that deindividuation and individuation moderate the effects of group formation on a purchase intention of social identity signaling products. And the results also show that sex has no moderating effect on the relationships between group formation and purchase intention of social identity signaling products under both situations. The results of Study 3 show that perceived social identity fully mediates the effect of group formation on purchase intention of social identity signaling products. The results also show that sex doesn’t moderate the effect of group formation on purchase intentions of social identity signaling products. Finally, managerial and theoretical implications of this research are provided. Limitations of this study and future research suggestions are also offered.

**Keywords:** group formation; social identity; assigned group; self-selected group; purchase intention

1. Introduction

Many researchers have focused on the effect of in-group social identity. For example, researchers demonstrated in their experiments that subjects likely gave more money to in-group members than to out-group members (Rubin & Hewstone, 1998). Ouwerkerk & Van Dijk et al. (2018) showed that when in-group members followed with interest an out-group misfortune, more members identified with the in-group, while the more schadenfreude they felt to news about the out-group’s misfortune.

In a marketing context, Berger & Heath (2008) empirically suggested that people usually try to be different from members of other social groups. They would have different possessions
and display different attitudes and behaviors. When their cultural tastes have been imitated by others, they just give them up (Berger & Heath, 2008). Consumers choose brands that are congruent with their own identity (Bhattacharjee & Berger et al., 2014). They select identity signaling products that are different from those adopted by other people or groups to make sure that they communicate their ideal identities successfully (Berger & Heath, 2007). The common conclusion of such researchers is that in-group social identity influences attitudes and behavior of social identity signaling products.

In-group social identity might not be always desirable. Mummendey & Kessler (1999) suggested members of the in-groups might compare with other out-groups that are relevant to them. By comparison, members of the in-group might think their social identity is advantaged or disadvantaged, or is negative or positive. A negative social identity might lead to dissatisfaction with in-group membership. Some researchers (such as Ellemers & Kortekaas et al., 1999) point out group characteristics can be categorized into three dimensions: group size, group formation, and group status. Because groups are not the same, social identities derived from some groups might be more desirable than the ones derived from other groups because of different group characteristics. And different attributes of group characteristics may have different effects on perceptions of social identity. This in turn might have different effects on consumer purchase intention or behavior of social identity signaling products.

This paper focuses on the effects of group formation (a self-selected group versus an assigned group) on purchase intentions of social identity signaling products. Our proposition is that group formation might have different effects on consumer purchase intentions of social identity signaling products. We also explore mechanisms that underlie the effects of group formation on purchase intentions of social identity signaling products. We propose that
deindivituation and individuation moderate the effect of group formation on purchase intentions of social identity signaling products. And then we further propose that perceived social identities mediate the effect of group formation on purchase intentions of social identity signaling products.

2. Theoretical Background

2.1 Social Identity

Social identity derives from all kinds of groups an individual belongs to, and social group memberships are part of an individual’s self-concept and affect their social behaviors (Luhtanen & Crocker, 1992). According to Hogg & Terry (2000), Tajfel first introduced the construct of social identity A social identity is ‘… that part of an individual's self-concept which derives from his knowledge of his membership of a social group (or groups) together with the value and emotional significance attached to that membership.’ (Tajfel, 1978, p. 63). A social group is ‘a set of individuals who hold a common social identification or view themselves as members of the same social category’ (Luhtanen & Crocker, 1992; Stets & Burke, 2000). According to social identity theory, individuals use group memberships to define who they are when they compare their own in-groups with out-groups (Reicher & Spears et al., 1995). Stets & Burke (2000) suggested that there are two important processes through which social identity has been formed. One process is self-categorization, which affects how an individual perceives the similarity between themselves and other in-group members and how an individual perceives difference between themselves and out-group members. The other process is social comparison, which causes self-enhancing outcomes for the self.

Some researchers treated social identity as a multidimensional construct (for example, Cameron, 2004; Mousavi & Roper et al., 2017). Cameron (2004) empirically examined the dimensions of social identity and suggested a three-factor model: centrality, in-group affect, and
in-group ties. But the dimensionality issue of social identity is far from having been solved. In terms of conceptualization and operationalization of social identity and its dimensions, there are many arguments among researchers (McGowan & Shiu et al., 2017). Generally speaking, the number and the composition of dimensions of social identity depend on specific researchers.

A substantial body of researchers demonstrated that social identity is a very useful construct and can be employed as a powerful predictor of an individual’s attitudes and behavior (Ellemers & Spears et al., 2002). For example, research results of Lalonde & Silverman (1994) showed that when individuals’ social identity was salient, they preferred collective behavior. Some researchers, such as Ashforth & Mael (1989), summarized the antecedents and consequences of social identity in organizational contexts. Other researchers tested the antecedents and consequences of social identity empirically. Ellemers & Kortekaas et al. (1999) examined the effect of different of group characteristics including group size, group status, and group formation on social identification and group favoritism. In their research they treated social identity as a three-dimension construct. Their research indicated that different characteristics of groups influence different dimensions of social identity. The results of their research showed that group size only affects the self-categorization dimension of social identity, and group status only affects group self-esteem. Both group status and group formation have impacts on affective commitment to a group. Their research further demonstrated that group commitment to group, which is one dimension of social identity, mediates the effect of group status and group formation on group favoritism and other features.

In a marketing context, extant literature indicates that social identity influences individuals’ attitudes or behaviors (for example: Berger & Heath, 2007; Berger & Rand, 2008; Chan & Berger et al., 2012; Bhattacharjee & Berger et al., 2014). Kleine & Kleine et al. (1993) suggested in their research that people are attracted to products that are congruent with and can enhance their social
identities, which are important components of self-concept. And the more congruent the products are to social identities, the more attractive the products are. Researchers (Berger & Rand, 2008) even demonstrated that social identity based interventions can be used to improve consumer health. Chan & Berger et al. (2012) explained in their research how consumers resolved conflicting motives for social group identification and individual uniqueness. The results of their research indicate that the willingness to communicate social identity made consumers choose products with attributes associated with their group. Bhattacharjee & Berger et al. (2014) empirically tested the framing effect of messages on purchasing social identity signaling products. Their research indicated that social identity marketing does have an impact on consumer behavior.

3. Hypotheses Formation

3.1 Group Formation and Purchase Intention of Social Identity Signaling Products

In the marketing context, previous researchers suggested that group characteristics affected consumer attitudes or behaviors toward social identity signaling products directly or indirectly. Berger & Heath (2008) in their research conducted 7 studies, and the research results indicated that members of an in-group tended to avoid social identity signaling products adopted by members of dissimilar out-groups. Berger & Heath (2008) illustrated that consumers avoid social identity signaling products shared by majorities or members of other groups. Their research indicated indirectly that group size might also affect consumer purchase intention and behavior on social identity signaling products.

Although there are no empirical marketing studies that demonstrate the effects of group formation on consumer attitudes and behaviors toward social identity signaling products, research in other fields has already demonstrated the effect of group formation on individuals’ attitudes. For example, the research results of Ellemers & Kortekaas et al. (1999) suggested that group formation
affected group favoritism. Their research showed members in a self-selected group had higher levels of affective commitment to a group than members in an assigned group, and this in turn led to a higher level of group favoritism. It is very reasonable to assume that in a marketing consumer behavior context we should observe the similar results.

![Figure 1: Conceptual Framework 1](image)

We suggest that group formation (self-selected group versus assigned group) might affect purchase intention of social identity signaling products (see Figure 1: Conceptual Framework 1). That is, members of a self-selected group should have higher levels of purchase intention of identity signaling products than members of an assigned group. Members of a self-selected group should have higher levels of affective commitment to their group than members of an assigned group so we should expect higher levels of purchase intention of social identity signaling products in a self-selected group than that in an assigned group.

Based on the discussions above, we state our first hypothesis as follows:

H1: Under consumption situations, group formation (self-selected versus assigned) affects purchase intention of social identity signaling products: compared to individuals of an assigned group, individuals of a self-selected group have higher levels of purchase intention of social identity signaling products.

### 3.2 The Moderating Effect of Deindividuation and Individuation

According to traditional models of deinviduation, immersion in a group and anonymity are the two factors that make selfhood lost and then lead to the loss of self-control (Reicher & Spears et al.,
1995). However, Reicher & Spears et al. (1995) challenged the traditional models of deindividuation, suggesting a social identity model of deindividuation and empirically demonstrating the effects of deindividuation on social identities through manipulation. Their research showed the effects of deindividuation affect social identity salience, and then they affect an individual’s thinking of how to express their social identities. According to Reicher & Spears et al. (1995), social identity can be enhanced by immersion in the social group and lack of personalizing cues.

Researchers can manipulate social identity priming in order to test the effects of social identity. Forehand & Deshpandé et al. (2002) examined the effects of identity priming and social distinctiveness on identity salience and their subsequent responses to targeted advertising. The results showed that Asian participants who were both primed and socially distinctive responded most positively to Asian spokespeople and Asian-targeted advertising. On the other hand, Caucasian participants who were both primed and socially distinctive responded most negatively to Asian spokespeople and Asian-targeted advertising. McGlone & Aronson (2006) stated that reminding students of their group memberships for which positive performance is expected can help them improve their intellectual performance. They tested this hypothesis by priming different social identities among undergraduates and got statistically significant results. Hackel & Coppin et al. (2018) found in their research that priming social identity can affect perceived food pleasantness during consumption.

We suggest that the reason why group formation affects consumers purchase intention of social identity signaling products is different individuals’ identification with a group. The more an individual becomes deindividuated in a group, the more their identity salience is, and the more they identify with the group. In terms of group formation, on the one hand, individuals of a self-
selected group might view their membership as very important, so they tend to be deindividuated, and this in turn leads to a higher level of identity salience. On the other hand, individual of assigned group might not take their membership seriously so they might tend to more individuated.

Based on the analysis above, we suggest that when priming deindividuation, individuals in both a self-selected group and an assigned group might have an increased purchase intention of social identity signaling products. Through manipulation of deindividuation, we can affect individuals’ social identity salience, and individuals in both groups might become more depersonalized and more identified with group. Thus their purchase intention of social identity signaling products should be increased. In contrast, when priming individuation, individuals of both self-selected and assigned groups might have a decreased purchase intention of social identity signaling products. Through manipulation of individuation, individuals in both groups might become more personalized and less identified with their group. Thus we should observe a decreased purchase intention of social identity signaling products (see Figure 2: Conceptual Framework 2).

![Conceptual Framework 2](image)

**Figure 2: Conceptual Framework 2**

Based on discussion above, we state a second hypothesis as follows:

H2: Under consumption situations, deindividuation and individuation moderates the effects
of group formation on purchase intention of social identity signaling products.

H2a: Under consumption situations, compared to individuals without priming deindividuation when priming deindividualization, individuals of different group formation (self-selected versus assigned) might both become more likely to purchase social identity signaling products, and the increased purchase intention of social identity signaling products of individuals in an assigned group should be more than that of individuals in a self-selected group.

H2b: Under consumption situations, compared to individuals without priming individuation when priming individuation, individuals of different group formation (self-selected versus assigned) might both become less likely to purchase social identity signaling products, and the decreased purchase intention of social identity signaling products of individuals in a self-selected group should be more than that of individuals in an assigned group.

3.3 The Mediating Effect of Social Identity

Our previous analyses suggest that group formation has impacts on the purchase intention of social identity signaling products. We also suggest that deindividuation and individuation moderate the effect of group formation on purchase intention of social identity signaling products. This partially explains the effect of group formation. We should further explain the effect of group formation on purchase intention of social identity signaling products.

Previous researchers demonstrated that group formation affected social identity. The research results of Ellemers & Kortekaas et al. (1999) showed that members in self-selected group had higher level affective commitment to a group (which is one dimension of social identity) than members in an assigned group. We suggest we should observe the same results in a consumer
behavior context. That is to say, different group formation (self-selected versus assigned) has an impact on perceived social identity.

Based on previous research, it is reasonable to assume that perceived social identity might mediate the effect of group formation on purchase intention of social identity signaling products at least partially (see Figure 3: Conceptual Framework 3). That is to say, group formation might affect perceived social identity, and perceived social identity in turn might affect purchase intention of social identity signaling products. Although in many studies social identity is treated as a multi-dimension construct, how many dimensions of this construct largely depends on a specific research context. In this paper, social identity is treated as a single-dimension construct.

**Figure 3: Conceptual Framework 3**

Ethier & Deaux (1994) found that social identity moderated the effect of change in context on identity maintenance. The research results of Van Zomeren & Postmes et al. (2008) showed that social identity is an important antecedent of collective action. Blader & Tyler (2009) indicated that the social identities of employees derived from their work groups and that their organizations are strong predictors of whether employees display organization citizenship behaviors. In a longitudinal quasi-experiment, Tsai & Bagozzi (2014) suggested that social identity had positive effects on contribution behavior in virtual communities. In a marketing context we can suppose
that we should observe the same result. That is to say, social identity should positively affect purchase intention of social identity signaling products.

Based on the discussion above, we state our final hypotheses as follows:

H3: Under consumption situations, perceived social identity mediates the effect of group formation (self-selected versus assigned) on purchase intention of social identity signaling products:

H3a: Under consumption situations, group formation affects perceived social identity; compared to the assigned group, individuals of the self-selected group have higher level of perceived social identity.

H3b: Under consumption situations, perceived social identity positively affects purchase intention of social identity signaling products. That is, the higher the perceived social identity is, the higher the purchase intention of social identity signaling products is, and vice versa.

4. Study 1

4.1 Overview

Study 1 aims to examine the effect of group formation (self-selected versus assigned) on purchase intention of social identity signaling products. In order to reach people with different demographic characteristics and thus give our study higher external validity, we used an online survey to collect data. Measurement of purchase intention of social identity signaling products was revised based on items used by Dodds & Monroe et al. (1991). It includes four items: The likelihood of purchasing a social identity signaling product is high; I would consider buying a social identity signaling product; The probability that I would consider buying a social identity signaling product is high; My willingness to buy a social identity signaling product is high. We use a seven-point
Likert scale to indicate different levels of purchase intention under the question of each item. For example a score of 7 means “very likely” and a score of 1 means “very unlikely.”

4.2 Procedure

We designed two different questionnaires for two separate groups of subjects (i.e., subjects of a self-selected group versus subjects of an assigned group). At the beginning of both questionnaires we introduced instructions about how to answer the questions. Next, we asked subjects to recall groups they once joined because of being self-selected or because of being assigned. In one questionnaire we asked subjects to recall groups that they joined due to being self-selected. In the other we asked subjects to recall groups that they joined in because of being assigned. Then subjects answered questions that indicated their purchase intention of social identity signaling products. Finally, subjects gave their personal information related to demographic characteristics and then submitted their questionnaire.

We collected 110 valid questionnaires altogether. There are 59 subjects in the self-assigned group and 51 subjects in the assigned group. Of all subjects, 49 were female and 61 were male. In terms of generations (i.e., age cohorts by decade of birth), 5 subjects were born in the 1960s; 13 were born in the 1970s; 67 were born in the 1980s, and 25 were born in the 1990s. There were 4 subjects with a high school education (or less) or working on a high school diploma; 24 subjects with an associate degree or working on it; 73 subjects with a bachelor’s degree or working on it; 9 subjects with master’s degree or working on it. Table 1 shows the detailed information related to demographic characteristics.

<table>
<thead>
<tr>
<th>Table 1. Demographic Characteristics of Subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group Formation</td>
</tr>
<tr>
<td>Self-Selected</td>
</tr>
<tr>
<td>Sex</td>
</tr>
<tr>
<td>Female</td>
</tr>
</tbody>
</table>
4.3 Results and Discussion

We used SPSS 22.0 to run data analyses. The reliability statistics of the scale of purchase intention of social identity signaling products showed Cronbach’s Alpha is 0.918 (see Table 2). Levene’s test equality of error variances indicates $F = 1.390$, $p = 0.125$ (see Table 3). This shows that the error variance of the dependent variable is equal across groups. Thus the data are suited for analysis of variance. According to the results of tests of between-subjects effects (see Table 4), group
formation affects purchase intention of identity signaling products (F = 52.953, p = 0.000). The effect of group formation on the purchase intention of social identity signaling products is statistically significant. Thus H1 is supported.

The results also indicate sex (F = 0.624, p = 0.432), generation (F = 0.591, p = 0.623), and education (F = 0.195, p = 0.900) don’t affect purchase intention of social identity signaling products. The interaction effects between group formation and sex (F = 1.236, p = 0.270), group formation and generation (F = 0.077, p = 0.972), and group and education (F = 0.326, p = 0.807) are not statistically significant. The interaction effects among group formation and the other two of three variables (i.e., sex, generation, and education) are not statistically significant either. This analysis demonstrates that variables do not moderate the effect of group formation on purchase intention of social identity signaling products. The interaction effects between sex, generation and education or among them are not statistically significant either.

Table 2. Reliability Statistics of The Scale of Purchase Intention

<table>
<thead>
<tr>
<th>Cronbach's Alpha</th>
<th>Cronbach's Alpha Based on Standardized Items</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>.918</td>
<td>.920</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 3. Levene's Test of Equality of Error Variances

<table>
<thead>
<tr>
<th>Dependent Variable: Purchase Intention</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
</tr>
<tr>
<td>1.390</td>
</tr>
</tbody>
</table>

Tests the null hypothesis that the error variance of the dependent variable is equal across groups. a. Design: Intercept + Group Formation + Sex + Generation + Education + Group Formation * Sex + Group Formation * Generation + Group Formation * Education + Sex * Generation + Sex * Education + Generation * Education + Group Formation * Sex * Generation + Group Formation * Sex * Education + Group Formation * Generation * Education + Sex * Generation * Education + Group Formation * Sex * Generation * Education

Table 4. Tests of Between-Subjects Effects

<table>
<thead>
<tr>
<th>Dependent Variable: Purchase Intention</th>
</tr>
</thead>
</table>

305
The results show that the grand mean of purchase intention of social identity signaling products is 4.230 (see Table 5). Separately, mean of purchase intention of subjects in the self-selected group is 5.123 and that of subjects in the assigned group is 3.359 (see Table 6). Independent sample t-tests show that the mean difference between these two groups is statistically significant: t = 16.618, p = 0.000 (see Table 7). We also ran linear regression analyses in SPSS 22.0. We regressed dependent variable purchase intention of social identity signaling products on independent variable group formation (see Table 8, Table 9, Table 10, and Table 11). The results showed R square = 0.719, F = 276.151, p = 0.000. This indicates that the linear relationship
between purchase intention of social identity signaling products and group formation is statistically significant. Statistical results show standardized coefficients $B = -1.765$ ($p = 0.000$) and the standardized coefficient is $\text{Beta} = -0.848$ ($p = 0.000$).

All these results show that H1 is supported. That is, under consumption situations, group formation (self-selected versus assigned) affects purchase intention of social identity signaling products: compared to individuals in the assigned group, individuals in the self-selected group have higher levels of purchase intention of social identity signaling products.

**Table 5. Grand Mean**

<table>
<thead>
<tr>
<th>Dependent Variable: Purchase Intention</th>
<th>Mean</th>
<th>Std. Error</th>
<th>95% Confidence Interval</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4.230a</td>
<td>.076</td>
<td>4.079</td>
<td>4.381</td>
<td></td>
</tr>
</tbody>
</table>

a. Based on modified population marginal mean.

**Table 6. Group Formation Statistics**

<table>
<thead>
<tr>
<th>Group Formation</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase Intention</td>
<td>59</td>
<td>5.1229</td>
<td>.56548</td>
<td>.07362</td>
</tr>
<tr>
<td>Assigned</td>
<td>51</td>
<td>3.3578</td>
<td>.54373</td>
<td>.07614</td>
</tr>
</tbody>
</table>

**Table 7. Independent Samples Test**

<table>
<thead>
<tr>
<th>Levene's Test for Equality of Variances</th>
<th>F</th>
<th>Sig.</th>
<th>t-test for Equality of Means</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
<th>Std. Error Difference</th>
<th>95% Confidence Interval of the Difference</th>
<th>Lower</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 8. Variables Entered/Removed\(^a\)

<table>
<thead>
<tr>
<th>Model</th>
<th>Variables Entered</th>
<th>Variables Removed</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Group Formation(^b)</td>
<td></td>
<td>Enter</td>
</tr>
</tbody>
</table>

\(^a\) Dependent Variable: Purchase Intention

\(^b\) All requested variables entered.

Table 9. Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.848(^a)</td>
<td>.719</td>
<td>.716</td>
<td>.5552</td>
</tr>
</tbody>
</table>

\(^a\) Predictors: (Constant), Group Formation

Table 10. ANOVA\(^a\)

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>1</td>
<td>85.219</td>
<td>276.151</td>
<td>.000(^b)</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>108</td>
<td>.309</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>109</td>
<td>118.548</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^a\) Dependent Variable: Purchase Intention

\(^b\) Predictors: (Constant), Group Formation

Table 11. Coefficients\(^a\)

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>6.888</td>
<td>.164</td>
<td></td>
<td>41.940</td>
</tr>
<tr>
<td>Group Formation</td>
<td>-1.765</td>
<td>.106</td>
<td>-.848</td>
<td>-16.618</td>
</tr>
</tbody>
</table>

\(^a\) Dependent Variable: Purchase Intention

5. Study 2
5.1 Overview

Study 2 aims to examine whether the effect of group formation on purchase intention of identity signaling products is due to group identification. We test the moderating effects of deindividuation and individuation between the relationships on group formation and purchase intention of social identity signaling products. In Study 1 we used an online survey to collect data. Although we may have much better external validity, the internal validity cannot be guaranteed because of a lot of uncontrollable factors that might intervene in the causal effect. In order to have better internal validity and exclude other factors’ influence, in Study 2 we used experiments to collect data and test our hypotheses. The measurement of purchase intention of social identity signaling products is the same as in Study 1. In Study 2 we conducted two sets of separate experimental studies. In each set of experimental studies, subjects were divided into two types of group: an experimental group and a control group. These two sets of experimental studies tested the moderating effects of deindividuation and individuation separately. We conducted experimental studies among undergraduates at a four-year university.

5.2 Procedure

We designed six different questionnaires, and two of them were the same as in Study 1. In experimental groups, we first primed deindividuation or individuation on subjects, and then they answered a questionnaire. In control groups, subjects answered one of two questionnaires that were the same as those in Study 1.

At the beginning of the questionnaire we provided instructions about how to answer questions. Under the deindividuation situation in the control group, we asked subjects to recall groups they once joined because of being self-selected or because of being assigned. In one questionnaire we asked subjects to recall groups that they joined because of being self-selected. In
the other we asked subjects to recall groups that they joined because of being assigned. They then answered questions to indicate their purchase intention of social identity signaling products. Under the deindividuation situation in the experimental group, we asked subjects to recall groups they once joined because of being self-selected or because of being assigned. In one questionnaire we asked subjects to recall groups which they joined because of being self-selected. In the other we asked subjects to recall groups that they joined because of being assigned. We then asked subjects to recall the most memorable experience in which they solved a difficult issue with team efforts. We also listed some information that emphasized the importance of being part of a group and of collective efforts. And then they answered some questions to indicate their purchase intention of social identity signaling products. At the end of the questionnaire all subjects gave their information related to demographic characteristics.

Under an individuation situation in the control group, we asked subjects to recall groups they once joined because of being self-selected or because of being assigned. In one questionnaire we asked subjects to recall groups that they joined because of being self-selected. In the other we asked subjects to recall groups that they joined because of being assigned. They then answered questions to indicate their purchase intention of social identity signaling products. Under an individuation situation in the experimental group, we asked subjects to recall groups they once joined in because of being self-selected or because of being assigned. In one questionnaire we asked subjects to recall groups that they joined because of being self-selected. In the other we asked subjects to recall groups that they joined because of being assigned. They then answered some questions to indicate their purchase intention of social identity signaling products. We then asked subjects to recall the most memorable experience in which they solved a difficult issue solely. We also listed some information that emphasized the importance of being independent. Then they
answered some questions to indicate their purchase intention of social identity signaling products. At the end of the questionnaire all subjects gave their information related to demographic characteristics.

In the one set of experimental studies in which subjects in the experimental group were primed with deindividuation, we collected 121 valid responses. There were 62 subjects in the experimental group and 59 subjects in the control group. In terms of group formation, 57 subjects were self-selected and 64 were assigned; 51 subjects were female and 70 were male. Table 12 shows the detailed information of demographic characteristics under the deindividuation situation.

**Table 12. Demographic Characteristics of Subjects**

<table>
<thead>
<tr>
<th>Group Type</th>
<th>Group Formation</th>
<th>Sex</th>
<th>Sex</th>
<th>Female Count</th>
<th>Male Count</th>
<th>Female Count</th>
<th>Male Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Selected</td>
<td>16</td>
<td>14</td>
<td>12</td>
<td>20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assigned</td>
<td>10</td>
<td>17</td>
<td>13</td>
<td>19</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In the other set of experimental studies in which subjects in the experimental group were primed for individuation, we collected 142 valid responses. There were 72 subjects in the experimental group and 70 subjects in the control group. In terms of group formation, 69 subjects were self-selected and 73 were assigned; 61 subjects were female and 81 were male. Table 13 shows the detailed information of demographic characteristics under the individuation situation.

**Table 13. Demographic Characteristics of Subjects**

<table>
<thead>
<tr>
<th>Group Type</th>
<th>Group Formation</th>
<th>Sex</th>
<th>Sex</th>
<th>Female Count</th>
<th>Male Count</th>
<th>Female Count</th>
<th>Male Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Selected</td>
<td>19</td>
<td>17</td>
<td>15</td>
<td>21</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
5.3 Results and Discussion

5.3.1 Under Deindividuation Situation

We used SPSS 22.0 to run data analyses. Under the deindividuation situation, the reliability statistics of purchase intention of social identity signaling products showed a Cronbach’s alpha of 0.931. Levene’s test equality of error variances indicates $F = 1.107, p = 0.364$. This shows that the error variance of the dependent variable is equal across groups. Thus data are suited for analysis of variance. The results of tests of between-subjects effects indicate the difference of purchase intention of social identity signaling products between the experimental group and the control group is statistically significant ($F = 181.724, p = 0.000$). In the experimental group, the mean of purchase intention of subjects in the self-selected group is 5.800. And in the control group, the mean of purchase intention of subjects in the self-selected group is 4.833. An independent-samples t-test shows that the difference is statistically significant: $t = 6.093, p = 0.000$. In the experimental group, the mean of purchase intention of subjects in the assigned group is 5.406. And in the control group, the mean of purchase intention of subjects in the assigned group is 3.430. An independent-samples t-test shows that the difference is statistically significant: $t = 14.283, p = 0.000$. Thus the results support H2a.

The results of tests of between-subjects effects also show that the effect of group formation purchase intention of social identity signaling products is statistically significant ($F = 69.397, p = 0.000$). Thus H1 is supported again. Concerning the interaction effect between group type (experimental group versus control group) and group formation, group type is statistically significant ($F = 20.637, p = 0.000$). However, the interaction effects between group type and sex, and group formation and sex are not statistically significant. The interaction effect among group
type, group formation and sex is not statistically significant. The main effect of sex is not statistically significant either. These results show sex does not moderate the effect of group formation or group type on purchase intention of social identity signaling products. (For more information, see Table 14, Table 15, Table 16, Table 17, Table 18, and Figure 4.)

Table 14. Descriptive Statistics

<table>
<thead>
<tr>
<th>Group Type</th>
<th>Group Formation</th>
<th>Sex</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>Self-Selected</td>
<td>Female</td>
<td>5.7500</td>
<td>.57735</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Male</td>
<td>5.8571</td>
<td>.49725</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Assigned</td>
<td>Female</td>
<td>5.3333</td>
<td>.45644</td>
<td>12</td>
</tr>
<tr>
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<td>Male</td>
<td>5.4500</td>
<td>.49070</td>
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</tr>
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<td>Female</td>
<td>5.5714</td>
<td>.56049</td>
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<td></td>
<td></td>
<td>Male</td>
<td>5.6176</td>
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<td>Female</td>
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<td>.57795</td>
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<tr>
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<td></td>
<td>Male</td>
<td>4.8382</td>
<td>.72317</td>
<td>17</td>
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<tr>
<td></td>
<td>Assigned</td>
<td>Female</td>
<td>3.4423</td>
<td>.66265</td>
<td>13</td>
</tr>
<tr>
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<td></td>
<td>Male</td>
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<td>.61267</td>
<td>19</td>
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<td>Total</td>
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<td>4.0435</td>
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<td>23</td>
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<td>4.8824</td>
<td>1.06812</td>
<td>51</td>
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<tr>
<td></td>
<td></td>
<td>Male</td>
<td>4.8321</td>
<td>1.09736</td>
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</table>

Table 15. Levene's Test of Equality of Error Variances

<table>
<thead>
<tr>
<th>Group Type</th>
<th>Group Formation</th>
<th>Sex</th>
<th>Statistic</th>
<th>p-value</th>
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</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>Self-Selected</td>
<td>Female</td>
<td>5.7500</td>
<td>.57735</td>
</tr>
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<td></td>
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<td>.49725</td>
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<td>.45644</td>
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<td></td>
<td></td>
<td>Male</td>
<td>5.4500</td>
<td>.49070</td>
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<tr>
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<td>Total</td>
<td>Female</td>
<td>5.5714</td>
<td>.56049</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Male</td>
<td>5.6176</td>
<td>.52669</td>
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<tr>
<td></td>
<td>Control</td>
<td>Self-Selected</td>
<td>Female</td>
<td>4.8250</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Male</td>
<td>4.8382</td>
<td>.72317</td>
</tr>
<tr>
<td></td>
<td>Assigned</td>
<td>Female</td>
<td>3.4423</td>
<td>.66265</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Male</td>
<td>3.4211</td>
<td>.61267</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>Female</td>
<td>4.0435</td>
<td>.93131</td>
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<tr>
<td></td>
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<td>Male</td>
<td>4.0903</td>
<td>.97313</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>Female</td>
<td>4.8824</td>
<td>1.06812</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Male</td>
<td>4.8321</td>
<td>1.09736</td>
</tr>
</tbody>
</table>
Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + Group Type + Group Formation + Sex + Group Type * Group Formation + Group Type * Sex + Group Formation * Sex + Group Type * Group Formation * Sex

Table 16. Tests of Between-Subjects Effects

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>101.728*</td>
<td>7</td>
<td>14.533</td>
<td>42.675</td>
<td>.000</td>
</tr>
<tr>
<td>Intercept</td>
<td>2725.755</td>
<td>1</td>
<td>2725.755</td>
<td>8004.287</td>
<td>.000</td>
</tr>
<tr>
<td>Group Type</td>
<td>61.884</td>
<td>1</td>
<td>61.884</td>
<td>181.724</td>
<td>.000</td>
</tr>
<tr>
<td>Group Formation</td>
<td>23.632</td>
<td>1</td>
<td>23.632</td>
<td>69.397</td>
<td>.000</td>
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<tr>
<td>Sex</td>
<td>.084</td>
<td>1</td>
<td>.084</td>
<td>.246</td>
<td>.621</td>
</tr>
<tr>
<td>Group Type * Group Formation</td>
<td>7.028</td>
<td>1</td>
<td>7.028</td>
<td>20.637</td>
<td>.000</td>
</tr>
<tr>
<td>Group Type * Sex</td>
<td>.097</td>
<td>1</td>
<td>.097</td>
<td>.284</td>
<td>.595</td>
</tr>
<tr>
<td>Group Formation * Sex</td>
<td>.001</td>
<td>1</td>
<td>.001</td>
<td>.003</td>
<td>.954</td>
</tr>
<tr>
<td>Group Type * Group Formation</td>
<td>.003</td>
<td>1</td>
<td>.003</td>
<td>.010</td>
<td>.920</td>
</tr>
<tr>
<td>Sex</td>
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<td></td>
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<tr>
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<tr>
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<td>121</td>
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<td></td>
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<tr>
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<td>140.209</td>
<td>120</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

a. R Squared = .726 (Adjusted R Squared = .709)

Table 17. Independent Samples Test

<table>
<thead>
<tr>
<th>Source</th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Purchase Intention</td>
<td>Equal variances assumed</td>
<td>.723</td>
</tr>
</tbody>
</table>
Table 18. Independent Samples Test

<table>
<thead>
<tr>
<th></th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Purchase Intention</td>
<td>Equal variances assumed</td>
<td>4.03</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td>14.28</td>
</tr>
</tbody>
</table>

We also compared the difference of the increased purchase intention of social identity signaling products between the self-selected group and the assigned group because of deindividuation priming. We computed the mean value of purchase intention of self-selected group in the control group (m = 4.833). And we used the values of purchase intention of the self-selected group in the experimental group minus the mean value. This way we had the value of the increased purchase intention of social identity signaling products in the self-selected group because of deindividuation priming. The mean value of increased purchase intention of social identity signaling products of the self-selected group is 0.967. We also computed the mean value of
purchase intention of the assigned group in control group (m = 3.430). And we used the values of purchase intention of the assigned group in the experimental group minus the mean value. This way we had the value of the increased purchase intention of social identity signaling products in the assigned group because of deindividuation priming. The mean value of increased purchase intention of social identity signaling products of assigned group is 1.977. An independent-samples t-test shows the difference of the increased purchase intention between the self-selected group and the assigned group is statistically significant (t = 7.877, p = 0.000). (For more information, see Table 19 and Table 20.)

![Estimated Marginal Means of Purchase Intention](image)

**Figure 4**

**Table 19. Group Statistics**

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difference</td>
<td>Assigned</td>
<td>32</td>
<td>1.9766</td>
<td>.47413</td>
</tr>
<tr>
<td></td>
<td>Self-Selected</td>
<td>30</td>
<td>9667</td>
<td>.53498</td>
</tr>
</tbody>
</table>
### Table 20. Independent Samples Test

<table>
<thead>
<tr>
<th>Difference</th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal variances not assumed</td>
<td>F: 7.84, Sig: 6</td>
<td>t: 58.00, df: 9, Sig: .000</td>
<td>Mean Difference: 1.00985, Std. Error Difference: .12871, Lower: .7522, Upper: 1.2674</td>
</tr>
</tbody>
</table>

All these results support H2a: under consumption situations compared to individuals without priming deindividuation, when priming deindividuation individuals of different group formation (self-selected versus assigned) might both become more likely to purchase social identity signaling products; the increased purchase intention of social identity signaling products of individuals in the assigned group should be more than that of individuals in the self-selected group.

#### 5.3.2 Under Individuation Situation

Under the individuation situation, the reliability statistics of purchase intention of social identity signaling products showed a Cronbach’s alpha of 0.904. Levene’s test equality of error variances indicates F = 0.778, p = 0.607. This shows the error variance of the dependent variable is equal across groups. Thus these data are suited for analyses of variance. The results of tests of between-

---

**Table 20. Independent Samples Test**

<table>
<thead>
<tr>
<th>Difference</th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal variances not assumed</td>
<td>F: 7.84, Sig: 6</td>
<td>t: 58.00, df: 9, Sig: .000</td>
<td>Mean Difference: 1.00985, Std. Error Difference: .12871, Lower: .7522, Upper: 1.2674</td>
</tr>
</tbody>
</table>

All these results support H2a: under consumption situations compared to individuals without priming deindividuation, when priming deindividuation individuals of different group formation (self-selected versus assigned) might both become more likely to purchase social identity signaling products; the increased purchase intention of social identity signaling products of individuals in the assigned group should be more than that of individuals in the self-selected group.

#### 5.3.2 Under Individuation Situation

Under the individuation situation, the reliability statistics of purchase intention of social identity signaling products showed a Cronbach’s alpha of 0.904. Levene’s test equality of error variances indicates F = 0.778, p = 0.607. This shows the error variance of the dependent variable is equal across groups. Thus these data are suited for analyses of variance. The results of tests of between-

---

**Table 20. Independent Samples Test**

<table>
<thead>
<tr>
<th>Difference</th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal variances not assumed</td>
<td>F: 7.84, Sig: 6</td>
<td>t: 58.00, df: 9, Sig: .000</td>
<td>Mean Difference: 1.00985, Std. Error Difference: .12871, Lower: .7522, Upper: 1.2674</td>
</tr>
</tbody>
</table>

All these results support H2a: under consumption situations compared to individuals without priming deindividuation, when priming deindividuation individuals of different group formation (self-selected versus assigned) might both become more likely to purchase social identity signaling products; the increased purchase intention of social identity signaling products of individuals in the assigned group should be more than that of individuals in the self-selected group.

#### 5.3.2 Under Individuation Situation

Under the individuation situation, the reliability statistics of purchase intention of social identity signaling products showed a Cronbach’s alpha of 0.904. Levene’s test equality of error variances indicates F = 0.778, p = 0.607. This shows the error variance of the dependent variable is equal across groups. Thus these data are suited for analyses of variance. The results of tests of between-
subjects effects indicate the difference of purchase intention of social identity signaling products between the experimental group and the control group is statistically significant (F = 669.033, p = 0.000). In the experimental group, the mean of purchase intention of subjects in the self-selected group is 2.292. And in the control group, the mean of purchase intention of subjects in the self-selected group is 5.174. An independent-samples t-test shows that the difference is statistically significant: t = -26.898, p = 0.000. In the experimental group, the mean of purchase intention of subjects in the assigned group is 2.167. And in the control group, the mean of purchase intention of subjects in the assigned group is 3.716. An independent-samples t-test shows that the difference is statistically significant: t = -11.898, p = 0.000. Thus the results support H2b. That is, under consumption situations, compared to individuals without priming individuation, when primed for individuation individuals of different group formation (self-selected versus assigned) might become less likely to purchase social identity signaling products, and the decreased purchase intention of social identity signaling products of individuals in the self-selected group should be more than that of individuals in the assigned group.

The results of tests of between-subjects effects also show that the effect of group formation on purchase intention of social identity signaling products is statistically significant (F = 76.530, p = 0.000). Thus H1 is supported once again. In the interaction effect between group type (experimental group versus control group) and group formation, group type is statistically significant (F = 56.099, p = 0.000). However, the interaction effect between group type and sex is not significant. The interaction effect among group type, group formation and sex is not statistically significant. Although the interaction effect between group formation and sex is statistically significant, this might be due to sampling errors. The main effect of sex isn’t statistically significant (F = 1.623, p = 0.205). These results show sex doesn’t moderate the effect
of group formation or group type on purchase intention of social identity signaling products (for more information, see Table 21, Table 22, Table 23, Table 24, Table 25, and Figure 5).

### Table 21. Descriptive Statistics

<table>
<thead>
<tr>
<th>Group Type</th>
<th>Group Formation</th>
<th>Sex</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>Self-Selected</td>
<td>Female</td>
<td>2.3026</td>
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<td>19</td>
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<td>.50768</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Male</td>
<td>2.0833</td>
<td>.44954</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>Female</td>
<td>2.2941</td>
<td>.48645</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Male</td>
<td>2.1711</td>
<td>.43923</td>
<td>38</td>
</tr>
<tr>
<td></td>
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<td>Total</td>
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<td>Control</td>
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<td></td>
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<td>.91613</td>
<td>70</td>
</tr>
<tr>
<td>Total</td>
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<td>1.42571</td>
<td>31</td>
</tr>
<tr>
<td></td>
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<td>3.9211</td>
<td>1.55974</td>
<td>38</td>
</tr>
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<td>1.37866</td>
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</table>

### Table 22. Levene's Test of Equality of Error Variances

<table>
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<th>F</th>
<th>df1</th>
<th>df2</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>.778</td>
<td>7</td>
<td>134</td>
<td>.607</td>
</tr>
</tbody>
</table>
Tests the null hypothesis that the error variance of the dependent variable is equal across groups.  
a. Design: Intercept + Group Type + Group Formation + Sex + Group Type * Group Formation + Group Type * Sex + Group Formation * Sex + Group Type * Group Formation * Sex

Table 23. Tests of Between-Subjects Effects

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
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<td>207.443</td>
<td>7</td>
<td>29.635</td>
<td>118.540</td>
<td>.000</td>
</tr>
<tr>
<td>Intercept</td>
<td>1526.609</td>
<td>1</td>
<td>1526.609</td>
<td>6106.488</td>
<td>.000</td>
</tr>
<tr>
<td>Group Type</td>
<td>167.257</td>
<td>1</td>
<td>167.257</td>
<td>669.033</td>
<td>.000</td>
</tr>
<tr>
<td>Group Formation</td>
<td>19.132</td>
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<td>19.132</td>
<td>76.530</td>
<td>.000</td>
</tr>
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<td>Sex</td>
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<td>1</td>
<td>.406</td>
<td>1.623</td>
<td>.205</td>
</tr>
<tr>
<td>Group Type * Group Formation</td>
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<td>1</td>
<td>14.025</td>
<td>56.099</td>
<td>.000</td>
</tr>
<tr>
<td>Group Type * Sex</td>
<td>.000</td>
<td>1</td>
<td>.000</td>
<td>.001</td>
<td>.976</td>
</tr>
<tr>
<td>Group Formation * Sex</td>
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<td>5.547</td>
<td>.020</td>
</tr>
<tr>
<td>Group Type * Group Formation * Sex</td>
<td>.437</td>
<td>1</td>
<td>.437</td>
<td>1.749</td>
<td>.188</td>
</tr>
<tr>
<td>Error</td>
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<td>134</td>
<td>.250</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1788.313</td>
<td>142</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Corrected Total</td>
<td>240.942</td>
<td>141</td>
<td></td>
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</tr>
</tbody>
</table>
a. R Squared = .861 (Adjusted R Squared = .854)

### Table 24. Independent Samples Test

<table>
<thead>
<tr>
<th>Purchase Intentio n</th>
<th>Levene's Test for Equality of Variance s</th>
<th>t-test for Equality of Means</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
<td>t</td>
</tr>
<tr>
<td>Equal variance assumed</td>
<td>.31</td>
<td>.57</td>
<td>67</td>
</tr>
<tr>
<td>Equal variance not assumed</td>
<td>.31</td>
<td>.57</td>
<td>67</td>
</tr>
</tbody>
</table>

### Table 25. Independent Samples Test

<table>
<thead>
<tr>
<th>Purchase Intentio n</th>
<th>Levene's Test for Equality of Variance s</th>
<th>t-test for Equality of Means</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
<td>t</td>
</tr>
<tr>
<td>Equal variance assumed</td>
<td>.16</td>
<td>.68</td>
<td>72</td>
</tr>
</tbody>
</table>
We also compare the difference of the decreased purchase intention of social identity signaling products between the self-selected group and the assigned group because of individuation priming. We computed the mean value of purchase intention of the self-selected group in the experimental group ($m = 2.292$). And we used the values of purchase intention of the self-selected group in the control group minus the mean value. This way we had the value of the decreased purchase intention of social identity signaling products in the self-selected group because of individuation priming. The mean value of decreased purchase intention of social identity signaling products of the self-selected group is 2.883. We also computed the mean value of purchase intention of the assigned group in the experimental group ($m = 2.167$). And we used the values of purchase intention of assigned group in control group minus the mean value. This way we had the value of the decreased purchase intention of social identity signaling products in the assigned group because of individuation priming. The mean value of decreased purchase intention of social identity signaling products of the assigned group is 1.550. An independent-samples t-test shows the difference of the decreased purchase intention between the self-selected group and the assigned group is statistically significant ($t = -1.059$, $p = 0.000$). (For more information, see Table 26 and Table 27.) The results of Study 2 support H2. That is to say, under consumption situations, perceived social identity mediates the effect of group formation (self-selected versus assigned) on purchase intention of social identity signaling products.

Table 26. Group Statistics

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal variance not assumed</td>
<td>11.89</td>
<td>66.44</td>
<td>0.00</td>
<td>-1.54730</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td></td>
<td></td>
<td>-1.80691</td>
</tr>
</tbody>
</table>
Table 27. Independent Samples Test

<table>
<thead>
<tr>
<th></th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
<td>t</td>
</tr>
<tr>
<td>b1 Equal variances assumed</td>
<td>.134</td>
<td>.716</td>
<td>-</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>-</td>
<td>10.261</td>
<td>64.487</td>
</tr>
</tbody>
</table>

6. Study 3

6.1 Overview

Study 3 aims to examine the mediating effect perceived social identity in order to further explain why group formation affects purchase intention of social identity signaling products. In Study 3 we used a survey to collect data. We conducted the survey among undergraduates at a four-year university because we might have higher internal validity for our study than if we surveyed a much broader population, although we may sacrifice external validity to some extent because of this.

The measurement of purchase intention of social identity signaling products is the same as that used in Study 1 and Study 2. Perceived social identity is measured with a scale developed by Ellemers & Kortekaas et al. (1999). There are 9 items in this inventory including: I think my group has little to be proud of; I feel good about my group; I have little respect for my group; I would
rather not tell that I belong to this group; I identify with other members of my group; I am like other members of my group; My group is an important reflection of who I am; I would like to continue working with my group; I dislike being a member of my group; I would rather belong to the other group. We used seven-point Likert scale to indicate different level of purchase intention under the question of each item. For example a score of 7 means “very likely” and a score of 1 means “very unlikely.”

6.2 Procedure

The procedure in Study 3 was the same as in Study 1. We designed two different questionnaires for two separate groups of subjects (i.e., subjects in a self-selected group versus subjects in an assigned group). At the beginning of both questionnaires we introduced instructions about how to answer questions. Next, we asked subjects to recall groups they once joined by self-selection or because of being assigned. In one questionnaire we ask subjects to recall groups that they joined due to being self-selected. In the other we asked subjects to recall groups that they joined because of being assigned. Then subjects answered questions that indicated their purchase intention of social identity signaling products and their perceived social identity. Finally, subjects gave their personal information related to demographic characteristics and then submitted their questionnaire.

We collected 67 valid questionnaires in total. There are 35 subjects in self-assigned group and 32 subjects in assigned group. Of all subjects, 30 are female and 37 are male. Table 28 shows the detailed information related to demographic characteristics.

<table>
<thead>
<tr>
<th>Sex</th>
<th>Group Formation</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Self-Selected</td>
<td>Assigned</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Count</td>
<td>Count</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>18</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>17</td>
<td>20</td>
<td></td>
</tr>
</tbody>
</table>
6.3 Results and Discussion

Multivariate tests show that the effect of group formation under four statistics is statistically significant. This means that group formation significantly affects perceived social identity and purchase intention of social identity signaling products. The main effect of sex and the interaction effect between sex and group formation under four statistics are not statistically significant. This means that the variable sex doesn’t moderate the effect of group formation on perceived social identity and purchase intention of social identity signaling products.

The reliability statistics of purchase intention of social identity signaling products showed a Cronbach’s alpha of 0.891, while Cronbach’s alpha of perceived social identity was 0.907. Levene’s test equality of error variances of purchase intention indicates $F = 1.646, p = 0.188$. Levene’s test equality of error variances of perceived social identity shows $F = 0.134, p = 0.939$. This shows the error variance of the dependent variable is equal across groups. Thus the data meet the prerequisites of multivariate analysis of variance.

Tests of between-subjects effects indicate the effect of group formation on both perceived social identity ($F = 523.462, p = 0.000$) and purchase intention of social identity signaling products ($F = 171.241, p = 0.00$) is statistically significant. However, sex has no direct effect on both perceived social identity ($F = 2.384, p = 0.128$) and purchase intention of social identity signaling products ($F = 0.014, p = 0.908$). The interaction effect between group formation and sex is not statistically significant on both perceived social identity ($F = 0.094, p = 0.760$) and purchase intention of social identity signaling products ($F = 1.049, p = 0.310$). These results support H1.

(For more information, see Table 29, Table 30, Table 31, and Table 32.)
Table 29. Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>Group Formation</th>
<th>Sex</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Purchase Intention</strong></td>
<td>Self-Selected</td>
<td>Female</td>
<td>5.1389</td>
<td>.51608</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Male</td>
<td>5.0294</td>
<td>.26343</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>5.0857</td>
<td>.41098</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>Assigned</td>
<td>Female</td>
<td>3.4375</td>
<td>.55519</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Male</td>
<td>3.5750</td>
<td>.55072</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>3.5234</td>
<td>.54757</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>Female</td>
<td>4.4583</td>
<td>.99586</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Male</td>
<td>4.2432</td>
<td>.85490</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>4.3396</td>
<td>.91980</td>
<td>67</td>
</tr>
<tr>
<td><strong>Perceived Social Identity</strong></td>
<td>Self-Selected</td>
<td>Female</td>
<td>5.1528</td>
<td>.50831</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Male</td>
<td>5.3088</td>
<td>.47211</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>5.2286</td>
<td>.49024</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>Assigned</td>
<td>Female</td>
<td>2.2292</td>
<td>.45799</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Male</td>
<td>2.4625</td>
<td>.55769</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>2.3750</td>
<td>.52747</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>Female</td>
<td>3.9833</td>
<td>1.53400</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Male</td>
<td>3.7703</td>
<td>1.52682</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>3.8657</td>
<td>1.52214</td>
<td>67</td>
</tr>
</tbody>
</table>

Table 30. Multivariate Tests$^a$

<table>
<thead>
<tr>
<th>Effect</th>
<th>Value</th>
<th>F</th>
<th>Hypothesis df</th>
<th>Error df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>Pillai's Trace</td>
<td>.989</td>
<td>2725.244$^b$</td>
<td>2.000</td>
<td>62.00 .000</td>
</tr>
<tr>
<td></td>
<td>Wilks' Lambda</td>
<td>.011</td>
<td>2725.244$^b$</td>
<td>2.000</td>
<td>62.00 .000</td>
</tr>
<tr>
<td></td>
<td>Hotelling's Trace</td>
<td>87.911</td>
<td>2725.244$^b$</td>
<td>2.000</td>
<td>62.00 .000</td>
</tr>
<tr>
<td></td>
<td>Roy's Largest Root</td>
<td>87.911</td>
<td>2725.244$^b$</td>
<td>2.000</td>
<td>62.00 .000</td>
</tr>
<tr>
<td>Group Formation</td>
<td>Pillai's Trace</td>
<td>.893</td>
<td>257.949$^b$</td>
<td>2.000</td>
<td>62.00 .000</td>
</tr>
<tr>
<td></td>
<td>Wilks' Lambda</td>
<td>.107</td>
<td>257.949$^b$</td>
<td>2.000</td>
<td>62.00 .000</td>
</tr>
<tr>
<td></td>
<td>Hotelling's Trace</td>
<td>8.321</td>
<td>257.949$^b$</td>
<td>2.000</td>
<td>62.00 .000</td>
</tr>
<tr>
<td></td>
<td>Roy's Largest Root</td>
<td>8.321</td>
<td>257.949$^b$</td>
<td>2.000</td>
<td>62.00 .000</td>
</tr>
<tr>
<td>Sex</td>
<td>Pillai's Trace</td>
<td>.052</td>
<td>1.684$^b$</td>
<td>2.000</td>
<td>62.00 .194</td>
</tr>
<tr>
<td></td>
<td>Wilks' Lambda</td>
<td>.948</td>
<td>1.684$^b$</td>
<td>2.000</td>
<td>62.00 .194</td>
</tr>
<tr>
<td></td>
<td>Hotelling's Trace</td>
<td>.054</td>
<td>1.684$^b$</td>
<td>2.000</td>
<td>62.00 .194</td>
</tr>
<tr>
<td></td>
<td>Roy's Largest Root</td>
<td>.054</td>
<td>1.684$^b$</td>
<td>2.000</td>
<td>62.00 .194</td>
</tr>
<tr>
<td>Group Formation * Sex</td>
<td>Pillai's Trace</td>
<td>.019</td>
<td>.590$^b$</td>
<td>2.000</td>
<td>62.00 .557</td>
</tr>
<tr>
<td></td>
<td>Wilks' Lambda</td>
<td>.981</td>
<td>.590$^b$</td>
<td>2.000</td>
<td>62.00 .557</td>
</tr>
<tr>
<td></td>
<td>Hotelling's Trace</td>
<td>.019</td>
<td>.590$^b$</td>
<td>2.000</td>
<td>62.00 .557</td>
</tr>
</tbody>
</table>

$^a$ Estimated significance levels based on the assumption of equal group sizes.
Roy's Largest Root |  .019 |  .590 |  2.000 |  62.000 |  .557
---|---|---|---|---|---

a. Design: Intercept + Group Formation + Sex + Group Formation * Sex
b. Exact statistic

**Table 31. Levene's Test of Equality of Error Variances**

<table>
<thead>
<tr>
<th>Source</th>
<th>Dependent Variable</th>
<th>F</th>
<th>df1</th>
<th>df2</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase Intention</td>
<td></td>
<td>1.646</td>
<td>3</td>
<td>63</td>
<td>.188</td>
</tr>
<tr>
<td>Perceived Social Identity</td>
<td></td>
<td>.134</td>
<td>3</td>
<td>63</td>
<td>.939</td>
</tr>
</tbody>
</table>

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + Group + Sex + Group * Sex

**Table 32. Tests of Between-Subjects Effects**

<table>
<thead>
<tr>
<th>Source</th>
<th>Dependent Variable</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>Purchase Intention</td>
<td>41.046$^a$</td>
<td>3</td>
<td>13.682</td>
<td>58.276</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Perceived Social Identity</td>
<td>136.741$^b$</td>
<td>3</td>
<td>45.580</td>
<td>177.528</td>
<td>.000</td>
</tr>
<tr>
<td>Intercept</td>
<td>Purchase Intention</td>
<td>1191.623</td>
<td>1</td>
<td>1191.623</td>
<td>5075.470</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Perceived Social Identity</td>
<td>926.968</td>
<td>1</td>
<td>926.968</td>
<td>3610.402</td>
<td>.000</td>
</tr>
<tr>
<td>Group Formation</td>
<td>Purchase Intention</td>
<td>40.204</td>
<td>1</td>
<td>40.204</td>
<td>171.241</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Perceived Social Identity</td>
<td>134.398</td>
<td>1</td>
<td>134.398</td>
<td>523.462</td>
<td>.000</td>
</tr>
<tr>
<td>Sex</td>
<td>Purchase Intention</td>
<td>.003</td>
<td>1</td>
<td>.003</td>
<td>.014</td>
<td>.908</td>
</tr>
<tr>
<td></td>
<td>Perceived Social Identity</td>
<td>.612</td>
<td>1</td>
<td>.612</td>
<td>2.384</td>
<td>.128</td>
</tr>
<tr>
<td>Group Formation * Sex</td>
<td>Purchase Intention</td>
<td>.246</td>
<td>1</td>
<td>.246</td>
<td>1.049</td>
<td>.310</td>
</tr>
<tr>
<td></td>
<td>Perceived Social Identity</td>
<td>.024</td>
<td>1</td>
<td>.024</td>
<td>.094</td>
<td>.760</td>
</tr>
<tr>
<td>Error</td>
<td>Purchase Intention</td>
<td>14.791</td>
<td>63</td>
<td>.235</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Perceived Social Identity</td>
<td>16.175</td>
<td>63</td>
<td>.257</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Purchase Intention</td>
<td>1317.563</td>
<td>67</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Perceived Social Identity</td>
<td>1154.125</td>
<td>67</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>Purchase Intention</td>
<td>55.838</td>
<td>66</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
We ran four linear regressions in order to test the mediating effect of perceived social identity. First, we regressed dependent variable purchase intention of social identity signaling products on independent variable group formation. The results showed R square = 0.731, F = 176.355, p = 0.000. This indicates that the linear relationship between purchase intention of social identity signaling products and group formation is statistically significant. Statistical results show standardized coefficients B = -1.562 (p = 0.000) and standardized coefficients is Beta = -0.855 (p = 0.000). All these results show that H1 is supported. (For more information, see Table 33, Table 34, Table 35, and Table 36.)

**Table 33. Variables Entered/Removed**

<table>
<thead>
<tr>
<th>Model</th>
<th>Variables Entered</th>
<th>Variables Removed</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Group Formation</td>
<td>.</td>
<td>Enter</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Purchase Intention
b. All requested variables entered.

**Table 34. Model Summary**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.855a</td>
<td>.731</td>
<td>.727</td>
<td>.48099</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Group Formation

**Table 35. ANOVA**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>40.800</td>
<td>1</td>
<td>40.800</td>
<td>176.355 .000b</td>
</tr>
<tr>
<td>Residual</td>
<td>15.038</td>
<td>65</td>
<td>.231</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>55.838</td>
<td>66</td>
<td>.231</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Purchase Intention
b. Predictors: (Constant), Group Formation

Table 36. Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>6.648</td>
<td>.183</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Group Formation</td>
<td>-1.562</td>
<td>.118</td>
<td>-.855</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Purchase Intention

Secondly, we regressed mediator (dependent variable) perceived social identity on independent variable group formation. The results showed $R^2 = 0.890$, $F = 526.765$, $p = 0.000$. This indicates that the linear relationship between perceived social identity and group formation is statistically significant. Statistical results show that unstandardized coefficients $B = -2.854$ and standardized coefficients is $Beta = -0.943$, $p = 0.000$.

Data analyses show that the causal relationship between group formation and identity salience is statistically significant. The results also indicate Unstandardized Coefficients $B = -2.854$, $Beta = -0.943$, $p = 0.000$. An independent-samples t-test shows the mean of perceived social identity of the self-selected group is 5.229 and that of the assigned group is 2.375. The difference is statistically significant: $t = 22.951$, $p = 0.000$. These results support H3a: in consumption situations, group formation affects perceived social identity, compared to the assigned group, individual of self-selected group has higher level of perceived social identity. (For more information, see Table 37, Table 38, Table 39, Table 40, Table 41, and Table 42.)

Table 37. Variables Entered/Removed

<table>
<thead>
<tr>
<th>Model</th>
<th>Variables Entered</th>
<th>Variables Removed</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Group Formation</td>
<td>.</td>
<td>Enter</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Perceived Social Identity
b. All requested variables entered.
Table 38. Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.943a</td>
<td>.890</td>
<td>.888</td>
<td>.50834</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Group Formation

Table 39. ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>136.120</td>
<td>1</td>
<td>136.120</td>
<td>526.765</td>
<td>.000p</td>
</tr>
<tr>
<td>Residual</td>
<td>16.796</td>
<td>65</td>
<td>.258</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>152.916</td>
<td>66</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Perceived Social Identity
b. Predictors: (Constant), Group Formation

Table 40. Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>8.082</td>
<td>.194</td>
<td>41.676</td>
<td>.000</td>
</tr>
<tr>
<td>Group Formation</td>
<td>-2.854</td>
<td>.124</td>
<td>-.943</td>
<td>-22.951</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Perceived Social Identity

Table 41. Group Statistics

<table>
<thead>
<tr>
<th>Perceived Social Identity</th>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Self-Selected</td>
<td>35</td>
<td>5.2286</td>
<td>.49024</td>
<td>.08287</td>
</tr>
<tr>
<td></td>
<td>Assigned</td>
<td>32</td>
<td>2.3750</td>
<td>.52747</td>
<td>.09324</td>
</tr>
</tbody>
</table>

Table 42. Independent Samples Test

<table>
<thead>
<tr>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

330
Thirdly, we regressed dependent variable purchase intention of social identity signaling products on mediator perceived social identity. The results showed R square= 0.825, F = 306.469, p = 0.000. This indicates that the linear relationship between purchase intention of social identity signaling products and perceived social identity is statistically significant. The results also show unstandardized coefficients B = -0.549 and standardized coefficients is Beta = 0.908, p = 0.000. It means that when perceived social identity increases one unit, purchase intention of social identity signaling products increases 0.549 unit. When perceived social identity increases one standard deviation, purchase intention of social identity signaling products increases 0.908 standard deviation. Thus H3b is supported: under consumption situations, perceived social identity positively affects purchase intention of social identity signaling products. That is to say, the higher perceived social identity is, the higher the purchase intention of social identity signaling products is, and vice versa. (For more information, see Table 43, Table 44, Table 45, and Table 46.)

Table 43. Variables Entered/Removed

<table>
<thead>
<tr>
<th>Model</th>
<th>Variables Entered</th>
<th>Variables Removed</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Perceived Social Identity</td>
<td>.</td>
<td>Enter</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Purchase Intention
b. All requested variables entered.

**Table 44. Model Summary**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.908&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.825</td>
<td>.822</td>
<td>.38771</td>
</tr>
</tbody>
</table>

<sup>a</sup> Predictors: (Constant), Perceived Social Identity

**Table 45. ANOVA<sup>a</sup>**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Regression</td>
<td>46.067</td>
<td>1</td>
<td>46.067</td>
<td>306.469</td>
<td>.000&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Residual</td>
<td>9.771</td>
<td>65</td>
<td>.150</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>55.838</td>
<td>66</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup> Dependent Variable: Purchase Intention
<sup>b</sup> Predictors: (Constant), Perceived Social Identity

**Table 46. Coefficients<sup>a</sup>**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>(Constant)</td>
<td>2.218</td>
<td>.130</td>
</tr>
<tr>
<td>Perceived Social Identity</td>
<td>.549</td>
<td>.031</td>
</tr>
</tbody>
</table>

<sup>a</sup> Dependent Variable: Purchase Intention

Lastly, we regressed dependent variable purchase intention of social identity signaling products on mediator perceived social identity and independent variable group formation. The results showed R square = 0.825, F = 150.922, p = 0.000. This indicates the linear relationships between purchase intention of social identity signaling products and perceived social identity and group formation are statistically significant. The results show unstandardized coefficients of mediator perceived social identity B = 0.560 and standardized coefficients is Beta = 0.927, p = 0.000. The results also show unstandardized coefficients of independent variable group formation
B = 0.036 and standardized coefficients is Beta = 0.020, p = 0.000.

These four regression analyses demonstrate that H3 is supported: under consumption situations, perceived social identity mediates the effect of group formation (self-selected versus assigned) on purchase intention of social identity signaling products. (For more information, see Table 47, Table 48, Table 49, and Table 50.)

Table 47. Variables Entered/Removed

<table>
<thead>
<tr>
<th>Model</th>
<th>Variables Entered</th>
<th>Variables Removed</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Group Formation, Perceived Social Identity&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.</td>
<td>Enter</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Purchase Intention  
b. All requested variables entered.

Table 48. Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.908&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.825</td>
<td>.820</td>
<td>.39068</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Group Formation, Perceived Social Identity

Table 49. ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>46.070</td>
<td>2</td>
<td>23.035</td>
<td>150.922</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>9.768</td>
<td>64</td>
<td>.153</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>55.838</td>
<td>66</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Purchase Intention  
b. Predictors: (Constant), Group Formation, Perceived Social Identity

Table 50. Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>2.121</td>
<td>.785</td>
<td>2.703</td>
</tr>
<tr>
<td></td>
<td>Perceived Social Identity</td>
<td>.560</td>
<td>.095</td>
<td>.927</td>
</tr>
</tbody>
</table>
7. Overall Discussion and Conclusion

This paper focuses on how and why group formation affects the purchase intention of social identity signaling products. The results of Study 1 indicate that group formation affects the purchase intention of social identity signaling products. Compared to subjects in the assigned group, subjects in the self-selected group had higher level of purchase intention of social identity signaling products. The results of Study 1 also show demographic characteristics variables, such as education, generation, and sex, do not moderate the effect of group formation on purchase intention of social identity signaling products. The results of Study 2 show that deindividuation and individuation moderate the effect of group formation on purchase intention of social identity signaling products. When priming deindividuation, subjects in both the assigned group and the self-selected group have an increased purchase intention of social identity signaling products. When priming individuation, subjects in both the assigned group and the self-selected group have a decreased purchase intention of social identity signaling products. The results of Study 3 show that perceived social identity fully mediated the effect of group formation on purchase intention of social identity signaling products. The results of both Study 2 and Study 3 show sex does not moderate the effect of group formation on purchase intention of social identity signaling products.

7.1 Managerial Implications

This paper indicates that group formation affects purchase intention of social identity signaling products. This means that when marketers use some criteria to segment markets, they should not take it for granted that people within a segment are homogenous. When marketers use targeting strategies to promote their products they should consider the formation of segments. On the one hand, those marketers whose products signal social identity should select their segments very
carefully. There are possibilities that consumers in some segment identify with each other and that they value the membership of that segment just like individuals in the self-selected group. Under such situations, when targeting such segments, social identity signaling products sellers are more likely successful. On the other hand when consumers in a segment do not identify with each other and do not identify with the segment very much just like individuals of assigned groups, social identity signaling products sellers more likely suffer a failure.

Although marketers can use a social identity concept in promoting their product (for example, research results of Marin & Ruiz [2009] demonstrate that identity salience determines the influence of CSR initiatives on consumer loyalty), there might be negative consequences of identity-based consumption choices (Oyserman, 2009). Marketers can manipulate deindividuation or individuation to market their products by making consumers depersonalized or personalized. However, there are possibilities that they would use these techniques in an unethical way. Policy makers should realize such facts and should set effective preemptive policies to deal with this kind of possible unethical marketing practices.

7.2 Theoretical Implications

This paper examined the effect of group formation (self-selected versus assigned) on purchase intention of social identity signaling products and elucidate the mechanisms underlying such an effect. This research indicates that the effect of group formation on purchase intention of social identity signaling products is statistically significant. Compared to individuals in an assigned group, individuals in a self-selected group have higher levels of purchase intention of social identity signaling product. This research demonstrates the moderating effect of deindividuation and individuation on the relationships between group formation and purchase intention of social identity signaling products. This research also shows that perceived social identity fully mediated
the effect of group formation on the purchase intention of social identity signaling products. Thus the finding of this research has further enriched the extant literature related to social identity.

8. Limitations and Future Research

There are limitations in this research in terms of research design, sampling methods, and other aspects. This paper relied on subjects’ self-reporting about group formation, and because of this some other factors might affect the internal validity of this research. Future researches can manipulate the group formation and thus prevent other factors from affecting internal validity of researches. The samples in this research did not correspond to the real composition of the general population. Although this is a valid research practice, it was at the expense of external validity. Future researches should use more representative samples to retest. This research did not examine the effects of other group attributes, such as group size and group status, which might have moderating effects. Future research can further examine the possible moderating effects of those variables. Nier & Gaertner et al. (2001) empirically examined the effect of in-group interactions and demonstrated it affected Whites’ interracial evaluations. We suggest in-group interaction might also affect the effect of group formation. According to Postmes & Spears (2005), social identity can be formed in different ways, such as deductive identity and inductive identity. This might also influence the effect of group formation. And researchers can study these perspectives in the future.

9. Acknowledgments

This research has been sponsored by several sources: China Scholarship Council (CSC); 2019 Research Project Grant of Guangxi University of Finance and Economics; Projects of the National Social Science Foundation of China (No. 14BKS063); Collaborative Research and Innovation Team of China-ASEAN International Tourism; Support Programs for Innovation Team of Guangxi University of Finance and Economics. 本研究得到多方面资助：中国国家留学基金
委员会（CSC）资助（留金法[2016]5112号）；广西财经学院2019年科研课题资助；
国家社会科学基金项目“中国-东盟自由贸易区背景下增强国家文化软实力的路径研究”
（项目编号：14BKS063）；中国-东盟国际旅游合作研究创新团队；广西财经学院创新团队支持计划。

Special thanks to Prof. Ruiqian Liang (梁儒谦)。

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References


Discuss on the Material Factors of Visible Display and the Construction of Catering Brand

Haiyan Miao

Shandong Yingcai University

Abstract

Chinese catering culture is extensive and profound, but the brand building lags behind, lacking of influential and lasting global brands. The research finds that there are some problems in brand building of catering industry in China, such as lack of brand marketing awareness, lack of cultural connotation and corporate image support, lagging brand equity management and insufficient brand promotion. Material factors in tangible display, including surrounding factors, design factors and social factors, can effectively stimulate customers sensorily, guide customers' expectations, and help consumers identify corporate image. Therefore, the study suggests that we can promote the brand building of catering industry from four aspects: environmental layout, brand design, catering products and humanistic characteristics.

Keywords: Visible Display; Brand Design; Product; Humanistic Atmosphere

1. Brand Construction of Catering Industry

In the process of new changes in the national economic structure and promoting high-quality economic development, the contribution rate of consumption to economic growth
is constantly increasing. With the increase of people's income and the expansion of middle-income groups, the consumption structure of catering has accelerated to diversification, specialization and quality upgrading, and the leading role of brand catering is remarkable. The catering industry plays a strong role in expanding domestic demand, promoting consumption, stable growth and benefiting people's livelihood. The catering market continues to show a steady growth trend. But looking at the list of top 100 Chinese catering enterprises in 2018, Yum China Holdings Limited and Golden Arch Gate (China) Limited rank the first two. This also explains the dilemma of Chinese local catering brands.

The brand building of catering industry is of great practical significance to enterprises, regional economy and consumers. It will play an important role in satisfying the diversification and individualization of consumer demand, improving the competitiveness of enterprises, breaking through the bottleneck of the development of catering industry and helping enterprises to find ways to develop. Therefore, the study of catering brand and the construction of catering brand are of great practical significance.

2. Material Factors of Tangible Display

Catering industry is not a service industry in the full sense, but its service ability is an important factor to attract customers to choose. One of the important factors affecting service capability is tangible display, which is a tangible component of conveying service characteristics and advantages. Material factors in tangible display include the surrounding environment, design factors and social factors. As shown in Table 1.

Table 1. Components of material factors
<table>
<thead>
<tr>
<th>Component</th>
<th>Describe</th>
<th>Constiute</th>
</tr>
</thead>
</table>
| Surrounding environment | Neutral and negative factors | Air quality
Humidity
Ventilation condition
Noise
Cleanliness |
| Design factors     | The easiest factor to detect, active stimulation | Aesthetic factors: Architecture, Color and style
Functional factors: Display, Comfort, Logo |
| Social factors     | People in the environment         | Audience: Quantity, Appearance, Behavior
Service staff: Quantity, Appearance, Behavior |

On the one hand, tangible display can stimulate customers sensorily, guide customers to produce reasonable expectations, control the level of expectation quality that affects service quality, so as to provide "high-quality" service; on the other hand, tangible display can help consumers identify the image of service enterprises and their products, and also help enterprises train employees.

3. Problems in Brand Construction

In the process of brand building, because of the complexity of Chinese dishes, the catering
industry has not formed a unified industry standard. At the same time, the relevant legal system is not perfect, which makes the innovation of dishes lack assurance. However, the author believes that the development of catering industry is more to find subjective reasons.

3.1 Lack of Brand Marketing Awareness in Enterprises

China has a long history of catering industry, but it is still in its infancy in brand management, especially in catering industry. According to the survey, many cities in China have their own catering brands, but the vast majority of brands only have a small reputation in the city, did not achieve national reputation, let alone occupy a place on the world stage. Most catering enterprises have not been able to expand the brand's influence because of insufficient funds, brain drain, lack of predictive ability in the market economy environment, outdated management system and so on. Some old-name enterprises are not adapted to the new market demand, some are changing their ways, some are miserable, while some excellent young catering enterprises, some stop at the door of brand management, only satisfied with the victory of a small region; some excessively pursue brand construction, but ignore brand marketing. When the chain operation is on the initial scale, the management quality drops and the quality of products decreases. And the taste also declined a lot, going up and down.

3.2 Lack of Cultural Connotation and Corporate Image Support

Brand should be the symbol of a certain enterprise culture or product culture and service culture. The key to creating a good brand lies in the deepening and sublimation of culture. An excellent enterprise must have its own excellent corporate culture. The catering leader
McDonald's has created a "happy McDonald's" image. The slogans of these successful enterprises are well-known, turning consumers into good media for their corporate image promotion. At present, some domestic enterprises are keen to pursue gorgeous appearance and superficial affectation when creating catering brands, which can not but affect the healthy growth of their brands. Nowadays, reports about dish names are often reported in newspapers. The reason is that some restaurants use dish names as the whole connotation of the restaurant brand and try to use some vulgar combination of words to attract the attention of the public. This practice makes consumers disgusted and also destroys the good image of enterprises. What's more, the vulgar human feast is hyped, which leads the color, fragrance and taste of Chinese catering culture to the low-level road.

3.3 Lagging of Brand Asset Management

Famous brands are intangible assets of catering enterprises, which have great economic value. Nowadays, more and more attention is paid to the value of brands. Our country has always neglected the evaluation of corporate brand, people do not pay enough attention to the value of brand, so that most of our well-known brands do not show the corresponding economic value. Some traditional brand names lack innovation and characteristics in asset management and marketing, far from giving full play to the multiplier effect and expansion effect that traditional brand should have, and their corresponding position in the industry is declining. This is extremely unfavorable to the development of well-known brands, and also becomes another major obstacle for China's well-known brands to enter the international market.

3.4 Lack of Brand Promotion
McDonald's and KFC can occupy the global market and develop into a global multinational corporation. However, it is rare for the national brands of catering industry to go abroad. Many old-fashioned restaurants with a history of over a hundred years are still unable to break through the geographical boundaries. Many old-fashioned catering enterprises are actually just local specialty stores. Fear of the market and lack of awareness of brand promotion make it difficult for China's catering industry to go abroad to the world. If we can't push the Chinese catering brand to the world market, we can't further improve the value of the brand.

4. Improving the Level of Visible Display and Creating Brand Image

Because of the particularity and complexity of Chinese catering, in order to build a famous brand enterprise of Chinese catering, it is necessary to give full play to the characteristics of Chinese catering, carry out featured management by taking advantage of its strengths and avoiding its weaknesses, and start from differentiation is the key to build a Chinese catering brand.

4.1 Characterization of Environmental Layout

How to design restaurant environment depends on brand positioning. First of all, catering enterprises should consider their own business routes, the level of customer sources, brand connotation, the size of investment budget and so on. Then it conceives how to create a comfortable and elegant dining atmosphere. While facilitating guests'entry and exit and service operation, it also provides appropriate tone matching, lighting and beautiful line decoration. In short, the dining atmosphere should not only meet the psychological
expectations of diners, but also match the characteristics of restaurant management; it is beautiful, generous, elegant and prominent. Only in this way, the environmental design can achieve the purpose of attracting customers and impressed customers, increase customer loyalty to the brand, make it become the obligatory propagandist of enterprises, and complete the brand communication.

(1) Appropriate Location

Appropriate geographical location can easily attract more customers. Here, the appropriate location mainly refers to the restaurant close to the target customer concentration area, not simply refers to the restaurant should be located in a busy business district with more passenger flow or convenient transportation. This shows that understanding the characteristics of various locations and customers' consumption needs is the premise of effective promotion of service products. By choosing appropriate locations, the contradiction between supply and demand caused by the indivisibility of services can be eliminated and customers can arrive conveniently.

(2) Environmental Hygiene in Restaurants

Environmental hygiene is the most basic condition for restaurant operation. Its good condition will not make consumers feel particularly satisfied, but losing these elements or failing to meet the requirements of consumers will weaken customers' confidence in restaurant service. Before customers choose a restaurant, the first thing to look at is whether the restaurant is clean and hygienic. From the outside, it requires neat and clean signs, clear propaganda writing, trimmed bonsai; from the inside, it requires customers to sit, restaurant
furnishings and display desks, kitchens, preparation rooms and bathrooms to be neat and clean.

However, good environmental hygiene still needs to be maintained. We can set strict standards for cleaning up, and we can divide health responsibilities in detail, but what we neglect is to maintain the environment in the process of operation. In other words, between short-term benefits and strict cleaning standards, our catering industry tends to choose the former while ignoring the latter, which is the root cause of poor sanitation in many restaurants.

(3) The Atmosphere of the Restaurant

Restaurant atmosphere is an important factor affecting the service quality of the restaurant. Therefore, both the external and internal design and decoration of the restaurant should set off a certain atmosphere in order to highlight the purpose of the restaurant and strongly attract existing and potential customers. Restaurant design, decoration, layout, lighting, tone, sound and so on will affect the atmosphere of the restaurant. For example, sound, moderate volume of music can make customers pleasant to hear, increase appetite; conversely, excessive volume may affect the conversation of customers, make people bored. Different restaurants should also choose different styles of music. Fast restaurants may be suitable for playing more rhythmic pop music, while elegant restaurants are more suitable for classical music with beautiful melody and slow speed.

4.2 Characterization of Brand Design

Brand design is an important part of corporate identity system. Through brand, customers
can define their own purchasing interests, producer value, corporate cultural connotation and corporate personality characteristics. The following points should be paid attention to in the brand design of catering industry:

First, the brand name combines with the connotation of corporate culture, which is easy to read and identify.

Secondly, brand logo has visual impact, conforms to the development of the times, and complements each other with the name. For example, Taoran, a national chain, highlights green, healthy and Bashu culture in its brand logo. And this concept is embodied in the staff's clothing, shop decoration and other prominent positions, to complete communication with consumers.

4.3 Characterization of Catering Products

The formation of catering enterprise brand is based on the integration and construction of products, services, environment, culture and other factors, but its foundation is products, which are supported by the brand of products. Therefore, a complete product quality assurance system should be established.

The uniqueness of core products is one of the most prominent aspects in catering industry's characteristic management. Most famous catering enterprises in China choose to operate characteristic core products to highlight their brands. For example, Quanjude Roast Duck in Beijing and Little Sheep in Inner Mongolia attract customers with the characteristics of their own products to maintain customer loyalty to their brands. In 1930, Colonel Sanders used 11 spices to make Kentucky delicacies that remain today. The stability of this flavor
plays an important role in the loyalty of consumers to famous brand products. Because the spread of catering brand mostly relies on customers' personal experience to produce brand recognition, and then spread by customers in the form of word of mouth, so it is very important for catering enterprises to maintain the quality of core products and achieve the true name.

4.4 Characterization of Humanistic Spirit

(1) Training Staff

Marketing managers can also use internal marketing methods similar to external marketing to train internal employees, so that they can master service knowledge and skills, guide employees' service behavior, and provide customers with high-quality services. Training staff includes not only learning and abiding by enterprise rules and regulations, but also recognizing enterprise culture, cultivating employees' big customer awareness, and cultivating employees to internalize rules and regulations into their own needs.

The staff's appearance must be in harmony with the overall atmosphere of the restaurant. In addition, the training of employees' service skills and speech and behavior is also indispensable. While providing meticulous and thoughtful service, the staff's words and deeds, whether ancient or simple and fashionable, should be in harmony with the overall cultural connotation of the restaurant, thus giving the entity a bright spot for display.

(2) Guiding Customers

Customers interact and restrict each other. Through the creation of restaurant atmosphere,
we can correctly guide customers' behavior and behavior, win customers' recognition of corporate culture, and establish customer brand loyalty.

5. Conclusion

In short, the environment is a strong evidence of support and response service product quality, can help customers feel the characteristics of service products and improve the benefits of access to services, help establish the image of service products and enterprises, and support the implementation of marketing strategies. The catering industry should pay full attention to the important role of tangible display, rational use, and vigorously promote its own brand building.

6. Acknowledgments

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References


Study on Construction of Harmonious Corporate Culture

Based on Humanistic Care and Psychological Counseling

Baikun1

1Shandong Women’s University, Jinan, Shandong, China

Abstract

In recent years, the studies on business management have been broader and broader, and the study fields already expand from the experience management and scientific management to cultural management category. From the latest study trends, it already became the important direction to value about the psychological factors of staff. It is an issue worth discussing for the interaction between the humanistic care and psychological counseling mechanism and the corporate culture construction mode. In this paper, the systematic analysis is conducted on the interactive relationship between corporate culture construction and benign psychological counseling mechanism by taking the construction of the harmonious corporate culture as the main line, thinking about how to form a more effective interaction between them, thus to provide the useful implications and practical suggestions for constructing the harmonious corporate culture mode.

Keywords: Humanistic care; Psychological counseling; Corporate culture; Construction of mechanisms;

Corporate culture is called “company culture” in the United States and called “agency atmosphere” in Japan. The concept and theory of corporate culture were first
produced in the United States in the last century, and it was proposed by American
managerialist after summarizing the management experience of Japanese companies.
While as a mainstream ideology, corporate culture was firstly produced and
implemented in Japan. In the 1980s, the studies on corporate culture were introduced
into China.

In recent years, the studies on corporate culture have been broader and broader, and
the corporate management studies ascended to the cultural management stage from
the experience management and scientific management, realizing the qualitative leap
of management theory. Moreover, the emphasis of management also changes to the
humanistic management gradually, implementing humanistic management and
improving the corporate competitiveness. However, although the cultural
management theory is getting mature increasingly, its practice lags far behind the
theory. Especially that there are few studies truly combining the management theory
of corporate culture with the psychological problems faced by corporate staff.

1. Connotation of corporate culture and problems and deficiencies in
its construction

Culture is the “collective mental programming” of people in environment. Corporate
culture refers to stable corporate spirit, corporate ethics, corporate value, corporate
appearance, life belief, common ideals, and behavioral habit gradually formed and
recognized and adhered by most members during the production operation process
under a certain economic social cultural background, and the business strategies,
business philosophy, business philosophy, and business sense formed on this basis.

The connotations of corporate culture include the following aspects:
Corporate culture is value. Corporate culture includes business philosophy, value orientation, moral code, and business strategy, etc., and it is the overall presentation of an enterprise value orientation.

Corporate culture is the combination between software and hardware. Hardware includes structure, system and style, while software includes staff, skills, strategy and common value. Among which, software is the emphasis for the construction of corporate culture.

Corporate culture is constituted by four parts including system culture, behavior culture, psychological culture and material culture. Psychological culture is the central contents of corporate culture, and the construction of corporate culture cannot be separated from the construction of psychological culture of corporate staff.

During the construction of corporate culture, some enterprises lack of their clear corporate value concept and corporate spirit; some companies only value about the material incentive but ignore the spiritual pursuits of staff, and even do not respect the dignity of staff and ignore the humanistic care and psychological counseling toward staff, unable to combine the corporate culture with the psychological counseling towards staff, ignoring the inner appeal and practical confusion of staff, and therefore, lots of companies do not construct the excellent corporate culture which conforms to their characteristics, and it caused that the business management is still in the traditional experience management stage, and companies lack of cohesion, creativity and identity inside; however, outside the companies, there are poor public awareness and loyalty, with bleak market outlook.

The problems which need to be solved urgently in construction of corporate culture:
1.1 Value material but ignore spirit, lacking of soul

If a company values material culture construction but ignores spiritual culture construction, the company will lack of soul. The construction of corporate culture also includes the construction of material culture. However, corporate spiritual culture construction is the guiding ideology of material culture construction.

1.2 Value form but ignore connotation, lacking of personality

Lots of companies value the form of culture construction while ignore the connotation of culture construction. They position corporate culture as the sloganeer and recreational and sports activities, they only do something superficial, without creating a true space for staff to play themselves.

The connotation of corporate culture construction is “people oriented”, implementing humanistic management. However, some companies do not make “people oriented” in construction and execution of human resource development management system, and ignore humanistic care, lacking of humanization. Consequently, staff will have job burnout and abnormal mood, the significance and sense of happiness for job disappear, enormous psychological pressure is produced, thus, the companies will lack of cohesion and centripetal force and cannot develop normally and orderly.

1.3 Value system but ignore execution, lacking of consistency

Most of company value about system construction with ignore execution, lacking of consistency and becoming formalistic. Business managers also cannot abide by the corporate system and lack of the consistency, varying with each individual, teaching by percept and example, and eventually, corporate system becomes a dead letter.
1.4 Value use but ignore cultivation, lacking of mechanism

The overall quality of corporate staff is low, which is adverse for construction of corporate culture and implementation of corporate culture management, because companies value use but ignore cultivation and lack of the education and cultivation mechanism, the overall quality of staff needs to be improved.

2. Analysis on psychological status of corporate staff and construction of psychological counseling mechanism

In the reports of the 19th National Congress of the Communist Party of China, it emphasized “taking spiritual culture construction as the core and make the harmonious team cohesion”. The harmonious team construction needs to strengthen humanistic care and psychological counseling of corporate staff, including staff psychological counseling into the work deploy of corporate culture. “Psychological counseling is an inevitable product after society develops to a high level of civilization and the occupational demand generated after long-term accumulation of social practices.” Guide, support and help people to conduct psychological adjustment and emotional catharsis by applying psychological knowledge, languages, or behaviors, thus to unblock psychological barriers, and face life and work with the healthy spiritual status.

2.1 Fully play the autonomy and cooperation spirit of staff, unblock staff psychological counseling channel, help staff build sense of being respected, sense of responsibility and sense of mission, guide the convergence development of values of staff, cultivate harmonious and positive corporate culture, and combine the individual development of staff with the corporate development.
2.2 “Guide staff to correctly treat psychological problems, increase psychological endurance and self-regulation ability, correctly face with difficulties, setbacks and honors, always keep the positive, optimistic and health spiritual status, and throw themselves into the work.” The psychological counseling work of staff needs to closely connect with the objective reality and psychological problems of staff, suiting the remedy to the case, enhancing contact and communication in humanistic care and psychology, respecting and understanding emotionally, caring and guiding in action, thus the satisfaction of staff can be improved, the effectiveness of psychological counseling work can be enhanced, creating a good harmonious psychological atmosphere, guaranteeing the safe production and rapid development of companies, and providing good psychological supports and harmonious environment guarantees for constructing harmonious companies, thus to realize the win-win development of staff gaining profits and companies gaining benefits.

3. The core philosophy of construction of harmonious corporate culture is people oriented

“Corporate culture determined the corporate standards and styles. If we want to improve the corporate core competitiveness, shorten the creation period and growth period, extend mature period and decline period, prolong corporate lifecycle, and realize the sustainable development, we must enhance corporate culture construction, and the core is to enhance the cultivation of corporate spirit and implement culture management.” The positive corporate culture guides companies to the path of healthy development and promotes the corporate sustainable development. During the construction and management of corporate culture, cultivating corporate unique culture according to corporate reality is a powerful weapon for companies to cope
with the economic crisis and extend lifecycle.

Companies must enhance cultural construction, emphasize staff cohesion, improve corporate core competitiveness, and promote corporate sustainable development. For cultivating corporate spirit, we must cultivate the people oriented spirit first. People oriented spirit is the theoretical basis for humanistic management. “Humanistic management is the management of people oriented, and it refers to a set of management mode which takes people are the core of full and free development, creates the corresponding environment, takes personal management as basis and takes the common will of the organizations as a guidance, namely, trusting people, respecting people, relying people and developing potentials of people.” The management of people oriented is not to take people as the labor tools, but to profoundly learn about people’s role in social economic activities, and realize the management of people oriented. For people oriented, it demands companies to take corporate staff oriented.

“Corporate culture management must build the management idea of people oriented, take people as the major objects of management, fully respect people, understand people, care about people and play the positive factors of each staff, and seek for the joint development between companies and individuals.” It needs to organically combine the construction of corporate culture with construction of reasonable staff psychological coordination mechanism, unblock staff psychological counseling channel, complete communication modes, help staff build healthy employment psychology, stimulate staff’s enthusiasm, creativity and spirit of devotion, cultivate harmonious and positive corporate culture and enhance corporate cohesion.

4. Interaction between harmonious corporate culture construction
and staff psychological counseling mechanism

Companies need to implement the management philosophy of “people oriented”, and take psychological counseling as an important mean to cultivate the healthy and positive corporate culture. “Staff are the corporate soul, as long as staff have a good psychological status, can it effectively promote companies to constantly develop.” “Staff’s subject roles are fully played by the modes such as system construction counseling, theoretical learning counseling, theme activity counseling, occupational emotion counseling, hot issue counseling, social responsibility counseling, and cultivation typical counseling.” Help staff build the sense of being respected, sense of safety, sense of happiness, sense of achievement, sense of proud, sense of responsibility, as well as sense of mission, unblock staff psychological counseling channel, and help staff build healthy employment psychology. The construction of corporate staff psychological counseling mechanism promotes the construction and harmonious corporate culture and injects the vitality and energy for the development of companies.

“Corporate culture standardize the daily thinking behavior of staff through advertising and implementing the advanced ideology and value to staff, thus to reach the effect of improving management.” During the planning process of corporate culture, it needs to combine with the current status and characteristics of companies, fully analyze and study the basic constitution and ideology status of staff, do a good job of ideological counseling ahead of time and solve the psychological problems of staff from origin. During the construction of corporate culture, no matter for advertising or implementation stages, we need to adhere to do things and solve problems for staff and strengthen the sense of identity towards companies. Construct a
good psychological counseling mechanism, companies need to effectively focus on staff from culture aspect, adhere to the philosophy of people oriented in construction of corporate culture, and show humanistic care towards staff in corporate culture, and influence and change staff by culture.

4.1 Corporate culture influences the psychology and mode of action of staff, and is the active agent for physical and psychological health of staff

During the process of psychological counseling towards staff, corporate culture plays the role of guider and it is the unique lifestyle or “living style” of group members in companies. It is a composite concept, the unique cultural phenomenon constituted by its values, belief, attitude, symbol, system, manner as well as technology characteristics of an organization, and the considered effective and sharing and commonly abiding basic belief and recognition built and formed by companies for solving survival and development issues. Positive and open corporate culture can enhance team cohesiveness, and it is the active agent for physical and psychological health of corporate staff. The ultimate goal of corporate culture is staff, the philosophy of corporate culture shall be returned back to staff and internalized in staff. Based on the recognition of staff, the long-term dynamic developing corporate culture between companies and staff is gradually formed and fixed. Corporate culture influences the psychology and manner of staff to a certain degree, and meanwhile, the psychology and manner of staff also become one of the manifestation of corporate culture.

4.2 The philosophy of people oriented in construction of corporate culture is the basis for constituting the benign psychological counseling mechanism

For constructing the benign psychological counseling mechanism, companies need to
effectively concern about staff from the aspect of culture. The cultural concern mainly shows in corporate culture’s humanistic care towards staff. Corporate culture concerns about the changes of sense of responsibility and values of staff by the modes of permeation and integration; concerns about the direction of struggle of staff by the mode of target orientation; concerns about the cooperation between staff and companies via the mode of cohesion and debugging.

Constructing the benign psychological counseling mechanism demands companies to adhere to the philosophy of people oriented when constructing corporate culture, to show the humanistic care towards staff in corporate culture, and to influence and change staff by culture. The influences of corporate culture towards staff are shown in various ways. First, companies need an amiable corporate culture, and attract staff to activity concern about corporate culture by the culture charm instead of the teaching style infusing. Second, corporate culture needs to show its desire and determination to help staff realize the life value, focus on the growth of staff, and closely combine with companies and staff to grow mutually.

4.3 Effective staff psychological counseling mechanism produces healthy and positive corporate culture

The good labor relationship needs effective psychological counseling mechanism, while the effective psychological counseling mechanism produces the healthy and positive corporate culture, and healthy and positive corporate culture is beneficial for forming the two-way, dynamic and positive psychological contract between companies and staff, constructing benign psychological counseling mechanism, promoting the establishment of balance between companies and staff. The effective healthy corporate culture can form the more positive and beneficial interaction and
mutually promote the prosperity and development of companies.

4.4 The benign staff psychological counseling mechanism is the necessary condition for constructing harmonious corporate culture

The harmonious corporate culture can make the mind and body of staff be at the pleasant state of balance, maximally motivate the work enthusiasm, subjectivity and creativity of staff, and facilitate staff to play their own personal ability and wisdom and to realize the corporate goals of companies.

The harmonious culture is the soul of the excellent traditional culture of the Chinese nation and the essential why Chinese nation can last for 5,000 years. We advocate “harmonious culture”, and for companies, the basis of “harmonious culture” is the harmony of corporate culture. The development of companies cannot be separated from the construction and penetration of harmonious culture, the establishment of corporate culture not only includes the harmonious colleague relationship, harmonious social relationship, and harmonious relationship between companies and nature, but also includes the harmony of psychology of corporate staff. While the harmony of psychology of staff needs the construction of the positive, benign, and healthy psychological counseling mechanism.

The harmony of companies demands the effective psychological counseling mechanism. Effective psychological counseling mechanism produces the healthy and positive corporate culture, while the healthy and positive corporate culture is also beneficial for the formation of the two-way, dynamic and positive psychological contract, constructing the benign psychological counseling mechanism and promoting the establishment of balance between companies and staff. How the effective
psychological mechanism and healthy corporate culture form the effective interaction is the new subject faced by the construction of modern business management and corporate culture, and it still needs to constantly explore and practice.

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Research on the Quality Evaluation Strategy and Practice of Informatization Teaching in Colleges and Universities

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Abstract

The teaching quality evaluation of informatization teaching in colleges and universities is of great significance to the development of teachers and the improvement of students' comprehensive quality. Judging from the current practice of informatization teaching evaluation in colleges and universities in China, there are still many problems in the evaluation of informatization teaching in colleges and universities: during the organization and implementation of the evaluation, the information acquisition required for formative evaluation in the operation process is more complicated than the conclusive evaluation, which costs much more time and energy. Therefore, it is necessary to propose corresponding strategies according to the actual situation of colleges and universities' informatization teaching evaluation practice, to finally ensure the evaluation of informatization teaching quality can be completed more smoothly and guaranteed both by the quality and quantity.

Keywords: colleges; informatization teaching; evaluation
1 To Strengthen the Evaluation Authority Construction for the
Quality Evaluation of Informatization Teaching in Colleges and
Universities

The practical work of the quality evaluation of informatization teaching in colleges and universities is a complex systematic process including the preparation work before the evaluation, the implementation of evaluation and the feedback of evaluation results. In order to ensure a smooth progress of the quality evaluation of informatization teaching in colleges and universities, the evaluation work must be guided and organized by a special leading organization.

The author believes that colleges and universities should pay attention to the quality evaluation of informatization teaching and establish an independent quality evaluation department for informatization teaching, which will be the highest management main body for the teaching evaluation. In addition, the quality evaluation of informatization teaching is implemented by a two-level management mechanism at school and college. The quality evaluation department of informatization teaching in universities is a leading organization with a working group and an expert group.

The main functions of the school-level leading group are as following: to formulate the objectives, evaluation policies, evaluation systems, the judgment and feedback of evaluation results of colleges and universities in accordance with the objectives of informatization teaching in colleges and universities. The main function of the working group is to guide the development of the informatization teaching quality
evaluation of colleges and universities according to the rating form formulated by the leadership group, and to guide the collection and maintenance of the teaching record information in network platform of the informatization teaching; the exam and analysis of the use of multimedia equipment in schools. The main functions of the expert group are: to examine the informatization teaching situation of each college according to the quality evaluation table of the school, listen to the report of the informatization teaching situation of each college, and communicate with the representatives of teachers, students and teaching administrators of the colleges by many ways, such as symposium, school BBS, E-mail, etc., and then to comprehensively understand the actual situation of informatization teaching in colleges and universities, and to put forward suggestions to the leading group as the basis for the evaluation work of informatization teaching.

The evaluation department of the college is the organization and management institution of the evaluation work of informatization teaching in colleges with main function of conducting the teaching quality evaluation work of informatization teaching in colleges according to the instructions and requirements of the school, to organize teachers, students, teaching managers to carry out the evaluation work of information-based teaching and conduct data collection of various evaluation indicators and submit evaluation reports to the school authorities.

2 To Clarify the Basic Tasks and Implementation Principles of the Quality Evaluation Work of Informatization Teaching in Colleges
and Universities

The basic tasks of quality evaluation of informatization teaching in colleges can be proposed from the connotation of informatization teaching.

Firstly, with the concept of student-centered, that is to say, from the perspective of stimulating the comprehensive development of students, to require the students to achieve progress and success during the process of informatization learning by principal exploration, collaborative learning and teacher-student interaction so that to promote their own quality and ability.

Secondly, teachers are required to understand the problems existing in the teaching from the feedback information of the informatization teaching quality evaluation for teacher's own better development, to timely reflect and improve their teaching activities, and to promote the development of their own teaching level, so that to better improve the teaching quality of informatization teaching in colleges and universities.

Thirdly, from the aspect of the managers of informatization teaching quality in colleges and universities, the managers have to understand the development of informatization teaching in colleges and universities so as to understand and solve the problems existing in teaching management, and to provide more effective support to teachers and students.

To achieve the basic task of the quality evaluation of the informatization teaching in
colleges and universities, teachers, students and teaching administrators are not only required to clarify their own responsibilities in the quality evaluation work of informatization teaching, but also they need to cooperate with each other to complete the quality evaluation work. From the student's perspective, students must learn to self-evaluate. The quality evaluation of informatization teaching in colleges and universities is very difficult to be implemented if separated from the active participation of students by only relying on teachers and teaching administrators. At the same time, the self-evaluation ability of students also requires the correct guidance of the teacher and the support of the teaching administrator. From the perspective of teachers, teachers must firstly have a modern concept of teaching evaluation. As an important role in the quality evaluation of the informatization teaching in colleges and universities, teachers should conduct self-evaluation through frequent self-examination, writing teaching blogs and self-assessment scale. The evaluation of informatization teaching in colleges and universities is no longer a single evaluation of students, nor is it passively accepting the evaluation activities organized by managers. Instead, it should be changed to a positive attitude to pass the teaching evaluation into the process of information-based teaching, to cooperate with each other to form a common evaluation. From the perspective of managers of the informatization teaching, managers should actively and positively participate in the evaluation work of informatization teaching together with teachers and students.

3 Emphasis on the Integration of Teaching Process and Quality Evaluation of Informatization Teaching in Colleges
The quality evaluation of informatization teaching in colleges and universities is a cumbersome and arduous task with many difficulties in implementation. Compared with the traditional teaching evaluation focused on conclusive evaluation, informatization teaching pays more attention to the combination of formative evaluation and conclusive evaluation. The formative evaluation requires the quality evaluation of informatization teaching throughout the entire teaching process. In the formative evaluation, the proportion of evaluation activities in teaching activities should be considered, the time and intensity should be arranged reasonably, and the actual effect of evaluation should be paid attention to, while less attention to the form of evaluation. The teacher's implicit evaluation of students' learning integration, learning attitude, learning interest, interaction ability, and learning style can be observed and recorded. In addition, the evaluation of the quality of informatization teaching in colleges and universities are proposed to advocate new teaching evaluation methods and informatization evaluation methods, and to avoid the unreasonable evaluation methods. Therefore, on the one hand, the teachers should be familiar with the use of various evaluation methods; on the other hand, the teachers should choose different evaluation methods to conduct scientific and reasonable evaluation according to the actual situation of informatization teaching activities.

4 To Implement Comprehensive Evaluation through the Diversified Evaluation Subjects and Evaluation Criteria

The informatization teaching activity in colleges and universities is a systematic
process involving teachers, students, teaching content, teaching environment and other factors. Therefore, in the evaluation of the quality of college education, we should firstly determine the diversified evaluation criteria to evaluate factors affecting the quality of informatization teaching in colleges and universities. Then, we have to determine the evaluation subjects namely who is the evaluation subject. From the perspective of evaluation criteria, the comprehensiveness of informatization teaching evaluation is firstly evaluated in terms of factors such as teachers, students, teaching content, and teaching environment. Then, when evaluating each element, it is necessary to comprehensively consider the factors included in each element. From the perspective of the evaluation subject, the informatization teaching process of colleges and universities mainly involves teachers, students and teaching administrators. Because of their different positions and roles in the teaching process, the level of their understanding about the evaluation indicators is different. If a single evaluation subject is used, the evaluation results will inevitably be biased which may affect the fair and just progress of the evaluation of informatization teaching. So, it is necessary to determination teachers, students and teaching administrators all as evaluation subjects.

5 Emphasis on the Collection and Standardization of Evaluation Information

The collection, collation and analysis of evaluation information is an important part of the quality evaluation of informatization teaching in colleges which should be paid attention to both in the understanding and action of it. The quality evaluation of the
informatization teaching in colleges and universities will be the basis for some decision-making of the informatization teaching in future, so the evaluation must be based on reliable data. In order to obtain first-hand information on informatization teaching activities in colleges and universities, we should strengthen the supervision and evaluation of informatization teaching activities through some new means.

Firstly, to build an information-based teaching classroom broadcast system: the teaching administrator can fully understand the performance of teachers and students in the process of information-based teaching through the recording and broadcasting system, to grasp the teaching situation of the true text, and objectively to evaluate teachers and students.

Secondly, to strengthen the construction of the informatization network teaching platform: the informatization network teaching platform should not only have the function of the realization of the informatization teaching, but also the function of supporting the evaluation of the informatization teaching. The teaching functions of the informatization network teaching platform should include uploading and downloading of teaching resources, interactive communication between teachers and students, personal electronic portfolio, assignment and submission of assignments; support functions for informatization teaching evaluation should include a certain statistics of login times of teachers and students in a period of time, statistics on the number of uploading and downloading teaching resources, statistics on the number of posts posted by teachers and students in the discussion area, teacher layout, revision
assignments, and the number of times students submit jobs on time, information on teachers and students, and E-mail communication statistics, teaching records written by teachers and by students about feelings and experience in learning;

Thirdly, to build a multimedia classroom repair management system, to strengthen the physical environment management of the information-based teaching environment, and to record its impact on information-based teaching. The multimedia classroom repair management system should have the function of multimedia classroom fault reporting and maintenance feedback and the status inquiry function of fault and maintenance in a certain period of time.

Fourthly, to establish an online quality evaluation system for informatization teaching to serve the quality evaluation work of informatization teaching with multiple subjects and multiple standards.

Fifthly, to regularly organize some practical activities, academic activities, skill competitions, etc., and the results of which can be as a reference for students' learning outcomes.

6 To Correctly Treat With the Quality Evaluation Results of Informatization Teaching in Colleges and Universities

The quality evaluation of informatization teaching in colleges and universities is a process of continuous cycle. The results of an informatization teaching quality evaluation will be the reference and starting point of the next informatization teaching
evaluation with the development of informatization teaching activities. The purpose of quality evaluation of informatization teaching is no longer to pay too much attention to the quality of teachers' teaching, but to enable teachers to develop better. Also at the aspect of student, evaluations focus not only on the merits of students' academic performance, but also on students' comprehensive growth situation. The results of the evaluation of the quality of informatization teaching in colleges and universities should be promptly fed back to teachers and students. Teachers can find out the problems existing in their teaching based on the feedback information of the evaluation, so as to solve problems and improve their teaching ability and level by participating in relevant training activities of the college or self-learning methods for the further informatization teaching. Students can also reflect on their informatization learning based on the evaluation results and improve the inadequacies in time to better coordinate with the teachers to carry out the informatization teaching activities.

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Better or Unchanged: How Quality of Photos Affects Evaluations of Your Experiences?

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Abstract
We investigated whether the quality of photos will exert a strong influence on the post-evaluations of the experiences? Through two experiments, we found that the influence does exist. When people reactivate memories through photos, photos can work in the following ways. Firstly, photos can make the memory fragments which are related to photos’ content more prominent. Secondly, photos’ content can replace the already obscured original memories to a certain extent. When the quality of photos is high, people tend to accept the memories being reprocessed, driven by photos, thus improving the evaluations of the original experiences. When the quality of the photos is low, people subconsciously reject the information that photos convey and still insist on the judgment of the original experiences. The above scenarios apply when people still have an initial impression on their experiences.

Keywords: The quality of photos; Experiences; Enjoyment; Evaluations

1. Introduction
When people endeavor to look for a variety of beautiful backgrounds, smile or pose in front of the camera, it is obvious that an exquisite photo may be born. A better subject, more light, more professional equipment…People unconsciously work hard to improve the quality of photos. However, except for appreciation, sharing photos to social circles, showing off or
increasing the joy of the moment, have people ever thought what better photos can exactly bring to them?

As a tool for congealing time (Bruno, 2003), photos are often expected to help people recall their original experiences afterwards. However, this is not always the case. Memories may be blurred over time, and when photos are used to relive experiences, photos may prompt people to reprocess their memories, leaving the experiences out of original appearance.

In this paper, through two experiments, we predict and prove that: when the memories are vague and the impressions of the original experiences still exist, the high-quality photos can prompt people to make more positive evaluations of experiences; while the low-quality photos do not change people's evaluations of experiences. The self-enhancement plays a critical role in this process. Our focus is on uncovering a novel and interesting phenomenon, which fills a gap in the literature on the field of photos’ attributes.

As a relatively novel topic, researches about photos are quite limited, and most of them focus on the effect of photos on memories’ accuracy. This research contributes to extent researches on how photos influence evaluations of experiences by revealing the hidden value of an unexplored factor, the quality of photos. Considering the popularity of photo-based websites and applications, as well as people’s habits of uploading photos, this paper has significant managerial implications. For example, online travel websites and applications might increase their positive amount of WOM by encouraging consumers to upload high-quality photos and give reviews.

2. Literature Review and Predictions

Photos are defined to be products that select, shape, and construct physical elements to reflect
the psychology of the photographer (Crawshaw & Urry, 1997). Photos can capture the fleeting moments, so people often use photos to record information and life events (Chalfen, 1998; Harrison, 2002), i.e., recording the current experiences. Experiences are collection of things that people have seen, done, or encountered. In fact, although the photos can record the experience, the content recorded in the photo does not necessarily fit the real one. First of all, as a carrier of visual information, photos often miss information such as hearing, touch, smell and taste. Even the visual information in the experiences, the photos can only capture a portion, and sometimes what they record is different from people’s normal perspective. Secondly, researches on the photo-taking-impairment effect suggest that the act of taking photos may weaken the memories of the object being photographed. As time goes by, memories become unstable, and some information about the original experiences begins to be missing. Under these circumstances, people need to depend on external clues and tools such as photos to help them reactivate and remember what happened before. It is precisely in this process that the memories of experiences in the human mind have been distorted.

The memories fragmentation hypothesis argues that experiences are stored as fragments in the brain, and that a memory fragment traces the perception of a segment. It is notable that photos can provide a semantic context that makes related ideas and images more accessible to people's minds. Thus, in the presence of photos, people are more likely to recall the experience segments which are related to photos’ content. Furthermore, photos can prompt people to reprocess and encode information based on photos’ content. Research on the misinformation effect confirms the enormous influence that photos can exert on people's memories—people rework memories based on photos’ content, and even fictionalize
memories that do not belong to them, and considered the fabricated photos’ content as what they have actually experienced.

Putting these together, we know that photos, obviously, will influence people's evaluations of experiences. We predict that quality—the important attribute of the photos—will inevitably be involved in this process, thus influencing people's evaluations of experiences. Photos of high quality can present more beautiful scenery, more vivid stories and more positive experiences. When people process information based on high-quality photos’ content, compared with low-quality photos, the memories highlighted or reworked will be more positive.

Therefore, we predict that:

**H1:** Compared with low-quality photos, when people use high-quality photos to relive their experiences, people's post evaluations of original experiences can be more positive.

Self-enhancement believes that people tend to selectively emphasize and exaggerate self-positive aspects. Self-enhancing biases motivate people to experience positive emotions and avoid being involved in negative feelings. Conway also suggests that in the process of retrieval, people usually modify various aspects of their memories to maintain or enhance an ideal current self.

This also means while people still have impressions of original experiences, facing high-quality photos, people are more likely to undergo memory processing, driven by photos, and thus improve the evaluations of original experience. And when the quality of the photos is not ideal, people subconsciously refuse to accept the photo information and insist on the original experience judgment. This led to our second hypothesis:
**H2**: When using photos to relive experiences, high-quality photos can enhance people's positive evaluations on experiences, while low-quality photos will not affect people's evaluations of experiences.

We conducted two studies to test our assumptions. Both the study 1 and study 2 verified hypothesis 1. In the second experiment, the principle mechanism behind hypothesis 1, that is, hypothesis 2 is further explored and verified.

3. **STUDY ONE**

We designed study 1 to examine the association between the quality of photos and enjoyment of previous experiences. We showed participants a first-person perspective video of real-life experience in London and asked them to imagine actually experiencing the events as if they were the protagonists in the video.

3.1 **Pretest**

We selected five scenes from the video and each scene corresponds to several photos. These photos can present scenes. Then, we recruited 59 participants (47% female, mean age = 26.7) to assess the quality of photos. These photos were chosen according to three principles of classic photography materials *New York Institute of Photography* to choose a good photo: a. Know the subject; b. Draw attention to subject; c. Simplify.

The results show that the quality of the different photos in each scene is significantly different (see appendix). We picked out photos with the highest and lowest average scores in each scene separately as props in our following formal experiment. We ensured that the photos of high quality (vs. low) selected were recognized by most of people.

3.2 **Methods**
105 participants were randomly assigned to one of two conditions (high-quality photos vs. low-quality photos). Participants were first asked to watch a first-person perspective of a street walk in London (about 1 second and 23 seconds) and imagine they were actually experiencing what the video was showing. In the high-quality (vs. low-quality) photos condition, we showed the participants a set of high-quality (vs. low-quality) photos, which presented the same scenes they had experienced in the previous video.

After that, we replicated the experimental operations of Barasch (Alixandra Barasch et al. 2017) by asking the participants how much they enjoyed this experience. In addition, as another indicator of how much individuals enjoyed their experience, we asked them “To what extent would you recommend visiting the same place where you have experienced to your friends?” (from 1 = “Not at all” to 7 =“Extremely”).

As a check of the quality manipulation, participants were required to assess the quality of photos (from 1 = “Extremely low” to 7 =“Extremely high”). Besides, we asked participants some basic information.

3.3 Results

**Manipulation check of quality of photos:** As we expected, the quality scores that participants rated significantly varied between two conditions (high-quality: M =5.255, SD=1.4810; low-quality: M =3.060, SD=1.6953; F(1,103)=50.112, p=0.000).

**Enjoyment:** Consistent with our prediction, an ANOVA revealed a significant effect of quality of photos on enjoyment (high-quality: M =5.255, SD=1.4810; low-quality: M =3.060, SD=1.6953; F(1,105)=50.112, p=.000), which suggested high-quality photos was associated with higher enjoyment relative to low-quality photos. We also found a marginally significant
effect of photos’ quality on the other indicator, recommendation (B = 0.600, SE = 0.318, t(104) = 1.885, p = .062), indicating people prefer to recommend the experience to a friend when the photos they have taken were of high quality.

3.4 Discussion

Study 1 have provided evidence that the quality of photos has influence on evaluations of experiences (H1). However, we can't make sure whether high-quality photos improve people's evaluations or low-quality photos reduce people's evaluations or both of them can make sense. We will further test our findings in study 2 by examining a different context.

4. Study Two

In study 2, we used another first-person perspective video of real-life experience. Compared with study 1, we made three improvements. First, we selected a video with richer scenes in Thailand, and added photo-taking animation and sound effects to the video, making it more likely to create an immersive feeling. Second, we added another condition where the participants needed to evaluate the experience without being shown any photos. This added condition was designed to examine how the quality of photos affected evaluations of experience. Third, we adopted a different scale to measure the enjoyment.

4.1 Pretest

We recruited 54 participants (42.6% female, mean age = 25.5) to assess the photos we planned to adopt in study 2 (see appendix). The procedures were the same as study 1 and we finally picked out 6 groups of photos for different scenes.

4.2 Methods

201 (65% female, mean age = 23.9) individuals participated in study 2 online or offline and
they were randomly assigned to one of three conditions (high-quality photos vs. low-quality photos vs. no-photo). The experimental procedures and manipulation in the high-quality photos condition and low-quality photos condition are the same as study 1. In the no-photo condition, participants were asked to report their enjoyment scores while they were not given any photos about the experience.

Four items assessed enjoyment of the traveling experience: the extent to which participants liked the experience (1 = “disliked it very much” and 7 = “liked it very much”) and the extent to which the experience was fun, enjoyable, and good (1 = “not at all” and 7 = “a great deal”).

4.3 Results

Manipulation check of the quality of photos: The results showed that photos’ quality significantly varied between two conditions (high-quality: M =5.981, SD=0.7794; low-quality: M =2.119, SD=1.1351; F(1,117)=440.195, p=.000), proving that the quality control was successful.

Enjoyment: We estimated a ANOVA with the manipulation of quality of photos as the only independent variable. Participants reported higher enjoyment in high-quality photos condition (high-quality: M =5.7308, SD=0.90728) than reported enjoyment in low-quality photos condition (low-quality: M=5.1493, SD=1.22479, p=0.015) and no-photo condition (no-photo: M =5.2031, SD=1.12940, p=0.035). There is no significant difference in participants’ enjoyment between low-quality photos condition and no-photo condition (p=1.00, see figure1).
**Figure 1.** Enjoyment between three conditions in Study 2. Error bars represent ±1 SE.

### 4.4 Discussion

Study 2 replicates the conclusions of study 1 and verifies H2, indicating that high-quality photos can improve people's positive evaluations of experiences, while low-quality photos fail and have no effect. As we mentioned before, self-enhancement biases make people willing to accept the information transmitted by high-quality photos, and thus rework memories based on high-quality photos’ content. Nevertheless, the information passed by the low-quality photos is ignored.

### 5. General Discussion

Experiences are worth to be remembered, and photos can serve as eternal recorder and valuable retrieval cues to relive the experiences. It does matter to understand whether a photo will exert an influence on experiences and how this happens. Empirical evidence from two experiments confirms that when people use photos to relive their experiences, under the motivation of self-enhancement, the influence of high-quality photos is accepted, and thus the
evaluations of post-event experiences is improved; while the influence of low-quality photos is rejected.

Most of the previous researches focused on the impact of photo taking on memories accuracy or enjoyment of current experiences, not the post evaluations of original experiences; or the photo/photographing behavior is treated as a unified whole, meaning that the researches on the photo attributes are obviously missing. Our findings are the first to document how the quality of photos can alter post original evaluations of experiences.

Also, our paper have some limitation, we need more studies to explore the moderating and mediating effect of some factors, or explore boundaries of effect.

5.1 Substantive Implications

The present research offers several novel insights for consumer research and provides a theoretical basis for certain business practices. Photo-sharing applications like Instagram, LOFTER, Nice and webs such as Mafengwo.com can take the following as references.

a. Encourage consumers to take photos during consumption or sightseeing

Since we already have known that high quality photos can enhance the evaluations of the original experience when reviewing experiences, thus it is reasonable to speculate that people will be triggered to experience again. In case of noisy or out of some reasons, some restaurants or attractions forbid people from taking photos. However, now we are confident to say it is not wise. Creating photo-taking atmosphere, planning a popular photo-taking point or providing photo props for customers will benefits enterprises.

b. Encourage people to upload and share high-quality photos to social network applications or websites
With the advanced development and enormous functions of social platforms, photos are convenient to upload and easy to review. When people are revisiting high photos of their own, they often get a sense of satisfaction and pleasure. If a website or application can become the database to store high-quality photos or a medium for revisiting photos, people will unconsciously establish a connection with the website or application and add stickiness to the site. That's why we say that websites should help people upload photos more easily and encourage people to upload high-quality photos through a variety of tools.

**c. Use technology such as LBS to increase the likelihood of people reviewing photos**

The documents show that people have great enthusiasm for taking photos but rarely revisit photos. Many platforms, such as Qzone, now have recognized the value of reviewing photos. We believe that platforms like Meituan.com, Ctrip.com, Mafengwo.com, which use photos as an important carrier to attract customers can integrate various technologies such as LBS to help consumers to review their high-quality photos. In this way, the customer's desire to re-experience is stimulated and secondary consumption is promoted.

**5.2 Future Research**

In the remainder of this section, we suggest directions for future research.

**a. The person related to photos vs. photo viewers**

This paper cares about the impact of the quality of photos on certain person related to photos. But we know that, sometimes when people browse photos taken by someone else, especially those tourist photos or food photos posted on the website, they may be impressed by photos’ content, and choose to experience the same thing. Therefore, future research perspective can be transformed to study what impact may early exposure of other people’ photos (friends or
relative, idols, Internet celebrity) with different quality on the consumer's following experience.

b. The interval time

One reason for our effect is the dilution of people's memories. In this case, when people look back at the photos taken at the time, the photos are used as a cue, the process of people's memories reorganization or distortion is affected by photos of different quality. Therefore, we guess that the longer the elapsed time after the experience, the greater the effect which different quality photos can play. When the interval time is long enough, people can't rely on the impression of the original experience, low-quality photos can reduce people's evaluations of the original experience. Future research can be considered to explore this.

c. Timing

Whether the timing of photos entering people's recall will lead to different results? We suspect that if people have been exposed to other memories cues or have already started to recall before they see photos, the first occurrence may have taken over the mind, thus the impact of photo quality on the memories processing process may be weakened or dissipate.

d. Mix of different quality photos or the number of photos

In our experiments, participants were shown photos of single quality, i.e., all of high quality or all of low quality. What will happen if different quality photos are mixed? What will happen if the proportion of photos of different quality changes? These questions are worthy of further exploration in future experiments.

References
1. Lux, M., Kogler, M., & Fabro, M. D. (2010). Why did you take this photo: a study on user intentions in digital photo productions. Acm Workshop on Social. ACM.


Appendix

In both pretests, we found significant differences between scores of each photo in one group.

(see Table 1. & Table 2.)

### Table 1. Descriptive Statistics Results of Pretest in Study 1

<table>
<thead>
<tr>
<th>Photo groups of study 1 (N=57)</th>
<th>High-quality photos</th>
<th>Medium-quality photos (N=57)</th>
<th>Low-quality photos (N=57)</th>
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<tbody>
<tr>
<td>1-1</td>
<td>5.75</td>
<td>4.23</td>
<td>2.37</td>
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<tr>
<td>1-2</td>
<td>5.88</td>
<td>3.63</td>
<td>3.09</td>
</tr>
<tr>
<td>1-3</td>
<td>5.23</td>
<td>3.79</td>
<td>2.23</td>
</tr>
<tr>
<td>1-4</td>
<td>5.93</td>
<td>3.63</td>
<td>2.16</td>
</tr>
<tr>
<td>1-5</td>
<td>5.77</td>
<td>3.45</td>
<td>2.26</td>
</tr>
</tbody>
</table>

### Table 2. Descriptive Statistics Results of Pretest in Study 2

<table>
<thead>
<tr>
<th>Photo groups of study 2 (N=54)</th>
<th>High-quality photos</th>
<th>Medium-quality photos (N=54)</th>
<th>Low-quality photos (N=54)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-1</td>
<td>6.31</td>
<td>4.76</td>
<td>2.76</td>
</tr>
<tr>
<td>2-2</td>
<td>5.98</td>
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<td>2-3</td>
<td>6.17</td>
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</tr>
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<td>2-6</td>
<td>6.50</td>
<td>4.59</td>
<td>2.41</td>
</tr>
</tbody>
</table>

Zhang Qiong

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Abstract

"New normal" refers to the comprehensive transformation and upgrading of the country's economy and society. The reform of adult continuing education should be actively integrated and adapted to this "new normal". Through the collation of the thought of participating scholars in the first academic forum of China Adult Education Association, it is found that the transformation of macroscopic background and microscopic field has an important influence on the development of adult continuing education in China, and has important enlightenment to the reform and development of adult continuing education in the future. Based on the new normal, the development trend of adult Continuing education in China will effectively broaden the vision of the reform and development of adult continuing education in China.

Keywords: new normal; adult continuing education; transformation

Since the speed of change is as rapid as racing, reality is sometimes like a kaleidoscope that has lost control, and if we look at the speed of such change with a new perspective,
many phenomena that seem sudden and incomprehensible at the moment will become less difficult. [1] because the acceleration of change has not only hit industrial countries, but has also become a powerful force, deep inside our personal lives, forcing us to play new roles that may be extremely upsetting for us as a psychopath ". Alvin Toffler's description is a good view of today's real world, how can our adult continuing education adapt to this rapid change? Especially in the context of the new normal, where will continuing adult education go? To this end, in April 2015, the first Academic forum of the China Adult Education Association, on the theme of "The reform and development of adult continuing education under the background of new normality", was held in Nanchang, with the aim of deepening the study of adult continuing education and promoting the sustainable development of adult continuing education in the context of the new normal. Through the collation of the views of the participants, we hope that we can probe into the future development of adult continuing education and explore the law of the development of adult continuing education.

I. A summary of the views on the development of adult continuing education based on the new normal background (i) based on the macroscopic background, this paper probes into the way of the reform of adult continuing education "The new normal" is one of the important key words of the new idea of central governance. In May 2014, General Secretary Xi Jinping proposed a major strategy for "the new normal of economic development". Turning to the new normal of China's economic development, General Secretary Xi Jinping stressed in particular the need to pay more attention to strengthening education and improving the quality of human capital, and to scientific
and technological progress and comprehensive innovation. It can be seen that the "new normal" is not only reflected in the new normal of economic development, but also reflected in the party's 18 major, the CPC Central Committee put forward the overall construction of a well-off society, the overall deepening of reform, the overall promotion of the rule of law, the overall strict administration of the party after the development of all aspects

II. The new normal for all-round transformation and upgrading. This requires that the reform of our adult continuing education should be actively integrated and adapted to this "new normal" at present and in the coming period. 1. The path to the reform of adult continuing education based on a political macro background. Zhu Xinfa, former president and consultant of the China Adult Education Association, stressed in the thematic report of "The reform and development of adult continuing education under the" four Comprehensive "perspectives: adult continuing educators discuss the new normal of economic development and the work of adult continuing education under the background of the" four comprehensive "strategic layout of the CPC Central Committee. President Zhu focused on the initial understanding of the "four comprehensive" and the focus that adult educators should pay attention to, stressing that adult continuing education should start from three action points: (1) demand-oriented, improve the adult continuing education system, and strive to meet the needs of the learning-oriented society, the needs of the new normal economic development, The demand of building a socialist country ruled by law, the construction of the party, especially the need of ideological construction; (2) to improve the quality of education with the focus on the
development of adult continuing education; (3) to combine the combination of school-
enterprise and teaching and research (educational and training institutions and scientific
research institutions) as a breakthrough to innovate the talent training model Cultivate
applied talents and technical skills and innovative talents in three industries. 2. The road
to continuing educational reform for adults based on information technology
background. Aiming at the new situation of the development of network education,
Zhang Shaogang, Deputy Secretary of the party committee of the National Open
University, analyzes the multiple social changes under the background of the new
normal society under the theme report of "Open online education under the background
of new normal", and holds that under the new normal social background, open online
education presents six development orientation: first, in the context , The modernization
of educational governance needs to open up educational think tanks, to provide advice
for large and small decisions, and second, the Network Society and non-network society
gradually integrate into the "Internet +" era, third, the liberation of popular ideas, policy
restrictions, democratic political advocacy, advanced technology dissemination,
economic expansion and many other driving forces to drive the opening of education,
With the opening of learning, the learner's consumption concept has gradually shifted
from functional and brand consumption to participatory and experiential consumption,
which requires open online education to innovate the teaching mode of O2O. Four, the
new social normality and the new connotation of educational elements bring about the
new state of education, the value of education can be created through integration, or
through specialized production, The rise of online vocational education and continuing
education; five, the principle of network cooperation has led to the opening of education and teaching, but in the process of adult continuing education reform, content and curriculum is the core; In six, MOOC influenced educational reform with the cultural characteristics of the curriculum, and adult continuing educators could implement innovative projects for the training of graduate students in adult education based on the network.

III. The road of adult continuing education reform based on the background of economic development. Professor Wu Zhaoyun, vice president of Jiangxi University of Finance and Economics, based on the theme of "Adapting to the new normal of economic development and promoting the new development of continuing education in China", analyzes the new requirements of the new normal of social and economic development for continuing education from the perspective of economics and management, and points out that China has become the second largest economy in the world. A large number of high-end innovative talents are needed, and continuing education, as an important way to continuously develop human resources, alleviate structural contradictions in employment and promote the construction of a learning-oriented society, has a huge functional space. He believes that under the new normal economic development, China's adult continuing education work should have the "new normal" thinking, seize new opportunities, seek new breakthroughs, and strive to form a "speed change, structural optimization, power transformation" development trend. The so-called "speed change" refers to the "service for the Whole life learning" for the purpose of transforming the concept of continuing education, from the past pursuit of
extensive scale expansion to deepen the construction of project connotation. The so-called "structural optimization" refers to the development of regional economy based on service, the full mobilization of social forces multi-channel school. The so-called "power transformation" refers to the multi-channel solution to the bottleneck of continuing education. The first is to strengthen national legislation to create a good rule of law environment for the healthy development of continuing education; The second is to strengthen the construction of the teaching staff, to lead the quality of the characteristics of brand projects, but to broaden the horizons, strengthen international exchanges and cooperation, and promote the construction of network information engineering technology. Jenny, a famous American sociology professor In his "Sociology of Education", H. Balantan points out that "there is an interaction between educational organizations and the environment." The environment includes everything that revolves around the organization and in some way affects the organization, which includes constantly updating the technological environment that develops and affects the functioning of the system, influencing the political environment of the system through legal control, the economic environment in which the system is financed, the surrounding communities and their mainstream attitudes, values reflected in social movements or fashions, Norms and social changes, demographic changes and so on. For each organization, the critical environment changes over time. But the importance of the environment will not change "[2]. Environment is the dependence and catalyst of the development and change of social organization, and the adult Continuing education institution is no exception. It relies on the environment to gain a lot of
information and resources, and will change its own development as the environment changes. The original meaning of "new normal" is a kind of "different from the old quality", the trend, irreversible development state. Based on the political, scientific and technological and economic trend of the country in the new period, the three experts analyzed the multiple opportunities and challenges faced by adult continuing education, and discussed the future reform of adult continuing education based on the political macroscopic background.

(Ii) Focusing on the microscopic field and exploring the future of adult continuing education 1. The road to the sustainable development of adult higher education. The sustainable development of adult higher continuing education is the inherent requirement of social development under the new normal. Many representatives have made in-depth exchanges on the current situation, major problems, development situation and existing challenges of adult higher education, focusing on the main topics: (1) The development of enrollment and planning for adult higher education, to meet the requirements of the new normal of economic and social development, through the top level design at the national level, Constructing a new system of adult higher education; (2) on strengthening the self-connotation construction of adult higher education, it presents a diversified view. For example, repositioning its function from a single academic education to the coordinated development of academic education and non-academic education; Changing the goal of personnel training, further improving the training level, opening up the channels for the training of graduate education, and paying more attention to the cultivation of all kinds of middle and high-end talents,
expanding the space for running schools, insisting on the expansion of school space to rural areas, enterprises, communities and elderly groups, and innovating the operating mechanism, To reform a single talent training system and enrollment examination system in colleges and universities, and to establish a new mechanism for cultivating innovative talents; Accelerate its informationization construction, establish a multi-network-based Distance education Network Service platform and Learning Resource base, build a variety of educational resources to share the overpass, strengthen international exchanges and cooperation, in order to promote reform and development; (3) with regard to the quality assurance of adult higher education, we should further improve the brand characteristic project and adopt the support of funds, policies and teachers, To ensure the development of characteristic courses and improve the quality of adult higher education. Adult education refers to the whole organized educational process. Different forms of adult education will enable social adults to obtain knowledge or skills to improve, and then achieve the overall development of human beings. Adult higher education is an important subsystem in the adult Continuing education system, which not only plays an important role in the function of popularizing higher education in society, but also helps to promote the internal self-improvement of adult continuing education system. Of course, many delegates agreed that the current change in the concept of development of adult higher education will take time, the transformation of the entire adult higher education system needs to be further explored and practiced, the quality of adult higher education needs more policy and financial support, the transformation and development of adult higher education needs strong
theoretical support and protection. 2. The path of balanced development of the region for adult continuing education. The regional development of adult Continuing education bears a glorious and arduous historical mission to realize regional education equity under the background of the new normal. Some representatives, combined with the development of regional adult education, analyzed the economic development situation of the region under the background of the new normal, and pointed out that adult continuing education, as an important part of regional social development, accompanied by the process of regional economic revitalization, also stood at the historical starting point of the new normal. Some people also believe that adult education in less developed areas should be more than the developed regions, starting from the following three points: (1) The development of learning channels to promote the continuous growth of human resources, (2) adhere to the local people's livelihood, pay attention to vulnerable groups, promote the continuous improvement of regional labor employment rate; (3) Set up the thought of lifelong learning and integrate into the trend of the times to build a lifelong education system. Many representatives jointly pointed out that regional adult education should take the initiative to play the role of the main force of lifelong education, serve the changing learning needs and learning styles of the vast number of social members in the region, provide more learning opportunities for members of society, constantly innovate the mode and development mode of running schools, and promote the fair and just development of education. Judging from the development degree of adult Continuing education in China, there is indeed an unbalanced development, mainly manifested in: the development of the
continuing education system for adults in the region and urban and rural areas is uneven, the investment of adult continuing education is uneven, and the facilities of adult continuing educational institutions are not balanced. Of course, these are mainly related to regional economic development and differences in the level of cultural development, as well as the deviation of education policy orientation. At present, under the background of the new normal, the regional adult Continuing education is in a good period of transformation and reform and development, and the challenges it faces are gradually transformed into development space. To this end, adult continuing education institutions need to emancipate the mind, change ideas, based on existing resources and future development space, and seek ways to reform and innovate. 3. The road of innovative development of community adult education. The outline of the national medium and long term education reform and Development Plan (2010-2020) puts forward that "we should carry out urban and rural community education extensively, speed up the construction of all kinds of learning organizations, and basically form a learning society of national Learning and lifelong learning". Community Education is an educational system in which all members of the community and various community forces participate, and the development of community education is not only the need of the all-round development of human beings, but also the need of the new normal social construction. Therefore, some people also believe that in the process of community education development, we should pay more attention to rural community education, encourage the broad participation of civil society, make community education become an inclusive form of education for the whole social group, and transform autonomous
learning and joint learning into the mainstream way of popular learning. Although the development trend of community education is good, there are some difficulties and problems that cannot be ignored, the low participation of residents and the lack of vitality of popular learning are the main problems that plague the development of community education. Therefore, we should vigorously advocate the active cultivation of "community learning community", not only to construct the theory system of Community education in theory, to perfect the construction of learning society, but also to constantly try to explore the effective form of learning organization in the community.

The characteristics of Community learning community are consistent with the characteristics of community education, and the community learning community can be better developed through the strategies of value leadership, clear cultivation of objectives, optimization of grassroots community structure and identification of incentives.

Adult education is designed to promote the full development of the human person, with a broad social foundation and mass base, including geriatric education, women's education, education for persons with disabilities and education of other vulnerable groups in society. Community adult education can stimulate the vitality and vitality of the life of the elderly, women and vulnerable groups in the community, and enhance the quality and ability of the residents of the community. It is based on the "community" organization, with its flexible and diverse types of education to take the initiative to carry out life-long education for members of society, to meet the various educational and cultural needs of the majority of community residents, can indeed contribute to
community building.

4. The road to the development of the discipline of adult education. Under the background of the new normal, how will the subject of adult education develop? The heads of master's degree disciplines in adult education in dozens of colleges and universities in the country gathered to discuss the road to future development, among which the main topics of discussion on the development of subject construction were:

(1) The definition of the boundaries of the subject of adult education. It was suggested that the attributes of "continuing", "higher continuation", "New normal" and "harmonious society" should be added before "adult education", which needed special clarification for the development of disciplines; It was also pointed out that adult education was positioned as "the sum of educational content beyond the age of 18", that borders were too broad and should be focused, and (2) on the reform of adult education personnel training. It was pointed out that the new normal broadened the new horizon of adult education personnel training and provided a new opportunity for the training of graduate students in adult education. The new normal of adult education graduate students should try to highlight the characteristics and specialties of personnel training, emphasize the meticulous and fine training of talents, focus on building the high quality and high quality of personnel training, and strive to promote the rationality and sustainability of personnel training; (3) The construction of teaching staff in adult education subjects. Many representatives pointed out that the teaching staff of adult education is more special, the number of change and part-time teachers are more, the tutor team is unstable, there are problems such as insufficient overall quantity, aging
age, unreasonable academic structure and low professional counterparts rate. Therefore, it is urgent to build a team of mentors with reasonable structure and excellent professional quality, which is an important condition for developing postgraduate education of adult education, ensuring and improving the quality of postgraduate education, and promoting the sustainable development of degree points. From the 1930s Rosenstock put forward the concept of adult education to date, has gone through more than 80 of years of history. During this period, with the vigorous development of adult education activities around the world, the subject of adult education has also been accumulated and sublimated in practice and speculation. Compared with other types of discipline construction practice, the subject construction of adult education has its particularity, and it is necessary to seriously examine the training of talents and the construction of the teaching staff. In a word, although the development of adult education in China is tortuous and difficult, its development has an indispensable side. Scholars have paid great enthusiasm and efforts to construct the subject system of adult education, which is the inevitable development logic of adult education subject itself from the beginning to maturity. At present, the subject system of adult education in our country is still in the exploration and growth period of construction and perfection, which needs to be based on the practical soil of adult continuing education, and strengthen the research on the construction of adult education theory system, so as to promote the sustainable development of adult education discipline.

II. Reflections on the development trend of adult continuing education in China under the background of new normal Shakespeare once said: "The solemn sea produces
dragons and whales salamander, shallow river only some for Ding butcher delicious fish and shrimp." "The new economic normal traction of all aspects of society, such as the" solemn sea "environment to expand the boundaries of adult learning content, pressing for the rise of a learning society and human resources power for adult continuing education to bring opportunities and challenges. In order to get rid of the existing predicament and realize the transformation in the real sense, the adult continuing education of our country needs to be integrated into the new situation, find a good orientation and seek new development in the open education system.

(I) Synergy: Keeping the transformation of adult continuing education synchronized with the changes of the external environment The synergy theory created by Harken, a professor at Stuttgart University, is a new subject gradually formed and developed on the basis of multidisciplinary research in the 70′s, and it is an important branch theory of system science. The "self-organizing principle" described in the Synergy theory explains that "under certain external energy flow, information flow and material flow input, the system will form a new time, space or functional ordered structure through the synergy between a large number of subsystems" [3]. This shows that if any system lacks communication with the outside environment, it will itself be isolated or closed, and eventually appear a "dead silence" scene. China’s adult Continuing education system is no exception, it is necessary to establish a cooperative relationship through the continuous exchange of material, information and energy with the external environment, in order to maintain its vitality and develop in the direction of order. The transformation of adult continuing education should be coordinated with the
political context. "The International Commission for the Development of education emphasizes the fact that political action plays a very important role in the field of education" [4]. From a political point of view, any major change in the political system will inevitably directly call for a new type of political culture and political concept adapted to the changed political system, requiring the subject of social practice —— adults to change their original political ideas and political pursuits as soon as possible, Taking on the historical responsibility of the construction of a new round of political system, this also puts forward the requirements of reform and development for adult education, and drives it to make a corresponding change as soon as possible "]5]. After the 18, the new central leading collective took the initiative to create a "new normal", initially aimed at the economic sector, but the new economic normal must be in line with the new political normal. In the new political situation, in the new political concept, put forward the "people-oriented" new concept of governance, pay more attention to the issue of people's livelihood, endow the status of the people with a new connotation. Adult continuing education needs to change the concept immediately, do a good job in their role positioning, pay more attention to the all-round development of people, improve the livelihood.

(II) 2. The transformation of adult continuing education should be commensurate with the scientific and technological context. In today's world, with rapid advances in science and technology, modern information technologies such as the Internet, cloud computing and big data have profoundly changed the way human thinking, production, life and learning, and profoundly demonstrated the prospects for world development. Gary King,
a sociology professor at Harvard University, said: "This is a revolution, and huge data resources have led to a process of quantification in all areas, which will begin in all areas, whether academia, business or government" [6]. "[7] Victor Maire Schoenberg, a professor at the Internet Institute at Oxford University, points out that" information technology cannot be indisputable as a basis for progress, but the changes we face today are not on a technical level ". The current change is a change in the organization. It is the organizations that make better use of big data to adapt to learning that determine the future of adult continuing education. The reason why MOOC has dominated the headlines in recent years has attracted attention because it has popularized education and made it easy for learners to access all kinds of information. One of the constituent elements of MOOC is that it produces big data, tells learners what is most efficient, and reveals puzzles that could not be discovered in the past. Big Data promotes the combination of education and technology, and also brings opportunities and challenges to the reform and development of adult continuing education. 3. The transformation of adult continuing education should be integrated with the economic situation. Education is an important symbol of the progress of human civilization, but also an important source of power for social and economic development. With the advent of the era of knowledge economy, the future of mankind and the prosperity of the country are more dependent on education than ever before. The most basic factor of economic development is people, while the improvement of human quality depends on education. From this level, education is the engine of the economy and the driving force and fulcrum of economic development and transformation. Adult Continuing education is
an important part of the education system, is a subsystem of the social system, it is bound to be inextricably linked with the social economy. As an economic term, the new normal economy is a kind of economic development mode with shift growth rate, structural upgrading and innovation-driven, which is the macroscopic control of China's economic development during the period of strategic opportunity, which points out the direction and innovative ideas for the future development of China's economy. The adjustment of economic structure will inevitably bring about the change of employment structure. Adult Continuing education is closely related to employment and entrepreneurship, can effectively solve the contradiction of employment structure, orderly promotion of urbanization construction, and help to narrow the gap between urban and rural areas. Therefore, the new normal adult continuing education must take the service social development as the goal, closely combine the market demand, train the high-quality laborers, promote the improvement of the social livelihood, so that the broad masses of the people will enjoy the dividends of economic development.

(ii) COUPLING: Realization of various types of coordinated development of adult Continuing education system "any system is an organic whole, it is not a mechanical combination of the various parts or simply adds up, and the overall function of the system is the nature of the elements that are not in isolation," [8]. The elements in the system do not exist in isolation, each element in the system is in a certain position, play a specific role. Elements are interrelated and constitute an indivisible whole. Adult education itself is a huge structure system, involving objects, levels, forms, content, management system and many other aspects. In the field of adult education research,
the widely agreed view is that adult education is basically divided into adult academic education (including adult secondary education, adult higher education, etc.), adult non-academic education (including rural literacy education, job training, continuing education, community education, etc.), adult self-study examinations and social forces running schools. To realize the coupling development of education type in adult Continuing education system is the precondition of building educational power and human resource power. The coupling between theory and practice. "Adult education research is generally divided into theoretical research and practical research. Theory and practice are the wings of the development of adult Education "[9]. However, in the real situation, the situation of adult education research is not so ideal, there is a disconnect between theory and practice, which needs to seek to achieve a balanced state through dialogue and interaction between the two. On the one hand, the theory of adult continuing education should be rooted in the soil of practice, explore the knowledge of adult education, improve the subject of adult education, examine the problem of adult education, on the other hand, the practice of adult continuing education should take theoretical research as the direction of action, summarize the Basic Law of adult education in practice Then explain and guide the problems existing in the process of practice. At present, although the practice of adult continuing education is closer to adult learners and close to adult education activities, there are also some shortcomings, such as lack of systematicness and generality, although the theory of adult Continuing education has the depth and width in a broader sense, but it will also be subject to the difference of specific circumstances, and there are one-sidedness, metaphysical and
superior problems. Nowadays, there are multiple problems that plague the development of adult education, such as how to construct the lifelong education system, how to solve the problem of fairness of adult education opportunities, how to improve the quality of adult education, and so on, all of which need the coupling development of theory and practice and joint exploration. Coupling of various types of adult education type functions. At present, the social post system in our country is very complicated, which requires different types of talents to carry out these posts, and the education and training of these talents will inevitably require all kinds of adult continuing education to develop, give full play to their respective functions, and promote the overall development of adult continuing education with local coupling. Nowadays, many colleges and universities are keen to develop higher education, while ignoring non-academic education which can embody the characteristics of adult education, the development of adult continuing education seems to be overshadowed today. Therefore, it is necessary to break the closed school system, realize the two-way interaction between schools, training departments and enterprises, communities and other organizations, stimulate the development vitality of adult continuing education, establish a two-way participatory school system, promote school-running institutions to penetrate into enterprises and communities, strengthen cooperation between schools and enterprises, and To maximize the development and use of adult education and adult learning resources, improve the quality of adult education, to create good social benefits. Coupling of the development of regional adult education. In order to solve the problem of equity in the development of adult continuing education, it is necessary to actively
realize the balanced development of regional adult education. The degree of
development of flexible and diverse types of adult education is closely related to
regional economic development and policy orientation. Based on the huge and complex
situation of adult education system, the branches of adult education in various regions
are very different in development ability, classification guiding standard and subject
system, and there are differences in the degree of development, focus and function
orientation of regional adult education as a whole. Therefore, in order to shorten the
gap and seek collaborative development, the regions where adult continuing education
is developing well, such as Beijing, Shanghai and other regions, need to share
successful experiences and educational resources. The regions with lagging adult
education development need to combine the characteristics of economic development
in the region, draw on excellent experience, actively try to develop various types of
adult education, enhance the quality of social members, promote regional economic
development, and then increase the investment of regional adult education, so repeated
circulation, will achieve the balanced development of adult education as far as possible.

(iii) Transformation: promoting comprehensive and profound changes in adult
continuing education Orelia Pessy, founder and development of the Roman club, has
pointed out sharply that "any development and progress is worthless if it does not at the
same time lead to progress in moral, social, political and human behavior" [10]. Social
transformation is a comprehensive and profound change involving political, economic,
cultural and other fields. The fundamental purpose of adult continuing education is to
realize the all-round development of human beings and the overall progress of society,
and to show and improve people's value in an all-round way. The change of social transformation not only provides the guarantee and support of material, human and financial resources for the development of adult continuing education in our country, but also puts forward more extensive and multidimensional requirements for the development of adult continuing education. Social transformation shows the inevitability of the transformation of adult continuing education. The transformation of adult continuing education can be advanced from the following three areas:

The functional transformation of adult continuing education. Under the social background of "new normal", "improving People's livelihood" has become one of the core of national social governance, and the government function has begun to change from economic construction type to public service type. Adult education is an important element in the development of society as a whole and an important force for economic development and social progress. Under the current social background, adult Continuing education should shift from serving the economic transformation service to serving the social transformation, giving full play to its function of promoting the all-round development of human beings and serving the society. In the setting of the content of continuing education for adults, we should provide targeted and characteristic educational services according to the needs of different adult groups, integrate all kinds of educational resources, make use of digital platform, carry out all kinds of new vocational training and re-employment training, and provide relatively fair educational opportunities for all kinds of social groups in the giving of adult education opportunities. Coordinate urban and rural regional development. The
structural transformation of adult continuing education. The new normal society requires the improvement of the overall quality of the people, and the continuing education of adults is aimed at serving the lifelong education and lifelong learning of human beings, and the structure of adult education must be optimized. It should actively promote the development of adult higher education, reform the form of education and professional structure, adjust and optimize the independent establishment of adult colleges and universities; it should vigorously develop modern distance education, make use of modern distance education technology, improve the quality of traditional rtvu and correspondence education; Third, we should vigorously develop community adult education, build a learning community, improve the quality of Community personnel and quality of life; four, vigorously carry out job training, improve labor productivity and work efficiency; five, accelerate the development of adult education in less developed areas, and contribute to the improvement of the quality of residents in the western region or rural areas. The transformation of adult continuing education mechanisms. An important mission of adult continuing education is to build a learning society. This process requires adult education to get rid of bondage, introduce open market mechanism, constantly reform the traditional operating mechanism, and promote the transformation of adult continuing education. The development of adult continuing education is faced with the shortage of running funds, the difficulties of enrollment, the unreasonable setting of professional courses and the jumbled teaching staff, and it is urgent to implement open schools, raise funds for educational development through market operation, and constantly adjust professional settings to
market demand, absorb local students, and train all kinds of talents for regional economic development. It is helpful to shorten the development gap of adult continuing education in the region, realize education equity, establish the teacher management system adapted to the characteristics of market economy, and optimize the teaching staff.

References


Human Resource Sharing of Independent Directors and Corporate Operation Efficiency from Listed Logistics Companies in China

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Abstract

Under the circumstances of sharing economy, few studies have shown how human resource sharing of senior management affects corporate operation efficiency. This study attempts to explore the influence of human resource sharing of independent directors on corporate operation efficiency in China’s listed logistics companies. Based on sharing characteristics of human resources for independent directors of listed logistics companies, by analyzing the relationship between senior human resources such as independent directors’ vigor, skills and knowledge shared by listed logistics companies and corporate operation efficiency, the research shows that human resource sharing of independent directors’ vigor has positive influence on corporate operation efficiency, and that sharing of independent directors with human resources including government skills, academic skills or various vocational skills has significantly positive effect on corporate operation efficiency. It is helpful for listed logistics companies to select suitable independent directors in order to improve the operation efficiency.
Keywords: Listed logistics companies; Independent directors; Human resource sharing; Operation efficiency

1. Introduction

Independent directors are senior human resources with sharing nature in listed companies. As the scarce human resource of senior management from external sharing, independent directors can affect the operation, management and decision-making of listed companies by using the skills and knowledge obtained in other organizations, which then affects operation efficiency of listed companies. This study attempts to analyze the influence of human resource sharing of independent directors on corporate operating efficiency in China’s listed logistics companies, and reveals the influencing rules, in order to provide decision-making reference for human resources sharing of independent directors from listed companies in logistics industry.

2. Research design

2.1 Variable selection

2.1.1 Operation efficiency

In the current studies, the financial accounting index is mostly applied as corporate performance index, like choosing pre-tax profit, return on equity, earnings per share or Tobin Q value as performance indicators of listed companies, which can’t measure well the companies’ multi-input and multi-output operation efficiency.
Therefore, DEA method is used to obtain the relationship between the comprehensive efficiency of listed companies in logistics industry and human resources sharing of independent directors, and the comprehensive efficiency of corporate operation in listed logistics companies is represented by CRSTE.

2.1.2 Explanatory variable

Human resource sharing variable of independent directors’ vigor is measured by the age of independent directors, which is divided into three types. Firstly, the proportion of independent directors under 45 is represented by AGEUNDER45. Secondly, the proportion of those aged 45 to 55 is represented by AGE45T55. Thirdly, the proportion of those aged 55 and above is represented by AGEABOVE55.

In human resource sharing variables of independent directors’ skills, the variable of independent directors’ government skills is defined as the proportion of independent directors coming or retired from government department and its affiliates, which is represented by GOVSKILLS; Human resource variable of independent directors’ scientific research and academic skills is defined as the proportion of those coming or retired from academic institutions, which is represented by ACASKILLS; The human resource variable of independent directors’ executive skills is defined as the proportion of current or retired top management personnel from other companies, which is represented by EXESKILLS; Some independent directors may engage in various professionals, first in education or academic institutions, and go to government departments, then go to the enterprises, being independent directors of
listed companies. As for the proportion of those in such multi-career situation called independent directors with human resource of complicated skills, the variable is represented by COMSKILLS.

Regarding human resource sharing variable of independent directors’ knowledge, this study adopts the suggestions of Gang Wei et al. [1]: the percent of independent directors with Philosophy Doctor’s degree is expressed as PHDPERCENT; the percent of ones with Master’s degree or being doctoral students is represented by MASPERCENT; the percent of ones with Bachelor’s degree or being postgraduates is expressed as BACPERCENT; The percent of ones with other qualifications is indicated by OTHPERCENT.

2.1.3 Control variable

Board size, company size and board independence are chosen as control variables in this study. Board size is defined as the number of directors of the board, which is represented by BOASIZE. This study selects company size as control variable and uses the companies’ natural logarithm of total assets to represent company size, which is represented by COMSIZE. Board independence is defined as the percent of independent directors in the board, which is represented by BOAINDEPENDENCE.

2.2 Sample and data source

In this study, the data originate from 2012 annual reports of listed companies in Shanghai and Shenzhen, and 46 listed logistics companies with main business in logistics industry have been screened out to be the sample according to main business and operating scope of listed companies. After eliminating abnormal listed
companies, 40 listed companies in logistics industry have been determined as the research object. The data on corporate operation efficiency are from comprehensive operation efficiency of China’s listed logistics companies proposed by Linbang Fan [2]. The data of explanatory variable come from annual report of listed logistics companies that are selected manually.

3. Data analysis and results

3.1 Descriptive statistics and analysis of correlation

SPSS17.0 is used to conduct descriptive statistical analysis of the data, and the results are shown in Table 1.

Table 1. Descriptive statistics of sample companies

<table>
<thead>
<tr>
<th>Items</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporate operation efficiency (CRSTE)</td>
<td>0.684</td>
<td>1.000</td>
<td>0.909</td>
<td>0.092</td>
</tr>
<tr>
<td>Vigor of independent directors</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion under45 (AGEUNDER45)</td>
<td>0.000</td>
<td>0.750</td>
<td>0.156</td>
<td>0.230</td>
</tr>
<tr>
<td>Proportion aged 45 to 55 (AGE45T55)</td>
<td>0.000</td>
<td>1.000</td>
<td>0.383</td>
<td>0.275</td>
</tr>
<tr>
<td>Aged 55 and above (AGEABOVE55)</td>
<td>0.000</td>
<td>1.000</td>
<td>0.461</td>
<td>0.284</td>
</tr>
<tr>
<td>Skills of independent directors</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government skills (GOVSKILLS)</td>
<td>0.000</td>
<td>0.667</td>
<td>0.155</td>
<td>0.192</td>
</tr>
<tr>
<td>Academic skills (ACASKILLS)</td>
<td>0.000</td>
<td>1.000</td>
<td>0.409</td>
<td>0.329</td>
</tr>
<tr>
<td>Executive skills (EXESKILLS)</td>
<td>0.000</td>
<td>1.000</td>
<td>0.319</td>
<td>0.308</td>
</tr>
<tr>
<td>Complicated skills (COMSKILLS)</td>
<td>0.000</td>
<td>1.000</td>
<td>0.117</td>
<td>0.219</td>
</tr>
<tr>
<td>Knowledge of independent directors</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent of Doctors (PHDPERCENT)</td>
<td>0.000</td>
<td>1.000</td>
<td>0.376</td>
<td>0.317</td>
</tr>
<tr>
<td>Percent of Masters (MASPERCENT)</td>
<td>0.000</td>
<td>1.000</td>
<td>0.268</td>
<td>0.264</td>
</tr>
<tr>
<td>Percent of Bachelors (BACPERCENT)</td>
<td>0.000</td>
<td>1.000</td>
<td>0.259</td>
<td>0.287</td>
</tr>
<tr>
<td>Percent of others (OTHPERCENT)</td>
<td>0.000</td>
<td>0.500</td>
<td>0.097</td>
<td>0.148</td>
</tr>
<tr>
<td>Control variables</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Board independence (BOAINDEPENDENCE)</td>
<td>0.300</td>
<td>0.500</td>
<td>0.347</td>
<td>0.035</td>
</tr>
<tr>
<td>Board size (BOASIZE)</td>
<td>6.000</td>
<td>15.000</td>
<td>9.775</td>
<td>1.775</td>
</tr>
<tr>
<td>Company size (COMSIZE)</td>
<td>4.633</td>
<td>6.974</td>
<td>5.769</td>
<td>0.570</td>
</tr>
</tbody>
</table>
3.2 Analysis of regression and results

3.2.1 Human resource sharing of independent directors’ knowledge or vigor and corporate operation efficiency

Firstly, this study analyzes the influence of human resource sharing about independent directors’ knowledge or vigor on corporate operation efficiency, which is tested by using the following model:

\[
CRSTE = \alpha + \beta_1 PHDPERCENT + \beta_2 MASPERCENT + \beta_3 BACPERCENT + \beta_4 OTPERCENT + \beta_5 AGEUNDER45 + \beta_6 AG45T55 + \beta_7 BOAINDEIENDENCE + \beta_8 BOASIZE + \beta_9 COMSIZE + \epsilon
\]

Then, explanatory variable is analyzed by correlation coefficient, and the analysis of correlation indicates no serious problem on multi-collinearity between explanatory variables. Through the above model, the analysis of regression is carried out by using the least squares, and the results are shown as in Model 1 of Table 2.

| Table 2. Influence of education, age and professional background on corporate operation efficiency |
|----------------------------------|----------------------------------|----------------------------------|
|                                  | Model 1                          | Model 2                          |
| CRSTE                           | CRSTE                            | CRSTE                            |
| \( \alpha \)                    | 0.291                            | 0.222                            |
| PHDPERCENT                      | 0.040                            | GOVSKILLS                        |
| MASPERCENT                      | 0.034                            | ACASKILLS                        |
| BACPERCENT                      | -0.081                           | EXESKILLS                        |
| OTPERCENT                       | -0.013                           | COMSKILLS                        |
| AGEUNDER45                      | -1.101                           | BOAINDEIENDENCE                  |
| AGE45T55                        | 0.196**                          | BOASIZE                          |
| AGEABOVE55                      | 0.234**                          | COMSIZE                          |
| BOAINDEIENDENCE                 | 0.586                            | Adj R^2                          |
| BOASIZE                         | 0.099                            | 0.790                            |
| COMSIZE                         | -0.047                           |                                  |
| dj R^2                          | 0.649                            |                                  |

Notes: ***and ** indicate the significant levels of 0.01 and 0.05 respectively.
As is shown from the results via analysis of regression in Model 1 of Table 2, human resource sharing of independent directors’ knowledge has no significant relationship with operation efficiency of listed logistics companies, suggesting that independent directors’ education has no obvious effect on corporate operation efficiency, but human resources sharing of independent directors’ vigor has positive impact on operation efficiency of the companies.

3.2.2 Human resource sharing of independent directors’ skills and corporate operation efficiency

The influence of human resource sharing about independent directors’ skills on corporate operation efficiency can be tested by using the following model:

\[ CRSTE = \alpha + \beta_{GOVSKILLS} + \beta_{ACASKILLS} + \beta_{EXESKILLS} + \beta_{COMSKILLS} + \beta_{BOAINDENDENCE} + \beta_{BOASIZE} + \beta_{COMSIZE} + \varepsilon \]

Through the above model, the analysis of regression is carried out by adopting the least square method, and the results are shown as in Model 2 of Table 2. It can be seen from the model that human resource sharing of independent directors with government skills has significantly positive impact on corporate operation efficiency, and that human resource sharing of those with scientific research and academic skills has significantly positive influence on corporate operation efficiency, and human resource sharing of those with various vocational skills has positive effect on operation efficiency of the company.
4. Conclusion

This study starts from the problem on how to select independent directors of emerging listed companies in logistics industry, analyzing the influencing relation between key factors of human resource sharing of hiring independent directors and corporate operation efficiency for listed companies in China’s logistics industry. From the above analysis, it is obvious that human resources sharing of independent directors’ vigor has positive impact on corporate operation efficiency, and that sharing of independent directors with human resources including government skills, scientific research and academic skills or a variety of vocational skills has significantly positive impact on corporate operation efficiency. The results show that the sharing should focus on human resource of independent directors’ vigor, government skills or scientific research and academic skills or a variety of complicated professional skills when hiring independent directors, in order to improve the operation efficiency of listed logistics companies in China.

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References


The Effects of Perceived Selling Behavior on Consumer Revisiting Intentions: the Moderating Role of Patronage Motivations and Frequencies

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Abstract

Based on the different trading habits and backgrounds of consumers in the process of commodity trading, consumers perceive different sales behaviors. Sales personnel adopt sales strategies to increase sales, prompt consumers to buy and perceive high-pressure sales behaviors. An objective evaluation of satisfaction with sales staff, affecting whether or not to visit store again. This paper attempts to explore the impact of consumer perceived sales behavior on the willingness of revisiting store by using enter store motivation and patronage frequency as the moderator variables. It mainly uses SPSS 23 and SmartPLS 3.2.8 as statistical software tools for data processing, establishes structural equation models and moderator effect tests, verifies hypotheses and further explores them.

Keywords: Perceived sales behavior; willingness of revisiting; Enter store motivation; Patronage frequency; partial least squares structural equation model
1. Introduction

The ever-changing development of the commodity era, in order to increase sales, salespeople use various means to increase sales. In the process of selling goods between salesperson and consumer by persuading consumer behavior. Consumers will also feel the express and implied in the marketing process. The consumer is prompted to purchase the product as communication and requirement and at the same time tapping the consumer demand. According to consumer perception theory and persuasion knowledge model. In order to increase sales to meet the maximization of profits use different levels of aggressive or indicative sales behavior when customers perceive different sales methods will generate shopping pressure and objective evaluation of sales staff satisfaction, affecting the willingness to patronize the store. This paper mainly discusses the relationship between perceived sales behavior and shopping pressure and sales staff satisfaction. Whether the degree of influence on the willingness to patronize is positive or negative, or the influence relationship is not significant. The motivation to enter the store and the frequency of visits have a regulatory effect on the entire model. It affects consumers' purchasing decisions and also has important guiding significance for business decision-making.

2. Literature review and research hypothesis

On the basis of researching and sorting out a large number of relevant literatures, the paper sorts and summarizes the theories related to consumer perceived sales behavior.
The purpose to accurately explore and classify the perceived sales behavior dimensions and determine the theoretical model that influences consumers' patronage.

In consumer perception theory, product packaging, understanding of brand awareness and salesperson service attitudes influence consumer perception. Oshavsky (1973) believes that in the consumer purchase process, purchasing decisions are influenced in many ways, including the behavior and methods of sales personnel and whether consumer purchase and quantity. Sales staff are a central force directly affecting consumer purchasing decisions (Bursk 2006). Short-term gains from high-pressure sales tactics can lead to rapid sales, using pressure strategies to harm customers, salespeople, and retailers (Chu et al. 1995). Some scholars such as the Chu believe that the pressure sales strategy creates a false sense of urgency or deliberately exaggerates the advantages of the product. D'Astous (2000) on the results of retail shopper research shows that among the 38 sales incentives cited by shoppers, high-pressure sales are rated as the most annoying sales method and perceived sales behavior can be divided into perceived aggressive sales and indicative sales.

For perceived aggressive sales (Zboja, JJ, Clark, RA, & Haytko, DL, 2016), consumers experience mandatory information that may tend to adopt a defender strategy that is generally characterized by resolute resistance, confrontation, punishment, neglect, avoidance, language attack, rejection, escape. For perceived indicative sales, consumers may be more inclined to adopt a searcher strategy when they are guided to purchase: mainly for inquiry, reward, positive feedback, friendly conversation, obedience, and establishment of personal contact. Of course, there is also a possibility. At the same
time, there is a defender strategy and a searcher strategy. The consumer and the
salesperson play a game of bargaining until a party makes a concession.

Shopping pressure follows the Jones (2006) study to point out that shopping behavior
does not put pressure on consumers, causing stress when the external environment
stimulates him. Mick and Fournier (1998) show that giving up can be a very powerful
way to avoid.

The sales staff can meet the customer's demand level, which will affect the customer's
satisfaction with the sales staff. Since the concept was proposed, there have been many
studies on measurement mechanisms and influencing factors. Through empirical
research, satisfaction has a positive impact on customer behavior through service
quality.

The willingness of consumers to patronize the same store is to maintain the relationship
with the merchants and the potential consumption trends. Andreassen and Lervik (1999)
suggest that the attractiveness of the product's performance characteristics and the
continued suitability and satisfaction of the same brand of goods in the future are the
main source of consumer re-appreciation. The willingness to purchase can be seen in
consumer loyalty. Finkelstein (2004) defines impression management as people pay
attention to their own image from the perspective of their minds and they want to
manage and control others to form an impression of themselves. A good impression
will deepen consumers' willingness to enter the store again.

The Persuasion Knowledge Model (PKM) was first proposed by Friestad and Wright
(1994). It is mainly used to deal with the persuasion strategy of sales staff in the process
of sales. Through the accumulation of experience, the subtle influence is formed in the mind and finally, the personal knowledge of their own purpose is achieved. Persuading Knowledge Model as a means of responding to the persuasion behavior of sales staff, exploring the consumer's response to sales staff and a new perspective on the interaction between them. Persuading Knowledge Model to pave the way for the consumer-performing sales behavior follow-up model while revealing: consumer response to different persuasive strategies.

Persuasive information can be seen as an active sales behavior with a focus on products that can be motivated to be targeted in a credible and indicative manner. Aggressive sales information is more likely to cause negative reactions using mandatory and manipulative arguments to force consumption purchases. Bursk (2006) argues that consumers can reduce satisfaction with sales staff by convincing them to buy unwanted things. Campbell and Kirmani (2000) argue that when salespeople use expertise to persuade consumers then evaluate salespeople even if they perceived indicate sales and have a positive buying impact. Consumer perception of sales behavior causes shopping pressure and the greater perceived impact, then the greater shopping pressure, so the following hypothesis are made:

H1a: Consumer perception of aggressive sales has a positive impact on shopping pressure.

H2a: Consumer perception of indicative sales has a positive impact on shopping pressure.
Satisfaction with sales staff, reflecting sales staff capabilities and product expertise, persuasion knowledge while increasing sales and consumers are willing to visit again. Based on the persuasive knowledge model, Kirmani and Campbell (2004) pointed out in the study that there are two different persuasive roles in the persuasion plot. Consumers generally do not approve of merchants recommending pre-specified products, which will bring negative evaluation results to sales personnel. Another situation is sales personnel act as agents to help consumers find suitable products to play an indicative role, although the sales method does not cause consumers to be bored, but still not satisfied and feels that the sales staff is not sincere, so this paper proposes the following hypothesis:

H1b: Consumer perception of aggressive sales has a negative impact on satisfaction with sales staff.

H2b: Consumer perception of indicative sales has a negative impact on satisfaction with sales staff.

The frequency of patronage refers to the number of times consumers visit the same store, and whether they often enter the store can directly reflect the satisfaction of consumers with store and goods. Albrecht, Hattula, and Lehmann (2017) pointed out in the study that the higher frequency of consumers entering a store, the more reason to determine the consumer's willingness to purchase. The strategic adjustment of the shopping mall decoration environment and other forms, patronage frequency is a good test of the moderator mode. In summary, when consumers purchase goods in a physical store, patronage frequency can be used as a response indicator to react indirectly to the
willingness to purchase.

Patronage frequency has a moderator effect on perceived aggressive sales and satisfaction with sales staff. Patronage frequency is the frequency at which consumers enter the store. Consumers who frequent the store are shop frequent customers. From the perspective of relationship marketing, consumers and sales personnel level of familiarity has deepened, and some of them have established good relations. When the consumers who frequent the store perceive the aggressive sales behavior, the satisfaction of the salesperson changes and thus it has a moderator effect.

H3: Patronage frequency has a moderator effect on perceived aggressive sales and satisfaction with sales staff.

Perceived shopping pressure increases consumer perceived risk and reduces perceived quality and shopping plan awareness, ultimately reducing customer satisfaction. Shopping pressure and perceived sales behavior are generated at the same time, the sales staff will be evaluated whether or not to decide to continue consumption after the impact.

Shopping pressure is the impact of perception on attitudes and consumer perception of stress has a negative impact on satisfaction (Duhachek and Kelting 2009). In the shopping environment, consumers will have an impact on sales staff measures and performance. For example: satisfaction and loyalty (Jones et al. 2006). Under the premise of purchasing goods, consumers with psychological pressure increase their negative satisfaction with sales personnel.

H4a: Shopping pressure has a negative impact on satisfaction with sales staff.
Lunardo and Mbengue (2009) pointed out in the study that the direction of entering a store determines the consumer's goal. Holmqvist and Lunardo (2015) argue that entering the market can be a psychologically specific response when consumers buy goods. Later, some scholars specifically divided the motivation of entering the store and believed that motivation and life are necessary to connect. Albrecht and Hattula (2017) extended on this basis, such as adventure shopping, impulsive purchase and so on.

The motivation to enter the store can moderator consumer shopping pressure and satisfaction with sales staff. Baker and Wakefield (2012) found in the study that consumers with a clear motivation to enter the store had different effects on satisfaction with salespeople.

H5: Entry store motivation has a moderator effect on shopping pressure and satisfaction with sales staff.

Aylott and Mitchell (1998) found that consumers are more likely to give up buying when they are under shopping pressure. Moschis (2007) pointed out that consumers refused to buy goods when they felt high-pressure shopping instructions.

H4b: Shopping pressure has a negative impact on the willingness of revisiting.

Moschis (2007) argues that consumer satisfaction can systematically influence avoidance behavior. According to the "Matthew effect", if the higher satisfaction that more people enter the store will attract other people to visit. All of them may develop into customers with extremely high loyalty to the brand and will affect other people to become potential purchases.
H6: Satisfaction with sales staff has a positive impact on the willingness of revisiting.

The research model is shown below.

![Research model diagram](image)

**Figure 1. Research model diagram**

3. Method

It is mainly described in detail through three aspects: variable definition and measurement, survey design, and partial least squares structural equation model.

3.1 Variable definition and measurement

Because of many scholars have used the above variables in the literature, this paper is based on the existing literature and is appropriately modified according to the actual research situation to form the items required for this research.

Table 1. Construct item list

<table>
<thead>
<tr>
<th>Construct</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enter store motivation</td>
<td>Which of the following options best describes why you entered the store?</td>
</tr>
<tr>
<td>Patronage frequency</td>
<td>I often visit this shop.</td>
</tr>
<tr>
<td></td>
<td>I am a frequent visitor to this store.</td>
</tr>
<tr>
<td>Perception of aggressive sales</td>
<td>I can feel that the sales staff put pressure on me during the sales process to make me buy.</td>
</tr>
<tr>
<td></td>
<td>The salesperson tried to make a purchase decision before I really thought about buying it.</td>
</tr>
<tr>
<td></td>
<td>The salesperson tried to make a purchase decision before I fully understood my needs and answered my doubts.</td>
</tr>
<tr>
<td></td>
<td>I feel that the salesperson is trying to guide me to make a purchase decision.</td>
</tr>
<tr>
<td>Perception of indicative sales</td>
<td>When I show interest in a product, the salesperson constantly recommends another product to me.</td>
</tr>
<tr>
<td></td>
<td>I feel the pressure from the salesperson to let me buy the products he recommends, instead of buying what I originally wanted.</td>
</tr>
<tr>
<td></td>
<td>The salesperson is more interested in selling the products he recommends to me than selling what I want.</td>
</tr>
<tr>
<td>Shopping pressure</td>
<td>I feel a little nervous when shopping at this store.</td>
</tr>
<tr>
<td></td>
<td>I feel a little uncomfortable when shopping at this store.</td>
</tr>
<tr>
<td></td>
<td>I feel a little busy when shopping at this store.</td>
</tr>
<tr>
<td></td>
<td>I feel a little scared when shopping at this store.</td>
</tr>
<tr>
<td></td>
<td>I feel a little in a hurry when shopping at this store.</td>
</tr>
<tr>
<td></td>
<td>I feel a little burden when shopping at this store.</td>
</tr>
<tr>
<td>Satisfaction with sales staff</td>
<td>I am satisfied with the sales staff in the store.</td>
</tr>
<tr>
<td></td>
<td>My interaction with the sales staff is enjoyable.</td>
</tr>
<tr>
<td></td>
<td>I have a good interaction with the sales staff.</td>
</tr>
<tr>
<td>Willingness of revisiting</td>
<td>I will still visit this store in the future.</td>
</tr>
<tr>
<td></td>
<td>I am willing to continue shopping at the store if necessary.</td>
</tr>
</tbody>
</table>

3.2 Survey design

The survey design is as far as possible to allow respondents to objectively and accurately select according to their actual situation. To ensure that the entire survey results are true and reliable. According to the number of items in this research questionnaire, the minimum number of samples required for this survey is 300.
Use the questionnaire star platform to create an electronic questionnaire, distribute it to classmates, family members, and friends through online surveys. Then forward it to other group chats. In short, it will gradually accumulate in the form of “snowballing”.

In the end, 341 copies of the questionnaire were collected, and there were 12 errors in the inconsistency and 329 in the effective questionnaire. The effective rate of the questionnaire was 96.48%.

3.3 Partial least squares structural equation model

Questionnaire data analysis is based on partial least squares (PLS), which finds a linear regression model by casting predictors and observed variables into a new space. PLS can be used to fit several corresponding variables in a single model. The PLS research goal is predictive-oriented and based on the number of variances. Moreover, each latent variable is a linear combination of observed variables. The relationship between variables is divided into two aspects, the reactivity index, and the formative index. Research inference can maximize the overall predictive power. Overall distribution of sample data is highly elastic. In general, partial least squares are accurate and good as a modeling tool.

3.4 Date Analyzing

This part of the research mainly uses statistical software SPSS, SmartPLS as a tool for data analysis, structural equation model analysis from two aspects of the measurement model and structural model. Measurement model including reliability analysis, validity analysis, confirmatory factor analysis. A structural model including the fit effect test,
hypothesis test, moderator test and multiple analysis methods to process the data.

### 3.4.1 Descriptive statistical analysis

Before conducting data analysis, the descriptive statistical analysis of the respondent's personal data is first carried out. The specific results are as follows:

**Table 2. Descriptive statistical analysis table**

<table>
<thead>
<tr>
<th>Item</th>
<th>Category</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>male</td>
<td>135</td>
<td>41.03%</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>194</td>
<td>58.97%</td>
</tr>
<tr>
<td>Age</td>
<td>18-30</td>
<td>208</td>
<td>63.22%</td>
</tr>
<tr>
<td></td>
<td>31-40</td>
<td>55</td>
<td>16.72%</td>
</tr>
<tr>
<td></td>
<td>41-50</td>
<td>35</td>
<td>10.64%</td>
</tr>
<tr>
<td></td>
<td>51 or more</td>
<td>31</td>
<td>9.42%</td>
</tr>
<tr>
<td>Education level</td>
<td>Junior high school</td>
<td>28</td>
<td>8.51%</td>
</tr>
<tr>
<td></td>
<td>High school</td>
<td>40</td>
<td>12.16%</td>
</tr>
<tr>
<td></td>
<td>Undergraduate</td>
<td>214</td>
<td>65.05%</td>
</tr>
<tr>
<td></td>
<td>Postgraduate and above</td>
<td>47</td>
<td>14.29%</td>
</tr>
<tr>
<td>Career</td>
<td>student</td>
<td>176</td>
<td>53.5%</td>
</tr>
<tr>
<td></td>
<td>Government or institution</td>
<td>53</td>
<td>16.11%</td>
</tr>
<tr>
<td></td>
<td>Corporate staff</td>
<td>46</td>
<td>13.98%</td>
</tr>
<tr>
<td></td>
<td>Individual private owner</td>
<td>27</td>
<td>8.21%</td>
</tr>
<tr>
<td></td>
<td>Freelancer</td>
<td>27</td>
<td>8.21%</td>
</tr>
<tr>
<td>monthly income</td>
<td>3000 or less</td>
<td>186</td>
<td>56.53%</td>
</tr>
<tr>
<td></td>
<td>3001-5000</td>
<td>77</td>
<td>23.4%</td>
</tr>
<tr>
<td></td>
<td>5001-8000</td>
<td>47</td>
<td>14.29%</td>
</tr>
<tr>
<td></td>
<td>8000 or more</td>
<td>19</td>
<td>5.78%</td>
</tr>
</tbody>
</table>

### 3.4.2 Measurement model

The structural equation model is divided into a measurement model and a structural model. According to the results of the following table, the Cronbach's α coefficient value of each variable is greater than 0.8. The CR values are all greater than 0.6, indicating that the variables are ideally construct and the overall scale is highly reliable.
This paper is based on the literature of foreign marketing and the item itself is obtained according to the maturity scale. Some of the measurement items have been used repeatedly by many scholars and have been correctly translated and revised during the research process to explain the contents of the item is very effective.

Average Variance Extracted (AVE) uses different measurement methods to measure different constructs. The value should satisfy AVE>0.5, and the variable AVE value in the table is all greater than 0.5, indicating that the whole scale has good convergence efficiency.

Discriminate validity is the correlation between different constructs is low, the diagonal value is $\sqrt{\text{AVE}}$, most of the variables are related and the $\sqrt{\text{AVE}}$ of each row is greater than the correlation coefficient of the same row, indicating discriminate validity is good and the whole model is suitable for further discussion.

### Table 3. Reliability and Validity Analysis Table

<table>
<thead>
<tr>
<th></th>
<th>$\alpha$</th>
<th>CR</th>
<th>AVE</th>
<th>mean</th>
<th>St.d</th>
<th>AB</th>
<th>AC</th>
<th>AD</th>
<th>AE</th>
<th>AF</th>
<th>AG</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB</td>
<td>.951</td>
<td>.976</td>
<td>.953</td>
<td>3.825</td>
<td>1.187</td>
<td>.976</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AC</td>
<td>.821</td>
<td>.881</td>
<td>.650</td>
<td>4.186</td>
<td>.680</td>
<td>.340</td>
<td>.806</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AD</td>
<td>.804</td>
<td>.884</td>
<td>.720</td>
<td>4.257</td>
<td>.680</td>
<td>-.235</td>
<td>.372</td>
<td>.848</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AE</td>
<td>.842</td>
<td>.881</td>
<td>.554</td>
<td>3.530</td>
<td>.884</td>
<td>-.039</td>
<td>.468</td>
<td>.568</td>
<td>.744</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AF</td>
<td>.954</td>
<td>.971</td>
<td>.917</td>
<td>3.772</td>
<td>1.026</td>
<td>.439</td>
<td>.005</td>
<td>-.393</td>
<td>.406</td>
<td>.957</td>
<td></td>
</tr>
<tr>
<td>AG</td>
<td>.927</td>
<td>.965</td>
<td>.932</td>
<td>4.029</td>
<td>.941</td>
<td>.429</td>
<td>.017</td>
<td>-.294</td>
<td>-.366</td>
<td>.830</td>
<td>.965</td>
</tr>
</tbody>
</table>

### 3.4.3 Confirmatory factor analysis

The measurement model refers to the confirmatory factor analysis (CFA), also known as principal component analysis which tests whether the theoretical relationship between factors and variables is consistent. AA--AG is a latent variable and AA01--AG21 is an observed variable. The factor loading values displayed by each variable are
greater than 0.4, indicating that the entire model performs well in terms of explanatory power.

Table 4. Confirmatory Factor Analysis Table

<table>
<thead>
<tr>
<th>variable</th>
<th>Item</th>
<th>Factor load</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motivation (AA)</td>
<td>AA01</td>
<td>1.000</td>
</tr>
<tr>
<td>Frequency (AB)</td>
<td>AB02</td>
<td>.976</td>
</tr>
<tr>
<td></td>
<td>AB03</td>
<td>.977</td>
</tr>
<tr>
<td>Aggressive (AC)</td>
<td>AC04</td>
<td>.815</td>
</tr>
<tr>
<td></td>
<td>AC05</td>
<td>.863</td>
</tr>
<tr>
<td></td>
<td>AC06</td>
<td>.815</td>
</tr>
<tr>
<td></td>
<td>AC07</td>
<td>.725</td>
</tr>
<tr>
<td>Indicative (AD)</td>
<td>AD08</td>
<td>.740</td>
</tr>
<tr>
<td></td>
<td>AD09</td>
<td>.906</td>
</tr>
<tr>
<td></td>
<td>AD10</td>
<td>.889</td>
</tr>
<tr>
<td>Shopping pressure (AE)</td>
<td>AE11</td>
<td>.683</td>
</tr>
<tr>
<td></td>
<td>AE12</td>
<td>.795</td>
</tr>
<tr>
<td></td>
<td>AE13</td>
<td>.772</td>
</tr>
<tr>
<td></td>
<td>AE14</td>
<td>.716</td>
</tr>
<tr>
<td></td>
<td>AE15</td>
<td>.758</td>
</tr>
<tr>
<td></td>
<td>AE16</td>
<td>.737</td>
</tr>
<tr>
<td>Satisfaction with sales staff (AF)</td>
<td>AF17</td>
<td>.951</td>
</tr>
<tr>
<td></td>
<td>AF18</td>
<td>.966</td>
</tr>
<tr>
<td></td>
<td>AF19</td>
<td>.956</td>
</tr>
<tr>
<td>Desire of revisiting (AG)</td>
<td>AG20</td>
<td>.969</td>
</tr>
<tr>
<td></td>
<td>AG21</td>
<td>.962</td>
</tr>
</tbody>
</table>

3.4.4 Structural model

Structural equation modeling is a statistical method. Based on the covariance matrix, the relationship between variables can be found. The relationship between several latent variables can be processed simultaneously and multiple theoretical models can be
evaluated and compared. This study will detail the calculations and analysis to find the final model. The structural equation model test results are shown in the following figure:

![Figure 2 Structural equation model diagram](image)

### 3.4.4.1 Fitting effect test

The standardized residual root means square (SRMR) is used as the absolute fitting index to test the model fitting degree. The model SRMR is less than 0.05, the normal index NFI = 0.811 > 0.8, close to 1, all reach the recognized standard, because the SmartPLS software fitting effect algorithm is still in an experimental stage, the model fitting index was initially judged as reaching the standard and the fitting effect was good.

<table>
<thead>
<tr>
<th></th>
<th>SRMR</th>
<th>NFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>&lt;.05</td>
<td>&gt;.8</td>
</tr>
<tr>
<td>Value</td>
<td>.046</td>
<td>.811</td>
</tr>
</tbody>
</table>
3.4.4.2 Hypothetical test

According to the above results, the overall fit of the study is good, and the hypothesis test is further based on the SmartPLS results. The regression coefficients and saliency of each path are shown in the following table:

<table>
<thead>
<tr>
<th>Assumed path</th>
<th>Standardized path coefficient</th>
<th>P-value</th>
<th>Hypothesis test result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1a:AC → AE</td>
<td>.298</td>
<td>.000</td>
<td>Significant</td>
</tr>
<tr>
<td>H1b:AC → AF</td>
<td>.126</td>
<td>.000</td>
<td>Significant</td>
</tr>
<tr>
<td>H2a:AD → AE</td>
<td>.458</td>
<td>.000</td>
<td>Significant</td>
</tr>
<tr>
<td>H2b:AD → AF</td>
<td>-.158</td>
<td>.000</td>
<td>Significant</td>
</tr>
<tr>
<td>H4a:AE → AF</td>
<td>-.340</td>
<td>.000</td>
<td>Significant</td>
</tr>
<tr>
<td>H4b:AE → AG</td>
<td>-.035</td>
<td>.297</td>
<td>Not significant</td>
</tr>
<tr>
<td>H6: AF → AG</td>
<td>.816</td>
<td>.000</td>
<td>Significant</td>
</tr>
<tr>
<td>H5: AA moderating</td>
<td>.137</td>
<td>.005</td>
<td>Significant</td>
</tr>
<tr>
<td>H3: AB moderating</td>
<td>.110</td>
<td>.045</td>
<td>Significant</td>
</tr>
</tbody>
</table>

According to the p<0.05 principle, it is assumed that the p-value of H4b indicates that the shopping pressure has no significant effect on the willingness of revisiting, and the other path coefficients result are significant.

3.4.4.3 Moderating test

Moderating variables play a role in regulating the strength and weakness of two groups of variables which are divided into reinforcement interaction and interference interaction, this study is in SmartPLS adopted Two-stage(default), by using the main effect model and without interaction terms, by storing the potential variable scores, calculating the interaction items other than the prediction and adjustment variables, and analyzing the corresponding indicators of the second phase of the interaction item.
3.4.4.3.1 Entry store motivation moderating test

The motivation of entering the store plays a moderator role in shopping pressure to the satisfaction with the salesperson relationship. Hypothesis H5 is established because of the path coefficient is positive, the shopping pressure has a negative correlation with the salesperson satisfaction which is a negative moderator effect. The details are shown in the figure below. The three lines on the map are in turn motivation-1SD, motivation at means, motivation +1 SD.

![Moderating Effect 1](image)

Figure 3 Moderating Effect 1

3.4.4.3.2 Patronage frequency moderating test

After testing, the p-value is 0.045<0.05, indicating that the patronage frequency has a significant effect on the perceived aggressive sales to the sales staff satisfaction. Hypothesis H3 is established because the path coefficient is positive, the perceived aggressive sales and consumer satisfaction with the sales staff exist. A positive correlation is a positive moderator effect. The details are shown in the figure below.
The three lines on the map are in turn frequency-1SD, frequency at means, frequency +1 SD.

![Moderating Effect 2](image)

Figure 4 Moderating Effect 2

4. Results

Through the analysis and verification of the relevant data, the structural equation model is verified and summarized, and the hypotheses H1a, H2a, H2b, H3, H4a, H5, and H6 are established, assuming that H1b and H4b are not established. It is concluded that perceived aggressive sales have a positive impact on shopping pressure and satisfaction with sales staff. Perceived indicative sales are positively affecting shopping pressure, and shopping pressure have a negative impact on satisfaction with sales staff. In addition, the willingness of revisiting is positively influenced by satisfaction with sales staff. Enter store motivation has a negative moderator effect on shopping pressure and satisfaction with sales staff, and patronage frequency has a positive moderator effect for perceived aggressive sales on satisfaction with sales staff.
Table 7. Hypothesis test results table

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1a: Perceived aggressive sales have a positive impact on shopping pressure.</td>
<td>True</td>
</tr>
<tr>
<td>H1b: Perceived aggressive sales have a negative impact on satisfaction with sales staff.</td>
<td>False</td>
</tr>
<tr>
<td>H2a: Perceived indicative sales have a positive impact on shopping pressure.</td>
<td>True</td>
</tr>
<tr>
<td>H2b: Perceived indicative sales have a negative impact on satisfaction with sales staff.</td>
<td>True</td>
</tr>
<tr>
<td>H4a: Shopping pressure has a negative impact on satisfaction with sales staff.</td>
<td>True</td>
</tr>
<tr>
<td>H4b: Shopping pressure has a negative impact on the willingness of revisiting.</td>
<td>False</td>
</tr>
<tr>
<td>H6: Satisfaction with sales staff has a positive impact on the willingness of revisiting.</td>
<td>True</td>
</tr>
<tr>
<td>H5: Entry store motivation has a moderator effect on shopping pressure and satisfaction with sales staff.</td>
<td>True</td>
</tr>
<tr>
<td>H3: Patronage frequency has a moderator effect on perceived aggressive sales and satisfaction with sales staff.</td>
<td>True</td>
</tr>
</tbody>
</table>

Figure 3 Overall model diagram

5. Discussion

5.1 Perceived sales behavior and shopping pressure
Perceived aggressive sales behavior is positively related to shopping pressure. Due to the perceived aggressive sales impact, consumers are nervous and have a sense of oppression, causing panic and trouble which in turn creates shopping pressure and the greater perceived aggressiveness and coercion, the more pressure on shopping.
Perceived indicative sales are positively related to shopping pressure. Indicative sales behaviors such as bundled sales or extra sales. In short, that are not the products that you really want to buy, suggestive and guided sales, make consumers feel unhappy and the big pressure on shopping.

5.2 Perceived sales behavior and satisfaction with sales staff

Perceived aggressive sales have a positive correlation with satisfaction. Sales staff use professional brand knowledge and clear product characteristics in the process of selling products. It is easy to impress consumers. Therefore, they are satisfied with the sales staff and are willing to purchase products. At the same time, the aggressive sales approach will make consumers feel that the sales staff is very upright, so they also understand some of the excessive marketing methods.

Patronage frequency has a positive moderator effect. When a customer with a high frequency and perceiving an aggressive sales behavior, the satisfaction with sales staff is not affected too much. Because shop frequent customers often visit the store, they are not only familiar with the knowledge of the goods and brands, but also for sales. The personnel also very familiar with it. Therefore, brand loyalty is high, the purpose of purchase is strong, and it will not be interfered by outside sales.

Perceived indicative sales have a negative impact on satisfaction with sales staff and
indicative sales methods are implied and instructive, allowing consumers to buy more than expected. Therefore, in the minds of consumers, there will be a sense of being deceived and sales staff do not treat them with sincerity, so the satisfaction is low.

5.3 Shopping pressure and satisfaction with sales staff

Negative shopping pressure affects satisfaction with sales staff when consumers purchase goods. Shopping consumption can relax the body and mind have a material satisfaction because the pressure from the outside world makes the mood depressed, the shopping experience is unpleasant and consumer satisfaction will be greatly reduced. The motivation to enter the store has a negative moderator effect. Customers who have a clear purchase purpose will not pay special attention to the salesperson's marketing methods. They only focus on the products they want to buy and sometimes they will adopt a quick fix method. Therefore, they negatively impact satisfaction with the sales staff.

5.4 Satisfaction with sales staff and willingness of revisiting

Consumers have a positive impact on sales staff satisfaction and their willingness to revisiting. If consumers feel that salespeople have strong professional knowledge, understand the customer's demand for warm service and actively help to select the products they like. Or establish a friendly interaction with the sales staff will enhance the willingness to buy again.

5.5. Academic contribution

This research model is mainly based on persuasion knowledge theory and motivation model, on the basis of which changes are made to explore the mechanism of consumer
perception of sales behavior on the willingness of revisiting. In addition to the perception of shopping pressure and consumer satisfaction with sales staff, it takes the motivation of entering store and patronage frequency as the moderator variables broadens the research boundary and application of sales behavior. It has a certain degree of innovation, makes a little contribution to the high-pressure marketing behavior and fills the corresponding research vacancies and deficiencies.

5.6. Managerial implication

Product introduction to the market is an art. Through this research, the sales staff can be guided in the actual store sales, and the customer attitude and persuasion purchase method can be improved. Not only can the sales task be completed well, but it also increased the sales’ income. To enhanced customer satisfaction with sales staff and the willingness of revisiting.

5.6.1 Strengthen sales staff brand knowledge

The sales staff is proficient in brand knowledge and professional skills, which enables consumers to generate trust, increase confidence in purchasing products and training sales professional personnel to better serve consumers. Regarding product requirements issues and they should try their best to meet consumer requirements. Let consumers have confidence in products and feel satisfied with the sales staff service to patronize the will. At the same time, a warm and harmonious shopping environment will naturally reduce the pressure on consumers and also play soft and soothing music in the store to create a relaxed atmosphere.
5.6.2 Establish and improve the membership system

We will use the membership system to retain fixed customers, enjoy preferential discounts, giving priority to purchase new products and free distribution to home and other preferential measures. So that customers will feel the glory of members, clarify the motivation to enter store, dilute the impact of sales behavior on shopping pressure, increase patronage frequency, ensure and consolidate brand loyalty to some customers with high frequency of visits, increase the long-term economic benefits of the company and reach a good understanding with sales staff. Customers often patronize will also recommend other people to buy in addition to add one batch of potential customers.

5.6.3 Create a good marketing approach

Do a good job in product promotion and communications? The wine is also afraid of the alley. There is no advertising, consumers don’t know about the product enough. They don’t understand the product features and performance. When they buy the product, they will hesitate. If we add the outside sturdy sales model will generate shopping pressure. Therefore, invest in early advertising to better understand the product, increase enter store motivation and let consumers take initiative to enter a store to buy products. Even if consumers perceive the pressure of shopping, as the motivation to entering store is clear, the consumer's negative satisfaction will be reduced. The store also has good returns as killing two birds with one stone.

5.7 Limitations and future research opportunities

At the same time of serious research, due to limitations in resources and time, there are inevitably some limitations. I hope that future research will be overcome. The first
limitation is the questionnaire. The age of the respondents in this study is mainly between 18 and 30 years old. The education level is concentrated on the university and above. These inevitably cause the sample to be limited and the universality of the research conclusion will be affected. Therefore, it is possible to expand the scope of sample research and increase the scale of research. Second, the number of samples is very limited. The invalid questionnaires account for a portion. After the removal, 329 valid questionnaires remain. Although the research requirements are still met, it will be more convincing if the sample size is increased. The third point is the division of sales behavior dimensions. This paper only divides into two dimensions: perceived aggressive sales and perceived indicative sales. It does not completely cover the overall dimensions of perceived sales behavior.

In view of the limitations and inadequacies of the research, future research can be carried out through the following aspects: First, the number of samples is expanded to increase the age level, education level, occupation level, income level and so on. The wide coverage and large capacity make the conclusion more convincing. It is also possible to expand the research model in the future, find out more variables that influence the perception of sales behavior and further improve the model of influence on the willingness of revisiting.

References


Why Do Customers Pay for Online Entertainment Services?

Empirical Data from an Emerging Market

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**Abstract**

The purpose of this study is to evaluate the customers’ perceived value for fee-based entertainment services. The study explores the influence the benefit components (perceived usefulness and perceived enjoyment) and the sacrifice components (perceived price and perceived technicality) on perceived value, and examine the influence of customers’ perceived value on purchase intention of fee-based online entertainment services. This quantitative research was conducted from August to December 2018, with data collected from 352 Vietnamese respondents, and analyzed by the SPPS Statistics 20. The result of the study presents that perceived enjoyment and perceived price has the most significant influence on customers’ perceived value, as well as perceived usefulness and perceived technicality, to a lesser extent. Additionally, perceived value is found to have significant influence on customers’ purchase intention for these online services. However, more determining factors still need to be discovered to fully explain customers’ perception of value and their purchase intention for fee-based online entertainment services.

**Keywords:** Perceived Value; Online Services; Consumer Behavior; Digital Platform
1. Introduction

The piracy of copyright protected digital media goods is a large and growing problem in the software, videogame, music and movie industries. Digital piracy primarily includes the production and purchase of counterfeit products at a discount to the price of the copyrighted product and illegal file sharing of copyrighted material over peer-to-peer computer networks (Al-Rafee and Cronan 2006).

The history of piracy in the digital media industry can be traced back to early 1990s when computers and the early generation of the Windows operating system entered emerging markets such as China, India, Russia and Vietnam. Traditional piracy took the form of copying optical discs that were sold by street retailers. A main cause of piracy is the large gap in nominal GDP and personal income between western countries and these emerging markets. The lack of attention from the digital companies and the governments in the early period also contributed to the spread of piracy. Thereafter, piracy took root in culture of these emerging markets (Bateman et al. 2013). In the late 1990s, as computer and digital products began to play a more important role in business and daily life, traditional piracy reached its climax. Piracy retailers could be easily found on the streets with a various collection of digital products that could not even be found in licensed shops. At this same time governments and digital companies noticed the problem and took legal action to close down pirates’ factories. Since the demand for piracy remained high and the GDP per capita stayed low, the government’s action yielded little success. According to a report from the Business Software Alliance (BSA), the overall piracy rate stayed high at 94% in 2000. Entering the 2000s, traditional piracy was discouraged by a new type of piracy—internet file sharing. In 2008, China overtook the U.S in the number of broadband lines and became
the country with the largest user population in the world. Peer to peer file sharing software like BitComet and Emule is widely used in the country. Pirated digital media files can be easily found on websites and can be downloaded at zero cost. To examine the impact of piracy, we can look at digital media industry in two broad categories: business software and entertainment (music, movie, and games). Companies from all categories suffered from piracy in the early period. Some has managed to find a way against piracy, other still struggle to survive the competition. Netflix, Spotify, Steam are some examples of companies that has managed to find a way to make profit of content that is often pirated (Spangler 2016; Altschuller and Benbunan-Fich 2009).

In the age of Internet, how people find entertainment has changed drastically, mainly because of how easy and convenience searching for entertainment has become thanks to the Internet. In recent years, the development of the Internet has allowed online entertainment services industry to grow significantly, such as e-music, video-on-demand (VOD), e-book, online games, online streaming and broadcasting. The popularity of online music streaming services (Spotify, Apple Music), movie/VOD streaming services (Spotify, Hulu), e-books (through Kindle and iPad) indicated how much Internet has changed the way people receive information (Lin, Hsu, Chen, 2013). In developed countries, particularly in North America and Western Europe, customers spend billions of dollars to purchase music from various sources such as Yahoo, Napster, Apple’s iTunes store. However, emerging markets, particularly in Asia, have not experience such growth. Previous studies even revealed that Asians people are not willing spend money on online content services (Chu & Lu, 2007).

In order to help online entertainment service providers to have a better understanding of
why customers would pay for online content, it is crucial to examine how customer value fee-based online entertainment services, and what factors determine their perceived value.

2. Literature Review

This study aims at evaluating the perceived customers’ value for subscription-based online entertainment services in order to get a better understanding of why customers are willing to pay for online content. Therefore, this study will adopt the value-based adoption model (VAM). The value-based adoption model was proposed in a study on the adoption of mobile Internet (Kim, H.-W., Chan, H. C., & Gupta, S. 2007). It points out that the valuable the users perceive a mobile Internet service, the more they are willing to adopt such service. Moreover, how much value the users perceive a service is influence by their perceived usefulness, perceived enjoyment, perceived fee and perceived technicality (Kim, H.-W., Chan, H. C., & Gupta, S. 2007; Wang, Yeh, & Liao, 2012). A similar study in Taiwan on the purchasing of online music also include both benefit components and sacrifice components, and it reveals that both have a direct effect on perceived value (Chu & Lu, 2007). Based on previous findings from researchers, the VAM can be employed to investigate customers’ behavior toward purchasing online entertainment services, because it consists of both the benefits and sacrifice that a normal user has to consider before spending money on an online service (Chu & Lu, 2007; Kim, H.-W., Chan, H. C., & Gupta, S. 2007; Wang, 2008; Wang, Yeh, & Liao, 2012).
The research model of this study presented in Figure 1 suggests that perceived usefulness, perceived enjoyment, perceived price, and technicality have influence on consumers’ perceived value, and perceived value is the determining factor for purchase intention for fee-based online entertainment services.

2.1 Perceived Benefits

In this research, perceived usefulness represents the customer’s evaluation on the performance of an online service, whether or not it can satisfy his/her need or expectation (Davis, 1989; Chu & Lu, 2007). On the other hand, perceived enjoyment describes the fun and enjoyable experience an individual receives from the activity of using an online content services, without any interference or consequences (Davis, Bagozzi, & Warshaw, 1992).

In order to attract customers, persuade them to purchase and use your product/service, and convert them into loyal customers, any online entertainment services have to help the customers fulfil any entertainment needs he/she look for on the Internet, while
simultaneously provide them with a delightful and smooth experience. For example, an online music streaming service must offer a wide range of music choices (rock, pop, hip hop, classical, seasonal…) or an online video/movie streaming service should be able to have different types of movies available (blockbuster, old-school, foreign…) for the customers to watch at anytime and anywhere they want, thus the perceived usefulness is derived. But that is not enough, customers must have an enjoyable and exciting experience using the service without any interference or annoyance, whether it is searching, watching, or purchasing the desired content, thus the perceive enjoyment is derived. Many studies pointed out that perceived usefulness and perceived enjoyment are very essential determining factors for whether or not the user will adopt a hedonic information system (van der Heijden, 2004). Moreover, in the context of mobile Internet adoption, both perceived usefulness and perceived enjoyment are concluded to be positive determinants for perceived value (Kim, H.-W., Chan, H. C., & Gupta, S. 2007). As the results, the following hypotheses are proposed:

\[ H1: \text{Perceived usefulness has a positive effect on customers’ perceived value for fee-based online entertainment services.} \]

\[ H2: \text{Perceived enjoyment has a positive effect on customers’ perceived value for fee-based online entertainment services.} \]

2.2 Perceived Sacrifices

Perceived sacrifice also directly determines the perception of value for customers. It is one’s feeling toward giving something up (Dodds, 1999) or what an individual must give up or paid in order to perform a certain activity (Chu and Lu, 2007). Overall, there are two types of perceived sacrifices: monetary sacrifice and non-monetary sacrifice (Zeithaml,
1988). When considering the purchase of online services, customers take into account both the non-monetary and monetary costs.

\[ H3: \text{Perceived price has a negative effect on customers’ perceived value for fee-based online entertainment services.} \]

\[ H4: \text{Perceived technicality has a negative effect on customers’ perceived value for fee-based online entertainment services.} \]

2.3 Perceived Value

Perceived value can be defined as the evaluation the customers make, regarding the benefits and sacrifices from using an online service (Wang, Yeh, & Liao, 2012). A rational customer will take into consideration the benefits he/she will receive and the sacrifices he/she has to give up before making the ultimate final purchase decision (Zeithaml, 1988). If the product/service provide a lot of value to his/her everyday life, the customer will be more likely to purchase that product/service. Nowadays, there is an abundance of choices for the customers to choose, and it seems like there is much difference among the products. As a results, many companies make a lot of effort to differentiate themselves from competitors, introduce unique features on their product/service, so that they will be more valuable to the customers compared to their competitors, and convince them to purchase their product/service. In many researches, they have suggested that perceived value positively and directly influence customers’ purchase intention (Zeithaml, 1988; Dodds, Monroe, & Grewal, 1991; Sweeney, Soutar, & Johnson, 1997; Lu & Hsiao, 2010; Wang, Yeh, & Liao, 2012). Therefore, the following hypothesis is proposed:

\[ H5: \text{Perceived value has a positive effect on customers’ purchase intention for fee-based online entertainment services} \]
3. Methodology

For this study, 352 participants were surveyed (Male n=180; Female n=172). About 6.3% of the total respondents are between 15-17 years old. The number of participants in the “18-25 years old” group is 282, accounting for 80.1% of the total respondents. Lastly, the number of participants in the “26-30 years old” group is 48, accounting for 13.6% of the total participants. The dominance of the “18-25 years old” group and “26-30 years old” group is actually good for the research as these age groups are active the most in using online services – in both legal and pirate context. The study was approved by the ethical board and all participants indicated their informed consent prior to completing the survey.

All data were gathered online using Google Form.

4. Results

Means, standard deviations, and correlations were calculated for all measured variables. All variables were also tested for normality. After reliability testing, all items that have Cronbach’s alpha less than 0.6, “Corrected Item-Total Correlation” lower than 0.3, and the “Cronbach’s Alpha if Item Deleted” is higher than the current Cronbach’s Alpha were removed to increase the reliability of the construct. As a result, one item from “Perceived Usefulness”, one item from “Perceived Enjoyment” were removed. All final construct has a relative high alpha ranging from 0.8 to 0.9.

Then, all items were subjected to EFA test. The first-round result was as followed: KMO=.798, p is 0.000 < 0.05. Total Variance Explain has a value of 68.193%, which is higher than 50% and is acceptable. However, 2 items (PE2 and PT3) have loading factor less than 0.5. In the case of PE2, the difference between its absolute maximum value and absolute minimum value is 0.452, which is higher than 0.3 and is acceptable. However, in
the case of PT3, the difference between its absolute maximum value and absolute minimum value is 0.257, which is lower than 0.3 and does not meet the criteria. After removing PT3, the KMO value of second round was 0.791, p is 0.000 < 0.05. It can be concluded that this is an adequate and appropriate sample. The Total Variance Explain has a value of 69.303%, which is higher than 50% and the Eigenvalues for each component are also higher than 1, which is all acceptable. Rotated Component Matrix resulted in all factors loading have higher value than 0.5. The exploratory factor analysis meets all requirements, so no items will need to be removed. As the result, all 35 items are grouped into 4 groups:

- Group 1 (Perceived Usefulness): PU1, PU2, PU3, PU5, PU6
- Group 2 (Perceived Enjoyment): PE1, PE2, PE4
- Group 3 (Perceived Price): PP1, PP2, PP3
- Group 4 (Perceived Technicality): PT1, PT2, PT4, PT5

Multiple Regression Analysis was used to test the linear relationship between the independent variables (Perceived Usefulness, Perceived Enjoyment, Perceived Price, Perceived Technicality) and the dependent variable (Perceived Value). The following equation describe the significance of independent variables (Perceived Usefulness, Perceived Enjoyment, Perceived Price, Perceived Technicality) on dependent variable (Perceived Value): 

\[ PV = 2.257 + .237 \text{PU} + .439 \text{PE} - .300 \text{PP} - .181 \text{PT} \]

Further multiple regression analysis between the “Perceived Value” and “Purchase Intention” resulted in the value of Adjusted R Square is 0.431, which means that the independent variables (Perceived Value) have a 43.1% influence on the dependent variable (Purchase Intention), which also suggests that there are other unexplored factors that have
a 56.9% influence on the customers’ purchase intention of fee-based online entertainment services. The following equation describe the significance of independent variables (Perceived Value) on dependent variable (Purchase Intention):

$$PI = 1.113 + .713 PV$$

Based on the results, all hypotheses are supported and results in the final research model as showed in Figure 2.

Figure 2. Final Research Model
5. Conclusion

The purpose of this study is to evaluate the customers’ perceived value for fee-based online entertainment services, so the value-based adoption model in the study of Kim, H.-W., Chan, H. C., & Gupta, S. (2007) was employed because it takes into account the benefit components, both utilitarian (perceived usefulness) and hedonic (perceive enjoyment), as well as including the sacrifices components, both monetary (perceived price) and nonmonetary (technicality). The study was able to confirm that both benefit factors and sacrifices factors play important roles in affecting the perception of value to customers. Moreover, this study explores the influence of perceived value on purchase intention of online entertainment services, and also conclude that perceived value is considerably important to the purchase intention of fee-based online entertainment services. Perceived enjoyment is found to be a most significant determinant for perceived value of fee-based online entertainment services, following by perceived price. Perceived usefulness and perceived technicality is also an influence factor for perceived value, but at a lower level.

In this study, the context is in the entertainment aspect of online service, so it is no surprising that online users place more value on enjoyment and price. Many people, especially young people, such as college students seeks online services that offer them good-quality content but at a reasonable price. If the online users find that an online service gives them an enjoyable experience, but charging at a slightly higher price than other options, they tend to be more willing to switch another option, and sacrifice a little bit of that enjoyable experience to able to pay at a lower price. Similarly, if the price is considered inexpensive and reasonable, but providing nowhere near enough enjoyment or satisfaction, the customers will likely seek new alternatives, and are more willing to pay a little but more
money to get a more enjoyable experience. Therefore, online entertainment service providers need to invest time and resources to improve these two factors, making their service better in term quality and enjoyment, at a reasonable price, while adequately fulfilling the other factors (high perceived usefulness and low perceived technicality), they will become more valuable to the customers, and the more valuable online users perceive they are, the more the customers are willing to pay money to use their service.

5.1 Implications

Based on the finding from this study, it is recommended that if providers of online entertainment service want to surpass their competitors, attract more customers and generate more revenues, they need to focus on increasing their value in the eyes of online users. The most important thing to do as an online entertainment service provider is that they should constantly listen to feedback from online users regarding their service, so that they know what they have done right and wrong, thus make effort to improve. As pointed in previous discussion, there are many ways online entertainment service providers can make themselves become valuable to the customers, such as offering useful content/service that will fulfil the need of entertainment for online users. This can be done through making a wide range of options available to online users at all time. Moreover, the experience of using the service must be enjoyable, without any annoyance, interference or delay from connection, loading or any distractions, so online entertainment service provider need to invest time and resource in making their service technically adequate to be able to handle the traffic on the Internet. Providing a high quality service at a reasonable price tag is also very important, it is a challenge to generate enough profit to maintain the business but does not discourage the customers, and if done right, their service can thrive and grow. Last but
not least, online entertainment service providers need to pay attention to the technicality of their service, strive to provide clear, transparent information for online users about their service, instruct them on how to use it…so the users can quickly get used to it and become more comfortable using the service.

5.2 Limitations

Because this research used online survey, it may not give the most overall insight into customers’ perceived value for fee-based online entertainment services, so future studies should look into random sampling and offline techniques. Moreover, as seen in the multiple regression analysis, it suggests that there are more determining factors of perceived value and purchase intention that we need to explore and include in the study to improve the findings.

References


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Optimal Pricing with Consumer Environmental Awareness and Manufacturer’s Fairness Concern in Supply Chain

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Abstract
The paper considers the impact of consumer environmental awareness (CEA) and manufacturer’s fairness concern on wholesale price and retail price in an one-manufacturer and one-retailer supply chain. The manufacturer produces green products with environmental quality. We discuss three decision scenarios: decentralized model (scenario1), manufacturer is concerned about disadvantageous inequity (scenario2), manufacturer is concerned about advantageous inequity (scenario3), and give the explicit solutions of optimal wholesale price and retail price. Our analysis shows that: (1) when manufacturer is fair-minded, he wants to risk losses in favor of splitting the channel profit equally; (2) without fairness concern, both members’ profits increase with CEA; however, with fairness concern, both members’ profits may decrease with CEA; (3) compared with decentralized model, in case 2, manufacturer’s profits decline inevitably while retailer’s profits probably increase; manufacturer will not remove unfairness, but even risk losses; (4) compared with decentralized model, in case 3, manufacturer’s profits decline inevitably but retailer’s profits have a great chance to increase; manufacturer probably obtains fairness
although he risks losses.

*Key words*: Fairness concern; Consumer environmental awareness (CEA); Pricing

1. Introduction

Green supply chain has been an important research topic in recent years due to the increasing environmental problems. As the result of severe environmental pollution, governments have launched many environmental protection policies and people come to recognize the importance of environmental protection and ecological balance. Under the influence of environmental policies and consumers’ behavior, companies prefer to produce green products to response environmental policies and better serve customers. However, how to price the green products is still a challenge for manufacturers and retailers. For example, consumer’s environmental awareness, manufacturers’ and retailers’ behaviors are all factors that affect pricing. According to the previous studies, fairness concerns triggered by some behavioral factors including cost sharing and profit allocation, will affect the performance of the supply chain. Therefore, in this paper we mainly study how to price the green products with consumer’s environmental awareness and manufacturer’s fairness concern.

As more and more consumers have become environmentally conscious (Hartman Group, 2007) [1], researchers started to consider the impact of consumer environmental awareness (CEA) in a supply chain. Liu et al. [2] introduced environmental quality as a demand enhancement factor in the product demand function. Xiong et al. [3] analyzed the effect of carbon tax and CEA on carbon emissions and profits. Zhang et al. [4] explored how CEA impacts supply chain
coordination. Yu et al. [5] presented that manufacturers may earn more with the changes of CEA and subsidy policy. Yang et al. [6] suggested that with CEA, the system's profit with a dominant retailer is smaller than that with a dominant manufacturer. Affected by people's environmentally conscious, more and more manufacturers prefer to provide green product to obtain more profits (Brécard, 2013; Zhang, Wang & You, 2015) [7,4]. However, how to price the green products with CEA is a challenge for the manufacturer and retailer in a supply chain.

Above literature discussed the impact of CEA on supply chain, and assume that decision-makers are completely rational. While, fairness is a cornerstone not only in our daily social inter-actions but also in business-to-business transactions (Kahneman et al. 1986, Anderson and Weitz 1992) [8,9]. Thus, fairness concern is also a new important factor need to be considered in a supply chain. Fehr & Schmidt [10] mentioned decision-makers are not entirely rational to maximize their profits but very fair-minded of the whole supply chain. With fairness concern, Caliskan-Demirag et al. [11] explored channel coordination under fairness concerns and nonlinear demand. Most of them consider the impact of fairness concerns on the supply chain coordination, while optimal pricing with fairness concern is also very important for the manufacturer and retailer in a supply chain.

In this study, we contribute to the literature in two aspects: firstly, we introduce fairness concern to discuss manufacturer’s and retailer’s strategies when the manufacturer produces green products; secondly, we explore the impact of both CEA and manufacturer’s fairness concern on each party’s strategy of the supply chain. We
mainly investigate the following questions: (1) how to price the green products with consumer’s environmental awareness and manufacturer’s fairness concern. (2) how the manufacturer’s fairness concern affects the wholesale prices and retail prices of green products with CEA. (3) how the retailer’s and manufacturer’s profits change with CEA and manufacturer’s fairness concern.

We give the closed-form expressions of green products’ prices and both members’ profits and give the changes of wholesale prices and retail prices with CEA and manufacturer’s fairness concern. Our work contributes to the literature in four ways. Firstly, without fairness concern, the manufacturer’s and the retailer’s profits increase with CEA, however, with fairness concern, both members’ profits may decrease with CEA. Secondly, when manufacturer cares about disadvantageous inequity, there is the danger point for the fairness concern; when the fairness concern degree exceeds the ‘danger point’, the manufacturer’s profits decrease with CEA. Thirdly, when manufacturer cares about disadvantageous inequity, the manufacturer’s and retailer’s profits decreases with the fairness concern; manufacturer will not only remove unfairness, but also make both members suffer loss; once the manufacturer’s fairness concern degree exceeds the danger point, both members’ profits drop to the lowest and not decrease anymore. Finally, when manufacturer cares about his advantageous inequity, manufacturer’s profits decline inevitably but retailer’s profits have a great chance to increase; manufacturer’s behavior makes himself obtain fairness. In summary, when manufacturer is fair-minded, he will risk losses but obtain fairness of profit allocation.
The rest of the paper is organized as follows: The section 2 introduces the related literature. The section 3 presents the basic models and discusses the decentralized model. The section 4 analyzes the extended models with the consideration of manufacturer’s fairness concern, gives the equilibrium results in the table and presents some related propositions. The section 5 discusses the managerial insights, and concludes our work. Finally, the formal proofs of the results are presented in Appendix.

2. Related literature

Here we give a brief overview of the literature that are related to our work. Specifically, since our goal is to consider the impact of consumer environmental awareness (CEA) and manufacturer’s fairness concern on wholesale price and retail price in an one-manufacturer and one-retailer supply chain, in what follows, we mainly focus on the CEA and fairness concerns in operations management.

Most CEA-related literature revolved around product design, market competitiveness, and government policy. For example, Liu et al. [2] proposed that one manufacturer produces one product, then investigated the impact of consumers environmental awareness and manufacturer competition on the supply chain. They found that the retailers and manufacturers with superior eco-friendly operations will benefit when CEA increases. Xiong et al. [3] analyzed how carbon tax and CEA affect carbon emissions and profits in one manufacture-two retailers supply chain and two manufactures-one retailer supply chain. Zhang et al. [4] applied a return policy in a two-stage supply chain with two substitutable products and investigated the effect of
CEA on supply chain coordination. Luo et al. [13] studied the pricing and emissions policies for two manufacturers with different emission reduction efficiency under cap-and-trade policy. Yu et al. [5] studied how to choose green product’s green level with oligopolistic competition and government subsidy, and developed an optimization model for the manufacturers. Yang et al. [6] suggested that a revenue sharing contract does not necessarily dull the manufacturer’s effort in carbon emission abatement, it depends on whether she possesses first-mover advantage and whether consumers have environmental awareness. Our study is closely related to Zhang et al. [4], in addition, we take fairness concern into account.

Above literature based on completely rational hypothesis which is assumed that decision makers aim at maximizing their profits. But fairness is also the most important factors guiding supply chain members’ interactions in everyday life. So many scholars have gradually opened the study of fairness concerns in supply chain. Cui et al. [14] indicated that fairness concerns have a mediating impact and render the inefficient wholesale price contract into a coordinating one. Caliskan-Demirag et al. [11] extended the research of Cui et al. and proposed that, compared to the linear demand, nonlinear demand function requires less stringent conditions to achieve coordination when only the retailer is fairness-concerned. Shi et al. [12] analyzed manufacturer’s fairness concerns aggravates the “double marginalization” if the green effectiveness coefficient is below a certain threshold. Du et al. [15] showed that fairness concerns not only have no effect on coordinating the supply chain but also decreases the channel efficiency. Most of these studies focus on supply chain
coordination, only Shi et al. [12] considered green products and presented how fairness concern and green efficiency may affect price, but they didn’t consider CEA and advantageous inequity. While in our paper, we capture fairness according to Caliskan-Demirag et al. [11] and discuss how CEA and manufacture’s fairness concerns (disadvantage inequity and advantage inequity) affect pricing and both members’ profits. In this paper we not only discuss disadvantageous inequity but also advantageous inequity; and we explore the impact of both CEA and fairness concern on each party’s strategy of the supply chain.

3. Model assumptions and formulation

3.1 Basic model assumptions

We assume that manufacturer produces green products. Price (denoted as p) and environmental quality (denoted as e) are two attributes influencing consumer demand. Product demand increases with environmental quality, and decreases with its price. The demand function (denoted as D) for green products can be presented as follows:

$$D = a - p + \tau e.$$ 

where $a$ is initial market potential, $\tau$ represents consumer environmental awareness, following Liu et al. [2] and Zhang et al. [4]. Consumer environmental awareness affects consumer willingness to pay for green products, the higher CEA implies higher willingness to pay [18]. Table 1 summarizes the major notations we will use in our model development.

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<th>Parameter</th>
<th>Implication</th>
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Table 1. Model parameters and Decision variables
3.2 Decentralized model without fairness concern

We develop this model that neither the manufacturer nor the retailer is fair-minded as the benchmark model. Manufacturer moves first and determines wholesale prices of green products to maximize his own profits based on the demand information. As the follower, retailer determines the order quantity and retail price of green products to maximize his own profits. We further assume that both of them possess complete information regarding the demand. We apply the backward method to solve the Stackelberg game problem. First, we solve the retailer’s expected profit function under the condition that the manufacturer’s decision is given. Then we solve the manufacturer’s problem after the solution to the retailer’s expected profit function is derived. In this case, the profits of retailer and manufacturer are given as follows respectively:

\[ \pi_r(p) = (p - w)D. \]  \hspace{1cm} (1)
Theorem 1. In the decentralized model, the optimal retail price (denoted as $p_d$) and the optimal wholesale price (denoted as $w_d$) of the green products are given as follows:

$$p_d = \frac{3(a + e\tau) + c}{4},$$  
$$w_d = \frac{a + c + e\tau}{2}.  \tag{3}$$

Proposition 1. In the decentralized model, the wholesale prices $w_d$ and retail price $p_d$ increase with $\tau$ (CEA).

Proposition 1 suggests that when the manufacturer is fairness neutral, the higher CEA, the higher optimal wholesale price and optimal retail price.

Proposition 2. In decentralized model, manufacturer’s profit $\pi_{dm}$ and retailer’s profit $\pi_{dr}$ increase with $\tau$.

Proposition 2 suggests that the higher CEA, the higher retailer’s profits and manufacturer’s profits. In addition, the manufacturer’s profits increase more obviously with CEA than the retailer’s profits. It indicates that manufacturer benefits more with consumer’s environmental awareness than retailer, and it is good news for the government because the manufacturer is willing to produce more green products and make more effort to encourage retailer to sell green products.

4. **Manufacturer is concerned about fairness**

In this section, we consider that the manufacturer is fairness-minded, but the retailer is not. The manufacturer maximizes his utility whereas the retailer maximizes his own profits. Similar to Calkan-Demirag et al. [11] we capture fairness in the manufacturer’s objective function through the following utility function: is
\[ U_m = \pi_m + f_m. \] (5)

where \( \pi_m \) denotes the manufacturer’s monetary profit and \( f_m \) represents manufacturer’s disutility due to unfairness or inequity. Note that the disutility functions only have an adverse effect. For the sake of completeness, we briefly discuss the main characteristics of the disutility component which is adopted from an inequity-aversion model by Fehr and Schmidt [10]. According to this model, when a fair-minded manufacturer finds himself at an outcome that inferior to or superior to retailer, he feels unfair. Note that “fairness concern” implies that the manufacturer dislikes outcomes which bring higher as well as lower profits than what he believes equitable.

Let \( \mu \tau_r \) be the equitable outcome of the manufacturer, where \( \mu > 0 \) is the equitable ratio for the manufacturer. When \( \pi_m = \mu \tau_r \), manufacturer earns \( \mu \) times of retailer and feels general equality. When \( \pi_m < \mu \tau_r \), manufacturer earns less than \( \mu \) times of retailer and feels disadvantageous inequality. When \( \pi_m > \mu \tau_r \), manufacturer earns more than \( \mu \) times of retailer and feels advantageous inequality. It is reasonable to expect that the manufacturer dislikes more to be in the former situation than in the latter situation.

Correspondingly, the disutility function of the manufacturer can be written as:

\[ f_m = -\alpha_0 (\mu \tau_r - \pi_m)^+ - \beta_0 (\pi_m - \mu \tau_r)^+. \] (6)

Note that the disutility function can only take non-positive values: \( \alpha_0 \) is the coefficient of disadvantageous inequality which measures the manufacturer's disutility of earning less than the retailer. \( \beta_0 > 0 \) is the coefficient of advantageous inequality which measures the manufacturer’s disutility of earning more than the retailer (advantageous inequality). Many studies have shown that subject suffer more from inequity that is to
their monetary disadvantage than from inequity that is to their monetary advantage, thus \( \beta_0 < \alpha_0 \), \( 0 < \beta_0 < 1 \).

For a given wholesale price, the manufacturer’s utility function is as follows:

\[
U_w = (w - c)D - \alpha_0[\mu(p - w)D - (w - c)D]^* - \beta_0[(w - c)D - \mu(p - w)D]^*. \tag{7}
\]

Similar to 3.2, we assume the manufacturer is the leader and the retailer is the follower: firstly, the manufacturer determines wholesale prices of green products; then, the retailer determines the order quantity and retail price of the green product to maximize his own profits. We apply the backward method to solve the Stackelberg game problem in section 4.

### 4.1 Manufacturer is concerned about disadvantageous inequity

In this subsection, we consider when manufacturer cares about disadvantageous inequity \((\pi_m < \mu r_r)\), it means that a fairness-concerned manufacturer finds himself at an outcome which bring lower profits than what he believes equitable. From Equation (3), we could obtain that when \( \pi_m < \mu r_r, (\pi_m - \mu r_r)^* = 0 \). Therefore, manufacturer’s utility function reduces to:

\[
U_{1,m} = (w - c)D - \alpha_0[\mu(p - w)D - (w - c)D]. \tag{8}
\]

Theorem 2. When the manufacturer is concerned about disadvantageous inequity \((\pi_m < \mu r_r)\), the optimal retail price and wholesale price are given as follows:

\[
p_i^* = \begin{cases} 
\frac{a + w + er}{2}, & w < \frac{\mu(a + er) + 2c}{2} \\
\frac{(1 + \mu)w - c}{\mu}, & \frac{\mu(a + er) + 2c}{2} \leq w \leq \frac{\mu(a + er) + 2c}{2}
\end{cases}
\tag{9}
\]
Where \( \alpha_0 = \frac{2(a + \varepsilon \tau - c) - 2\mu(a + \varepsilon \tau)}{2(c - a - \varepsilon \tau) + 2c\mu + \mu(c + a + \varepsilon \tau)}, \mu_i = 1 - \frac{c}{a + \varepsilon \tau}. \)

Theorem 2 presents the optimal retail price and wholesale price with the disadvantageous inequality \((\alpha_0)\) and the fairness degree \((\mu)\), when the manufacturer is concerned about is concerned about disadvantageous inequity. In order to discuss the changes of the optimal wholesale price and retail price with \(\tau, \alpha_0\) and \(\mu\), we give Proposition 3.

Proposition 3. When the manufacturer is concerned about disadvantageous inequity, 
(i) the retail price \(p_1^*\) and the wholesale price \(w_1^*\) increase with CEA \((\tau)\);
(ii) (a) \(w_1^*\) and \(p_1^*\) increase with \(\alpha_0\), when \(\mu > \mu_i, 0 < \alpha_0 < \alpha_0\);
(b) \(w_1^*\) and \(p_1^*\) keeps constant with \(\alpha_0\), when \(\mu > \mu_i, \alpha_0 > \alpha_0\) or \(0 < \mu < \mu_i\).

Here we define \(\alpha_0\) as the danger point.

Proposition 3 shows that when the manufacturer cares about his disadvantageous inequity, both the optimal retailer price and wholesale price still increase with CEA; when the manufacturer earns more than retailer and cares less about his disadvantageous inequity \((0 < \alpha_0 < \alpha_0)\), he will increase the wholesale price to make more profits; in response to manufacturer, retailer will also increase his retail price in order to keep the previous profits; at this time, manufacturer increases wholesale price faster than retailer. But it is noteworthy that when manufacturer’s fairness concern
degree exceeds the certain point ($\alpha_0'$), both manufacturer and retailer will not increase their prices. This means that when manufacturer pays attention to fairness, he makes wholesale price of green products tends to be conservative, and the greater the fairness concern degree, the more conservative decisions he makes. When manufacturer pays too much attention to fairness ($\alpha_0 \geq \alpha_0'$), if he continues to increase the wholesale price he will suffer heavy losses as the demand for green products decreases, so in order to maintain the order quantity, he will keep the wholesale price unchanged and the retailer will take the same action to keep profits.

Proposition 4. When manufacturer is concerned about disadvantageous inequity, 
(i) the retailer’s profit $\pi_{1,r}^*$ increases with $\tau$;
(ii) manufacturer’s profit $\pi_{1,m}^*$ increases with $\tau$, when $\mu > \mu_1$, $0 < \alpha_0 < \alpha_0'$; 
manufacturer’s profit $\pi_{1,m}^*$ decreases with $\tau$, when $\mu > \mu_1$, $\alpha_0 \geq \alpha_0'$ or $0 < \mu < \mu_1$.

Proposition 4 shows that when the manufacturer cares about his disadvantage inequity, retailer’s profits still increase with CEA, but manufacturer’s profits decrease with CEA when his fairness concern degree exceeds the danger point ($\alpha_0'$). Therefore, once manufacturer’s fairness concern degree exceeds the danger point, the manufacturer will not make more effort to marketing the green product, but the retailer still have the incentive to invest in improving CEA (e.g. advertising).

Proposition 5. When the manufacturer is concerned about disadvantageous inequity, 
(i) manufacturer's profit $\pi_{1,m}^*$ and retailer’s profit $\pi_{1,r}^*$ decrease with $\alpha_0$, when $\mu > \mu_1$, $0 < \alpha_0 < \alpha_0'$,
(ii) $\pi_{1,m}^*$, $\pi_{1,r}^*$ keeps a constant with $\alpha_0$, when $\mu > \mu_1$, $\alpha_0 \geq \alpha_0'$ or $0 < \mu < \mu_1$. 
Proposition 5 shows that when manufacturer cares about his disadvantage inequity, if his fairness concern degree within the danger point \((\alpha_0')\), both manufacturer’s and retailer’s profits will decrease with his fairness concern degree. When manufacturer’s fairness concern degree exceeds the danger point \((\alpha_0')\), both members’ profits drop to the lowest and not decrease any more. This shows that manufacturer’s fairness concern makes its profits significantly decrease while reducing the retailer's profits. Due to invest in green products, manufacturers will pay more attention to the fairness of profits distribution. However, the fairness concern makes manufacturers tend to make their decisions conservative and pay more attention to the immediate benefits (increase the wholesale price and reduce the R & D cost) and make their decisions deviate from the rational optimal decision. In the long run, manufacturer’s behavior will reduce efficiency and lose his profits. Although manufacturer suffers a loss of profits, his share of supply chain profits is increasing significantly. In other words, manufacturer is willing to sacrifice his own profits to keep fair of profits distribution.

According to above Theorem and Propositions, we summarize the equilibrium prices, the retailer’s profits, manufacturer’s profits in Table 2.

Table 2. Equilibrium prices and profits when manufacturer is concerned about disadvantageous inequity

<table>
<thead>
<tr>
<th>(w_i^*)</th>
<th>(0 &lt; \mu &lt; \mu_i)</th>
<th>(\mu &gt; \mu_i)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(0 &lt; \alpha_0 &lt; \alpha_0')</td>
<td>(\frac{\mu(a + \sigma \epsilon) + 2c}{2})</td>
<td>(\frac{(1 + \alpha_0 + \alpha_0 \mu)(a + \sigma \epsilon) + c(1 + \alpha_0)}{\alpha_0(2 + \mu) + 2})</td>
</tr>
<tr>
<td>(\alpha_0 \geq \alpha_0')</td>
<td>(\frac{\mu(a + \sigma \epsilon) + 2c}{2})</td>
<td>(\frac{(1 + \alpha_0 + \alpha_0 \mu)(a + \sigma \epsilon) + c(1 + \alpha_0)}{\alpha_0(2 + \mu) + 2})</td>
</tr>
</tbody>
</table>
For convenience, according to Proposition 3, 4 and 5, we present the change of prices and profits in Table 3.

Table 3. Equilibrium prices and profits change with $\tau$ and $\alpha$

<table>
<thead>
<tr>
<th>Feasible region</th>
<th>parameter $s$</th>
<th>$w_1^*$</th>
<th>$p_1^*$</th>
<th>$\pi_{1,m}^*$</th>
<th>$\pi_{1,r}^*$</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0 &lt; \mu &lt; \mu_i$</td>
<td>$\tau$</td>
<td>↑</td>
<td>↑</td>
<td>↓</td>
<td>↑</td>
</tr>
<tr>
<td></td>
<td>$\alpha_i$</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>$\mu &gt; \mu_i$</td>
<td>$\tau$</td>
<td>↑</td>
<td>↑</td>
<td>↑</td>
<td>↑</td>
</tr>
<tr>
<td></td>
<td>$\alpha_i$</td>
<td>↑</td>
<td>↑</td>
<td>↓</td>
<td>↓</td>
</tr>
<tr>
<td>$\alpha_0 \geq \alpha_i$</td>
<td>$\tau$</td>
<td>↑</td>
<td>↑</td>
<td>↓</td>
<td>↑</td>
</tr>
<tr>
<td></td>
<td>$\alpha_i$</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

Proposition 6. Compare with the decentralized model, when manufacturer is concerned about disadvantageous inequity ($\pi_m < \mu \pi_r$),

(i) $\pi_{1,m}^* < \pi_{0,m}^*$;

(ii) $\pi_{1,r}^* > \pi_{0,r}^*$, if $0 < \mu < \mu_i$ or $\mu \geq 3 \mu_i$ and $\alpha_0 \geq \alpha_i$;

$\pi_{1,r}^* < \pi_{0,r}^*$, if $\mu > \mu_i$, $0 < \alpha_0 < \alpha_i$ or $\mu_i \leq \mu < 3 \mu_i$ and $\alpha_0 \geq \alpha_i$.

Proposition 6 shows that when manufacturer is concerned about his disadvantageous inequity, affected by manufacturer’s fairness concern and CEA together, manufacturer’s profits get less than that of decentralized model. When manufacturer earns much more or less than that of retailer and cares too much fairness, manufacturer’s fairness concern makes retailer’s profits increase with CEA more
significantly than decrease with fairness concern and retailer will earn more than that of decentralized model. This can further reflect manufacturer’s fairness concern damages his own profits even worse than damages retailer’s profits. This is because fairness concern as an individual attributes let manufacturer make their decisions conservative and deviate from the rational optimal decision. Manufacturer invests more to care fairness while reducing the quality of green products, especially when his fairness concern degree exceeds the danger point, due to the poor green products’ quality, his profits decrease with CEA. At last, manufacturer risks losses but obtain fairness of profit allocation.

4.2 Manufacturer is concerned about advantageous inequity

In this subsection, we consider when manufacturer has advantageous inequity \((\pi_m > \mu \pi_r)\), it means that a fairness-concerned manufacturer finds himself at an outcome which bring lower profits than what he believes equitable. From Equation (3), we could obtain that \((\pi_m - \mu \pi_r)^* = 0\). when \(\pi_m > \mu \pi_r\); therefore, manufacturer’s utility function is

\[
U_{2,m} = (w - c)D - \beta_0[(w - c)D - \mu(p - w)D].
\]

Theorem 3. When the manufacturer is concerned about advantageous inequity \((\pi_m > \mu \pi_r)\), the optimal retail price and wholesale price are given as follows:

\[
p^*_2 = \begin{cases} \frac{a + w + \epsilon \tau}{2}, & w < \frac{\mu(a + \epsilon \tau) + 2c}{2} \\ \frac{(1 + \mu)w - c}{\mu}, & w \geq \frac{\mu(a + \epsilon \tau) + 2c}{2} \end{cases}.
\]
\[ w_2^* = \begin{cases} \frac{\mu(a + \epsilon r) + 2c}{2}, & 0 < \mu \leq \mu_i \\ \frac{\beta_0 \mu(a + \epsilon r) - (1 - \beta_0)(a + c + \epsilon r)}{2}, & \mu > \mu_i, \ 0 \leq \beta_0 < \beta_0' \\ \frac{\mu(a + \epsilon r) + 2c}{2}, & \mu > \mu_i, \beta_0' \leq \beta_0 < 1 \end{cases} \] (13)

Where \( \mu_i = 1 - \frac{c}{a + \epsilon r}, \ \beta_0' = \frac{2}{2 + \mu} \).

Theorem 3 presents the optimal retail price and wholesale price with the advantageous inequality (\( \beta_0 \)) and the fairness degree (\( \mu \)). In order to discuss the changes of the optimal wholesale price and retail price with \( \tau, \beta_0 \) and \( \mu \), we give Proposition 7.

Proposition 7. When the manufacturer is concerned about advantageous inequity,

(i) (a) the wholesale price \( w_2^* \) increases with \( \tau \), when \( 0 < \mu \leq \mu_i \) or \( \mu > \mu_i \) and

\[ 0 < \beta_0 < \frac{1}{1 + \mu} \text{ or } \mu > \mu_i \text{ and } \beta_0' \leq \beta_0 < 1; \]

(b) \( w_2^* \) decreases with \( \tau \), when \( \mu > \mu_i \) and \( \frac{1}{1 + \mu} \leq \beta_0 < \beta_0' \);

(ii)(a) the retail price \( p_2^* \) increases with \( \tau \), when \( 0 < \mu \leq \mu_i \) or \( \mu > \mu_i \) and

\[ 0 \leq \beta_0 < \frac{3}{3 + 2\mu} \text{ or } \mu > \mu_i \text{ and } \beta_0' \leq \beta_0 < 1; \]

(b) \( p_2^* \) decreases with \( \tau \), when \( \mu > \mu_i \) and \( \frac{3}{3 + 2\mu} \leq \beta_0 < \beta_0' \).

Proposition 7 shows that when manufacturer is concerned about advantageous inequity moderately, the optimal wholesale price and retail price decrease with CEA. When manufacturer cares too much or less about advantage inequity, the wholesale price and retail price increase with CEA.

Proposition 8. When the manufacturer is concerned about advantageous inequity,

(i) \( w_2^* \) and \( p_2^* \) keep constant with \( \beta_0 \), when \( 0 < \mu \leq \mu_i \) or \( \mu > \mu_i \) and \( \beta_0' \leq \beta_0 < 1 \);
(ii) \( w^*_2 \) and \( p^*_2 \) decrease with \( \beta_0 \), when \( \mu > \mu_i \) and \( 0 \leq \beta_0 < \beta_0' \).

Proposition 8 shows that when manufacturer cares less about advantageous inequity, the optimal wholesale price and retail price decrease with fairness concern. When manufacturer cares too much about advantage inequity, the wholesale price and retail price keep constant with fairness concern.

Proposition 9. When the manufacturer is concerned about advantageous inequity ,

(i) (a) \( \pi^*_{2,m} \) increases with \( \tau \), when \( 0 < \mu \leq \mu_t \) or \( \mu > \mu_i \) and \( 0 \leq \beta_0 < \frac{1}{1 + \mu} \), or \( \mu_t < \mu < 1 + \mu_i \) and \( \beta_0 < \beta_0 < 1 \); (b) \( \pi^*_{2,m} \) decreases with \( \tau \), when \( \mu > \mu_i \) and \( \frac{1}{1 + \mu} \leq \beta_0 < \beta_0 < 1 \) or \( \mu < \mu_i \) and \( \beta_0 < \beta_0 < 1 \).

(ii) (a) \( \pi^*_{2,r} \) increases with \( \tau \), when \( 0 < \mu \leq \mu_t \) or \( \mu_i < \mu < 2\mu_i \) \( \beta_0 \leq \beta_0 < 1 \) or \( \mu \geq 2 \) and \( \beta_0 < \beta_0 < 1 \); (b) \( \pi^*_{2,r} \) decreases with \( \tau \), when \( \mu > \mu_t \) and \( 0 \leq \beta_0 < \beta_0 \) or \( 2\mu_t < \mu < 2 \) and \( \beta_0 < \beta_0 < 1 \).

Proposition 10. When the manufacturer is concerned about advantageous inequity ,

(i) (a) \( \pi^*_{2,m} \) keeps constant with \( \beta_0 \), when \( 0 < \mu \leq \mu_t \) or \( \mu > \mu_i \) and \( \beta_0 = \beta_0 < 1 \); (b) \( \pi^*_{2,m} \) increases with \( \beta_0 \), when \( \mu > \mu_i \) and \( 0 \leq \beta_0 < \beta_0 \);

(ii) (a) \( \pi^*_{2,r} \) keeps a constant with \( \beta_0 \), when \( 0 < \mu \leq \mu_t \) or \( \mu > \mu_i \) and \( \beta_0 = \beta_0 < 1 \); (b) \( \pi^*_{2,r} \) increases with \( \beta_0 \), when \( \mu > \mu_i \) and \( 0 \leq \beta_0 < \beta_0 \).

According to above Theorem and Propositions, we summarize the equilibrium prices, the retailer’s profits, manufacturer’s profits, and manufacturer’s utilities in Table 4.

Table 4. Equilibrium prices and profits when manufacturer cares about advantageous inequity
When the manufacturer is concerned about advantageous inequity ($\pi_m > \mu \pi_r$), we present the change of the manufacturer’s and retailer’s profits in Table 5.

Table 5. Equilibrium prices and profits change with $\tau$ and $\beta_0$, when manufacturer is concerned about advantageous inequity.

<table>
<thead>
<tr>
<th>Feasible region</th>
<th>$w_2^*$</th>
<th>$p_2^*$</th>
<th>$\pi_{2,m}^*$</th>
<th>$\pi_{2,t}^<em>$ = $U_{2,t}^</em>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0 &lt; \mu \leq \mu_1$</td>
<td>$\mu(a + \epsilon \tau) + 2c$</td>
<td>$(2 + \mu)(a + \epsilon \tau) + 2c$</td>
<td>$\frac{\mu(a + \epsilon \tau)}{2}$</td>
<td>$\frac{(2 + \mu)(a + \epsilon \tau)}{4}$</td>
</tr>
<tr>
<td>$\mu &gt; \mu_1, 0 \leq \beta_0 &lt; \beta_0^*$</td>
<td>$\frac{\beta_0 \mu(a + \epsilon \tau) - (1 - \beta_0)(a + c + \epsilon \tau)}{\beta_0(2 + \mu) - 2}$</td>
<td>$\frac{(a + \epsilon \tau)(3\beta_0 + 2\beta_0 \mu - 3) + c(\beta_0 - 1)}{2(\beta_0, \mu + 2\beta_0 - 2)}$</td>
<td>$\frac{(\beta_0 - 1)(\beta_0, \mu + \beta_0, \mu - 1)(a - c + \epsilon \tau)}{2(2\beta_0, \mu + \beta_0, \mu - 2)^2}$</td>
<td>$\frac{\mu(a + \epsilon \tau)((2 - \mu)(a + \epsilon \tau) - 2c)}{8}$</td>
</tr>
<tr>
<td>$\mu &gt; \mu_1, \beta_0 \leq \beta_0 &lt; 1$</td>
<td>$\frac{\mu(a + \epsilon \tau)((2 - \mu)(a + \epsilon \tau) - 2c)^3}{16}$</td>
<td>$\frac{(\beta_0 - 1)^2(a + \epsilon \tau - c)^3}{4(2\beta_0, \mu + \beta_0, \mu - 2)^3}$</td>
<td>$\frac{(2 - \mu)(a + \epsilon \tau) - 2c)^3}{16}$</td>
<td>$\frac{(2 - \mu)(a + \epsilon \tau) - 2c)^3}{16}$</td>
</tr>
</tbody>
</table>

Table 5 shows that when manufacturer earns much more than retailer and cares less about advantageous inequity, manufacturer’s and retailer’s profits increase with fairness concern but retailer’s profits may decrease with CEA; when manufacturer cares too much about advantage inequity, manufacturer’s and retailer’s profits keep constant with fairness concern but may increase with CEA; in this case, both
members’ profits varies with CEA depending on profits distribution ratio (\(\mu\)) and fairness concern (\(\beta_0\)). In other words, compared with decentralized model, the fairness concern may change the trend of the both members’ profits with CEA. When there is no fairness concern, both members’ profits increases with CEA; however, with advantageous inequity, both members’ profits may decrease with CEA.

Proposition 11. Compared with decentralized model, when manufacturer is concerned about his advantageous inequity \((\pi_m > \mu \pi_r)\),

(i) \(\pi_{2,m}^* < \pi_{dm}\);

(ii) (a) \(\pi_{2,r}^* > \pi_{dr}\), when \(0 < \mu \leq \mu_1\) or \(\mu > 3\mu_1\) and \(0 \leq \beta_0 < \beta_0^*\) or \(\mu_1 < \mu < 3\mu_1\) and \(\beta_0^* \leq \beta_0 < 1\); (b) \(\pi_{2,r}^* < \pi_{dr}\), when \(\mu_1 < \mu < 3\mu_1\) and \(\beta_0^* \leq \beta_0 < 1\).

Proposition 11 shows that when the manufacturer is concerned about his advantageous inequity, his profits get less than that of decentralized model. This is not inconsistent with the results of table 6. Because \(\pi_{2,m}^*\) increases with CEA and fairness concern much more slowly than \(\pi_{dm}\) increase with \(\tau\). In most cases, retailer’s profits get more than decentralized model (we define the first two ranges as “effective zone”), but when manufacturer earn not much more than retailer and manufacturer cares much about fairness, retailer’s profits will get less than decentralized model. In other words, manufacturer’s behavior can maintain the fairness of profits distribution.

5. Discussion and conclusion

We assume that the monopoly manufacturer is fair-minded and provides green products in the marketplace. This study explores the impact of manufacturer’s fairness concern and consumer environmental awareness (CEA) on wholesale price and retail
price of the green product in a one-manufacturer and one-retailer supply chain. Our work have some interesting findings: firstly, when manufacturer is fair-minded, fairness concern may change the trend of the both members’ profits with CEA. When there is no fairness concern, both members’ profits increase with CEA; however, with fairness concern, both members’ profits may decrease with CEA. In other words, manufacturer’s fairness concern may affect both members’ incentive to invest to improve CEA (e.g. advertising).

Secondly, when the manufacturer cares about his disadvantageous inequity, the manufacturer’s and retailer’s profits decrease with the fairness concern, manufacturer will not only remove unfairness, but also make both members suffer loss. There is the danger point for the fairness concern, once the manufacturer’s fairness concern degree exceeds the danger point, both members’ profits are minimized and no longer change. In this case, the fairness concern makes manufacturers tend to make their decisions conservative and pay more attention to the immediate benefits (increase the wholesale price and reduce the R & D cost) and make their decisions deviate from the rational optimal decision.

Thirdly, when manufacturer cares less about advantageous inequity, manufacturer’s and retailer’s profits increase with fairness concern but retailer’s profit may decrease with CEA; when manufacturer cares too much about advantage inequity, manufacturer’s and retailer’s profits keep constant with fairness concern but may increase with CEA. Moreover, when manufacturer cares about his advantageous inequity, manufacturer’s profits decline inevitably but retailer’s profits have a great
chance to increase. In other words, manufacturer is willing to reward the retailer’s generosity by risking losses in favor of splitting the channel profit equally.

In summary, when manufacturer cares about disadvantageous inequity, in order to gain fairness of profit allocation, he will probably make irrational decisions and greatly reduce his own profits. So, it is worthless for manufacturer to sacrifice for fairness. When manufacturer cares about advantageous inequity, retailer is likely to get more profits in “effective zone”. It is worthwhile for manufacturer to sacrifice for splitting the channel profit equally in “effective zone”.

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References


Appendix

Proof of Theorem 1.
It is obvious that the retailer’s profit function is concave with \( p_d \), then we let
\[
\frac{\partial \pi_{dr}}{\partial p} = 0,
\]
we derive \( p_d = \frac{3(a + c + e\tau)}{4} \). Similarly, we derive \( w_d = \frac{a + c + e\tau}{2} \). Hence theorem 1 is obtained.

Proof of Proposition 1.
\( p_d \) and \( w_d \) are functions of \( \tau \), so we separately seek the derivatives and derive the monotonicity of \( p_d \) and \( w_d \) for \( \tau \),
\[
\frac{\partial w_d}{\partial \tau} = \frac{e}{2} > 0, \quad \frac{\partial p_d}{\partial \tau} = \frac{3e}{4} > 0.
\]
Hence proposition 1 is obtained.

Proof of Proposition 2.
\( \pi_{dm}(w) = (w - c)(a - p + e\tau) \), we put Equations (3) and (4) into \( \pi_{dm}(w) \). Then, we can derive:
\[
\pi_{dm}(w) = \frac{(a - c + e\tau)^2}{8}, \quad \frac{\partial \pi_{dm}(w)}{\partial \tau} = \frac{e^2 \tau + e(a - c)}{4} > 0, \quad \pi_{dm}(w) \text{ increase with } \tau.
\]
Similarly, \( \pi_{dr}(p) \) increase with \( \tau \). Hence proposition 2 is obtained.

Proof of Theorem 2.
When manufacturer is concerned about his disadvantageous inequity, retailer aims to maximum his profits, but manufacturer aims to maximum his utility. we compare
\[
p_1, p^*, \text{ when } p_1 = p^*, \text{ then } w^* = \frac{\mu(a + e\tau) + 2c}{2}.
\]
then we can derive: when \( w < w^* \),
\[
p^*_1 = p_1 = \frac{a + w + e\tau}{2}; \quad \text{when } w \geq w^*, \quad p^*_1 = p^* = \frac{(1 + \mu)w - c}{\mu}.
\]

Case1. When \( w < w^* \), we find \( \frac{\partial^2 U_i}{\partial w_i} = -\alpha_0(1 + \frac{\mu}{2}) - 1 < 0 \). there is an optimal wholesale price to maximum manufacturer’s utility. Let \( \frac{\partial U_i}{\partial w_i} = 0 \), then \( w_i = \frac{(1 + \alpha_0)c + (1 + \alpha_0 + \alpha_0\mu)(a + e\tau)}{\alpha_0(2 + \mu) + 2} \).

we compare \( w_i \) with \( w^* \), then we derive: when \( 0 < \mu < \mu_i \) or \( \mu > \mu_i \) and \( \alpha_0 > \alpha_0^* \), the optimal wholesale price is \( w^* \); when \( \mu > \mu_i \) and \( 0 < \alpha_0 < \alpha_0^* \), the optimal wholesale price is \( w_1 \). Here \( \alpha_0 = \frac{2(a + e\tau - c) - 2\mu(a + e\tau)}{2(c - a - e\tau) + 2c\mu + \mu^2(a + e\tau)}(\alpha_0^*), \mu_i = 1 - \frac{c}{a + e\tau} \).
In case 1, we conclude:

\[
   w_1^* = \begin{cases} 
   \frac{\mu(a + \epsilon r) + 2c}{2}, & 0 < \mu \leq \mu_1 \text{ or } \mu > \mu_1, \alpha_0 \geq \alpha_0' \\
   \frac{\alpha_0(2 + \mu) + 2}{(1 + \alpha_0)(a + c + \epsilon r) + \alpha_0 \mu(a + \epsilon r)}, & \mu > \mu_1, 0 < \alpha_0 < \alpha_0' 
   \end{cases} \tag{14}
\]

Case 2. When \( w \geq w' \), we put \( p' \) into manufacturer’s utility function, then

\[
   w_2 = \frac{2c + \mu(a + c + \epsilon r)}{2(1 + \mu)}, \quad w_2 - w' = -\frac{\mu(c + a\mu + a\mu\tau)}{2(1 + \mu)} < 0, \text{ then we derive } w_2 < w',
\]

in this case, the optimal wholesale price is:

\[
   w_2 = \frac{\mu(a + \epsilon r) + 2c}{2}. \tag{15}
\]

We should compare equation (15) and equation (14)(ii).

when \( w < w' \), we put equation (14) into equation (3), then we derive

\[
   p_1^* = \begin{cases} 
   \frac{(2 + \mu)(a + \epsilon r) + 2c}{4}, & 0 < \mu \leq \mu_1 \text{ or } \mu > \mu_1, \alpha_0 \geq \alpha_0' \\
   \frac{(a + \epsilon r)(3 + 5\alpha_0 + 2\alpha_0\mu) + c(1 + \alpha_0)}{2(\alpha_0\mu + 2\alpha_0 + 2)}, & \mu > \mu_1, 0 < \alpha_0 < \alpha_0' 
   \end{cases} \tag{16}
\]

When \( w \geq \frac{\mu(a + \epsilon r) + 2c}{2}(w') \), \( p_1^* = \frac{(2 + \mu)(a + \epsilon r) + 2c}{4} \).

We put equation (14) and (16) into \( U_1'' = (w - c)D - \alpha_0[\mu(p - w)D - (w - c)D] \):

\[
   U_1'' = \begin{cases} 
   \frac{\mu((2 + \alpha_0\mu)(a + \epsilon r) + 2\alpha_0c)[(2 - \mu)(a + \epsilon r) - 2c]}{16}, & 0 < \mu \leq \mu_1 \text{ or } \mu > \mu_1, \alpha_0 \geq \alpha_0' \\
   \frac{(1 + \alpha_0^2)(a + \epsilon r - c)^2}{4(2\alpha_0 + \alpha_0\mu + 2)} \quad \alpha_0 < \frac{(2 - 2\mu)(a + \epsilon r) - 2c}{(\mu^2 - 2)(a + \epsilon r) + 2c(1 + \mu)}, & \mu > \mu_1, 0 < \alpha_0 < \alpha_0' \tag{18}
   \end{cases}
\]

We put equation (15) and (17) into \( U_1'' = (w - c)D - \alpha_0[\mu(p - w)D - (w - c)D] \), we can derive

\[
   U_1'' = \frac{\mu((2 + \alpha_0\mu)(a + \epsilon r) + 2\alpha_0c)[(2 - \mu)(a + \epsilon r) - 2c]}{16}. \tag{19}
\]

Let equation (19) minus equation (18)(ii),

\[
   (19) - (18)(ii) = -\frac{[(\alpha_0\mu^2 + 2\mu - 2\alpha_0 - 2)(a + \epsilon r) + (2\alpha_0\mu + 2\alpha_0 + 2)c]^2}{16(2\alpha_0 + \alpha_0\mu + 2)} < 0
\]

Because the manufacturer’s ultimate goal is to maximize his utility, so his optimal wholesale price is:
The retailer’s optimal price is:

\[
p_i^* = \begin{cases} 
\frac{(2 + \mu)(a + e\tau) + 2c}{4(a + e\tau)(3 + 3\alpha_0 + 2\alpha_0\mu) + c(1 + \alpha_0)} & , \quad 0 < \mu \leq \mu_1, \alpha_0 \geq \alpha_0' \\
\end{cases} 
\]

\[
\alpha_0(2 + \mu + 2) & , \quad \mu > \mu_1, \ 0 < \alpha_0 < \alpha_0'.
\]

Proof of Proposition 3.

From the above formulas of \(p_i^*\) and \(w_i^*\) in Theorem 2, we can obviously find that \(p_i^*\) and \(w_i^*\) increase with \(\tau\).

\[
\frac{\partial w_i^*}{\partial \alpha_0} = \begin{cases} 
0 , \quad 0 < \mu \leq \mu_1 \text{ or } \mu > \mu_1 , \alpha_0 \geq \alpha_0' \\
\mu(a - c - e\tau) & , \quad \mu > \mu_1 , 0 < \alpha_0 < \alpha_0'.
\end{cases}
\]

\[
\frac{\partial p_i^*}{\partial \alpha_0} = \begin{cases} 
\frac{1}{2} \frac{\partial w_i^*}{\partial \alpha_0} \quad \alpha_0 \geq \alpha_0' \quad \text{and} \quad \alpha_0 \leq \alpha_0'.
\end{cases}
\]

So when \(\mu > \mu_1\) and \(\alpha_0 \geq \alpha_0'\) or \(0 < \mu < \mu_1\), \(w_i^*\) and \(p_i^*\) keep constant with \(\alpha_0\).

When \(\mu > \mu_1\) and \(0 < \alpha_0 < \alpha_0'\), \(w_i^*\) and \(p_i^*\) increase with \(\alpha_0\).

Proof of Proposition 4.

\[
\frac{\partial \pi_{i,r}^*}{\partial \tau} = \begin{cases} 
\frac{(e - e\mu)[(2 - \mu)(a + e\tau) - 2c]}{2}, \quad 0 < \mu \leq \mu_1 \text{ or } \mu > \mu_1 , \alpha_0 \geq \alpha_0' \quad (i)
\\
e(1 + \alpha_0)^2(a + e\tau - c) & , \quad \mu > \mu_1 , 0 < \alpha_0 < \alpha_0'.
\end{cases}
\]

\[
\frac{\partial \pi_{i,m}^*}{\partial \tau} = \begin{cases} 
- \frac{e\mu[(\mu - 2)(a + e\tau) + c]}{4}, \quad 0 < \mu \leq \mu_1 \text{ or } \mu > \mu_1 , \alpha_0 \geq \alpha_0' \\
e(1 + \alpha_0)(a - e\tau + (\alpha_0 + \alpha_0\mu + 1)) & , \quad \mu > \mu_1 , 0 < \alpha_0 < \alpha_0'.
\end{cases}
\]

\[
\frac{\partial \pi_{i,r}^*}{\partial \tau} \geq 0, \text{ then } \pi_{i,r}^* \text{ increase with } \tau \text{ when } \mu > \mu_1 \text{ and } \alpha_0 \geq \alpha_0' \text{ or } 0 < \mu < \mu_1 \text{, } \pi_{i,m}^* \text{ decrease with } \tau \text{ when } \mu > \mu_1 \text{ and } 0 < \alpha_0 < \alpha_0', \frac{\partial \pi_{i,m}^*}{\partial \tau} \geq 0, \pi_{i,m}^* \text{ increase with } \tau.
\]

Proof of Proposition 5.
Since \( \frac{\partial \pi^*_t}{\partial \alpha_0} = 0 \), \( 0 < \mu \leq \mu_1 \) or \( \mu > \mu_1 \), \( \alpha_0 \geq \alpha_0^* \)\( \frac{\mu(1+\alpha_0)(a+\mu_2-\gamma)^2}{2(\alpha_0+\alpha_0\mu+2)} \), \( \mu > \mu_1 \), \( 0 < \alpha_0 < \alpha_0^* \).

when \( \mu > \mu_1 \) and \( \alpha_0 \geq \alpha_0^* \) or \( 0 < \mu \leq \mu_1 \), \( \pi^*_t \) keep a constant with \( \alpha_0^* \);

when \( \mu > \mu_1 \) and \( 0 < \alpha_0 < \alpha_0^* \), \( \pi^*_t \) decrease with \( \alpha_0 \).

Since \( \frac{\partial \pi^*_m}{\partial \alpha_0} = 0 \), \( 0 < \mu \leq \mu_1 \) or \( \mu > \mu_1 \), \( \alpha_0 \geq \alpha_0^* \)

\[
\frac{\alpha_0^2 \mu^2(a-c+\epsilon)^2}{8(2\alpha_0+\alpha_0\mu+2)}, \quad \mu > \mu_1, \quad 0 < \alpha_0 < \alpha_0^*.
\]

when \( \mu > \mu_1 \) and \( \alpha_0 \geq \alpha_0^* \) or \( 0 < \mu \leq \mu_1 \), \( \pi^*_t \) keep a constant with \( \alpha_0^* \);

when \( \mu > \mu_1 \) and \( 0 < \alpha_0 < \alpha_0^* \), \( \pi^*_m \) decrease with \( \alpha_0 \).

**Proof of Proposition 6.**

\[
\pi^*_t - \pi^{**}_t = \begin{cases} 
\frac{[c+(\mu-1)(a+\epsilon)^2]}{8}, & 0 < \mu \leq \mu_1 \text{ or } \mu > \mu_1 \text{ and } \alpha_0 \geq \alpha_0^* \\
\frac{-\alpha_0^2 \mu^2(a-c+\epsilon)^2}{8(2\alpha_0+\alpha_0\mu+2)}, & \mu > \mu_1 \text{ and } 0 < \alpha_0 < \alpha_0^* 
\end{cases}
\]

We can easily find \( \pi^*_t - \pi^{**}_t < 0 \).

\[
\pi^*_m - \pi^{**}_m = \begin{cases} 
\frac{[(2-\mu)(a+\epsilon)^2-(a+\epsilon)^2]}{16}, & 0 < \mu \leq \mu_1 \text{ or } \mu > \mu_1 \text{ and } \alpha_0 \geq \alpha_0^* \text{ (i)} \\
\frac{-\alpha_0 \mu(\alpha_0 \mu+4\alpha_0+4)(a+\epsilon)^2}{16(2\alpha_0+\alpha_0\mu+2)}, & \mu > \mu_1 \text{ and } 0 < \alpha_0 < \alpha_0^* \text{ (ii)} 
\end{cases}
\]

(1) when \( 0 < \mu \leq \mu_1 \), equation 25(i) > 0; (2) when \( \mu > \mu_1 \) and \( 0 < \alpha_0 < \alpha_0^* \), equation 25 (ii) < 0;

(3) when \( \mu_1 < \mu \leq 3\mu_1 \) and \( \alpha_0 \geq \alpha_0^* \), equation 27(i) < 0; (4) when \( \mu > 3\mu_1 \) and \( \alpha_0 \geq \alpha_0^* \), equation 27(ii) > 0;

**Proof of Theorem 3.**

Similar to Theorem 2, when manufacturer is concerned about his advantageous inequity, retailer still aims to maximum his profits, and manufacturer still aims to maximum his utility. finally we can derive
\[
\begin{align*}
w_2^* &= \begin{cases}
\frac{\mu(a + cr) + 2c}{2}, & 0 < \mu \leq \mu_i \text{ or } \mu > \mu_i, \frac{2}{2 + \mu} \leq \beta_0 < 1 \\
\frac{\beta_0(a + cr) - (1 - \beta_0)(a + cr)}{\beta_0(2 + \mu) - 2}, & \mu > \mu_i, 0 \leq \beta_0 < \frac{2}{2 + \mu}
\end{cases}

p_2^* &= \begin{cases}
\frac{(2 + \mu)(a + cr) + 2c}{4}, & 0 < \mu \leq \mu_i \text{ or } \mu > \mu_i, \frac{2}{2 + \mu} \leq \beta_0 < 1 \\
\frac{(a + cr)(3\beta_0 + 2\beta_0\mu - 3) + c(\beta_0 - 1)}{2(\beta_0\mu + 2\beta_0 - 2)}, & \mu > \mu_i, 0 \leq \beta_0 < \frac{2}{2 + \mu}
\end{cases}

\end{align*}
\]

Proof of proposition 7.

Since \( \frac{\partial w_2^*}{\partial \tau} = \begin{cases}
\frac{\mu e}{2}, & 0 < \mu \leq \mu_i \text{ or } \mu > \mu_i, \frac{2}{2 + \mu} \leq \beta_0 < 1 \\
\frac{e(\beta_0\mu + \beta_0 - 1)}{\beta_0(2 + \mu) - 2}, & \mu > \mu_i, 0 \leq \beta_0 < \frac{2}{2 + \mu}
\end{cases} \),

we can easily find that as follows:

(1) \( w_2^* \) increases with \( \tau \), when \( 0 < \mu \leq \mu_i \text{ or } \mu > \mu_i \) and \( \frac{2}{2 + \mu} \leq \beta_0 < 1 \) or \( \mu > \mu_i \) and \( 0 < \beta_0 < \frac{1}{1 + \mu} \);

(2) \( w_2^* \) decreases with \( \tau \), when \( \mu > \mu_i \) and \( \frac{1}{1 + \mu} \leq \beta_0 < \frac{2}{2 + \mu} \).

Since \( \frac{\partial p_2^*}{\partial \tau} = \begin{cases}
\frac{(2 + \mu)e}{4}, & 0 < \mu \leq \mu_i \text{ or } \mu > \mu_i, \frac{2}{2 + \mu} \leq \beta_0 < 1 \\
\frac{e(3\beta_0 + 2\beta_0\mu - 3)}{2(\beta_0\mu + 2\beta_0 - 2)}, & \mu > \mu_i, 0 \leq \beta_0 < \frac{2}{2 + \mu}
\end{cases} \),

we can easily find that as follows:

when \( \mu > \mu_i \), \( \frac{3}{3 + 2\mu} \leq \beta_0 < \frac{3}{3 + 2\mu} \), \( p_2^* \) increases with \( \tau \); when \( \mu > \mu_i \) and \( \frac{3}{3 + 2\mu} \leq \beta_0 < \frac{2}{2 + \mu} \), \( p_2^* \) decreases with \( \tau \).

Proof of Proposition 8.

Since \( \frac{\partial w_2^*}{\partial \beta_0} = \begin{cases}
0, & 0 \leq \mu \leq \mu_i \text{ or } \mu > \mu_i, \frac{2}{2 + \mu} \leq \beta_0 < 1 \\
-\frac{\mu(a - c + cr)}{(\beta_0\mu + 2\beta_0 - 2)^2}, & \mu > \mu_i, 0 \leq \beta_0 < \frac{2}{2 + \mu}
\end{cases} \), \( \frac{\partial p_2^*}{\partial \beta_0} = \frac{1}{2} \cdot \frac{\partial w_2^*}{\partial \beta_0} \).

we can easily find that as follows: when \( \mu > \mu_i \) and \( 0 \leq \beta_0 < \frac{2}{2 + \mu} \), \( w_2^* \) and \( p_2^* \) decrease with \( \beta_0 \); when \( \mu > \mu_i \) and \( \frac{2}{2 + \mu} \leq \beta_0 < 1 \) or \( 0 < \mu \leq \mu_i \), \( w_2^* \) and \( p_2^* \) keep constant with \( \beta_0 \).

Proof of proposition 9.
The retailer’s and manufacturer’s optimal profits are
\[ \pi_{2,r}^* = \begin{cases} \frac{[(2 - \mu)(a + \mu) - 2c]^2}{16}, & 0 < \mu \leq \mu_i \text{ or } \mu > \mu_i, \frac{2}{2 + \mu} \leq \beta_0 < 1 \\ \frac{\mu(a + \mu)(a + \mu) - 2c}{4(2\beta_0 + \mu, - 2)^2}, & \mu > \mu_i, 0 \leq \beta_0 < \frac{2}{2 + \mu} \end{cases} \]

\[ \pi_{2,m}^* = \begin{cases} \frac{e(2 - \mu)(a + \mu) - 2c}{8}, & 0 < \mu \leq \mu_i \text{ or } \mu > \mu_i, \frac{2}{2 + \mu} \leq \beta_0 < 1 \\ \frac{e(\beta_0 - 1)(a + \mu - 1)(a - c + \mu)}{2(2\beta_0 + \mu, - 2)^2}, & \mu > \mu_i, 0 \leq \beta_0 < \frac{2}{2 + \mu} \end{cases} \]

when \( 0 < \mu \leq \mu_i \) or \( \mu_i < \mu < 2\mu_i \), \( \frac{2}{2 + \mu} \leq \beta_0 < 1 \) or \( \mu \geq 2, \frac{2}{2 + \mu} \leq \beta_0 < 1 \), \( \pi_{2,r}^* \) increases with \( \tau \); when \( \mu > \mu_i, 0 \leq \beta_0 < \frac{2}{2 + \mu} \) or \( 2\mu_i \leq \mu < 2, \frac{2}{2 + \mu} \leq \beta_0 < 1 \), \( \pi_{2,r}^* \) decreases with \( \tau \).

\[ \frac{\partial \pi_{2,r}^*}{\partial \tau} = \begin{cases} \frac{e(2 - \mu)(a + \mu) - 2c}{4}, & 0 < \mu \leq \mu_i \text{ or } \mu > \mu_i, \frac{2}{2 + \mu} \leq \beta_0 < 1 \\ \frac{e(\beta_0 - 1)(a + \mu - 1)(a - c + \mu)}{2(2\beta_0 + \mu, - 2)^2}, & \mu > \mu_i, 0 \leq \beta_0 < \frac{2}{2 + \mu} \end{cases} \]

when \( 0 < \mu \leq \mu_i \) or \( \mu > \mu_i, 0 \leq \beta_0 < \frac{1}{1 + \mu} \), \( \pi_{2,m}^* \) increases with \( \tau \);

when \( \mu > \mu_i, \frac{1}{1 + \mu} \leq \beta_0 < \frac{2}{2 + \mu} \) or \( \mu \geq 2\mu_i, \frac{2}{2 + \mu} \leq \beta_0 < 1 \), \( \pi_{2,m}^* \) decreases with \( \tau \).

**Proof of proposition 10.**

According to proposition 9, we can easily derive:

\[ \frac{\partial \pi_{2,r}^*}{\partial \beta_0} = \begin{cases} 0, & 0 < \mu \leq \mu_i \text{ or } \mu > \mu_i, \frac{2}{2 + \mu} \leq \beta_0 < 1 \\ \frac{\mu(a + \mu)(a + \mu) - 2c}{2(2\beta_0 + \mu, - 2)^2}, & \mu > \mu_i, 0 \leq \beta_0 < \frac{2}{2 + \mu} \end{cases} \]

\[ \frac{\partial \pi_{2,m}^*}{\partial \beta_0} = \begin{cases} 0, & 0 < \mu \leq \mu_i \text{ or } \mu > \mu_i, \frac{2}{2 + \mu} \leq \beta_0 < 1 \\ \frac{\beta_0 \mu(a + \mu - 1)(a - c + \mu)}{2(2\beta_0 + \mu, - 2)^2}, & \mu > \mu_i, 0 \leq \beta_0 < \frac{2}{2 + \mu} \end{cases} \]

Then proposition 10 is obtained.
Proof of Proposition 11.

Since $\pi_{2,m}^* - \pi_{dm}$

\[
\begin{cases}
\frac{[(\mu - 1)(a + \epsilon \tau) + c]^{2}}{8}, & 0 < \mu \leq \mu_1 \text{ or } \mu > \mu_1, \frac{2}{2 + \mu} - \beta_0 < 1 \\
\frac{\beta_0^{2}\mu^{2}(a + \epsilon \tau - c)^{2}}{8(2\beta_0 + \beta_0^{2} - 2^{2})^{2}}, & \mu > \mu_1, 0 \leq \beta_0 < \frac{2}{2 + \mu}
\end{cases}
\]

Manufacturer's profits decline.

\[
\pi_{s,r}^* - \pi_{s,c} = \begin{cases}
\frac{[(2 - \mu)(a + \epsilon \tau) - 2c]^{2} - (a + \epsilon \tau - c)^{2}}{16}, & 0 < \mu \leq \mu_1 \text{ or } \mu > \mu_1, \frac{2}{2 + \mu} - \beta_0 < 1 \\
\frac{-\beta_0^{2}\mu(a + \epsilon \tau - c)^{2}(4\beta_0 + \beta_0^{2} - 4)}{16(2\beta_0 + \beta_0^{2} - 2^{2})^{2}}, & \mu > \mu_1, 0 \leq \beta_0 < \frac{2}{2 + \mu}
\end{cases}
\]

when $0 < \mu \leq \mu_1$, let $\pi_{s,r}^* - \pi_{s,c} = 0$, then $\mu = 1 - \frac{c}{a + \epsilon \tau}(\mu_1)$ or $\mu = 3 - \frac{3c}{a + \epsilon \tau}(3\mu_1)$.

\[
\frac{\delta^{2}(\pi_{s,r}^{*} - \pi_{s,c})}{\delta^{2}\mu} = \frac{(a + \epsilon \tau)^{2}}{8} > 0, \text{so we can derive when } 0 < \mu < \mu_1 \text{ and } \mu > 3\mu_1, \text{ so }
\]

proposition 11 is obtained.
An Analysis of the Development Path of Contemporary Higher Education at the Level of Philosophy

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Abstract

In the era of rapid development of science and technology, the mode of higher education is also changing. At present, the main purpose of higher education in China is to cultivate skilled talents in various fields, so the cultivation of talents must rely on the corresponding technical basis. Apparently, deep exploration in the field of technology is of great significance to optimize the mode of higher education. Micham, a famous philosopher of technology, put forward the concept of four dimensions of technology. Micham’s division of technology provides important reference value and practical guidance for the innovative construction and mode optimization of higher education. The four dimensions are as follows: exploring the mutual combination of technology and culture, artifacts and humanities, and giving full play to the humanistic color of contemporary higher education; analyzing the humanistic attribute of technology to promote the improvement of teachers' ability in technology and knowledge; exploring the humanities, practice, innovation and other factors contained in technology, and promoting the educational mode of “production-study-research”; giving full play to the role of human will and building a multi-structure and deep-level talent training system.
and mechanism based on technology.

**Keywords:** Higher Education; Philosophy of Technology; Development Path

The primary purpose of higher education in China at the present stage is to cultivate skilled talents for the country, so in any field, only with the corresponding skills can we have a foothold in this field. In addition to mastering the corresponding basic skills, those who master technology must also have correct values, which is the corresponding view of technology\(^1\). Constrained by traditional disciplines and knowledge systems, China's higher education still stays on the practical level of technology, a simple cognition of instruments, while the deep connotation of technology is not accurately and completely understood and mastered. This view of technology hinders the innovative development of higher education in the new era, and it is difficult to break through the educational model of traditional ideas. Therefore, the correct understanding and exploration of the deep connotation of technology is an important factor to promote the development of college education. Drawing lessons from Micham's theory of technical framework is of scientific significance for the innovation of higher education mode and the improvement of teaching quality in our country.

### 1. The Related Discussion on Philosophy of Technology

In the eyes of philosophers, the technology philosophy has both the subjectivity and the objectivity of technology\(^2\), which is also a process of transformation from naturalness to socialization. Humanistic technology philosophy and engineering technology philosophy were respectively established by humanistic scientists and technical
engineers. Humanistic philosophy of technology is mainly to find reflection on technology from the field of humanities, with the purpose of exploring the connection between technology and politics, culture, economy, religion and other fields. However, the philosophy of engineering technology is to explore the internal structure of technology itself and explore the transformation of nature and society by technology\[^3\].

2. The Significance of Micham's Concept of Technology to Technical Education

Engineering philosophy of technology and humanities philosophy of technology develop in their own independent fields, lack of interaction and connection with each other. Micham's concept of four dimensions gives a complete explanation of the essence of technology\[^4\]. The deep understanding of the concept and connotation of technology excavates the educational significance and value of technology through technology itself, improves the one-sided understanding of traditional concepts on technology education, and promotes the rational theoretical development of technology education at the philosophical level.

1.1 Types of Technology as Artifacts

On the artificial level of technology, according to Micham's point of view, that is, to see the essence of the problem through the phenomenon, mainly to explore the difference between artificial and natural. As far as artifacts are concerned, the biggest difference between itself and natural objects is that they are created by human beings with their wisdom and behavior. It reflects the creativity and initiative of people, and it is the realistic reflection of people's will and thinking mode. On the contrary, natural objects
are the embodiment of nature and instinct. Artifacts are the result of human wisdom, knowledge, culture and labor. Therefore, artifacts are the embodiment of human thinking and will. It is not to simplify the artifacts, but be the system and mechanism that covers the dual linkage between humanity and technology.

1.2 Types of Technology as Knowledge

When it comes to technology, people may first think of an object, that is, the so-called objects, tools and so on. In fact, with the in-depth exploration of technology, technology is also an embodiment of knowledge[5]. Technology as knowledge is also a theoretical level put forward by Micham. This is of guiding significance to the construction of new knowledge structure in higher education. Higher education not only cultivates students' practical ability, but also strengthens the cultivation of students' deep understanding of technical knowledge. The construction of students' technical knowledge system is not only the cultivation of skills, but also the cultivation of students' thinking mode and innovation ability.

1.3 Types of Technology as Activity

In Micham's opinion, the most basic form of technology is the form of technology as activity. Technology as activity contains artifacts, knowledge and volition, which are unified in technology as activity. Technology as activity is embodied in various structural modes such as practice, thinking, culture and so on. It also reflects the rising process of learning and innovation, and has a dual role in the promotion of practice and teaching.

1.4 Types of Technology as Volition
The use and creation of technology is not an isolated individual, but controlled and
controlled by people's subjective initiative, which also contains different values of
technology. In the same technological environment, people's technological activities are
not the same, which shows that people's technological activities not only rely on
knowledge, activities, but also need to rely on the promotion of the subjective will. The
will is an invisible being, invisible and intangible. But this kind of intangible existence
is exactly the important factor for the existence of technology and the key to the
realization of people's own value. The education of technical will is embodied in a kind
of teaching emotion and spiritual state in higher education. University teachers, on the
basis of technology as artifact, bring about the promotion of self-value and spiritual
satisfaction through the promotion of will. At this time, the technology is not only the
existence of things, but the existence of the will of thinking.

3. On the Problems Existing in the Teaching Process of Higher
Education at the Level of Philosophy of Technology

Contemporary society is constantly deepening its reflection on technology, and the
reflection on technology is endless. For higher education, more attention should be paid
to the in-depth reflection on problems in the field of philosophy of technology [6].

3.1 Higher Education at the Present Stage Lacks the Spirit of Humanist Philosophy

Most of training modes of education in many colleges and universities today are exam-
oriented. To meet the teaching objectives of colleges and universities, they
mechanically instill the knowledge in textbooks and take students as learning tools.
Most of them aim at employment, which reflects the utilitarian purpose of education.
In order for students to graduate successfully and obtain employment successfully, the mechanical training for students is lack of humanism in nature. In the era of rapid development of technology, the purpose of cultivating students in higher education institutions is to become a machine for the society and families to make money and work. This utilitarian concept seriously hinders the all-round cultivation of talents in higher education institutions. Technology keeps updating and developing rapidly, but for education, humanistic care should not be lost and the original goal and direction of our education should not be deviated from. We should re-examine the concept of higher education and build an education model of comprehensive innovation and development.

3.2 The Group of Teachers in Higher Education Institutions Lacks Reasonable Construction of Technical Knowledge.

As China's education is mainly exam-oriented, many of the teachers in colleges and universities are working on campus all the year round, and have no personal experience in social practice. The lack of practical links leads to a lack of profound understanding of technical theory index and a lot of wrong cognition. The explanation of knowledge is not only a theoretical process of indoctrination, but also a long-term accumulation of experience in practical work. The acquisition of such experiential knowledge is not achieved in a day, nor can it be achieved through books. Instead, it can only be achieved through the transformation of will into understanding under the concrete practical background, and can only be achieved through practical operation. As far as the present situation of colleges and universities is concerned, the teachers are lack of working experience in social enterprises, the systematic and complete technical knowledge
system and practical teaching mode, and the teaching mode remains in the dogmatic teaching of books.

3.3 The Theory of Higher Education More Important Than the Practice, Lack of Effective Combination Between Them

At present, most of higher education institutions in China still use a purely theoretical teaching mode, in which teachers teach in a dogmatic way and students passively accept. Students' understanding of technical knowledge is limited to textbooks, and there is no socialized experience. From the point of view of satisfying the purpose of social employment, higher education should pay more attention to meet the needs of the society for talents to find the correct positioning, and fully focus on the level of social needs for education and teaching. Practical ability and innovation ability have always been the indispensable training goal and direction of education, and the most essential embodiment of education. Technical theory is important, but ignoring the practical ability of education is not sound and reasonable. Only by focusing on serving the society and abiding by the concept of practical structure, can we cultivate socialized talents with high comprehensive quality and professional competence.

3.4 Lack of Spiritual Guidance for Students

In the traditional educational concept, higher education is to cultivate talents or the purpose of employment, and the cultivation of students' skills is a repetitive process, similar to the repeated operation of the machine. In the traditional concept, students are passive receivers, and using professional skills as the tool to seek wealth, which is a kind of mechanistic concept. Therefore, the purpose of education is to blindly inculcate
knowledge and mechanically cultivate skills, thus lacking the subjective reflection of self-will and self-thinking. Therefore, higher education should cultivate new talents with subjective initiative, knowledge and accomplishment, morality and ability, humanistic care and spiritual belief.

4. A Probe Into the High Quality Path of Higher Education From the Perspective of Philosophy of Technology

Based on the relevant enlightenment of Micham's technology concept, this paper analyzes the current higher education in China from the perspective of philosophy of technology, so as to further explore the way out of higher education\[^7\]. This study mainly analyzes from the following ways.

4.1 Exploring and Cultivating an Educational Model with Humanistic Feelings

In the current social environment with developed economy, the pursuit of material has far exceeded the pursuit of people's spiritual level. Therefore, it is of great significance to timely return to humanistic spirit and shape humanistic feelings. One needs not only excellent skills, but also humanistic qualities amid higher education. Today's educational concept is mainly restricted by utilitarianism, and there is still a lack of personality building. The training of talents should not only focus on technology, but also on improving students' humanistic quality. Schools should explore more values of human nature from the perspective of artifacts, so as to set up diversified values that advocate faith, morality and humanity with the combination of sensibility and rationality.

4.2 Reconstructing the Framework of Subject Technical Knowledge and
Expanding the Reasonable Space of Teachers' Teaching Ability

The understanding of technical knowledge is not a single fixed model, but a knowledge system, which is obtained through transformation. The exploration and analysis of technical knowledge is an important aspect of optimizing teachers' teaching ability. The traditional concept of vocational teaching holds that technical knowledge is only a simple cognitive content. In the face of this embarrassing situation, the analysis of technical knowledge is an important basis for improving teachers' effective teaching.

4.2.1 The linkage between enterprise operation and college teaching will enable enterprise employees to study theoretical knowledge in colleges and universities, and college teachers to exercise practical ability in enterprises, participate in the production and operation of enterprises, give play to their own value, and improve their practical ability and the ability of cognitive technology.

4.2.2 The technical knowledge and practical ability of college teachers should be included in the assessment of teaching ability, so as to enhance their sense of crisis and better optimize their knowledge system.

4.2.3 Higher education institutions cooperate with enterprises in running schools while teachers and students participate in the practical management of enterprises. By doing this to strengthen connection and communication, promote the construction of skill assessment mechanism, and improve the teaching level of technical knowledge and practical knowledge.

4.3 Innovation of Technological Practice Mode Based on “Industry-Study-Research” Cooperation
The ultimate return of teaching level in colleges and universities is to be realized in practical teaching activities. The ultimate purpose of teaching is to enable students to transform the technical knowledge they have received into corresponding professional skills, professional ethics, professional beliefs and other humanistic and technical qualities. In fact, technical activities are more important to reflect people's thinking, creation, will and so on. In the way of cultivating talents in colleges and universities, it is necessary to combine learning with application and research, and the cultivation of talents should be implemented in the development of industry and throughout the practice, so as to improve students' creativity in a certain field. Schools, enterprises, teachers and students should be combined to learn in production, research in learning and make good use of in research. In combination with the actual situation, students should repeatedly explore the technical process, understand the concept of technical knowledge, and achieve the required professional skills. We will vigorously promote the integration model of "production-study-research", constantly strengthen the construction of practical training bases, strengthen the joint operation of enterprises and schools, encourage students and teachers to innovate and start businesses together, and strengthen the linkage between enterprises and schools. The enterprise absorbs the university talented person as well as the advanced thought pattern, for the enterprise power. Colleges and universities use the platform of enterprises to conduct better research and development in skills and academic fields.

4.4 The Construction of Talent System and Mechanism Should be Guided by the Will of Technology
In the new era, it is of great significance for colleges and universities to constantly optimize and change the mode of talent cultivation, change the traditional mode of talent cultivation, and constantly innovate the new and diversified talent cultivation system and mechanism.

The construction of higher education system and mechanism must be guided by technical will, and comprehensive consideration should be given to students' technical skills, professional accomplishment, professional status, practical ability and other aspects. In the past, the assessment and evaluation standards of students' ability were only limited to the theories and skills in a certain aspect, but ignored the assessment of students' comprehensive will. At present, colleges and universities still take students' exam scores as the main reference basis, but the innovation ability, thinking mode and subjective willpower at the level of technical activities are not highly concerned. Therefore, in the future, higher education should pay more attention to the cultivation and attention of students in the field of technical will, and the assessment of students should also combine the will level with the technical activity level to carry on the comprehensive evaluation. In the future, a complete higher education system should not only have technical activities, but also focus on technical will, which is one of the ways to achieve high efficiency and precision of higher education.

To sum up, technology is one of the main factors in today's higher education, which plays an important role in promoting the improvement of education and teaching as well as students' ability and comprehensive quality. From the perspective of technology philosophy, the deep understanding of the concept of technology is conducive to the
correct establishment of the teaching direction and objectives of China's higher education in the new era, and the optimization and forward development of China's higher education.

5. Acknowledgments

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Reference


3. Dong jun. Thoughts on technology -- interpretation of heidegger's concept of


Research on the Evolution and of Provincial Entrepreneurship Inequality in China

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Abstract
Regional entrepreneurial performance can affect economic and social development deeply, entrepreneurial gap also cause the inequality of regional development. Based on panel data, the paper shows that entrepreneurial gap among China's provinces is shrinking, the balance of provincial level of entrepreneurship is rising. Regression analysis confirms that urbanization, financial support, cultural atmosphere, and market development are all important factors affecting provincial entrepreneurship performance. The decomposition of Shapley value shows that the main influence factors on provincial entrepreneurship inequality are urbanization and financial support which shows downward trend, cultural atmosphere and natural factors shows upward trend, So the policy design must be considered objective reality, then lead to equalization development by education, urbanization and cultural atmosphere systematically.

Keywords: Entrepreneurial environment; Entrepreneurship inequality; Regional inequality; Inequality decomposition

1. Introduction
Entrepreneurial activities are an important source of economic growth, and an
important way to stimulate the vitality of production factors and improve the efficiency of factor allocation. Regional entrepreneurial activity and entrepreneurial performance not only profoundly affect the quality of regional economic development, but also closely related to the people's livelihood level. In the context of the economy entering the "new normal", promoting entrepreneurial development is of great significance to solving many problems in China's economic and social development. Since 2005, China's global entrepreneurial activities have shown a significant growth trend. Based on the ratio of the number of newly-increased private enterprises in the region and the population, the overall entrepreneurial rate in China has increased at a rate of 17.50% between 2005 and 2014. Greatly promoted the momentum of China's economic development.

Compared with the total amount of vigorous development, due to the limitations of development foundation and soft environment, there is still a large imbalance in the objective performance of regional entrepreneurship in China. Taking 2014 as an example, Shanghai has the highest entrepreneurial rate in China with 7.54 newly-created private enterprises per 1,000 population. The lowest entrepreneurial rate in Hainan has only 0.22 newly-created private enterprises. According to the National Bureau of Statistics, the entrepreneurship rate in the eastern region is 2.97/1000, which is 2.05 times that of 1.45/1000 in the central region and 1.75 times that of 1.70/1000 in the western region (this study does not include Tibet). The data displayed by the Global Entrepreneurship Watch (GEM) also shows that the overall pattern of entrepreneurial performance between China's provinces is significantly higher than that of the West. Since the regions with high entrepreneurial activity can absorb more excellent resources and optimize the system dynamic mechanism of regional development, the imbalance of entrepreneurial performance will lead to the
spatial Matthew effect of the overall development of the region, resulting in an increase in the gap between the strong and the weak. Self-reinforcing mechanism. In order to understand this phenomenon, it is necessary to further explore the changing trends and causes of regional entrepreneurship in China. This study will use the relevant data from 2005 to 2014 to analyze the dynamic contribution of various influencing factors to the inter-provincial differences of entrepreneurial activities in China under the premise of analyzing the imbalance of entrepreneurial activities in China. And put forward countermeasures and suggestions for promoting the rapid development of entrepreneurial lagging regions and the relatively equalization of global entrepreneurial activities.

2. literature review

Entrepreneurial activities are the result of a combination of capacity and environmental opportunities\(^1\). The economic and social environment and the personal traits of entrepreneurs together contribute to the entrepreneurial entrepreneurial behavior\(^2\). In the rapid growth of entrepreneurial research literature in recent years, scholars' research on entrepreneurship has both micro and macro perspectives\(^3\). The micro perspective focuses on the resources and mechanisms of individual entrepreneurship and entrepreneurial success, and focuses on entrepreneurial entrepreneurs. Transcendental experience, cognitive models, and social capital are explored in depth; the macro perspective highlights regional differences in entrepreneurial performance, the impact of entrepreneurial environments, and the impact of entrepreneurial activities on regional economic development. The micro-level perspective focuses on the resources and mechanisms of individual entrepreneurship and entrepreneurial success, and explores the
entrepreneurial experience, cognitive model and social capital. The macro perspective highlights the regional differences in entrepreneurial performance, the impact of the entrepreneurial environment, and the impact of entrepreneurial activities on regional economic development.

2.1 Research on the difference of foreign entrepreneurship

In recent years, research on the differences in regional entrepreneurship performance has gradually increased. These studies are mostly carried out from the perspective of regional entrepreneurial environment differences. The entrepreneurial environment can be regarded as an organic combination of various elements of the actual role of the region in the process of specific entrepreneurial activities. Entrepreneurial activities are rooted in regional social ecosystems. The emergence of new ventures at the regional level requires systemic support from multiple elements of regional economic fundamentals, cultural climate, regulatory policies and product markets. The strong influence of these environmental factors on the growth of new ventures is widely recognized. Gnywali and Fogel (1994) proposed that as an entrepreneurial environment that needs to face and utilize the sum of factors for entrepreneurial success, it includes at least government policies and regulations, socio-economic conditions, and entrepreneurial financial support[4]. These factors include both “hard” environments such as natural endowments and technological foundations, as well as “soft” elements such as regional cultural climate and market development. Richard et al. (2003) argue that a sound market mechanism, good financing conditions, and incentive policies for entrepreneurs are essential elements of an entrepreneurial and friendly environment[5]. Global Entrepreneurship Watch summarizes regional entrepreneurial environmental conditions as financial support, government policy,
education and training, R&D transfer, market openness, availability of physical infrastructure, cultural and social norms, etc., which more comprehensively reflects the region. The analytical framework is also used by researchers to examine and compare regional entrepreneurial environments.

With the deepening of entrepreneurial research at the regional level, researchers have gradually focused on the causes of regional entrepreneurial differences based on the entrepreneurial environmental impact mechanism. Early research by Litvak and Maule (1976) pointed out that the key elements of the entrepreneurial environment are the financing environment, marketing market and government policies by comparing the performance of entrepreneurs in Canada, the United Kingdom and the United States. Bartik's (2001) study of entrepreneurial activities in different regions of the United States shows that population density, industry concentration, government taxation factors, and differences in venture capital in the financial sector together determine the heterogeneity of entrepreneurship in different regions. Armington and Acs (2002) show that industrial density, market demand changes and human capital differences are important reasons for the imbalance of entrepreneurship in the United States. Lee et al. (2004) focused on human factors to explore differences in entrepreneurship in different parts of the United States, confirming that population creativity, population growth, income growth, and human capital are all factors that contribute to regional entrepreneurship differences. Hiroyuki and Nobuo (2006) confirmed that factors such as market demand, human resources, financial support, industrial agglomeration and industrial structure are factors that cause differences in entrepreneurship rates in different regions of Japan. Among them, the human resources factors measured by the proportion of regional college students and the proportion of high-tech enterprises are the most significant. Human resources
factors have the most significant impact\textsuperscript{[11]}. Fritsch and Muelle (2006) found that factors such as differences in industrial structure and unemployment rate can be used to explain the differences in entrepreneurship levels in Germany, and propose that policy focus is on guiding innovation and fostering regional entrepreneurial climate\textsuperscript{[12]}. Verheul et al. (2009) examined the impact of policy support, industrial base, and urban economy on regional entrepreneurial performance gaps by comparing the differences between industrial start-ups and commercial start-ups in different regions of Italy\textsuperscript{[13]}.

2.2 Research on the differences in domestic entrepreneurship

In domestic research, Mai Yiyuan and Gan Zhilong (2008) used GEM data to confirm that the economic and cultural environment in 13 cities in China has a greater impact on the regional entrepreneurial capacity gap than the policy and industry environment\textsuperscript{[14]}. Gao Jian and Shi Shude (2009) used panel data from 1996 to 2006 and 29 provinces in China (excluding Tibet and Chongqing) to show that regional human capital, individual wealth and unemployment rate are important factors in determining regional entrepreneurial differences. The increase in market demand affects entrepreneurship through changes in population income\textsuperscript{[15]}. Jiang Sanliang (2009) pointed out that a superior entrepreneurial environment is not a sufficient condition to stimulate local residents to start a business. The entrepreneurial enthusiasm of regional residents is highly correlated with the local entrepreneurial atmosphere, and the interaction between endogenous and local individual behaviors and reference groups is highly correlated with entrepreneurial success rate, profitability and corporate density, and the different entrepreneurial atmosphere is an important factor leading to differences in entrepreneurial levels\textsuperscript{[16]}. Wu Yigang and
Rong Zhaozi (2011) focused on the impact of the entrepreneurial atmosphere, pointing out that the entrepreneurial atmosphere is the collective and external performance of all ethnic group members on entrepreneurial intelligence, values and customs. The level of entrepreneurial activity in the region can be improved by changing the entrepreneurial risk preferences of ethnic group members and increasing the frequency of replication of entrepreneurial practices. Therefore, for the regions where entrepreneurship is lagging behind at this stage, it is necessary to focus on fostering regional entrepreneurial atmosphere and achieving critical breakthroughs.  

Gao Xingmin and Zhang Xiangjun (2015) based on data from prefecture-level cities in Guangdong Province, showed that regional entrepreneurship levels are related to local agglomeration effects, innovation levels and market size. In the state of spatial interaction, the high entrepreneurial level can also generate radiation and lead effects in the surrounding area.

In addition, some domestic researches also analyze the differences in entrepreneurial performance between regions from the perspective of entrepreneurial impact on the economy. For example, Song Laisheng (2013) and Qi Yanna et al. (2014) show that there are regional differences in the promotion of economic growth in China. The positive effects are more pronounced in coastal developed areas, and this role remains to be further developed in some central and western provinces. Although scholars have partially discussed the performance and causes of regional entrepreneurial gaps, there are still some questions to be answered: for example, what is the gap in regional entrepreneurial performance in China? What is the trend of this gap? What factors in the economic society have led to an imbalance in the performance of entrepreneurship in various provinces in China? How do these factors affect the changes in regional entrepreneurial performance? This study attempts to
solve the above problems based on the province's provincial (provincial, autonomous region, municipality) as the basic unit, based on the 2005-2014 panel data using the Gini coefficient and other indicators and shapley value decomposition method. In order to provide a reference for narrowing the regional entrepreneurial gap and promoting the balanced development of entrepreneurship.

3. Differences and Evolution of China's Provincial Entrepreneurship: Analysis Based on 2005 - 2014

3.1 Data selection

The former is measured by the proportion of regional total participation in the region, and the latter is measured by the number of newly created private enterprises and the total number of regional indicators. Since the number of people involved in regional entrepreneurship is not available, the number of new private companies in the year is used to describe regional entrepreneurial performance, and its ratio to the total number of people in the region (unit: thousand) is used to enhance inter-regional comparability. It should be noted that the number of new private enterprises in each province and district in this study is subtracted from the number of private enterprises in the adjacent years. This calculation only draws the increase of registered enterprises in the adjacent years, and does not take into account the number of private enterprises that have withdrawn from the market. Since the latter data is not available, this study still adopts the above method to describe the level of regional entrepreneurship. This part of the data is taken from the China Economic and Social Development Statistics Database. The calculation results show that in 2005, the number of privately-owned private enterprises in the whole territory was 0.498, and in 2014, it reached 2.140. Specifically to the provincial level, the average of the top four provinces in terms of the number of newly created private enterprises in China is Shanghai (3.603), Beijing
(3.216), Guangdong (1.505) and Jiangsu (1.477). In addition to Tibet, there are only nine provinces with more than one privately-owned private enterprise in the entire province. The entrepreneurial rate in China is not only low overall but also has significant spatial imbalance. Beijing and Shanghai are far ahead of other provinces, and China's entrepreneurial activities also have certain spatial polarization characteristics. Table 1 reports the number of newly created private enterprises per 1,000 people in the Eastern and Central West in 2005-2014 according to the National Bureau of Statistics.

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>eastern</td>
<td>0.817</td>
<td>0.883</td>
<td>0.722</td>
<td>1.186</td>
<td>0.882</td>
<td>1.210</td>
<td>1.286</td>
<td>1.151</td>
<td>1.798</td>
<td>2.967</td>
</tr>
<tr>
<td>central</td>
<td>0.283</td>
<td>0.322</td>
<td>0.324</td>
<td>0.509</td>
<td>0.387</td>
<td>0.532</td>
<td>0.560</td>
<td>0.580</td>
<td>0.727</td>
<td>1.449</td>
</tr>
<tr>
<td>western</td>
<td>0.314</td>
<td>0.263</td>
<td>0.233</td>
<td>0.604</td>
<td>0.531</td>
<td>0.451</td>
<td>0.768</td>
<td>0.801</td>
<td>0.986</td>
<td>1.700</td>
</tr>
</tbody>
</table>

Source: According to the National Bureau of Statistics.

3.2 Indicator construction and data calculation

It can be seen from Table 1 that since 2005, the regional entrepreneurship rate in all regions has shown a growth trend. The average annual growth rate of entrepreneurship in the eastern, central and western regions is 15.42%, 19.92%, and 20.64%, respectively. The growth rate in the central and western regions is higher than that in the eastern region. It is related to the policy inclination of the central and western regions through the development of the western region and the rise of the central region and the systematic development of the industrial transfer in the eastern region. It also intuitively reflects the shrinking trend of the spatial gap in China's entrepreneurial performance. In order to more accurately reflect the spatial differences and evolution of entrepreneurial performance during the above-mentioned survey year,
this study used Gini index, Theil index and MLD index to further calculate the provincial gaps.

The Gini index is the most common indicator used to measure inequality. The Gini index calculation formula used in this paper is shown in equation (1). Among them, \( x_i \) represents the entrepreneurship rate of the \( i \) province (the number of private entrepreneurs in thousands), \( k \) is the number of geographical regions studied, and \( u \) is the weighted average of the entrepreneurship rates of all provinces.

\[
Gini = \frac{\sum_{i=1}^{k} \sum_{j=1}^{k} |x_i - x_j|}{2k^2u}
\]  

(1)

Theil index and MLD index are special forms of generalized entropy index derived from Taylor's use of entropy concepts in information theory to calculate income inequality in 1967. The Taylor index and the logarithmic deviation mean exponential expression are shown in equations (2) and (3), respectively.

\[
Theil = \sum_{i=1}^{k} p_i \frac{x_i}{u} \ln \left( \frac{x_i}{u} \right)
\]  

(2)

\[
MLD = \sum_{i=1}^{k} p_i \ln \left( \frac{u}{x_i} \right)
\]  

(3)

Among them, \( k \), \( x_i \), \( u \) refer to the same meaning as the Gini coefficient, and \( p_i \) is the proportion of the population in the \( i \) region to the national population. In general, the Gini coefficient is sensitive to changes in the medium-level development level. The Theil index and the MLD index are sensitive to the changes in the upper and lower levels of development, so the three indicators are used in this study for analysis. Table 2 reports the evolutionary trend of China's provincial entrepreneurship gap as measured by the number of newly created private enterprises per 1,000 people. The
Gini index, Theil index and MLD index all show that the gap in the province's entrepreneurial capacity gap shows a volatility trend. The provinces with lagging entrepreneurship have a catch-up effect on leading provinces.

Table 2. China's Provincial Entrepreneurship Rate Gap Index 2005-2014

<table>
<thead>
<tr>
<th>Year</th>
<th>GINI</th>
<th>Theil</th>
<th>MLD</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>0.393</td>
<td>0.356</td>
<td>0.261</td>
</tr>
<tr>
<td>2006</td>
<td>0.375</td>
<td>0.246</td>
<td>0.231</td>
</tr>
<tr>
<td>2007</td>
<td>0.427</td>
<td>0.331</td>
<td>0.352</td>
</tr>
<tr>
<td>2008</td>
<td>0.349</td>
<td>0.220</td>
<td>0.197</td>
</tr>
<tr>
<td>2009</td>
<td>0.306</td>
<td>0.169</td>
<td>0.156</td>
</tr>
<tr>
<td>2010</td>
<td>0.356</td>
<td>0.224</td>
<td>0.208</td>
</tr>
<tr>
<td>2011</td>
<td>0.323</td>
<td>0.181</td>
<td>0.169</td>
</tr>
<tr>
<td>2012</td>
<td>0.292</td>
<td>0.150</td>
<td>0.137</td>
</tr>
<tr>
<td>2013</td>
<td>0.385</td>
<td>0.251</td>
<td>0.328</td>
</tr>
<tr>
<td>2014</td>
<td>0.273</td>
<td>0.143</td>
<td>0.128</td>
</tr>
<tr>
<td>Mean</td>
<td>0.348</td>
<td>0.227</td>
<td>0.217</td>
</tr>
</tbody>
</table>

Table 3 further reports the value of the entrepreneurial Gini index of the Eastern Midwest between 2005 and 2014, according to the National Bureau of Statistics. The average Gini coefficient of the three regions in the survey year is 0.307, 0.152 and 0.244, respectively. The eastern region is higher than the central and western regions, and each region is lower than the average value of the global entrepreneurial Gini index. It can also be seen that the gap in the global entrepreneurship rate in China is mainly caused by the three regions and the eastern region. The internal differences in the central and western regions have a relatively small impact on the total difference.

Table 3. Internal entrepreneurial rate Gini index in 2005-2014 in the eastern, central and western regions of China

<table>
<thead>
<tr>
<th>Year</th>
<th>Eastern</th>
<th>Central</th>
<th>Western</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>0.392</td>
<td>0.081</td>
<td>0.238</td>
</tr>
<tr>
<td>2006</td>
<td>0.263</td>
<td>0.143</td>
<td>0.218</td>
</tr>
<tr>
<td>2007</td>
<td>0.380</td>
<td>0.177</td>
<td>0.316</td>
</tr>
<tr>
<td>2008</td>
<td>0.344</td>
<td>0.152</td>
<td>0.222</td>
</tr>
</tbody>
</table>
4. Regression analysis of the influencing factors of regional entrepreneurship differences

Regression analysis of the influencing factors of regional entrepreneurship differences was proposed by Shorrock (1999) based on cooperative game theory. The application of this method requires first determining the regression equation for the dependent variable[^21].

Regional entrepreneurship performance is the result of the integrated role of social ecosystems. Based on the research of previous scholars and the availability of parallel data, this paper selects regional urbanization level, financial development level, regional market-oriented culture and product market development as factors affecting the overall entrepreneurial performance (ent) of the region.

4.1 Factors affecting regional entrepreneurship differences

4.1.1 Regional urbanization level.

Cities and towns are the growth poles of regional economic and social development. The urbanization process can promote the agglomeration and intensive use of regional resources, and release new market demand and expand the potential space for regional economic development, thus providing a better economic and social foundation for regional entrepreneurship. For potential entrepreneurs, urbanization development can also enhance entrepreneurial opportunity density and opportunity quality by enhancing regional information flows and close economic exchanges, thereby enhancing their entrepreneurial efficiency and success expectations. Moreover, cities and towns are often regional innovation highlands. Urbanization development is

<table>
<thead>
<tr>
<th>Year</th>
<th>Value 1</th>
<th>Value 2</th>
<th>Value 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>0.251</td>
<td>0.118</td>
<td>0.286</td>
</tr>
<tr>
<td>2010</td>
<td>0.316</td>
<td>0.128</td>
<td>0.173</td>
</tr>
<tr>
<td>2011</td>
<td>0.270</td>
<td>0.078</td>
<td>0.328</td>
</tr>
<tr>
<td>2012</td>
<td>0.265</td>
<td>0.094</td>
<td>0.300</td>
</tr>
<tr>
<td>2013</td>
<td>0.310</td>
<td>0.424</td>
<td>0.228</td>
</tr>
<tr>
<td>2014</td>
<td>0.275</td>
<td>0.128</td>
<td>0.132</td>
</tr>
<tr>
<td>Mean</td>
<td>0.307</td>
<td>0.152</td>
<td>0.244</td>
</tr>
</tbody>
</table>
conducive to promoting regional innovation and promoting innovation spillover effects. This also helps potential entrepreneurs to explore and utilize new knowledge and market opportunities through innovative platforms. In this paper, the non-agricultural population as a percentage of the total population refers to the regional urbanization level (urb).

4.1.2 Financial development level.

Entrepreneurial activities require a large amount of capital investment. Financial institution loans are the main capital channels for the initial entrepreneurs in addition to their own funds. The ability to obtain financial resources support more conveniently is also an important factor in determining the level of regional entrepreneurship. Paulson et al. (2004) found that the degree of financial market constraints on entrepreneurial financing is significantly negatively correlated with the scale of regional entrepreneurship. The higher the degree of restriction, the smaller the scale of entrepreneurship in the region. Although the impact of financial development on regional entrepreneurship is directly reflected in the data on entrepreneurial loans, due to the inability to obtain direct data on entrepreneurial loans by provincial financial institutions, this paper divides the financial institution loan balance by the total population as the financial development level (fin) that affects entrepreneurship.

4.1.3 Regional market-oriented culture

Entrepreneurs in entrepreneurial activities have characteristics such as innovative investment and risk appetite, which are closely related to the regional cultural atmosphere. The beliefs and customs in this cultural atmosphere have a significant impact on whether potential entrepreneurs can implement entrepreneurship. In Ma and Todorovic (2012), the system and culture as intangible resources are the important
factors leading to the gap in entrepreneurship between regions. The system will influence the direction and efficiency of entrepreneurial resources allocation through social incentives and reward structures. The inherent characteristics of entrepreneurial activities with high risks and high uncertainty also require stable and efficient institutions. The cultural atmosphere of “dominant practices dominate” will hinder regional resources from investing in innovation and entrepreneurship through conservative and fearful failures. A culture of orientation will create a boost to entrepreneurship by creating support and tolerance\(^{[23]}\). Moreover, the market-oriented cultural atmosphere can also form a positive feedback evolutionary force with entrepreneurial activities as the main driving force of knowledge and compensation accumulation. That is, the market-oriented culture is conducive to incorporating more innovative elements into the field of entrepreneurial activities, and entrepreneurship Areas with more active activities will strengthen the culture of regional market orientation due to the continuous accumulation of successful entrepreneurial experiences. Since non-state-owned economic enterprises are relatively more able to reflect market-oriented management methods, the regional market-oriented culture (cul) refers to the proportion of individual and private employees in the total population. The indicator also reflects the regional business environment and entrepreneurial friendly institutional atmosphere.

4.1.4 Product market size

The product market size (prm) affects the entrepreneur's motivation to transform entrepreneurial ideas into reality, but has a dual impact on regional entrepreneurial performance. A mature product market will support the realization of innovative product value and reduce the perceived risk of entrepreneurs. At the same time, the regional mature product market is also conducive to the emergence of new demand to
promote niche market entrepreneurial opportunities outside the existing market. However, the more mature product market will also inhibit the enthusiasm of entrepreneurs due to the increase of imitators and competitors. This study refers to the degree of development of regional product markets by the ratio of total retail sales to GDP.

4.2 Regional Entrepreneurial Difference Model Construction and Regression Analysis

Among the above variables, non-agricultural population, total population, financial institution loan balance, GDP, total social retail goods, etc. are taken from the China Statistical Yearbook and relevant provincial statistical bulletins. The economic data were all subjected to anti-expansion treatment. During the inspection period, some missing values of some provinces were processed by interpolation method, and the individual missing values at the end were filled by prediction. The regional urbanization level, financial development level, and regional market-oriented culture are all expected to have positive impact on regional entrepreneurial performance, and the expected impact of product market development is uncertain. The influencing factors can neither replace each other nor have obvious confrontation. This study constructs a semi-logarithmic panel data model as shown in equation (4). The semi-logarithmic formal model was chosen because: the dependent variable is measured by the number of newly created private enterprises. After the logarithm, the index is closer to the normal distribution than the original value; in addition, the model is transformed by the decomposition equation. It is possible to avoid the controversy over whether the constant term contributes to the development of the dependent variable.

\[ \text{Lnent}_{it} = c + \delta_1 \text{urb}_{it} + \delta_2 \text{Lnfin}_{it} + \delta_3 \text{cul}_{it} + \delta_4 \text{mar} + d_i + \epsilon_{it} \quad (4) \]

In the above formula, \( i \) and \( t \) respectively represent different provinces and years,
\[i = 1, 2, ..., 30 \text{ (excluding Tibet)}, \ t = 2005, 2007, ..., 2014.\] \(\delta\) refers to the influence coefficient of different influencing factors, and the regional financial development level is processed logarithmically to eliminate heteroscedasticity. The cross-section dummy variable \(d_i\) reflects the individual characteristics of the region, and \(\epsilon_i\) is the error term. The regression analysis results of the GLS estimation method based on the section weighting and the fixed effect model are shown in Table 4.

<table>
<thead>
<tr>
<th>Statistical indicators</th>
<th>Constant term</th>
<th>urb</th>
<th>fin</th>
<th>cul</th>
<th>mar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coefficient</td>
<td>2.560</td>
<td>6.479</td>
<td>0.303</td>
<td>2.124</td>
<td>2.357</td>
</tr>
<tr>
<td>Std. Error</td>
<td>0.913</td>
<td>2.071</td>
<td>0.170</td>
<td>1.165</td>
<td>1.221</td>
</tr>
<tr>
<td>t-Statistic</td>
<td>2.804</td>
<td>3.128</td>
<td>1.785</td>
<td>1.823</td>
<td>1.931</td>
</tr>
<tr>
<td>Prob</td>
<td>0.005</td>
<td>0.002</td>
<td>0.075</td>
<td>0.070</td>
<td>0.055</td>
</tr>
</tbody>
</table>

The regression equation F value in Table 4 is 47.090 (\(p=0.000\)), and the adjusted decision coefficient \(R^2\) is 0.836. The explanatory variables selected in this study have positive impacts on regional entrepreneurial performance, and the urbanization level has the most significant impact. Through the 1\% significant level test, the clustering of factors and the emergence of innovation driven by the urbanization process are the core supporting forces for entrepreneurial development. The flow and agglomeration effects of various factors are conducive to improving the efficiency of knowledge and information dissemination, reducing the transaction costs and information asymmetry of market entities, and expanding entrepreneurial opportunities by deepening some of the regional work. Product market development degree influence intensity secondly, although mature product market will increase potential entrepreneurs' perception of business uncertainty due to more intense competition, but the growth of business opportunities driven by market development is still an important factor in stimulating
people's entrepreneurial desires. Moreover, the development of the product market can also form a positive superposition effect with the emergence of regional entrepreneurship: the improvement of the entrepreneurial level is conducive to promoting the continued growth of the product market by enriching the supply and enriching the product service format. The growth of the product market will provide greater potential for regional entrepreneurship. Market-oriented culture and regional financial development level have a positive impact on regional entrepreneurial performance and pass the 10% significant level test. The financial support and regional market-oriented cultural atmosphere promoted by regional financial development are also important factors supporting entrepreneurship. Financial development is conducive to alleviating the barriers to entrepreneurial funds and reducing the perceived risks of entrepreneurs; encouraging innovation and tolerance to fail the market-oriented culture will stimulate regional entrepreneurial potential through demonstration effects and increased input intensity.

5. Decomposition of Regional Entrepreneurial Performance Differences Based on Shapley Value

Before applying the Shapley value decomposition method, it is necessary to examine the degree of interpretation of the regional entrepreneurial differences in the equation 4, and obviously, the more differences that can be explained by the independent variables, the better. Wan Guanghua et al. (2005) proposed a method to evaluate the explanatory power of regression equations for inequality\(^{[25]}\). The basic principle is to calculate the interpretation ratio of independent variables and residuals to Gini coefficient. The residuals in Equation 4 regression equations reflect the influence of other unconsidered variables on the difference in provincial entrepreneurial performance. In the ideal state, the residual effect is zero. However, the effect of
residuals is usually not zero. Whether it is positive or negative indicates that there is still a “gap” in the interpretation of the differences in provincial entrepreneurial performance. The ratio of the absolute value of the residual influence to the Gini coefficient indicates the difference that is not explained by the independent variable, and the subtraction of 1 is the difference that can be interpreted by the independent variable. According to the calculation method proposed by Wan Guanghua et al., the interpretative proportions of each year in the period of 2005-2014 are above 80.52%, which indicates that the formula (4) has better overall explanatory power for provincial entrepreneurial performance differences.

The regression-based shapley value decomposition framework first needs to determine the dependent variable regression equation, and then take the mean of some independent variable into the equation to calculate the dependent variable value and its inequality index again. The latter has ruled out the effect of taking the mean independent variable. By comparing the inequality index before and after the dependent variable, the contribution rate of the independent variable to the inequality of the dependent variable can be obtained. In general, the contribution of the independent variable to the dependent variable gap depends on the equilibrium of the independent distribution of the independent variable and the correlation between it and the dependent variable. Since the value of other independent variables in the calculation process can be the actual value or the average value, the contribution of the specific explanatory variable calculated by the Shapley value to the inequality index is an expected value, and this part is calculated by the Java program.

The cross-section dummy variables of the fixed effects of the regression equation can be regarded as the regional intrinsic factors that are not reflected in the model. In the decomposition, use the section dummy variable to construct a new variable $d_i$ to
analyze the influence of the local factors on entrepreneurial performance (the coefficient is set to 1). Equation 5 is the decision equation for regional entrepreneurial performance differences. Since the equation is a semi-logarithmic equation, it is restored before decomposition. The specific decomposition results are shown in Table 5.

$$Lnent_{it} = 2.560 + 6.479 \times urb_{it} + 0.303 \times Lnfin_{it} + 2.124 \times cul_{it} + 2.357 \times mar + d_i + \varepsilon_{it}$$

(5)

Table 5. Regional Decomposition Results of Regional Entrepreneurship

<table>
<thead>
<tr>
<th>Year</th>
<th>The level of urbanization</th>
<th>Regional financial development level</th>
<th>Market-oriented culture</th>
<th>Product market size</th>
<th>Regional intrinsic factor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Gini mean</td>
<td>Gini mean</td>
<td>Gini mean</td>
<td>Gini mean</td>
<td>Gini mean</td>
</tr>
<tr>
<td>2005</td>
<td>79.73% 102.16%</td>
<td>16.16% 24.32%</td>
<td>8.46% 13.70%</td>
<td>2.21% 1.89%</td>
<td>-6.56% -42.08%</td>
</tr>
<tr>
<td>2006</td>
<td>77.78% 97.50%</td>
<td>15.33% 22.56%</td>
<td>8.63% 13.33%</td>
<td>1.93% 1.67%</td>
<td>-3.67% -35.06%</td>
</tr>
<tr>
<td>2007</td>
<td>76.60% 96.25%</td>
<td>15.99% 23.45%</td>
<td>8.86% 12.83%</td>
<td>1.61% 1.08%</td>
<td>-3.07% -33.62%</td>
</tr>
<tr>
<td>2008</td>
<td>74.82% 93.41%</td>
<td>16.20% 23.17%</td>
<td>9.69% 13.63%</td>
<td>2.46% 2.42%</td>
<td>-3.17% -32.64%</td>
</tr>
<tr>
<td>2009</td>
<td>73.39% 91.77%</td>
<td>16.02% 22.76%</td>
<td>10.17% 13.98%</td>
<td>2.52% 2.53%</td>
<td>-2.10% -31.03%</td>
</tr>
<tr>
<td>2010</td>
<td>71.78% 87.05%</td>
<td>13.66% 18.94%</td>
<td>9.66% 13.06%</td>
<td>3.06% 3.34%</td>
<td>1.84% -22.39%</td>
</tr>
<tr>
<td>2011</td>
<td>70.26% 84.53%</td>
<td>13.24% 18.10%</td>
<td>9.94% 13.14%</td>
<td>3.99% 4.32%</td>
<td>2.58% -20.99%</td>
</tr>
<tr>
<td>2012</td>
<td>68.67% 81.70%</td>
<td>12.56% 16.82%</td>
<td>10.19% 13.27%</td>
<td>4.50% 4.73%</td>
<td>4.09% -16.51%</td>
</tr>
<tr>
<td>2013</td>
<td>67.83% 79.93%</td>
<td>12.42% 16.55%</td>
<td>12.15% 15.17%</td>
<td>4.00% 4.13%</td>
<td>3.61% -15.78%</td>
</tr>
<tr>
<td>2014</td>
<td>65.82% 76.49%</td>
<td>12.32% 16.27%</td>
<td>14.34% 17.32%</td>
<td>3.61% 3.25%</td>
<td>3.92% -13.33%</td>
</tr>
</tbody>
</table>

The first column of the variables in Table 5 reports the contribution rate of the explanatory variables based on the Gini coefficient indicator measure to the imbalance of provincial entrepreneurial performance. In order to confirm the inherent robustness
of the research results, the first column of the variable reports the mean value of the imbalanced contribution rate of provincial entrepreneurial performance based on the Gini coefficient, Theil index and MLD index (in the length of this article, this paper does not report the unbalanced contribution rate of provincial entrepreneurial performance based on the Theil index and MLD index measurement explanatory variables, available on request). Table 5 shows that the ranking and change trend of the relative contribution of the explanatory variables based on the Gini coefficient measure is highly consistent with the three-index mean value measurement, which indicates that the selected variables in this study have inherent stability to the decomposition of regional entrepreneurial level differences. The factors affecting the overall level of entrepreneurship in the region, such as the level of urbanization, the level of regional financial development, and regional culture, have also led to gaps in entrepreneurial levels across regions.

The comparison between indicators shows that the regional urbanization process characterized by the non-agricultural population as a percentage of the total population is the most important factor leading to the imbalance of the internal entrepreneurial level in the whole year. The average contribution rate based on the Gini coefficient is 72.67%. As a regional economic development highland, cities and towns can effectively promote the concentration and intensive use of factors, and enhance the potential of economic development through the spillover effect of industrial development. For entrepreneurs, it is beneficial to explore potential innovation and entrepreneurial opportunities. The contribution rate of urbanization to the gap between entrepreneurial levels in the provinces is weakening. The relative contribution rate measured by Gini coefficient decreases from 79.73% in 2005 to 65.82% in 2014, which is due to the urbanization level in the whole region. The
degree of equilibrium reduction: the Gini coefficient of the provincial unit urbanization level decreased from 0.174 in 2005 to 0.117 in 2014. The narrowing of the gap in urbanization development between provinces helps to alleviate the imbalance of entrepreneurial performance. However, the imbalance of urbanization at the present stage is still the most important factor leading to the entrepreneurial gap. The average contribution rate of regional financial development level to entrepreneurial imbalance is ranked second in the survey year. Financial institution loans are an important source of funding for entrepreneurial activities. The relative contribution rate of the financial development level measured by the Gini coefficient to the imbalance of entrepreneurial performance between provinces also showed a downward trend year by year, with an average of 14.39%. This also stems from the decline in the level of financial development in the whole region. In 2005, the Gini coefficient of the financial development level characterized by the regional per capita financial institution loan balance decreased from 0.329 at the beginning of the period to 0.321. The narrowing of the financial gap will help to bridge the gap in entrepreneurship between regions.

The average contribution rate of the regional market-oriented culture reflected by the proportion of the number of employees in the private and private enterprises was the third in the survey year, and its contribution rate showed a growth trend. The calculation based on the Gini index showed an increase from 8.46% in the beginning of 2005 to 14.34% in 2014. Entrepreneurial activities are characterized by high risks and uncertainties. The improvement of entrepreneurial level at the regional level is inseparable from the cultivation of market-oriented culture. The Gini index of the market-oriented culture showed a slight downward trend during the survey year, but its relative contribution rate to the entrepreneurial gap increased, and exceeded the
level of financial development at the end of the investigation. This means that the
degree of dependence of regional entrepreneurial performance on the market-oriented
cultural atmosphere is deepening. Therefore, cultivating entrepreneurial lags regional
market-oriented regional culture is of great significance to make up for the internal
entrepreneurial gap. The cultivation of this kind of atmosphere requires both policy
guidance and hardware environment construction, as well as a regional atmosphere
that encourages entrepreneurship and tolerance failure.

The average contribution rate of the product market size reflected by the ratio of total
retail products to GDP is 2.99%, and it shows a slight increase trend during the survey
year. The increase in product market size is conducive to entrepreneurs to explore new
revenue space and increase their entrepreneurial efficiency, but the competition
caused by the expansion of product market scale will strengthen the perceived risk of
entrepreneurs, and thus inhibit entrepreneurs. The calculation results in Table 4 show
that the market size of the product at this stage still has a positive impact on the level
of regional entrepreneurship. Therefore, promoting the expansion of the regional
market after the start of the business is still conducive to make up for the internal
entrepreneurial gap.

The intrinsic factors of the region cover factors such as resource endowment,
development basis and long-term policy inclination that are not reflected in the
explanatory variables of this study. The imbalance in the development of China's
provinces is the result of long-term formation. The relative contribution rate of this
inherent difference in history to the regional entrepreneurial gap showed a trend of
positive and negative in the period of 2005-2014, that is, in 2005-2009, the intrinsic
factors of the region became the power to make up for the imbalance of internal
entrepreneurship within the whole region. This is related to the policy opportunities of
the Central Development and the rise of the West and the transfer of industries in the central and western regions. After 2010, the relative contribution rate of the intrinsic factors in the region turned positive, that is, the effect of the inherent factors to make up the gap gradually weakened, which became the factor that caused the imbalance of entrepreneurship between provinces. Therefore, the promotion of regional entrepreneurship development and the reduction of global entrepreneurial imbalance policy measures need to fully consider regional differences, which are appropriate for the region.

6. Research conclusions and countermeasures

6.1 Research conclusion

Based on the 2005-2014 data, this study shows that there are significant differences in the level of entrepreneurship in various provinces in China, but this difference is generally decreasing. In other words, the balance of entrepreneurial levels across the country has increased. Further decomposition studies show that the gap in the global entrepreneurship rate in China is mainly caused by the three regions and the eastern region. The panel regression results show that regional urbanization level, financial development level, market-oriented cultural atmosphere and product market scale are conducive to stimulate regional entrepreneurship, and the intensity of urbanization is the most significant. According to the shapley value decomposition of the regression results, among the factors causing the entrepreneurial gap in each province, the relative contribution rate of urbanization level is the highest, but it is significantly weakened, and the relative contribution rate of financial development level is also weakening. The market-oriented cultural atmosphere and regional intrinsic factors have an upward trend in the relative contribution rate of the global entrepreneurial performance, and the impact of product market size is relatively small.
6.2 Countermeasures

This study shows that the gap in urbanization development is still the main factor leading to the imbalance of entrepreneurship in the whole world at this stage. The narrowing of the gap in urbanization development is conducive to bridging the regional entrepreneurial gap. Therefore, for the regions with relatively lagging entrepreneurship, especially in the central and western regions, it is necessary to vigorously promote the new urbanization construction based on people, give play to the advantages and spillover effects of urban and urban factors, and provide an economic and social foundation for regional entrepreneurship development. In the process of urban and urban development, first, promote the flow of innovative elements such as information and capital, improve the construction of regional entrepreneurial information platforms, and increase the density of entrepreneurial opportunities within the region; the second is to improve the partial labor system in cities and towns, optimize the quality of entrepreneurial ecosystems in the region, and especially improve the intermediary trading system of market trading system, public technology services and entrepreneurial innovation, and reduce the perceived uncertainty of potential entrepreneurs; the third is to enrich the growth role of the city in the region, promote the spatial spillover of innovation elements and entrepreneurial atmosphere, and promote the overall level of innovation and entrepreneurship in the region; the fourth is to promote the economic and social urbanization process, and increase regional entrepreneurial potential through the transformation and upgrading of industrial structure and the improvement of the quality of urban (town) development.

In addition, in the process of urbanization in the central and western regions, it is necessary to increase education support to the central and western regions, improve
the quality of human resources in the central and western regions, and in particular, improve basic education in the central and western regions, and strengthen entrepreneurship counseling and entrepreneurship training, and eliminate regional entrepreneurial bottlenecks caused by lack of knowledge.

The current level of regional financial development gap is also an important factor leading to regional entrepreneurship differences. Therefore, it is necessary to strengthen financial support in the lagging areas of entrepreneurship, innovate financial support for entrepreneurship, improve the system of financial support for entrepreneurship, broaden the financing channels of start-ups, and strengthen the market-oriented orientation of regional credit resource allocation and increase credit support and financing guarantees for start-ups.

The market-oriented cultural atmosphere is also an important factor leading to regional entrepreneurship differences and its relative contribution rate has been increasing in recent years. Therefore, it is necessary to focus on the regional cultural atmosphere and entrepreneurial friendly environment that is conducive to entrepreneurship in the relatively lagging areas of entrepreneurship through policy propaganda, education guidance and typical demonstration. Optimize the regional business environment, reduce the cognitive barriers for social resources to enter the entrepreneurial field, and promote a spiral of growth between the regional entrepreneurial atmosphere and entrepreneurial activities with the accumulation of knowledge and compensation. Cultivating regional entrepreneurial atmosphere needs to further optimize the hardware system of entrepreneurial support, strengthen the interconnection and interaction between innovation elements, encourage the development of multi-agent innovation such as industry, education and research, and promote the transformation of scientific and technological innovation achievements.
Through the emergence of a large number of innovations to promote entrepreneurial development, improve the investment of venture capital and the construction of entrepreneurial bases, form a policy orientation and policy system to support entrepreneurship, guide the establishment of entrepreneurial and friendly employment and career choices, and stimulate the entrepreneurial source of the whole society.

The scale of product market is also an important factor leading to regional entrepreneurial performance and regional entrepreneurial gap. Therefore, it is necessary to promote the entrepreneurial willingness and entrepreneurial quality of entrepreneurs, especially entrepreneurs with lagging entrepreneurship, through market scale and environmental construction. The expansion of the product market needs to increase sales and consumption industry innovation, encourage the development of various Chaoyang-style consumer industries, and enhance the contribution of consumption to economic development. In the process of promoting the development of the product market, the government needs to regulate the market competition order, prevent the incumbent enterprises from predatory competition for new ventures, and reduce the entrepreneurial risks of entrepreneurs.

The intrinsic factors of the region became the force to make up for the regional entrepreneurial gap at the beginning of the inspection period, but it was weakened in the later period of the investigation period. Therefore, the post-development area needs to effectively link the “One Belt, One Road” strategy, continue to release the national regional policy dividends, enhance its endogenous development capacity, and narrow the entrepreneurial gap caused by the inherent factors of the region.

Due to the availability of data, this study only reflects the regional entrepreneurial performance in terms of the number of new ventures, and lacks an examination of the quality of entrepreneurial growth. In addition, there are many factors affecting
regional entrepreneurial performance. Only some variables are selected in this paper. The future research first is to comprehensively assess regional entrepreneurial performance through comprehensive indicators, and incorporate entrepreneurial quality into the scope of analysis; the second is to include more influencing factors into the analytical framework, and systematically analyze the impact of regional entrepreneurial ecosystems and increasingly close interactions between regions on regional entrepreneurial performance and inter-regional entrepreneurial differences; the third is to increase the content of policy simulation, examine the regional entrepreneurial performance under different virtual policies or policy combinations, and the evolution of entrepreneurial imbalances across the region, and provide direct support for targeted countermeasures.

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Research on Corporate Brand Culture Communication
Strategy in The New Media Era

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Abstract

The rapid development of new media not only has an impact on traditional media, but also enriches and expands the functions of traditional media, making the means and forms of corporate brand culture communication more diversified, more rich and extensive, and has a greater impact on the dissemination of corporate brand culture. Therefore, the arrival of the new media era has brought unprecedented opportunities and challenges to the spread of corporate brand culture. Therefore, enterprises need to innovate brand culture communication strategies to improve their visibility. In this context, this paper analyzes the impact of new media on corporate brand culture communication. In the era of new media, the significance of corporate brand culture communication is studied based on the problems of corporate brand culture communication in the era of new media and the proposed countermeasures. It is expected to bring brand culture communication effect to enterprises, optimize brand marketing management, so as to promote the rapid, stable and healthy development of enterprise brand culture, and finally promote the economic development of enterprises.

Keywords: New media; Corporate culture; Brand spread
1. Introduction

New media plays a positive role in spreading corporate brand culture. The application of the Internet greatly reduces the tedious communication in the communication of corporate culture and makes the communication of corporate brand culture more rapid. New media has novel and intuitive ways of expression, such as the use of images and video in corporate culture communication, which can make corporate brand culture propaganda more attractive and accepted by consumers. Nowadays, new media technology has been fully integrated into consumers' lives. Only by adopting new media can we spread enterprise brand culture more effectively.

2. Main features of new media

New media is an emerging media form under the support system of new technologies such as digital magazine, digital newspaper, digital broadcast, mobile communication, mobile TV and Internet. It is a dynamic form of communication. With the development of science and technology, its extension is expanding and its connotation is enriched with the continuous innovation of products. It is the media technology, media form, media product, communication mode and other media behavior. Compared with traditional media, new media has the following characteristics:

2.1 Communication is of mutual integration

In the past media communication process, the mode of communication has a certain one-way. Consumers are only receivers of information and it is difficult for them to provide feedback to enterprises. However, new media breaks down the boundaries between regions, countries and people. Therefore, the relationship between the sender
and receiver of information is no longer a one-way communication in the traditional sense, and each subject may become the source of information, as well as the sharer and user of information.

2.2 Real-time transmission

In the new media era, any information transmitted through the developed network will be shared globally in a very short time. It is precisely because of this real-time communication that the value and role of new media in modern society are further reflected.

In the new media era, individuals can use WeChat, microblog and other chat tools to release relevant personal information. Especially with the development of mobile video software, more and more people begin to live in a variety of platforms, with the help of the spread of present personalized content, this not only enriched the content of the new media, and media positioning also has certain influence to the whole.

2.3 Lead the development of new business models

The emergence of new media promotes cross-border cooperation among enterprises. Under the new media environment, the traditional media economic operation mode can no longer meet the needs of modern enterprise brand culture communication development. The economic forms represented by new media economy have begun to develop in the direction of informatization and digitization, which greatly promotes the spread of modern enterprise brand culture.

On the whole, great changes have taken place in the speed, interactivity and real time of transmission of new media. How to scientifically grasp the characteristics of new
media communication mode and better promote the development of modern society are all important aspects of corporate brand culture communication to pay attention to.

3. Significance of corporate brand culture communication

The development of new media promotes the modernization of enterprise brand culture construction. At present, new media platform is widely used by enterprises. Especially, as the foundation of enterprise new media platform -- portal website, it is a platform connecting traditional media with newspapers, magazines, internal radio, internal TV and other new media. It has become an important field of enterprise brand culture construction. Only when the audience makes full use of traditional media forms and builds a good network platform, can the traditional media resources be more effectively shared and various functions extended through the network platform of aggregation and link functions. The use of new media is of great significance to the spread of corporate brand culture.

3.1 Promote commodity sales and spread social civilization.

In the market competition, corporate profit is the driving force of corporate building and spreading brand culture. As for the object of brand communication, consumers should first exist as social people. Theoretically speaking, every social person has different complex personality characteristics, and the economic system and cultural background they are in will affect their value orientation, lifestyle and consumption behavior. Although these societies may have individual differences, they all have some common characteristics. Such commonness in culture provides an objective basis for shaping brand culture. On this basis, employees' unified values and corporate culture
play a huge role in earning profits for the enterprise. Meanwhile, it also conveys the essence of its corporate culture to the society and is recognized by consumers.

3.2 Help target audience to identify brand personality

The significant effect of the enterprise on the refinement and dissemination of brand culture is to create multi-level and multi-angle identification functions for the target audience of the brand. The refinement of brand culture can make the target audience form a differentiated cognition of the brand's visual image through the external visual system of the brand. Brand culture norms can also form the individual identity of brand concept in the minds of consumers through the establishment of corporate brand culture system and the contact and communication between employees and target consumers. For example, Nike uses new media to showcase cool, fresh and challenging personal heroism and unique corporate brand culture to its core 17-year-old consumers, and uses the social nature of sports to transform business models into various sports models. Nike turned it into a platform to build a communication platform for consumers, and then upgraded the platform to digital sports, and introduced all kinds of sports into social media to turn sports into a communication topic. This kind of brand culture communication is connected with consumers, and at the same time of spreading brand culture, it also understands consumer behavior in real time, so that consumers form a

3.3 Cultivate the loyalty of target consumers to the brand

With the increasingly fierce market competition, the homogeneity between different brands of the same category is becoming more and more serious. As a result, it is
increasingly difficult for consumers to distinguish between different brands. In this case, the enterprise needs to let the target consumers quickly identify the uniqueness of the brand in many brands. One of the more effective ways is to let the brand have a unique personality culture. For example, tesla successfully subverted the automobile tradition and created a pure electric vehicle with high market recognition. What is different is that when the brand culture is spread, tesla brings the idea of Internet into the car production and puts forward a new idea to sell cars. The official website of tesla has blogs, user stories, BBS, pictures and video, etc., and offers will be announced on the official website. Its user stories are all presentations of real users. User experience on the official website, pictures and video show every detail, allowing users to have the feeling of immersive. Through BBS, users can discuss their experiences and problems in use. The official receives these information on the Internet, and can solve the above problems quickly and timely, or directly operate offline. The move was welcomed by consumers. In the process of enterprise development, how to stand out, in fact, is to spread the difference of brand culture, get consumers' recognition, arouse consumers' resonance, enhance user experience.

4. Problems of corporate brand culture communication in the new media era

4.1 Enterprises do not pay enough attention to the communication of brand culture

At present, many enterprises only pay attention to the economic interests of enterprises and technological innovation, and do not pay enough attention to the promotion of
corporate culture. Some enterprises have insufficient cognition of the value of corporate brand culture. Corporate brand culture publicity is a mere formality, only through traditional means, such as newspapers, books and magazines, to carry out symbolic publicity, resulting in the shaping of corporate brand culture, unable to play its important role. It is not enough to exploit the value of enterprise brand culture only by relying on the advantages of traditional media. When traditional media spreads brand culture in enterprises, the publicity cost is high, and users cannot accurately grasp the value of enterprise culture. For example, in the first half of 2015, Wuhan 99-degree SOHO project encountered bottlenecks of increasing inventory and low sales conversion rate in the external market and internal sales. The reason is that Wanda only relies on traditional media such as newspapers, outdoor media, TV stations and short messages for its sales. However, consumers are not interested in this kind of communication. Wanda's corporate culture is difficult to be accepted and recognized by consumers. This is bound to affect the sales profit of enterprises.

4.2 Corporate brand culture communication mode is relatively backward

Although the arrival of the new media era has brought great changes to people's lives, many enterprises have not grasped the opportunity of the new media era to reform and innovate the brand culture communication mode, and still use the traditional corporate brand culture communication mode. At present, the cultural publicity of some enterprise brands in China still USES the traditional way of communication. The main modes include seminars, bulletin boards, related newspapers, etc., but the publicity
effect is not optimistic. In the Internet era, employees get information mainly through computers and hands. In this case, employees have little knowledge of corporate culture. For example, the year-on-year declines of P&G in fiscal year 2015 and fiscal year 2016 were 5% and 8% respectively. In fiscal year 2016, the year-on-year declines were all in four quarters, and the first two quarters of fiscal year 2017 were only flat. For such a multinational company, corporate culture marketing is an important part of it. Many people pointed out that its marketing communication mode home page relies on traditional media and cannot keep up with the development of the Internet, which is a backward performance. P&G's approach to cultural marketing is too traditional and outdated.

4.3 Lack of innovation in corporate culture communication system

In the information age, the original corporate brand culture communication system cannot meet the needs of The Times, but some corporate leaders do not pay attention to this problem, resulting in low efficiency of corporate brand culture communication. Only by combining the new media and innovating the existing communication system can the brand culture of enterprises be effectively disseminated. However, if enterprises ignore the role of consumers in the "communication" idea of brand culture, and use a large amount of official and conventional words in the communication content, the lack of emotion and warmth that can move consumers. Then it will not arouse the interest of consumers, nor will it produce consumption behavior. Therefore, enterprises should not only inculcate information and preach in a one-way way, but also communicate with consumers in a two-way and equal way. Only in this way can the estrangement between
enterprises and consumers be eliminated and the deepening of consumers' antagonism towards enterprises be prevented.

5. Strategies for corporate brand culture communication in the new media era

5.1 Create new media as a window for corporate brand culture and image promotion

It is an important task to build and spread enterprise brand and establish good enterprise image. The marketing thinking of new media is to use the network to establish a communication method that centers on consumers, finds and meets consumer demands in real time. Consumers are interested in more applications such as text status, photo uploads and the ability to share information through new media. Therefore, when using new media platforms to spread brand culture, enterprises should pay more attention to the attention and interest of consumers and combine with corporate culture elements. It is necessary to make full use of the characteristics of new media to enrich the carrier of corporate brand culture communication, spread faster and in more flexible and diverse forms, and promote the rapid spread of corporate brand culture to consumers. For example, Haier has been successful in spreading its brand culture through new media. Haier will actively interact with fans with the brand culture of "service attitude" and "sincerity forever", and not only seriously study their consumption preferences, but also treat fans as lovers. This is the secret of Haier's new media success. Haier on microblog "80000 official microblog " activity, which is often the net friend laugh at "unfair official microblog " reasons, but it's more features, but more Internet users to remember
the brand of enterprise culture.

5.2 Enterprises reposition their brand culture with new media

Enterprises should make use of the broad influence of new media platforms, exert the star effect, stimulate the economy of fans, reposition the brand, and endue the brand with new vitality. In 2016, southern black sesame group released full-page sliding screen ads through new media advertising, allowing consumers to re-discuss the brand on the new media platform, taking advantage of the opportunity to arouse consumers' resonance through corporate culture. This is a successful attempt of brand culture communication of new media. In addition, southern black sesame group attaches great importance to the influence of Internet channels and the distribution of traffic. It aims at high-end consumer groups with high Internet ratings by using Shenzhen satellite TV, "Hong Kong, Macao and Taiwan live broadcast" and other brands with high audience rating to expand the coverage of new media channels and spread effective brand culture.

5.3 Lay out new media matrix innovatively and enhance the exposure of enterprise brand culture

In the past, corporate advertising was launched in advance and live sales matched brand marketing campaigns. In the new media era, in the increasingly in-depth social life of digital life, enterprises will make brand culture spread more rapidly through more contacts. In order to cope with the traffic collection of new media, we should develop new brand culture communication strategies, strive to improve the mobile terminal of the audience interface, and pay attention to establish the network relationship between the communication brand and consumers. The establishment of new media matrix is an
effective way to fully capture brand traffic. New media matrix enables the company's brand to be promoted on multiple platforms and channels, and the whole network can quickly cover and realize the company's brand culture communication.

5.4 invest in public welfare activities and strengthen the positive shaping of brand culture

Commonweal is a public good that individuals or organizations voluntarily provide to society by doing good deeds. Public welfare behavior is closely related to enterprise brand image. With the development of The Times, more and more enterprises have joined the ranks of public welfare undertakings. By doing public service, it is easier to get public recognition. Public welfare image plays an important role in the dissemination of brand culture. For example, Alibaba group has rapidly improved its brand image and promoted the spread of brand culture by donating materials and helping vulnerable groups in disaster-hit areas. Putting hard advertisements to show the corporate brand culture to the public can reduce consumers' resistance to products, shorten the distance between the brand and consumers, win consumers' favor, and further promote consumption, so that the communication time of corporate brand culture will be longer.

6. Conclusion

New media has extremely important theoretical and practical significance for the publicity of corporate brand culture, which needs the attention of corporate brand culture communication workers. With the continuous development of market economy, the competition between enterprises is increasingly fierce, enterprise brand culture is
an important sign of enterprise development, is an intangible asset of enterprise competition. With the advent of new media era, corporate brand culture communication is facing new opportunities and challenges. Enterprises should make full use of the advantages of new media, actively promote the dissemination of enterprise brand culture in the new media era, and promote the healthy and rapid development of enterprise culture.

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Many thanks to China Marketing International Conference for giving me a high-level International communication platform, which gave me the opportunity to contact with top western Marketing scholars, local scholars, business leaders, government officials and representatives of non-profit organizations, and have friendly communication with them, which broadened my professional perspective. In the meantime, I would like to thank the conference staff for their convenience.

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The Role of Cultural Heritage in Tourism Route Design and Marketing

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Abstract

Overcrowding has been a severe problem to many popular tourism destinations, especially those small hotspots. The pattern of tourist flows often shows a dramatic distribution along the main routes to the landmark spots. To solve the problem, we propose that well-developed alternative routes may share the tourist flows and ease overcrowding on the main routes. As cultural tourism is thriving, we argue that cultural heritage plays a key role in tourism route design and marketing. Conducting a case study in Macau, we present our model.

Keywords: Cultural tourism; Route design; Tourism marketing; Crowd management; Commercial development

1. Introduction

The growth of tourism has been strong in recent years. In 2018, worldwide international overnight visitors increased 6% to 1.4 billion (UNWTO, 2019). It contributed to 3.7% growth of economy globally according to UNWTO’s (2019) study. However,
tourism meanwhile brought pressure of overcrowding. Especially for those popular, small destinations, overcrowding has become a severe problem. Too many tourists crowd into hotspots, making these destinations overloaded. The problem of overcrowding affects visitors’ experience and hinders commercial development in larger scope. Therefore, it is necessary to manage the tourist flows in an effective way. Recognizing the rise of cultural tourism (McKercher & Du Cros, 2002), we appeal for the use of cultural heritage in tourism route design and marketing. To share tourist flows that usually gather on main routes, the new-developed alternative routes seek to attract part of the tourists by providing cultural experience and commercial support. We use Macau as a case to present our model.

2. Tourism and Overcrowding in Macau

2.1 Tourist Overcrowding and Flow Pattern

Macau is under pressure of overcrowding in tourist hotspots. In 2018, it recorded 35,803,663 visitor arrivals, increased by 9.8% year-on-year (DSEC, 2018). The number of visitors was 53.6 times of the total population of Macau, which was 667,400 during the same period (DSEC, 2019). The number of visitors was far beyond the capacity of Macau as a small city, which’s total land area was just 32.9 km² as of December 2018 (DSCC, 2019).

The tourist flow pattern makes the problem even worse. Most of the visitors usually crowd into several hot sites. The most popular route is the main road from Senate Square to Ruins of St. Paul’s. Although there are other alternative paths between the two spots, seldom tourists use them. The flow pattern shows two extremes: the crowd density is extremely high along the main road, whereas the minor roads nearby are almost empty.

There are several reasons for this phenomenon. First, the main route is most well-
known. Tourists learn this route as a typical item in their agenda when they search information about Macau before the trip. Second, tourists naturally follow the crowd when there is no clear guide helping them identify other routes. Third, the current way of tourism promotion primarily focuses on introducing the top hotspots separately. Though the local authority has attempted to provide several different routes, it is inconvenient for tourists to use.

The overcrowding problem leads to several consequences.

- Visitors are hardly to move, let alone enjoying the attractions.
- Historical sites, buildings and facilities are overloaded, which threatens the conservation of the cultural heritage.
- The number of tourists is far beyond the capacity of the commercial entities (e.g., restaurants and shops) along the main road. However, the commerce along the minor roads are under development. This limits the total revenue driven by tourists.
- Overcrowding negatively influences tourists’ experience and then may hinder their revisits. Furthermore, unsatisfied tourists spread the negative experience via word of mouth.

Route design, therefore, becomes an urgent issue to solve the problems caused by overcrowding.

2.2 Tourist Needs

It is necessary to understand tourists’ needs. We seek insight from statistics of tourism in the past. Take the year of 2018 for an example. Divided by purposes of visit, 54.5% of the visitors were for vacation, much more than other categories – 14.9% for transit, 8.9%
for shopping, 5.5% for visiting relatives and friends, 5.1% for business and professional, 2.6% for gaming, and 0.9% for convention and exhibition events (DSEC, 2018).

As tourists visit Macau primarily for vacation, we argue that two needs are important for them:

- Sightseeing: Those historical sites and buildings would be what tourists would like to visit. Besides the top hotspots, there are lesser-known spots that are worthy of visiting. Tourists may enjoy these spots without the problem of overcrowding.
- Local experience: Authenticity of the place, which is deeply rooted in the culture, would be important to tourists. Hence, cultural heritage plays a key role in route design.

3. The Role of Cultural Heritage in Tourism

3.1 Cultural Heritage

Culture is “learned and shared values, beliefs, and behaviors common to a particular group of people” (Orbe & Harris, 2001). Cultural heritage is that kind of “legacy from the past, what we live with today, and what we pass on to future generations” (UNESCO, n.d.). Besides historical and artistic value, the cultural heritage of a tourism destination helps tourists understand the place and the natural and cultural environment (Vecco, 2010; Tengberg et al., 2012).

3.2 Cultural Tourism

Tourism is “a social, cultural and economic phenomenon which entails the movement of people to countries or places outside their usual environment” (UNWTO, 2008). Today people’s interest in cultural and heritage attractions are increasing, implying the value of
cultural heritage (Hansen, Trine, & Wanhill, 1998). Cultural heritage helps build up distinctive identity and attractiveness of a tourism destination (Qu, Kim, & Im, 2011; Mikulić, Miličević, & Krešić, 2016). The historical and cultural background rooted in the cultural heritage can provide visitors an authentic sense of place (Malpas, 2008; Campelo et al., 2014).

The partnership between cultural heritage and tourism has been pervasive. According to McKercher and Du Cros (2002), cultural tourism involves four elements:

- Tourism
- Use of cultural heritage assets
- Consumption of experiences and products
- The tourist

Therefore, we argue that an effective tourism route design involves two elements:

- Using cultural heritage to develop alternative routes.
- Developing commercial facilities to support the new routes.

3.3 Using Macau’s Cultural Heritage for Tourism Route Design and Marketing

Macau has rich cultural heritage. The Historic Centre of Macau was inscribed on the World Heritage List. It includes 22 historical buildings and 8 squares, connected by adjacent roads and squares. Hence it is possible to develop alternative routes for different visitors who have different preferences and purposes.

- Emphasizing culture, history and stories of the sites so as to provide the core of cultural tourism.
- Developing alternative routes between hotspots: These new routes would share tourist flows from the overcrowding main route by attracting them to the cultural
facilities along the new routes. This would directly ease the pressure caused by overcrowding on the main route.

• Putting second-tier historical sites and buildings along the new routes and connecting them with the first-tier ones (i.e., those recognized by the World Heritage List). The second-tier sites may be attractive to two categories of tourists: 1) those who revisit Macau and want to experience new spots; and 2) those who prefer less crowded sites.

• Developing commercial facilities to support the new routes: 1) as culture can provide added value for products, it is potential to develop cultural and creative industry; 2) tourists look for commercial facilities such as catering and souvenir shops. In this way, the development of the new routes can bring business opportunities for the local enterprises and influence the way how they operate tourism-related businesses (Richards & Hall, 2003).

• Smart tourism: Using mobile recommender systems and public digital platforms (e.g., social media) to promote alternative routes and support tourists during their move.

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Exploration on the Integration Mechanism of Tourism Industry

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Abstract

The tourism industry in China has developed rapidly under the guidance of the concept of industry integration in recent years, which has spawned a lot of new types of tourism, such as agricultural tourism, industrial heritage tourism, tourism equipment manufacturing, tourism performing arts, tourism financial, tourist car, tourism real estate and exhibition tourism, etc. To theoretically explore the conditions for the realization of tourism industry integration and to grasp the law of integration is undoubtedly very important for promoting the sustainable and healthy development of China's tourism industry.

Keywords: tourism industry; integration mechanism; exploration

1. The Concept of Tourism Industry Integration

New types of tourism and tourism product appeared due to the integration of tourism industry with the other industries, and with the continuous development of the industry, the boundaries of tourism resources has continued to expand from the previous dependence on natural capital, historical and cultural resources, gradually expand to the agriculture, industry, manufacturing and other industries in the second
industry, it has get rid of the previous dependence on traditional tourism resources by the result of the constantly expanding of the scope of tourism resource, which will facilitate the optimization of tourism product structure and tourism industry structure and lay a good foundation for the realization of tourism industry upgrade. Domestic scholars define the integration of tourism industry mainly by the following focuses: tourism system, tourism enterprise, industrial structure and industrial association. The most of the important definitions are focused on the industrial linkages. Tourism enterprises are the behavior body of tourism industry integration. The main body of the issue of the association, but there is only one piece of essay laying particular emphasis on the definition of tourism companies. At present, there is few essays focusing on exploring the effect of tourism enterprise on the integration of tourism industry among the research results of current tourism industry.

This paper based on the research of the above scholars and the theory of evolutionary economy argues that the integration of tourism industry refers to the process of re-searching and creating new routines, the targeted integration with the target industry as the main path of tourism product innovation, and through the role of the market selection mechanism®, which will lead to the imitation and follow-up of the peers of the same industry, and finally to the entire tourism industry when the original routines inherited by the tourism enterprises can not bring satisfactory profits under the influence of genetic mechanism.

2. The Conceptual Model of the Integration Mechanism of Tourism Industry
The completion of the integration of tourism industry from low-level to high-level is not only affected by the innovation ability of tourism enterprises, but also due to certain conditions. According to the theory of self-organization and the theory of innovation, the cross-industry integration of tourism industry is the performance of the tourism industry to adapt to the market environment. The main performances are: continuously expanding the development scope of resources, improving the utilization efficiency of tourism resources and the innovation ability of tourism products. Various types of integrated tourism products are available to meet the diverse and personalized tourism and leisure needs of people. In addition to relying on its own resources and capabilities, the tourism industry also needs the support of the external environment, including technological innovation and institutional innovation. The integration of tourism industry is the result of both self-organization and other organizations.

Generally speaking, the integration of tourism industry from low-level to high-level is not only related to external incentives such as the role of creative thinking, the advancement of modern science and technology, and the promotion of modular division of labor, but also to endogenous incentives such as the maintenance of coexistence, the promotion of comparative advantage, the effects of frequency-dependent and network effects. External incentives and endogenous incentives constitute the incentive mechanism for tourism industry integration. The objective existence of the competition mechanism promotes the development process of tourism industry integration. At the same time, the development of the integration of tourism industry is inseparable from the coordinated cooperation of
related industries. Competition and cooperation constitute the driving mechanism for the integration of tourism industry. To promote the development of the integration of tourism industry, it needs not only the resources and technologies of related industries, also certain new technology support, but at the same time it also needs to carry out relevant institutional innovations. Technological innovation and institutional innovation have become the guarantee mechanism for promoting the formation of tourism industry integration. The conceptual model of the integration mechanism of tourism industry constructed in this paper is shown below in Figure 1.
3. The Operational Mechanism of the Conceptual Model of Tourism Industry Integration Mechanism

3.1 The Interaction Between Incentive Mechanism and Dynamic Mechanism

With the improvement of human cognitive ability and learning ability, the innovation ability of human society is also constantly improving, which brings about the continuous maturity of human creative thinking, and objectively promotes the progress of modern science and technology as well as the refinement of social division of labor. The tourism industry as a type of comprehensive and modern service industry has depended much on the resources and technology of other industries, and other related industries are also constantly extending to the tourism industry in order to improve the development of the industry. The attractiveness of tourism products depends largely on the creative thinking of product designers. The starting point of tourism enterprises' innovative tourism products is mainly to maintain and enhance the comparative advantages in the market of similar tourism products. The tourism enterprises are usually influenced by the innovative subjects of similar products in the process of tourism products innovation. It is. The sales of tourism products are different from the sales of products in other industries. Usually, it is only to sell the right to use the product for a certain period of time. The ownership of the products does not change with the payment of the tourists. Many tourists can go sightseeing...
together in a specific and public observation area, and there is no obvious exclusion from each other as long as allowed by the bearing capacity of the tourist attractions, the more the tourists consume, the easier it is for tourism companies to achieve higher economic benefits. In the process of continuous profit-seeking, tourism enterprises will inevitably intensify the competition in the tourism market, and will also drive the development of other related industries. On the contrary, the role of the competition mechanism and the improvement of the competition level of the business entities will further encourage various tourism enterprises to continuously learn new knowledge and new technologies, and to improve the innovation consciousness and innovation ability of tourism products, and thus improve the efficiency of integrating relevant industry resources and technologies. The continuous maturity of other related industries provides more types of resources and technologies for the development of the cross-industry integration of tourism enterprises. It can be seen that the relation between incentive mechanism and the dynamic mechanism of tourism industry integration is of mutually interaction and inter-stimulation.

3.2 the Interaction Between Incentive Mechanism and Guarantee Mechanism

The tourism enterprises driven by market interests need to continuously improve the management efficiency of enterprises and the market appeal of tourism products in order to obtain satisfactory market profits, but at the same time, they must also control the operating costs of the enterprises and the producing costs of the products. In the process of realizing higher market profits at a lower investment cost, tourism enterprises are bound to use various new technologies developed by other industries
which is continuously applied to the production of new tourism products. The new technologies applied to the practice of tourism industry integration mainly include the following four major technologies, the technology of trust and suffering, the technology of exhibition, the manufacturing technology of various new materials and advanced equipment, and the environmental protection technology of resources. The completion of the integration and level of tourism industry with other industry depends not only on the degree of technological innovation in the tourism industry, but also on the institutional innovation of the tourism industry.

Tourism enterprises need the support of the innovation of industrial policies and institutional mechanisms of the country and also that of own continuously innovation of industrial policies and institutional mechanisms in the process of the cross-industry development, in order to improve the development effectiveness of cross-industry integration and expand the scope and level of industry integration, tourism enterprises must constantly applying new technologies, researching and developing new technologies, timely innovating their own management systems, and timely utilizing the new policies related to tourism development issued by our country, the previous technology and systems of the tourism industry are usually influenced by the development stage of the tourism industry and the development characteristics of the tourism market in the process of realizing the development of the industry integration in tourism industry. In order to continuously improve the innovation effect of the tourism industry and create a more powerful guarantee for the deep integration of the tourism industry, the timely and corresponding innovations in the existing
technologies and systems are required based on the dynamic demand of the tourism market. So it can be seen that the incentive mechanism and the protection mechanism of the tourism industry integration also interact with each other.

3.3 The Interaction of Dynamic Mechanism and Safeguard Mechanism

New companies will continue to join the tourism industry system due to the relatively low barriers to entry into the tourism industry. In order to improve the competitive advantage of the company's products in the similar tourism market at home and abroad, and to better develop the synergy advantage between tourism and related industries, the tourism enterprises in particular are required to make continuous technological innovation and institutional innovation. The tourism industry should timely reform and improve the original technology and system according to the needs of the tourism market competition. It can be seen that the dynamic mechanism and the guarantee mechanism of tourism industry integration are also mutually influential and mutually reinforcing.

4. Conclusion

The development of the integration of Tourism industry is a dynamic process that not only of self-organizing functions, but also relies on the external environment. The integration of tourism industry is also a very complicated process of innovation which requires more industries to provide relevant resources. It not only needs to exert the technical protection function of technological innovation in integrating tourism resources and enhancing the display effect of tourism products, but also needs to continuously conducting institutional innovation to provide corresponding
institutional guarantee for the integration and development of tourism industry.

Institutional innovation involves innovation in tourism administrative management system, tourism industry policy innovation, tourism education system innovation and tourism enterprise management system innovation. Technological innovation and institutional innovation interact and promote each other which is both inextricably linked and contacted with the realization of the integration of tourism industry.

References


The Study of Subjects’ Matching of Industry-University Collaborative Innovation

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Abstract

It is necessary for firms, universities and research institutes to develop collaborative innovation for the sake of accumulation of knowledge and technological innovation. The paper intends to begin with various aspects, investigating from the characteristics of universities and firms, relationship between firms and universities and external environment where firms located in to explore subjects’ matching of collaborative innovation, and finally, guides Chengdu municipal government to put forward relevant policy recommendations for collaborative innovation between universities and firms, order to supervise the development of collaborative innovation projects, and promote the transformation of the relevant achievements.

Keywords: Collaborative; Innovation; Industry-university; Cooperation; Licensing agreements
1. Introduction

In the 21st century, it is urgent issues that break through the barriers among innovation subjects and fully release the innovation vitality elements, including talents, capital, information, and technology, to achieve the in-depth of cooperation. By means of institutional innovation policies and programs, it is suggested that government guides and encourages universities, research institutions and firms developing in-depth cooperation, and establishing University Cooperative Innovation Alliance, to promote the sharing of resources, jointly carry out significant R&D projects, achieve tangible results in key areas, and make a positive contribution to strive for building an innovative country. The essence of industry-university collaborative innovation is large-span integrated technology innovation strategic alliance that is founded by enterprises, universities, research institutions, government agencies, and financial institutions in order to achieve major scientific and technological innovation. The matching subjects of industry-university collaborative innovation means each subject conduct appropriate mix and coordination for maximizing the outputs of innovation.

It is necessary for firms, universities and research institutes to develop collaborative innovation for the sake of accumulation of knowledge and technological innovation. The whole world reach general consensus through collaborative innovation promoting improvement of regional innovation capacity. The success of Silicon Valley has been
relying on the formation of regional collaborative innovation networks which companies, universities, research institutions and industry associations play pivot roles. Beijing Zhongguancun also significantly enhances regional innovation capability in the process of promoting industry-university cooperation in all fields. However, not as long as the strengthening of the research cooperation will be able to improve the regional innovation capability, cooperation is a two-way selection process, only can the mutual fit of the main bodies achieve efficient collaborative innovation. Therefore, figuring out how to carry out main bodies’ matching of industry-university collaborative innovation is the key point to solve the problems related to depth of cooperation and subjects’ common development. In response to the overall strategy of Chengdu City “reform and innovation, transformation and upgrading, and promote collaborative innovation and transformation of R&D achievements” to speed up the building of a national innovation oriented city, this paper proposes the factors influencing the mutual matching of collaborative innovation subjects in Chengdu.

Foreign scholars’ research on subjects’ matching of industry-university collaborative innovation is mainly reflected in the macro level, and trend of the research has been implicit in the idea of innovation process, namely internal functions of the main body, the innovation objects, and the collaborative environment. Isaksen (2009) suggests that there is no fixed formula applied to a region's universities to choose the right firms for
collaborative innovation, but according to the university's knowledge and firm’s innovation model to adjust the matching; Morandi (2013) and Nielsen (2014) pointed out that the three main bodies of innovation activities should be closely linked with each other in the different stages of innovation and industrial policy formulation process. Hemmert (2014) argues that the intensity of cooperation, the reputation of the partners and security of cooperation are important factors in the impact of industry-university collaborative innovation. Bstierl’s (2015) study shows that the flexibility and transparency of the intellectual property rights and the joint governance of universities will have an important influence on the trust matching relationship. Through the review of the literature, foreign scholars tried to emphasize unilateral factors when enterprises, universities and research institutions participate in the research of collaborative innovation matching from management science, organization science, new institutional economics perspectives, specifically, cooperation relations, the knowledge base of the enterprise, the enterprise views on technology, city field demand, interest driven, and the development of science and technology. All of these researches provide a positive theoretical exploration and practical analysis for the study of the determinants of collaborative innovation subjects’ matching. The number of domestic scholars who put forward collaborative idea in the field of innovation research has been relatively high, but majority of them focus on the micro
level, with emphasis on the dynamic mechanism. Their research paths slightly differ from the foreign scholars. Zhou Zheng (2015) proposes matching factors include some external driving factors, such as technology push, market demand, market competition and government support, as well as internal driving factors, such as benefits, strategic synergy guide, internal incentive and innovation safeguard; Shao Jingfeng (2013) sees that the impact of the external driving force on industry-university collaborative innovation includes market forces and technical complexity, and the internal driving force includes short-term benefits and innovative performance; He Lijun (2014) and Fan Xu (2014) discuss multi-factors influence collaborative innovation based on the perspective of universities and their partners; Yang Xue (2014) studies the impact of culture proximity on industry-university cooperation innovation; Wang Yuandi (2014) explores the determinants of collaborative innovation based on the perspective of enterprise technology licensing. Researchers reached a consensus in many ways, and propose that internal and external dynamic mechanism of subjects’ matching should be established on complementary advantages, distribution of benefits, and their respective needs.

In summary, the existing literature provides a theoretical basis for enterprise collaborative innovation research. However, the research on the subjects’ matching of the collaborative innovation is still required to further. In terms of existing research,
the majority is based on the analysis of the factors that influence the matching solely from enterprise or university, furthermore, these factors are still not comprehensive. As for research methods, theoretical research is dominant, lack of a typical case analysis based on a special city or region. How to fit the appropriate matching is in the spotlight of the enterprises and universities. For example, in the technological collaborative innovation stage, why Sichuan Changhong was licensed with Electronic Science and Technology University rather than the Sichuan University? Whether this is related to university’s grades or categories? Which factor results in disparity between the licensing agreements that Sichuan Changhong was licensed with Electronic Science and Technology University and the Sichuan University? Therefore, it is significant for firms and university to study the above questions in order to find the appropriate collaborative innovation partners. In view of this, this paper intends to begin with various aspects, investigating from the characteristics of universities and firms, relationship between firms and universities and external environment where firms located in to explore subjects’ matching of collaborative innovation, and finally, guides Chengdu municipal government to put forward relevant policy recommendations for collaborative innovation between universities and firms, in order to supervise the development of collaborative innovation projects, and promote the transformation of the relevant achievements.
2. Empirical Analysis

2.1 Data

The data used in this analysis originate in the National Intellectual Property Office patent license record data and Chinese industrial enterprise database, whose time span is the period of 2009-2012. After the initial screening of the patent license for the record data and matching with industrial enterprise database, we obtain a series of indicators of enterprise level. Industrial enterprise database is the most comprehensive micro enterprise database, including the all state-owned industrial enterprises and non-state-owned industrial enterprises above Designated Size (annual income is more than 5 million yuan), time span of which is from 1998 to 2012. Given that the patent licensing data of National Intellectual Property Office is update to 30, June 2013, in order to ensure the availability, integrity and accuracy of the data, this paper selects the period 2009 ~ 2012 as the study time span, and related data for patent is from the patent retrieval platform in the China Intellectual Property Office and university patent information service platform in the Ministry of Education Science and Technology Development Center. The cleaning of the data resulted in an initial set of 460 original licensing agreements, with 20 universities and 115 firms. Those licensing agreements
are classified into three categories, Chengdu firms licensed with Chengdu universities, Chengdu firms licensed with non-Chengdu universities, and non-Chengdu firms licensed with Chengdu universities.

2.2 Model specification

2.2.1 Dependent variable

\[ LICENSE_{ijt} = \begin{cases} 
1 & \text{if Chengdu firm } i \text{ licensed with one or more patents to Chengdu university } j \text{ in year } t; \\
2 & \text{if Chengdu firm } i \text{ licensed with one or more patents to non-Chengdu university } j \text{ in year } t; \\
3 & \text{if non-Chengdu firm } i \text{ licensed with one or more patents to Chengdu university } j \text{ in year } t; \\
0 & \text{otherwise.} \end{cases} \]

2.2.2 Independent variables

2.2.2.1 Characteristics of licensee firm \( i \) in year \( t \)

\[ AGE_{it} = \text{the year when firm } i \text{ was licensed - the year when firm } i \text{ was founded} \]

Different \( AGE_{it} \) causes the distinct stock of knowledge and technology accumulation, which will lead to gap in terms of the technical capabilities. Xiang Yonghui (2014) also
argues that the age of the firm has significant positive effect on innovation output. Therefore, the greater the $AGE_{it}$ is, the more technical accumulation and innovation output is, and the smaller the possibility of obtaining a patent from the university is. A negative sign for $AGE_{it}$ is expected.

$$SIZE_{it} = 1 \text{ if the number of employees is greater than 300;}$$
$$= 0 \text{ otherwise.}$$

The existing literature usually utilizes the number of employees or sales revenue to represent the firm's scale (Zhang Yuchen, 2013). Previous studies have verified the impact of $SIZE_{it}$ on the technological capabilities of firms. Generally speaking, the larger the scale of the firm is, the more obvious Economies of Scale effect is, and the stronger the technical ability is (Xiao Renqiao, 2012). Chen (2004) proposes that the promotion of R & D efficiency needs a certain scale effect, and the scale of the firm is positively correlated with the R & D efficiency; Zhu Youwei's (2006) conclusion also confirms this view. Therefore, when the innovative technology capability is very strong, it will be less likely for firm to introduce patent from university, the result of regression should also be negatively correlated. Nevertheless, Pavitt’s (1987) research shows that R & D efficiency of larger firms and smaller firms are higher, while the R & D efficiency of middle scale firms are relatively low, so, the overall is U type
relationship; Scherer suggests that with the continuous expansion of the scale firms, management and control ability of firm will reduce or emerge excessive bureaucratic control phenomenon. All of these are likely to lead to increased friction, and firm's R & D efficiency will continue to decline. And some scholars even believe that there is no relationship between the two. Hence, the expected sign for $SIZE_{it}$ is ambiguous.

$$ABSORPTION_{it} = \text{the prior five years’ number of patents applied for by firm } i \text{ up period } t.$$  

The existing researches usually tend to measure the enterprise's absorptive capacity utilizing R&D expenditure. Although the index of firm's R & D expenditure can be obtained from Chinese industrial enterprise database, but the database only released some years (2001, 2005, 2006 and 2007) data (Ma Yanyan, 2014), it is difficult for this paper to let R & D expenditures as alternative variables for absorptive capability. Therefore, this study adopts Wang’s (2014) methods. Absorptive capacity theory think that absorptive capacity of firms will contribute to promoting external technology acquisition, and firm with higher absorptive ability can better digest and absorb purchased external technology and then enhance the own technology capacity (Winkelbach A, 2015). Tsai (2001) indicates that the impact of R & D cooperation on innovation performance is greatly affected by the absorptive capacity of the firm. Therefore, the stronger the $ABSORPTION_{it}$ is, the more the firm can improve their
innovation performance from the purchased patent. Compared with the internal R & D, this way is more efficient. The expected sign for $ABSORPTION_{it}$ is positive.

$$PROPERTY_{it}= 1 \text{ if state-owned;}$$

$$= 0 \text{ if non-state-owned.}$$

Firms with distinct $PROPERTY_{it}$ have different characteristics of innovative behavior, and thus there is discrepancy referring to the technical ability (Zhang Yuchen, 2013). The difference in terms of corporate governance structure and operation mode will reflect on the output efficiency, if firm has different property rights. And the difference has been confirmed in many empirical studies. Hu (2001) thinks that the efficiency of non-state firms are higher in the field of products transformation from R&D. The expected sign for $PROPERTY_{it}$ is ambiguous.

### 2.2.2.2 Characteristics of licensor university $j$ in year $t$

$$LEVEL_{jt}= 1 \text{ if “211” university;}$$

$$= 2 \text{ if “985” university;}$$

$$= 0 \text{ otherwise.}$$

Given that level hierarchy, scientific research strength, infrastructure, government support and visibility show the discrepancy, Li Daoxian (2012) pointed out that local
universities tend to use their own R&D superiority cooperating with firms. Correspondingly, out of risk and profit, firms are more likely to be licensed with the universities which already has existed related technical achievements. He also says that some local colleges have some patents developed from characteristic disciplines or resources, which will also attract willing buyers. But that may be a minority. A positive sign for $LEV_{jt}$ is generally expected.

$SALE_{EXPERIENCE_{jt}} = \text{the prior five years’ number of patents granted by university } j \text{ up to period } t$.

Sale (licensor) experience is used as yet another proxy for the transaction cost of licensing. Experience in gathering information about prospective licensees, negotiating, writing contracts and enforcing them will lower the cost of licensing for the seller (Kim, 2006). In addition, the more the number of patent licensing is, the higher efficiency of the technological innovation transformation is, and the stronger overall innovation capability is. In turn, firms are easier to acquire patents from these universities. A positive sign for $SALE_{EXPERIENCE_{jt}}$ is expected.

2.2.2.3 Relationship between firms i and university j in year t

$DISTANCE_{ijt} = \text{the straight-line distance between the city of firm } i \text{ and that of university } j$. 
Cooke (2006) points out that through the interaction between different institutions, making regional resources, social capital, culture combine, and then form a specific regional innovation capability. Innovation is produced from the interaction, and geographical proximity is conducive to interacted cooperation and knowledge sharing, especially tacit knowledge exchange. The shorter geographical distance benefits negotiation before licensing, reach the agreement as well as communicating and feedback in the process of cooperation, which is conducive to knowledge sharing and cost reduction. Berchicci (2013) points out that geographical proximity is in favor of the formation of economic and institutional linkages, and thus conducive to the creation of innovative activities and knowledge spillovers; And Howells (2002) think that even for explicit knowledge, distance proximity is still important, because the spread of that often accompanied with invisible knowledge. However, Gallie (2010) believes that the purpose of Inter Organizational R & D cooperation is to obtain complementary knowledge, ability and equipment. Zhou Changhui and Cao Yinghui (2011) suggest that the similarity knowledge obtained from the outside cannot obviously promote innovation performance of firm, whilst the difference and diversification of knowledge or information can do. Therefore, firms can be benefit from the wider scope of Inter Organizational R & D cooperation through broadening the width of the organizational knowledge base, enriching the types of organizational
knowledge source, and ultimately boost the improvement of enterprise's innovation performance. Thus, firms may prefer to long-distance matching. The expected sign for $DISTANCE_{ijt}$ is ambiguous.

$$FAMILAIRITY_{ijt} = \text{The number of licenses granted by university i to firm j up to period } t - 1.$$  

As the breadth of Inter Organizational R & D cooperation increase, searching costs will rise (Berchicci, 2013). Furthermore, the disparity of information and control system and decision-making process between partners will lead to more effort to coordinate, manage, and control partner’s R & D activities (Gulati, 1998). All of these will contribute to higher transaction costs, and then inhabit the innovation performance. Goerzen (2007) suggests that repeated licensing agreements can advance the improvement of economic performance. Mutual understanding will enhance in the aspects of value and concept on the condition that the two sides actively cooperate with each other. In addition, partners’ trust relationship will be built via communication of internal R&D personnel. A positive sign for $FAMILAIRITY_{ijt}$ is expected.
### 2.2.2.4 Characteristics of external environment in year \( t \)

\[
MARKET_{it} = \frac{\text{technical market turnover of firm } i \text{'s province in year } t}{\text{GDP of firm } i \text{'s province in year } t}
\]  

Gu (2009) thinks that the communication and cooperation between licensor and licensee has a significant influence on improving technology utilization rate and the conversion efficiency of scientific and technological achievements. As a result, many regions have been establishing technical markets. Maturity of the technology market can generate corresponding positive effect on the innovation activities, whatever for licensor or licensee. The more mature the market environment is, the higher the innovation efficiency is. From this we can know firm can engage in licensing agreements without the need for inter provincial cooperation. A negative sign for \( MARKET_{it} \) is expected in model 2 and model 3, but possibly positive sign in model 1.

\[
INNOVATION_{it} = \frac{\text{the number of invention patent applied for of firm } i \text{'s province in year } t}{\text{the number of all of patents applied for of firm } i \text{'s province in year } t}
\]  

(2)

The number of invention patents represents the intermediate achievements of technological innovation, moreover, is also an international common indicators used to measure the output of scientific and technological innovation (Guan, 2009). The number of patents applied for can reflect the efforts made by firms in R&D, meanwhile is also potential technology output. Even if the patent license is not authorized, it will still generate positive impact on the follow-up work. Furman (2002) and Guan (2010)
question the patent acting as benchmark in the measurement of scientific innovation output, whose reason is that economic transformation efficiency of some patents is low. However, other indicators have not yet been found to better reflect scientific innovation output. Model 2 and model 3 is expected to have a negative sign, conversely, model 1 is opposite.

\[
GOVSUPPORT_{it} = \frac{\text{government R&D investment of firm i's province in year } t}{\text{GDP of firm i's province in year } t}
\]  

(3)

Guan’ (2010) study illustrates that the funds of firm positively affect the improvement of the industry innovation efficiency, while government funds is significantly negative for that. Yu Yongze (2009) argues against this view. He thinks that inconsistent conclusion lies in the different efficiency measurement method and the sample data of different years. The impact of government's financial support and coordination management differ for firms being at differentiated stages. The expected sign for \(GOVSUPPORT_{it}\) is ambiguous.

2.3 Regression Analysis

2.3.1 Descriptive analysis and Spearman correlation matrix

Tables 1 and 2 provide descriptive statistics of the variables and the Spearman correlation matrix respectively.

We can be seen from the correlation coefficient of each variable, except for \(AGE_{it}\) and
$SIZE_{it}$, the remaining independent variables are highly statistically significant with the dependent variable (5% level). And the correlation coefficient between the independent variables is small, with the maximum of 0.5111. It can be predicted that multicollinearity is non-existent. The VIF test (Table 4) further verifies this conclusion.

Table 1 Descriptive statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Std.Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>LICENSE_{ijt}</td>
<td>0.626</td>
<td>1.118</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>AGE_{it}</td>
<td>12.960</td>
<td>11.444</td>
<td>0</td>
<td>56</td>
</tr>
<tr>
<td>SIZE_{it}</td>
<td>0.635</td>
<td>0.482</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>ABSORPTION_{it}</td>
<td>1.837</td>
<td>4.422</td>
<td>0</td>
<td>42</td>
</tr>
<tr>
<td>PROPERTY_{it}</td>
<td>0.130</td>
<td>0.337</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>SALEXPERIENCE_{ijt}</td>
<td>0.104</td>
<td>0.306</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>LEVEL_{ijt}</td>
<td>21.350</td>
<td>24.570</td>
<td>0</td>
<td>255</td>
</tr>
<tr>
<td>DISTANCE_{ijt}</td>
<td>1.548</td>
<td>0.795</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>FAMILAIRITY_{ijt}</td>
<td>91.570</td>
<td>70.300</td>
<td>0</td>
<td>235.200</td>
</tr>
<tr>
<td>MARKET_{it}</td>
<td>0.496</td>
<td>0.655</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>INNOVATION_{it}</td>
<td>0.006</td>
<td>0.015</td>
<td>0.000194</td>
<td>0.138</td>
</tr>
<tr>
<td>GOVSUPPORT_{it}</td>
<td>0.101</td>
<td>0.052</td>
<td>0.052</td>
<td>0.400</td>
</tr>
</tbody>
</table>

Table 2 Spearman correlation matrix

<table>
<thead>
<tr>
<th>LICENSE_{i}jt</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGE_{it}</td>
<td>0.05</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$SIZE_{it}$</td>
<td>0.05</td>
<td>0.27</td>
<td>7</td>
<td>8*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ABSORPTION_{it}</td>
<td>-0.0</td>
<td>0.08</td>
<td>0.14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PROPERTY_{it}</td>
<td>98*</td>
<td>9</td>
<td>9*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LEVEL_{ijt}</td>
<td>0.24</td>
<td>0.13</td>
<td>0.25</td>
<td>0.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DISTANCE_{ijt}</td>
<td>5*</td>
<td>2*</td>
<td>9*</td>
<td>99*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MARKET_{it}</td>
<td>-0.1</td>
<td>-0.0</td>
<td>0.06</td>
<td>0.2</td>
<td>-0.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INNOVATION_{it}</td>
<td>44*</td>
<td>48</td>
<td>0</td>
<td>31*</td>
<td>24*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2.3.2 Multination Logit Regression Analysis

Multination Logit regression estimates of the likelihood of firm $i$ licensed with university $j$.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>$LICENSE_{ijt}$</td>
<td>0.000285</td>
<td>0.0505**</td>
<td>-0.00969</td>
</tr>
<tr>
<td></td>
<td>(0.0206)</td>
<td>(0.0241)</td>
<td>(0.0148)</td>
</tr>
<tr>
<td>$AGE_{it}$</td>
<td>-0.183</td>
<td>-1.541***</td>
<td>0.335</td>
</tr>
<tr>
<td></td>
<td>(0.585)</td>
<td>(0.694)</td>
<td>(0.347)</td>
</tr>
<tr>
<td>$SIZE_{it}$</td>
<td>0.0192</td>
<td>-0.0974</td>
<td>0.0811*</td>
</tr>
<tr>
<td></td>
<td>(0.0462)</td>
<td>(0.186)</td>
<td>(0.0486)</td>
</tr>
<tr>
<td>$ABSORPTION_{it}$</td>
<td>0.961</td>
<td>1.650*</td>
<td>0.305</td>
</tr>
<tr>
<td></td>
<td>(0.712)</td>
<td>(0.967)</td>
<td>(0.691)</td>
</tr>
<tr>
<td>$PROPERTY_{it}$</td>
<td>0.00328</td>
<td>0.0242***</td>
<td>0.0187**</td>
</tr>
<tr>
<td></td>
<td>(0.0277)</td>
<td>(0.00932)</td>
<td>(0.00815)</td>
</tr>
<tr>
<td>$SALEXPERIENCE_{jt}$</td>
<td>0.0653</td>
<td>-0.660*</td>
<td>0.0152</td>
</tr>
<tr>
<td></td>
<td>(0.394)</td>
<td>(0.365)</td>
<td>(0.224)</td>
</tr>
<tr>
<td>$LEVEL_{jt}$</td>
<td>-3.202</td>
<td>0.0201***</td>
<td>0.00852***</td>
</tr>
<tr>
<td></td>
<td>(90.03)</td>
<td>(0.00637)</td>
<td>(0.00286)</td>
</tr>
<tr>
<td>$DISTANCE_{ijt}$</td>
<td>-4.253***</td>
<td>-0.401</td>
<td>-5.410***</td>
</tr>
<tr>
<td></td>
<td>(0.950)</td>
<td>(0.364)</td>
<td>(1.130)</td>
</tr>
</tbody>
</table>

*Significant at the 5% level
Table 6 presents the estimation results. Three different models are presented with relativity results. Model 1 shows the variables how to influence Chengdu firm \( i \) licensed with Chengdu university \( j \). Model 2 illustrates the effect of the variables on Chengdu firm \( i \) licensed with non-Chengdu university \( j \). Model 3 give the estimation results of non-Chengdu firm \( i \) licensed with Chengdu university \( j \). The estimation results are relatively strong. No signs reverse across models and the size of the coefficients remain relatively stable.
3.2 Discussion

$SIZE_{ii}$ has a significant positive impact on Model 2. The possible explanation for this result is: firstly, the elder firm with a certain amount of innovation output needs to broaden the selection scope of licensors if intends to make a breakthrough. These licensors whose basic knowledge is essentially identical with the firm but possess different specialized technology (Liu Zhiying, 2013). Differentiated and diversified knowledge or information conduces to the boom of firm’s innovation performance. Secondly, the elder firm usually has more sophisticated licensing agreement process to avoid trust problems and control risks leading to non-Chengdu universities tend to cooperate with it. $SIZE_{ii}$ has a significant negative impact on Model 2. According to China's reality, it is tough for SMEs to carry out technological innovation owing to lack of resources, especially the limited innovation resources inclined to be dispersed, resulting in the lower utilization efficiency of innovation resources (Terziovski, 2010). In the meantime, local colleges and universities mainly engage in licensing agreement with SMEs, rarely with large firms, as they believe it is unable to satisfy demands of large firms out of concern for their own R&D competence. Similarly, large firms give priority to key universities, which is because firms are not very clear about what R&D achievements universities have due to information asymmetry and other restricted
factors. Unfortunately, these key universities may not have superiority in the field of what the firm needs and end up with less desired results (Li Daoxian, 2012).

\(\text{ABSORPTION}_t\) has a significant positive effect on Model 3. Higher \(\text{ABSORPTION}_t\) contributes to stronger transformation ability realizing promotion of firm’s technology ability (Hong Jin, 2014).

\(\text{PROPERTY}_t\) are statistically positively significant for Model 2. The state-owned firms usually enjoy rich resource, whose operation is more supported by the state or local government (Pan Jia, 2014). Even though engaging in long-distance licensing agreement, it is more likely to match licensors and bear higher transaction costs.

\(\text{SALEXPERIENCE}_{jt}\) has a significant positive effect on Model 2 and Model 3, which is in line with estimations.

\(\text{LEVEL}_{jt}\) produces negative influence on Model 2. Faced with financing difficulties, high tax burden and weak R & D capabilities, especially compared with large enterprises, smaller firms are deficient in resources, formal strategic and organizational stability (Terziovski, 2010). Due to transaction risk and opportunity cost, non-local universities tend to be unwilling to engage in licensing agreement with these small firms.

\(\text{DISTANCE}_{ijt}\) affects licensing positively for Model 2 and Model 3. After ranking the distance, the top ten occurred in the eastern developed regions, such as Shanghai,
Zhejiang and Jiangsu provinces. As China's regional economic development is uneven, innovation environment shows great discrepancy in the different regions (Zhao Ruifen, 2011). The innovation environment of the eastern region is superior to that of the west. As a result, the innovation output of local colleges and universities is higher, and the Chengdu firms are more inclined to cooperate with these colleges and universities. And more firms located in the eastern region cause greater demand for patents.

$FAMILIARITY_{ijt}$ has a significant negative effect on Model 1 and Model 3, which implies that the universities and firms in Chengdu rarely engage in long-term licensing cooperation. Goerzen (2007) says that duplication of licensing cooperation will restrict firm’s access to external knowledge and technology, thereby inhibiting the promotion of economic performance. In fact, the relationship between the depth of R & D cooperation and innovation performance may be linked with the growing stage of firm. In terms of the firms whose types is transforming from production processing to that combined with R&D, U type curve will be expected. This is because, initially, firms is deficient in licensing agreement experience, and unable to generate cooperation practice and tacit understanding. At this time, there is a high degree of uncertainty referring to licensing agreement, and the positive impact of familiarity on the cooperative performance may not be significant, and even be negative (Zollo, 2002).

$MARKET_{it}$ has a significant negative effect on Model 3, consistent with the estimation.
INNOVITION$_{it}$ has a significant positive effect on Model 1 and Model 3. The reason for Model 3 is possibly that western region universities take advantage of national support policies, with the help of the adjustment and upgrading of industrial structure, and make full use of the unique natural resources to develop characteristic patent technology. Besides, through the imitating and learning advanced technology and management expertise in the developed area, these universities further enhance the efficiency of innovation (Xiao Renqiao, 2012). Thus, even though sitting in the province with sound innovation environment, sometimes these firms also could be licensed with universities located in less developed region.

GOVSUPPORT$_{it}$ has a significant negative effect on Model 2. Lach (2002) finds that using data of the Israel emerging industries, government funding is not only produce auxiliary effect, but greatly stimulates R & D investment of SMEs, which is conducive to rapid development of these firms.

Table 4 shows the results of VIF test. We can see that VIFs of the variables are all less that critical value 10. Therefore, it can be concluded that the model is not affected by multicollinearity.

<table>
<thead>
<tr>
<th>Variable</th>
<th>VIF</th>
<th>1/VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGE</td>
<td>1.160</td>
<td>0.861</td>
</tr>
<tr>
<td>SIZE</td>
<td>1.210</td>
<td>0.825</td>
</tr>
<tr>
<td>ABSORPTION</td>
<td>1.090</td>
<td>0.921</td>
</tr>
<tr>
<td>PROPERTY</td>
<td>1.310</td>
<td>0.765</td>
</tr>
</tbody>
</table>
### 4. Conclusions

This study has investigated the determinants of subjects’ collaborative innovation matching using an extensive panel data set of licensing transactions during the period 2009–2012 involving 115 firms and 20 universities traded in Chengdu City. The incentives to engage in licensing agreements are explained by sets of variables reflecting the characteristics of these firms, the characteristics of these universities, the relationship between firms and universities and external environment where firms lie in.

(a) In terms of the characteristics of firms, older age, stronger absorption capacity, state-owned property and smaller size facilitate firms and universities in Chengdu engaging in licensing agreements.

(b) In terms of the characteristics of universities, more patents granted experience and weaker comprehensive strength of universities promote the occurrence of licensing agreements.
(c) In terms of relationship between firms and universities, longer distance and less familiar contribute to engage in licensing agreements.

(d) In terms of external environment of firms, the less mature technical market and government R&D investment are, the higher probability of engaging in licensing agreements is. And the larger proportion of invention patents facilitates firms and universities in Chengdu engaging in licensing agreements.

The Chengdu government should encourage local firms to choose licensors whose basic knowledge is essentially identical with the firm but possess different specialized technology. SMEs are backbone of the national innovation system. However, they are confronted with many problems, such as financing difficulties, high tax burden, and weak R & D capability. Government and financial institutions need to pay more attention to the development dilemma of SMEs, and provide necessary financial and policy support. As for large-scale firms, it is essential to further strengthen the industry-university mechanism which plays a coordinating and regulatory role.

Chengdu government and intermediary agencies act as pivot roles in the process of collaborative innovation. At the stage of seeking licensing agreement partners, they can convey technical requirements of the enterprises and introduce the R&D achievements of universities. Through interaction and integration of the information, they organize R&D personnel communication with each other. Hu thinks that the
innovation transformation efficiency of non-state-owned enterprises is higher than the state-owned via the study of high-tech enterprises in Haidian District. Therefore, the Chengdu government should launch the corresponding incentive policies to encourage universities located in other province cooperating with local private firms. Meanwhile, the government should provide security measures for long-term risk sharing and benefit allocation mechanism in the process of collaborative innovation. These measures can reduce licensing risk concerns for both sides in a certain extent as well as guaranteeing to establish profound effective collaborative innovation mechanism.

The both subjects will encounter cultural discrepancy, identity divergence, distribution of interests, and rights disputes when licensing comes into depth stage, which requires government and intermediary agencies to coordinate so that avoids cooperation rupture resulting from the problems cannot be resolved in a timely manner. In addition, it is necessary to strengthen the profound integration between universities in Chengdu to reinforce preponderant disciplines and encourage interdisciplinary research and collaboration, ultimately, induce the output of characteristic patents.

The innovation model of Sichuan province pertains to low R&D and high conversion efficiency (Xiao Renqiao, 2012). On the one hand, by means of introducing technology, creating sound investment and financing environment and opening the market, Sichuan province harvests considerable economic achievements utilizing existing patents. On
the other hand, the R&D output in Sichuan province is disproportionate with the R&D investments. On the basis of introducing new technology, the local firms require to augment digestion, absorption and re-innovation ability. Simultaneously, the firms also emphasize fundamental research and improve the basic quality and innovative ability of employees.

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Discussion on We-Media Marketing in Mobile Internet Era
from the Phenomenon of Gathering Thumb-ups in WeChat

Haiyan Miao

1Shandong Yingcai University

Abstract
This article takes the Jinan WeChat gathering thumb-ups Hotspot event as an example to analyze the problems existing in the current we-media marketing, such as low information credibility and poor customer identification accuracy, and then analyzes the impact of the rapid development of we-media on the marketing of the company. In response to the above problems and impacts, the article proposes corresponding marketing strategies from the aspects of we-media establishment, information dissemination and supervision, and hopes to help the company's we-media marketing efforts.

Keywords: We-Media; Immediatelization; Precision
The mobile Internet cycle represented by mobile phones has become the 5th new technology cycle in the past 50 years. Mobile phones have become the protagonist of the mobile Internet era. At the same time, the we-media represented by Weibo, WeChat and M-zone have also developed rapidly. We-Media based on mobile internet has become a new channel for interaction between companies and customers. This article will explore the company's we-media marketing strategy through the analysis of the Jinan WeChat “gathering thumb-ups” event.

1. We-Media

1.1 Concept of We-Media

The concept of we-media first appeared in Dan Gillmor's definition of "News Media 3.0" in 2002. In July 2003, Shayne Bowman and Chris Willis defined we-media in the we-media research report published by the Press Center of the American Press: we-media is a way for ordinary people to understand how the general public provides and share their own facts and their own news after being strengthened by digital technology and connected with the global knowledge system.

The primary form of we-media is instant messaging such as MSN and ICQ. The sign of the advent of the we-media era is the widespread popularity of blogs. As of December 2017, the number of Weibo active users in China was 376 million, an increase of 27% compared with the same period in 2016, of which mobile accounted for 92%; daily active
users reached 165 million, an increase of 25% over the same period of last year. The
number of WeChat active users has exceeded one billion people. Subsequently, the citizen
news website gradually emerged, guiding the we-media to mature. In short, we-media
platforms represented by Weibo, Wechat, and news clients are all actively adapting and
meeting the needs of Internet users in the era of fragmentation. Therefore, we-media is
favored by netizens in a streamlined, flexible and diversified way, both in terms of
information content and form.

1.2 The Characteristics of Communication From the We-Media

We-media is relative to the Social media, information dissemination has its own
uniqueness. First of all, the propagator is civilian. We-Media is the media of civilians, and
ordinary people have become information creators from information receivers. Second,
the communication platform is simplified. With the development of mobile network
technology, mobile phones become a mobile network terminal. People can receive and
publish we-media information anytime, anywhere. Again, the transmission path is
reticulated. In the we-media era, there is no strict distinction between producers,
distributors and recipients of information. At the same time, we-media has transformed
the "point-to-face" and "one-way fan-shaped" communication model into a
"many-to-many" mesh-like broadcast. This has changed the traditional media's
“top-down” and “point-to-face” methods of communication, then we-media can achieve
rapid audience growth in the short-term. Finally, homogenization of the scope of
transmission. In the process of we-media operations, the disseminating subject and the
object are mutually reference groups. They have the same needs and values, and the information from the we-media is more easily accepted in the dissemination.

2. Hot Case Analysis

This article takes the hot events in Jinan as an example.

2.1 Toread

Many citizens have seen the “Toread” brand’s propaganda through the WeChat circle of friends to carry out product promotions. The netizens who arrived at the mall immediately found that new words such as “limited prizes”, “numbered queues”, were added to the posters. For those customers who did not receive the waiting number plate, the organizer’s person did not give a reply.

2.2 Tourism

Many citizens often seek “thumb-ups” in WeChat, because “if this information is sent to 20 friends, you can earn the qualification to earn free travel” and “Accumulate 36 thumb-ups, you can get a five days and four nights free travel in Hainan”. However, after the tourist ticket was got, the citizens discovered that everyone needed to pay another 250 yuan for the cost of returning to and from Shenzhen. Almost every day there are plenty of shopping spots, at least nine. Moreover, according to regulations, the households or permanent residents of Guangdong, Guangxi, Fujian, and Hainan cannot be used, and their age is limited to 28-58 years old.

2.3 Analysis of Events

As can be seen from the above events of the WeChat “gathering thumb-ups”, we-media
has brought opportunities for the company’s marketing, but due to its own characteristics, it has also brought many problems in the implementation process. Since the we-media threshold is low, information dissemination is often apt to lose truth and lose moral restrictions. In addition, due to factors such as imperfect laws and regulations and difficulties in the identification and locking of persons responsible, the we-media information dissemination is easy to lose institutional constraints. In the process of its dissemination, it is prone to the high-speed spread of virus-like networks and group effects. Through the dissemination of we-media channels and the "free" temptation, information is rapidly spreading among citizens. Although citizens play a role in brand promotion, the accuracy of the customer's information identification is low, and non-target customer groups are inevitably present among the participants. Those with ulterior motives and those who are not satisfied can become communicators of negative information.

3. The Influence of We-Media on Corporate Marketing

We-Media is the integration of channels and media. Through we-media customers can realize a series of activities such as collecting, ordering and paying for commodity information. At the same time, with mobile phone positioning, companies can achieve accurate information dissemination, which reduces the company's promotional costs and channel management costs. We-Media has a large amount of information and flexible communication channels, light application makes the arrival rate of information high, and it also facilitates enterprises to complete customer information accumulation and data
mining. However, the process of popularization is often separated from the control of enterprises, which also reduces the authority of we-media.

4. Research on Marketing Strategies of Enterprises We-Media

With the rapid development of we-media and the popularization of smart phones, companies have begun to try we-media marketing. However, at present, mobile marketing represented by WeChat has problems such as content amateurism, promotion, no-planning and no-law. In order to make good use of such a platform, companies need to make more efforts in practicality, interest, convenience, and technical support. Specifically, they can do the following:

4.1 Establish We-Media, Achieve Diversification and Immediatelization

In the era of we-media, data can be converted into sales to achieve the integration of sales promotion and sales. Enterprises can realize the creation of we-media at a low cost and thus play an important role in marketing media. Specifically, mobile marketing must complete a three-step strategy. The first step is to mediaize members’ mobile phones. Traditional mobile phone marketing adopts “push-based” short messages; now it emphasizes “pulling”, that is, the mobile phone mediaization of members is achieved through technologies such as APP and WAP. As a result, companies can easily complete real-time communication with tens of thousands of members, and achieve media platformization and platform medialization. For example, Kelan Diamonds has set up a WeChat public number. Customers pay attention to their public number and click on the link to get a micro-life membership card to obtain brand information. The second step is
the socialization of member mobile phone media. After completing the preliminary mobile mediaization of members, the exemplary scope and role of members and non-members in the membership have been expanded and strengthened. This process broke through the boundaries of space and time, and was achieved through we-media. For example, Kelan Diamond members can complete their influence on good friends by sharing the contents of the WeChat public account to the WeChat circle of friends. The third step is the clustering of member mobile phone media. After entering the mature stage, companies can share their brands through customer databases to improve the “fish pond” effect of mobile marketing. In the work, we must pay attention to the real-time information and update speed, and make the interaction between the platform and the customer normal.

4.2 Accurate Market Locking, Improve Information Efficiency

At present, the content of we-media marketing information is mainly discounted sales, focusing on the unlimited diffusion of information. This approach ignores the main function of “branding” from the we-media platform, neglects the need for differentiation in “fish ponds”, and ignores the quality of “bait”. Therefore, companies must make accurate customer identification and improve information effectiveness. Specifically, on the one hand, it collects various types of valid data from we-media and performs data analysis and mining to complete customer lock-in and customer classification. On the other hand, on the basis of customer classification, the content of the dissemination is refined so that the information content can be adapted to the different needs of customers.
For example, for potential customers, companies must combine their own brand positioning to provide guidance for the purchase of demand, seasonal products, customer feedback, etc., to achieve pre-sale guidance; For customers who have already purchased products, they should focus on pushing information such as maintenance and usage skills to improve customer satisfaction after purchase.

4.3 Enrich the Content of Communication and Improve the Search Rate of Information

In the we-media era, customers can use technical means to achieve advertising shielding, unless the information can cause consumers' selective attention. This requires mobile marketers to combine the characteristics of the goods to rationally design the content of the distribution, out of the dilemma of discounts and offers.

Specifically, there are following topics for choosen: First, discount promotions, suitable for fast moving consumer goods, daily necessities, but need to pay attention to the frequency and update speed of information transmission; Second, the information broadcast type, for the development of old customers, suitable for new product promotion, pre-sale and other content; Third, the expert type. It is suitable for some professionalism, beyond the level of popular knowledge, and easily attracts the attention of specific target audiences. For example, in 2011, Huatai Santa Fe’s Weibo topic on “three oils per 100 kilometers” even attracted the participation of many insiders. Fourth, maintain emotional class, including humorous for adults and caring for the elderly. Fifth, the mood type, mainly suitable for narrow categories of goods, foreign trade original single-class goods,
high-end price goods, this is also a good way to shape the brand image and taste, but often lacks good topics and writers. Of course, many times, companies can also choose information beyond product marketing. The Jiuzhaigou Scenic Area once published the topic of “Jiuzhaigou Small Loli” through the media, and successfully carried out brand marketing. At present, the proportion of such information is low, which should be the focus of development, and thus achieve a soft landing of mobile marketing.

4.4 Diversify Communication Strategies and Improve Service Interaction

After the content of the information is determined, it is also necessary to pay attention to the way of dissemination of creative information, and pay attention to the interactive management in information dissemination. First, choose the right opinion leader. In the we-media era, the role of the spokesperson is more driven by the dissemination and guidance of public opinion in the network. For example, the network big V. The big V is mainly scholars, celebrities, stars, etc. Due to the large number of fans, they have certain influence on Weibo. However, “opinion leaders” are required to have the ability to grasp information, screen information, and see information. Second, diversified communication strategies. The focus of the we-media communication strategy is on soft landing and precision. First of all, the topic and keyword search strategy, that is, when the customer searches for the corresponding keyword or topic by means of the we-media, the advertiser puts relevant information on the page to achieve precision. For example, Twitter’s Promoted Tweets advertising product. Again, the soft text communication strategy. The company cooperates with the opinion leaders to complete the text
promotion of specific topics, so as to achieve the purpose of product or service promotion and sales. Soft text dissemination is more comprehensive, more subtle, and more inflammatory, reducing consumer rebellion against advertising. Soft text communication can be done by celebrities, or by grassroots with high user viscosities, which will be more in line with the characteristics of the we-media era and user needs. Finally, a communication strategy based on mobile network technology. We-Media can use network analysis technology to complete the analysis of user's geographical location, identity characteristics and personal hobbies, so as to achieve accurate information delivery. There is also a need to strengthen customer interaction. The interactivity of information dissemination is especially critical. We-Media users are more focused on social, respectful and self-fulfilling these high-level needs, and timely interaction is an important channel to achieve these needs. Emphasis on interactive marketing can achieve the transition from the initial stage of gathering popularity to the advanced stage of building trust and loyalty.

4.5 We-Media Management

The emergence of we-media has brought opportunities to enterprises, but there are also many drawbacks in new things. Therefore, it is necessary to gather government, society, we-media platform and users to help them grow healthily.

(1) Improve Laws and Regulations and Refine Sanctions

In recent years, the network legislation process has gradually accelerated. However, in view of the low cost of we-media propaganda, the sanctions standards should consider
factors such as the scope of dissemination and achieve consistency between punishment and harm.

(2) Establish A Regulatory System

Through the establishment of monitoring institutions, improvement of complaints reporting platform, adoption of information filtering and other technical means, and strengthening of publicity and education, a three-dimensional regulatory system linking government, operators and users is formed. For example, as early as April 2008, Japan established a third-party “mobile website review and use monitoring agency”, referred to as “EMA”. In February 2007, Japan launched an activity to popularize mobile phone filtering software. In December of the same year, the Ministry of Internal Affairs and Communications required mobile phone operators to provide network filtering services for young mobile phone users in principle.

(3) Improve the We-Media Platform Responsibility

At present, there are more and more we-media platforms, which have provided convenience to the public and gained benefits from them. The we-media platform also should assumes corresponding responsibilities, including undertaking responsibility for information publishers’ filing, credit records, and network real-name system promotion. For example, on May 21, 2014, in order to prevent WeChat as a marketing platform, Tencent issued an announcement to limit the number of contacts to personal WeChat engaged in commercial marketing.

(4) Improve User Self-Discipline
Through social education and publicity, we-media users should be able to actively cooperate with the requirements of the real-name system of the network, and be able to cultivate information recognition capabilities, and be able to do not manufacture or disseminate false information.

In short, we-media marketing should comply with the needs of the times, which will bring opportunities for business development. However, enterprises must learn and practice in terms of concepts, strategies, and technologies in order to use this platform for their own purposes in order to achieve high returns.

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Smart Tourism and Marketing: WiFi Positioning for Tourism Patterning

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Abstract

In the globalization era, tourism is one of the most important sources of income in Macau. As the increment of the tourists, overcrowding becomes a problem recently. In this work, a WiFi positioning is introduced to solve the overcrowd problem in the ruins of St. Paul’s pedestrian zone in Macau.

\textbf{Keywords:} Tourism routes; Tourist flows; WiFi positioning; Smart tourism; Tourism marketing.

1. Introduction

The number of tourists visiting Macau have been increased extensively recently, according to the statistics from the statistic and census department of Macau, more than 35 million tourists visit a 600,000 population, 30 square kilometer city – Macau in 2018 (DSEC, 2018). Such number of tourists causing the pressure on transportation, sights, environments etc. The Ruins of St. Paul’s is one of the sights that most tourists will visit. The issues of overcrowd in the pedestrian zone of the Ruins of St. Paul’s will be studied, see Figure 1. Here are several negative impacts due to the issue of overcrowding in the area:

- Commercial entities are overloaded
• Tourists are hardly to move
• Unsatisfied tourists

Recently, tourism studies have been extensively used information technology tools (Gavalas, Konstantopoulos, Mastakas & Pantziou, 2014; Borràs, Moreno & Valls, 2014; Zheng, Liao & Qin, 2017). In this work, information technology is also used. A WiFi positioning system is introduced for collecting the data of the tourists, such as the stay on spots, and the path of movement. The data can be presented in real-time or analyzed. One simple way is that the government may check the real-time data in order to implement pedestrian control in the area. Further analysis of the data is also possible in order to understand the tourist’s behavior, so that the relocation of the commercial entities becomes possible and practical. And thus, tourists may spread in the area other than just congesting in the main street.

In the following sections, a WiFi positioning system will be further explained, and the applications will be introduced in detail.

Figure 1. The red highlighted area is the overcrowd pedestrian zone of the Ruins of St Paul’s, between the Ruins of St. Paul’s and Largo do Senado
2. Wireless Explained

In the following subsections, some technical terms will be introduced and explained.

2.1 The 802.11 Standard

Institute of Electrical and Electronics Engineers (IEEE) has been standardized the wireless transmission in the 802.11 Standard (IEEE 802.11 Working Group, 2016). Without going into some technical details, the 802.11 standard can be found easily in daily life, say the family-use WiFi router labels the 802.11a/b/g/n/ac, the suffix “a”, “b”, “c”, “g” and “ac” represents the generation of the standard. Roughly speaking, the standard defines a wireless packet (or WiFi packet) and the wireless transmission protocol. That is, the structure of wireless packets, and how these packets are transmitted respectively.

2.2 Media Access Control (MAC) Address

Every device in the IEEE 802 network has a MAC address, such as the Bluetooth device and WiFi device in a mobile phone. This information can be checked in the mobile phone setting. More interestingly, this MAC address uniquely identifies a device. This work focuses on the WiFi device. Under this MAC address identification, each mobile phone can be uniquely identified, and which means, pedestrians can be identified without knowing its face or their ID.

2.3 The WiFi Packet

Let us begin with an example, suppose Alice is trying to send a file to Bob in a mobile phone. The mobile phone will “chop” the files into small pieces that could be carried by the wireless signal. After adding the sender/receiver information and some other processes of these pieces and converted into transmission-ready packets, these packets that carries
data are called data packets. By following the transmission protocol, Alice can transmit the data packets to Bob, and Bob can read the file by “reversing” the processes. Other than data packets, there are also management packets and control packets. In this work, a type of management packet – probe request packet and data packet will be used.

In daily life, a WiFi device (the WiFi Network Interface Controller [NIC] in a mobile phone) constantly detects all possible WiFi hotspots nearby. In Figure 2., it briefly describes the protocol that how a mobile phone obtains those nearby WiFi hotspots. Roughly speaking, a probe request packet will be broadcasted from a mobile phone. Once a WiFi hotspot received this packet, and responses by sending the probe response packet back to the corresponding WiFi device.

An early study (Freudiger, 2015) shows that, on average, each mobile phone broadcasts the probe request packet within 2 minutes. Therefore, based on the property of WiFi packets and the above observation, we have the following design to capture the tourism pattern.

Figure 2. Dialog between a WiFi device and a WiFi hotspot.
3. Model

In this part, a detail method of capturing tourism pattern will be introduced.

3.1 Devices

Here are the devices that are used in order to be able to capture the WiFi packets:

- Raspberry Pi 3 Model B+
- Wireless adapter (with chipsets that are monitor mode ready)

The Raspberry Pi is a popular IoT device to build various IoT devices. Most of the wireless adapter in the market does not support “monitor mode”, this is the wireless network mode that allows the WiFi to listen to the packets, and so an extra wireless adapter on the Raspberry Pi is required.

3.2 The Packet Capturing Network

In the pedestrian zone near Ruins of St Paul’s in Macau, since souvenir shops are on both sides of the road, it is basically unable to move a single step every day. This also provides an excellent scenario to observe the tourism pattern in the Ruins of St Paul’s area. Therefore, it is suggested to setup a packet capturing network by using the devices in 2.1.

The Packet Capturing Devices (PCDs) are installed on both side of the roads, and for any PCD, at least 2 PCD WiFi APs are within 5 – 10 meters range. For example, the Figure 3. below is an example to setup the APs on a road. Basically, at each point on the road, there are at least 3 WiFi signal are covered.
3.3 Data Collection

Regardless of wireless packet types, the following information that is useful can be obtained:

- Sender’s MAC address – this is the origin of the packet;
- Receiver’s MAC address (this part will leave blank if a probe request is broadcasted) – this is the destination’s MAC address;
- Received signal strength indicator (RSSI) – it represents the signal strength from the sender to the packet capturing device, and measuring in dBm that can be used to approximate the distance between the mobile phone and the packet capturing device;
- Packet type – it can be used in identifying the packet types.

Once a pedestrian’s mobile phone broadcasts a probe request packet, the nearby PCDs capture the sender’s MAC address and RSSI, then upload to the centralized server for further process and analyse.
Besides, if a mobile phone is connected to any WiFi AP, and some of the applications in the mobile phone sends/receives thousands of data packets (since the mobile phone user maybe web surfing, playing games, checking social media, etc). In this case, two types of data packets will be observed:

- Mobile phone is the sender
- WiFi AP is the sender

In this work, “mobile phone is the sender” is the interested data packet. As the RSSI captures the information signal strength from the mobile phone to the packet capturing device. On the other hand, all the data packet from the WiFi AP will be dropped. In the Figure 4. below, it shows how a packet can be captured by a PCD WiFi AP. In fact, the data frame in the packet is encrypted, only the legitimate receiver can read. For the MAC addresses, and the signal strength, it is still be able to read.

![Figure 4. Scenario of packet capturing.](image)

### 3.4 Implementing the WiFi Positioning

In practice, two types of WiFi positioning algorithms are often used. The first algorithm uses triangulation positioning via RSSI. Like the Global Positioning System (GPS), as long as the signal are received by 3 out of 24 satellites, the GPS can accurately provide the latitude-longitude of the mobile phone. A draw back to this algorithm is that it costs quite
a bit computational power of the server to come up with an accurate location value.

On the other hand, the second algorithm is called the fingerprint method (Chen and Kobayashi, 2002; Youssef, Agrawala and Shankar, 2003). That is, all the packet capturing devices manually measure the signal strength of the mobile phone at a point on a road. In practice, the road is segmented into grids, and measures the average signal strength of a mobile phone for each grid. One can view the road as a collection of mesh grids as shown in Figure 5.

In the case of the Ruins of St Paul’s pedestrian zone in Macau, it is suggested to implement the fingerprinting algorithm as the entire zone is not that big so that the meshing can be done.

Figure 5. Segmenting the road into grids, apply fingerprinting for each grid.
3.5 The Fingerprinting Psudo-algorithm

I. Pre-process:

I.1 Collect the signal strength for each grid for all the PCD WiFi AP and store it in the fingerprinting database

I.2 Identify all the WiFi AP source (that is, to eliminate the data packets that sent from these APs)

II. Main process:

II.1 Collect all the received packets

II.2 Keep the probe request packets and the data packets that are sent from a mobile phone

II.3 Upload the data to the server from all the APs

II.4 For each unique MAC address, since there are at least 3 APs have the record at a certain timestamp (say the delay is within 0.5 seconds), it is easy to find the closest grid by checking the fingerprinting database.

II.5 Store the MAC address, time and the grid

4. Possible Applications

By using the above information, one can develop the following applications:

4.1 Pattern of Tourist Flows

- Stay on Specific Spots
  - Average stop time for each spot, this implies the longer time that the tourists stay in the spot, the more likely they will purchase something or some services
  - Average number of tourists in a certain duration of time
Path of movement

- Trajectory of the tourists
- Speed of the pedestrians walk in the area
- The way that the tourists enter the area

These data can be useful for tourism marketing. The patterns of tourist flows, no matter at the individual level or the aggregate level, reflect tourists’ needs, preferences, and behaviours. The authority and business entities can use these data to design marketing programs.

4.2 Crowd Management

By observing the real time walking speed on the road, the government could re-route the tourists to different path instead of the main of the zone in order to decrease the pressure of the crowd.

4.3 Urban Planning and Tourism Route Design

The citizens from the Ruins of St Paul’s pedestrian zone is suffered from congestion of tourists for a long time, in fact, some shops can be moved to the bystreet of the main street of the area so that the pressure could be decreased.

5. Acknowledgement

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Research on the Data Mining Based on Cloud Computing

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Abstract
Cloud computing can realize the low-cost and high-efficient mining of massive data with the development of science and technology. With the Map Reduce model on cloud computing, the efficient parallel processing of massive data can be realized, which will not only improve the information acquisition of massive data, but also will ensure the accuracy of data mining results.

Keywords: cloud computing; data; mining

1. The Overview of Cloud Computing

1. 1 The Definition of Cloud Computing
Cloud computing is a type of computing model that mainly relies on the internet to provide users with related services, by which, the provided resources of data can be processed through virtualization of dynamic scaling. In fact, the cloud computing is a new type of business model that can complete related tasks by computers being connected to each other on the internet at low cost and it can provide the application systems with computing resources, storage resources, and other service resources.
it has been found that the cloud computing has been existing for a long time from the analysis from the aspect of technical level, which is seen as the evolution of distributed computing technology, the expansion of virtualization technology, the centralized management of information resources, the extension of SOA architecture and the embodiment of intelligent deployment mechanism. From the perspective of business, the core of cloud computing is to provide users with the computing resources they need to better meet the developmental demands of organizational innovation and rapid change. In general, there are three common mainstream business models of the cloud computing, namely platform-as-a-service (PaaS), infrastructure-as-a-service (IaaS), and software-as-a-service (SaaS).

1.2 The Application Value of Cloud Computing

Cloud computing has very high application value in the process of social development, it can filter and sort all kinds of resources by the use of the server cluster on the Internet, and then process it according to the actual request so that to achieve resource conservation and utilization. At the same time, compared with the individual operation of large-scale computers, cloud computing plays an irreplaceable role in the processing of massive data (especially deep data mining and integration). For example, in the process of computing resource pools, cloud computing can be used for the processing of massive data and documents by the effect.

1.3 the Parallel Computing Model of Cloud Computing Platform
Google Labs proposed the Map Reduce model after a series of studies, which is a distributed parallel programming framework or model that enables parallel processing of large-scale data. A Map Reduce operation usually consists of a series of Map and Reduce tasks. At the same time, it can divide massive data processing jobs into multiple Map tasks that can be run independently according to a certain format, and assigns them to different machines to get a certain formatted intermediate file, then merge these intermediate files through several Reduce tasks to get the output file. Map Reduce and distributed lock mechanism Chubby, distributed file system GFS, cluster management Borg and large-scale distributed database Big Table are hailed as the five technologies of Google in the field of cloud computing. Only by the application of the above technologies to the cloud computing platform, to achieve efficient processing of massive data. In fact, It is known as an important magic weapon for Google's success in search engine applications which is to divide the massive data in the Internet into small and identical data blocks by certain means, and to performed distributed storage on related servers in the cloud computing network, and to make use of the Map Reduce parallel computing model in subsequent data processing. In order to complete the parallel computing of massive data through the Map Reduce calculation model, it is necessary to ensure that the structure is consistent. When applying massive data-intensive to data mining tasks, it usually involves computing methods of program iteration, approximate solution, data dimension reduction, etc., which increases the difficulty of calculation. In this case, the application of cloud computing in massive data mining has received extensive
attention in academia and industry.

2. the Importance of Data Mining Based on Cloud Computing

2.1 To Obtain Valuable Information From Network

The reason why the network data has a feature of weak correlation is that the valuable information of network can be obtained from the screening and analysis of valuable network data information to better promote the development of Internet services. Internet network platform has a relatively low barrier to entry, which will lead to the mix of massive network spam information and affect the existence value of the Internet network platform. The cloud computing technology based on massive data can realize the efficient management of network data by means of related mathematical model simulation.

2. 2 To Enhance the Efficiency in Data Acquisition

At present, the Internet has been widely used in all walks of life so that the operating efficiency and development model of various industries have changed a lot. We have found the unique behaviors and ideas of internet users by analyzing Internet data of users. In order to improve the service efficiency of the network platform, some industries choose to “seeker friendly”, to make statistics and analysis of the network use quest and basic network habits of the network users, and to use the massive data mining based on cloud computing to acquire data more efficiently so that to better enhance the efficiency in data acquisition.
2.3 To Promote the Application and Development of Big Data Technology

In general, the development of big data technology is a good match between big data management technology and cloud storage technology. Big data technology generally is to better understand and grasp the weak correlation of data through the high efficient mining of massive data, so as to better improve the management efficiency of massive data in the network. The cloud computing is to achieve the high efficient processing of massive information by compute simulation, based on which to conduct massive data mining, so that it can better promote the application and development of big data technology.

3. The Data Mining Technology Based on Cloud Computing

3.1 The Distributed Computing Technology

Nowadays, distributed computing is to connect thousands on thousands of computers together by the network to form a virtual supercomputer, which can divide a large computing task into thousands of small parts and assign them to the computers connected by network. The final result is obtained by the analysis of the calculated scores obtained by the computer. The cloud computing technology is developed on the basis of the distributed computing technology, but there are certain difficult in the later debugging and programming coding. At the same time, due to the environment of distributed system, it will increase the network delay, even surpassing the single-machine system. The unreliability of such components and the heterogeneity of
node are obstacles to the development of cloud computing distributed systems. Nowadays, with the introduction of the Map/Reduce model in the cloud computing system, Google has greatly facilitated the development of cloud computing application systems and efficiently improved the efficiency of cloud computing.

3.2 The Distributed Storage Technology

A large amount of data has been generated in the rapid development of Internet technology, which has spawned a series of distributed storage technologies. The distributed file system is a more common method, which not only facilitates the user to visit the local file system and the remote server file system, besides, it can also ensure the accuracy of the massive data stored on the remote server by own fault tolerance mechanism and redundant backup mechanism. The cloud computing environment adopted by this research is to build the storage service mechanism built on the basis of distributed storage technology, and to make corresponding adjustment of its configuration according to own characteristics of cloud storage, so that to better improve the massive data mining efficiency of cloud computing.

4. The Analysis of Data Mining Based on Cloud Computing

4.1 The Data Mining

Data mining is actually the discovery process of related knowledge in the database. It is mainly a process of finding effective, novel, potentially valuable and applicable data from massive data by relevant means. Enterprises hope to mine useful
information from massive data by the use of certain means, and the larger the data size, the better, which is the only way to ensure the authenticity and accuracy of the data, so there is very high requirements of the application and development environment of massive data mining, but the cloud computing platform can meet the above requirements. The cloud computing platform can effectively store massive data, and dynamically allocate data resources according to the actual situation of the data mining application in order to effectively expand the data mining method and ensure the reliability of data mining by means of fault tolerance mechanism.

4.2 The Advantages of Data Mining Based on Cloud Computing

(1) Distributed parallel data mining on the cloud computing platform can realize efficient and real-time mining of massive data, which not only can bring low-cost computing environment for enterprise development, but also can alleviate the dependence on large high performance machines of certain specific data.

(2) Massive data mining based on cloud computing can shield the underlying layer and ensure the effectiveness of development. For the majority of users, it is generally not necessary to consider the data allocation to the node, the division of data and the scheduling of computing tasks.

(3) With the help of original equipment on the basis of parallelization can effectively improve the processing capacity of massive data, and at the same time greatly facilitate the increase of nodes and improve the fault tolerance.
(4) Cloud computing data mining can share mining technology and effectively reduce the threshold of data mining applications, and better meet the basic requirements of massive data mining.

4.3 The Massive Data Mining Model Based on Cloud Computing

On the cloud computing platform, the ultimate goal of mining massive data is to leverage the massive storage and parallel processing capabilities of cloud computing to effectively solve the problems related to massive data processing that often encountered in data mining. The hierarchical chart of massive data mining model based on cloud computing is shown in figure 1.
Figure 1 is the hierarchical chart of massive data mining model based on cloud computing. In fact, the massive data mining model based on cloud computing generally includes three levels:

(1) The cloud computing service layer is located at the bottom of the hierarchical chart. It can not only realize the distributed parallel data processing, but also complete the storage of massive data. During the process of storing massive data on the basis of cloud computing, it is not only needed to consider the high availability of data, but also to ensure the security and reliability of massive data. Cloud computing chooses distributed data processing to realize efficient storage of massive data, and it can save multiple copies, which can ensure the normal use of data encountered in the event of disaster. At present, the data storage technology of cloud computing mainly includes resource-exploiting HDFS and non resource-exploiting GFS, while the former was developed by the Madoop team, the later was developed by the Google team, meanwhile, the parallel work mode adopted on the cloud computing platform can enable users to send a large number of requests simultaneously and provide them with corresponding services.

(2) The data mining processing layer is located above the cloud computing service layer, which includes massive data mining algorithm parallelization and massive data preprocessing. In fact, massive data preprocessing can complete the priority processing of irregular massive data. If the massive data is not ideal, the data mining results obtained are also not ideal. On the cloud computing platform, the Map Reduce
calculation model has been widely used in the massive data with consistent structure, so that when faced with various forms of massive data, it needs to be preprocessed by certain methods. In fact, the data preprocessing methods mainly include data conversion, data extraction, data specification, data cleaning and integration, and automatic generation of concept hierarchies. The preprocessing of massive data can not only improve the overall effect and quality of data mining, but also ensure the effectiveness of data mining. The parallelization of data mining algorithms is the key to massive data mining. The cloud computing platform chooses the Map Reduce computing model, which needs to transform the current data mining algorithms and parallelization to better complete the task of massive data mining. After the research on the parallelization of massive data mining, the effectiveness of massive data mining can be effectively improved. The parallelization method of massive data mining algorithms mainly include parallel classification algorithm, parallel association rule method and parallel clustering algorithm, which can be used for model classification or prediction, data clustering, data summarization, sequence patterns, dependency models or relationships, association rules, exceptions, and trend discovery. And a series of extensions and upgrades can be carried out by means of cloud computing models on the basis of massive data mining, which can greatly improve the effectiveness of massive data mining.

(3) The top level is the user-oriented user layer to complete the reception of the user request, and then pass it to the superior in order to show the final data mining result to the user. Users can manage and query the execution results of task by the visual
interface. The user's request of data mining can be transmitted to the system through a user input module, and the massive data mining can be targeted according to the relevant requirements submitted by the user. In this process, it is necessary to select the matching data mining method in the algorithm base, and to invoke the preprocessed massive data, and then to assign it to the Map Reduce platform to realize effective mining of parallel data. Finally, to pass the results of the mining to the user.

4. 4 The Problems Existed in the Data Mining Based on Cloud Computing

Since cloud computing technology is in the stage of rapid development in China, it is necessary to face certain challenges and difficulties, which leads to certain defects and problems in data mining based on cloud computing. The problems are mainly reflected in the following aspects:

(1) The demands caused by cloud computing;

(2) The problem of massive data;

(3) The choice of algorithm, it is necessary to select the matching algorithm and parallel strategy when conducting the task of massive data mining, and the adjustment of parameters and the design of the algorithm will have certain influence on the final result;

(4) Unclear problems. there are often some problems of ambiguity in the process of massive data mining, and the end result of data mining is o reduce this ambiguity to
the lowest level, which generally include the ambiguity at the stage of data collection and pre-processing. The ambiguity in tasks of data mining, the ambiguity in the selection of data mining method, and ambiguity in the estimation of data mining result.

4. 5 The Countermeasures of Data Mining Based on Cloud Computing

As to the above problems and deficiencies, it can be solved from the following aspects:

1) To build a set of targeted and systematic massive data mining service platform on the basis of satisfying individualized and diversified needs as well as giving comprehensive consideration to the characteristics of various industries in various fields in the process of infrastructure construction.

2) In the application product research of cloud service, we should consider the actual needs of the society, and encourage and guide more people to participate in it in order to better meet the basic needs of diversified and personalized data mining.

3) The application of virtualization technology can provide certain technical support for the development of data mining services. Therefore, more in-depth research on virtualization technology is needed to better promote the development of this technology to achieve efficient allocation and scheduling of computing resources.

4) In terms of credibility, the selected algorithm needs to have the characteristics of
universality, and can adjust, check and use the data at any time.

5) It is not possible to encrypt massive data directly according to the traditional method. It is better to encrypt it according to the actual needs of customers in the terminal of own platform to achieve efficient protection of massive data.

5. Conclusion

As one of the key technologies in the era of massive data, the cloud computing has been widely used in various fields, with the help of cloud computing, it can not only achieve the high efficient processing of massive data, but also can enhance the value of data utilization by ensuring the authenticity and accuracy of massive data mining.

References


Motivations of Senior Tourists in Outbound Package Tour

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Abstract

This study initiates an original inquiry into the motivations of senior tourists in Vietnam, a developing country which is transiting through an era of rapid economic development as well as high rate of aging. After Vietnam opened its market in 90s, more and more people have traveled abroad. This research was conducted with the purpose of finding out the factors affecting the motivation Vietnamese senior to travel in abroad by package tour. The research was conducted within 4 months in early 2019 by using a quantitative approach with a questionnaire-based survey was carried out among a sample size of 424 valid respondents living from both urban and sub-urban areas in Vietnam. Then, the data collected were analyzed using both SPSS and AMOS software. The findings highlight the highest relationships between four motivations - Societal Progress, Socializing, Time and Personal Reward, whereas Health and Improving Wellbeing are not significant with the motivation of Vietnamese seniors. Especially, four sub-groups are also discussed from the senior groups.

Keywords: Marketing; travel motivations; senior citizens

1. Introduction

Tourism is one of the most key activities enhance the economic development for all the
countries around the world through the development policy of Vietnam Government has been released in 2011 that tourism was became as the spearhead in Vietnam’s economy. With the regard to this planning and orienting, Vietnam has been as the final destination for 10 million foreign visitors last year, the country also increased the number of Vietnamese citizens who intent to travel overseas as many as 7.5 million from 2016 to 2021 (MasterCard’s Report, 2016). Also by the previous report, Vietnamese travelers spent approximately US$ 7-8 billion in outbound vacations by Vietnam’s middle class each year. However, there are not so many agencies willing to especially designed group package tours for elder people in Vietnam tourism market based on the proven scientific research. According to Meiners et al. (2010), tourist providers have to alter their products and services to meet the current and future necessities of the senior market which is a marketing strategy to seniors nowadays (Nieschlag et al. 2002). And in reality, it can be stated that Vietnamese senior citizen has no an official scientific research in demand of travelling abroad by package tour yet. Understanding the elder tourism market and responding to the necessary demand through special service designs for elder tourist are the opportunities for marketers to enrich existing products and services in travel agencies at the moment as well as the efforts to improve the quality of life for senior citizens through leisure activities. Therefore, this study was conducted to determine the senior citizen’s motivations that influence on the overseas travel in term of choosing group package tour provided by tour operator. We systematically explored two research questions: What factors affecting the motivation of senior people toward outbound group packed tour? How would external conditions and internal desires of the model affect the behaviour of Vietnamese seniors when undertaking outbound travel trip?
2. Theoretical Background and Hypotheses Development

The model of C.H.C Hsu (2007) provided a full view of internal and external factors could be affected motivation coming from seniors by themselves. Thus, it is suitable to be applied all on this study.

2.1 Societal Progress

Moschis (1992) indicated that the differences of environment influenced on the cohort of seniors from the formative years to advanced years. According to Hsu (2007), seniors under the age of 70 tended to be more enthusiastic and attentive when expressing their opinions about travel than those who are aged 70 and over. Chen and Wu (2009) and Nyaupane et al. (2008) state that the tendency to travel increases from 60 years of age. While Zimmer et al. (1995) claim that it begins to decline after the age of 65. Pederson (1994) also mentioned that most of the seniors are more concerned with comfort than younger travellers, by being comfortable in both, psychological as well as physical aspects.

**H1:** The societal progress positively and indirectly affects seniors’ motivation for leisure travel through cohort effects.

2.2 Personal Finance

The concept of Western country totally differs with East country in traditional culture (e.g. Zimmer, Brayley, & Searle, 1997). To most seniors, family usually has crowds of children and grandchildren. In some conditions, they also live in house with one married children. Vietnamese seniors feel commitment to financially support their children, and expect the same back supported from their children, depending on who is better off. While providing for elder parents is more likely as based on need in developed countries, providing for parent is regarded as expectation in their old age.

In addition, senior citizens are put in more sensitive price group while the group package tours are usually less expensive than other kind of travels due to the advance made from travel agents like “bulk purchases on hotel accommodations, meals, and transportation at discounted group rates” (Enoch, 1996). Therefore, the personal finance factor of Vietnamese senior should be considered in such a context. Hence, we hypothesize:
**H2:** The personal financial conditions positively and indirectly affect seniors’ motivation for leisure travel through their family support and responsibility.

**2.3 Time**

According to Hsu (2007), some seniors’ willingness to ‘‘sacrifice’’ their travel time for the good of their children and grandchildren. It could be induced by an unspoken agreement that they exchange the time for financial support from their children. This willingness to sacrifice may also result from societal pressure. If there is any time conflict between traveling and their family, in most cases they would give up traveling.

**H3:** Timing positively and indirectly affects seniors’ motivation for leisure travel through their family support and responsibility.

**2.4 Health**

The decline of physical ability is an inevitability result of aging. Patterson (1996) has listed three constraints put senior people to trouble when travelling as personal problem: age, health and responsibilities for family; responsibilities of service’s providers: cost and providing lack of information; government’s policies in travelling including external factor as security and environmental problem. Poor health condition could be regarded as a universal obstacle to senior citizen, and Vietnamese senior are not exception.

Muller and O’Cass (2001) stated that the decision making on travelling or even the motivation of travelling could be affected by perceived risks which are to being ill on the holiday, not a good value for the money, problem with travel arrangement, the duration of holiday or not being satisfied for personal need. For this reason, the next hypothesis is proposed:

**H4:** The perception of their health condition and availability of health care positively and indirectly affects seniors’ motivation for leisure travel.

**2.5 Life Continuity**

The aging of developing country was explained on three competing theories “disengagement, activity, and continuity” in which the theory of disengagement proposed that elder people are forecasted to withdraw from social relation and also society manage
to disengage from elder citizen (Cumming and Henry, 1961). In contrast, the activity theory developed by Havighurst (1952) mentions that “optimal aging is associated with the maintenance of activities even in the later stages of life”.

Senior citizen has motive force to travel around in the mature stage due to a genuine desire to improve socializing with friend and family, extending life time, escaping from daily living and relaxing (B. D. Lee, 2005). Patterson (1996) found that lacking of the companion of the journey is likely another potential reason lead senior people to choose all-inclusive journey provided by a professional travel agency with a desire to socialize, meet people and bond friendship (Shoemaker, 2000). Based on this, it is reasonable to hypothesize that:

**H5:** The improvement of both physical and mental wellbeing, to escape from daily routines, and to socialize positively and indirectly affects seniors’ motivation for leisure travel with the ultimate pursuit of life continuity.

### 2.6 Respect

Muller and Strickland (1995) pointed out that seniors are looking for opportunities understanding themselves and the world around, and travel is a powerful medium in leisure activity which could be found in numerous studies (e.g. Backman et al., 1999; Cleaver et al., 1999; Kim, Weaver, & McCleary, 1996). Milman (1998) pointed out a positive connection of senior tourist that the more happiness they have in life the more leisure activities they are take part in on the trip such as sightseeing, shopping, visiting famous historical places. This leads to change in their psychological positively as well. Thus, from the above definitions, the hypothesis could be laid as:

**H6:** The discovery of country’s change and the high sense of pride and patriotism positively and indirectly affect seniors’ motivation for leisure travel with the ultimate pursuit of life continuity and respect.

### 2.7 Personal Reward

Numerous studies conduct in developed countries argued relaxation as an important motivation factor to senior tourist for those things they had to face off every day and handle boring jobs related to housework at home. As for China senior travelers, Hsu et al. (2007) highlighted another force for travelling are to reward for hardships in the past and discover
the changes of country through leisure travels are not be a luxury vacation. This point is similar with senior travelers in Vietnam where was suffered over 30 years of hardship after the World War II compared to other countries in the world at that time. Nowadays, Viet Nam’s human development indicators have shown substantial improvements due to changes in the economic structure and available un-obligated time in Viet Nam, seniors now have enough afford to desire for reward themselves. Therefore, it is reasonable to hypothesize that:

**H7**: The reward of past hardships positively and indirectly affects seniors’ motivation for leisure travel.

### 2.8 Nostalgia

Cleaver (1999) pointed out “Nostalgic“ is a motivation to travel with seniors. Numerous studies proposed the emotional tourism is a phenomenon in case of American war veteran and their close relative who choose to visit Vietnam, South Korea and Germany with desire to relive the memories of the past (Jordan, 1997; Smith, 1998).

Spending youth age with a rich and traumatic experience during the time of war leads to a strong purpose for nostalgic motivation to travel and has much to reminisce in soul. Due to the different historical event at various stage of life of elder people, most seniors positively desire to be backed to their ancestral or birth places as China quotes “returning home in glory”. Thus, the next hypothesis was:

**H8**: The nostalgic reminiscence positively and indirectly affects seniors’ motivation.

### 3. Methodology

#### 3.1 Data gathering methods and data analysis techniques

600 senior citizens were surveyed from January to April 2019 at various locations in Vietnam. A face-to-face convenience sampling was used. 522 samples were selected from a collection rate of 87 percent. From this group, the total number of usable samples was 424 after unreliable and unsatisfactory answered surveys were removed. Data from all samples were subjected to validity test, reliability tests, exploratory factor analysis (EFA),
confirmatory factor analysis (CFA) to verify the reliability and construct the validity of the scale. Finally, the result was examined with Structural Equation Modeling (SEM) that indicates the importance level of the independent variables and for testing the hypothesized causal relationships in a research model.

3.3 Results and Findings

A total of 424 valid questionnaires were collected. Almost the respondents were between 50 and 60 years old (83%), the majority of whom were female (61%). In terms of education level, 22% had secondary education and more than half were educated to secondary school (24.9%) or higher education level (29.1%). Most of the respondents were self-employment (74.6%), followed by the employment of private company at 26%, working for public enterprise at 18%, and others who have occupation different than the above groups constitute 10% of the sample. The majority of households the respondents are living with their wife/husband their children, and the smallest group of respondents is living with wife/husband only which just took a percentage of 14%. Most of the respondents pay for their travel by their own saving makes up the largest proportion (48%), around 33% of respondents receives a part of money from their children, the remaining people choose option “All funding form children” which account for 28% of the total respondents. The income level of the sample was relatively high, as more than half of the sample had an income between 10 million and 15 million VND monthly, with an income above 15 million VND a month being the most commonly found (36%).

KMO of factor analysis results was 0.896, the data contains a satisfactory correlation among motivation items. After running EFA analysis technique, some invalid items will be eliminated and valid items will be settled into related group. There are 45 items are grouped into 12 components with a factor loading greater than 0.5. This value met all the all satisfied requirements (>0.5), indicating that the model has a quite good fit. Confirmatory Factor Analysis (CFA) was conducted through using the AMOS 16 software to measure the relationships among 12 variables: Societal Progress (SOCPRO), Personal Finance (PERFI), Time (TIME), Health (HEA), Improve Wellbeing (IMP), Escaping Routine (ESC),
Socializing (SOC), Seeking Knowledge (SEE), Pride and Patriotism (PRI), Personal Reward (PERE), Nostalgic (NOS) and Motive (MOT). According to the criteria for measurement model in the table, all the model-fit measures are quite good. In detail, Chi-square/df =1.666 (<2), GFI=0.868 (>0.9), TLI= 0.947 (>0.9), CFI=0.953 (>0.9) and RMSEA=0.040 (<0.6). Although the value of GFI is lower than 0.9, it is still acceptable in this circumstance because the whole value is almost close to the criteria. Therefore, this result is considered as satisfactory and the measurement model is fit the data.

This is the most important part of this research by giving the result of hypothesis testing by the Structural Equation Modeling (SEM), after that the relationship between measurement variables would be showed. The variables affect to the other ones can be estimated in this step based on the regression weight which must have a p-value lower than 0.05. The structural equation modeling must also fit to the standard model which is similar to the criteria of CFA. In detail, Cmin/df =2.352 (<5), GFI=0.810, TLI=0.892 (>0.8), CFI=0.9 (>0.9) and RMSEA=0.057(<0.06).

Table 1: Hypothesis testing results

<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seeking Knowledge</td>
<td>0.132</td>
<td>***</td>
</tr>
<tr>
<td>Societal Progress</td>
<td>0.332</td>
<td>***</td>
</tr>
<tr>
<td>Escaping Routine</td>
<td>0.09</td>
<td>0.017</td>
</tr>
<tr>
<td>Socializing</td>
<td>0.245</td>
<td>***</td>
</tr>
<tr>
<td><strong>Improve Wellbeing</strong></td>
<td>-0.018</td>
<td>0.748</td>
</tr>
<tr>
<td><strong>Health</strong></td>
<td>-0.038</td>
<td>0.44</td>
</tr>
<tr>
<td>Pride and Patriotism</td>
<td>0.082</td>
<td>0.048</td>
</tr>
<tr>
<td>Time</td>
<td>0.163</td>
<td>***</td>
</tr>
<tr>
<td>Nostalgic</td>
<td>0.134</td>
<td>0.001</td>
</tr>
<tr>
<td>Personal Finance</td>
<td>0.073</td>
<td>0.033</td>
</tr>
<tr>
<td>Personal Reward</td>
<td>0.142</td>
<td>***</td>
</tr>
</tbody>
</table>

According to the result, there was no significant for the positive effect of “Improve Wellbeing” and “Health” on “Motive”, therefore these pairs had not supported.

After obtaining the results of data analysis and the test of research hypotheses, a revised
research model is presented as follows:

![Diagram of research model]

**Figure 1: Structural model testing results**

The study showcased that the most important external-condition factor that pulls the tourists to visit a new place in abroad is the dimension “Societal Progress” (0.332), whereas senior tourists visiting a foreign destination by an all-inclusive tour are devoted to fulfill their personal growth and intrinsic interest because of the highest value items loaded in the dimension of internal-desire group are “Socializing” (0.245) and “Personal Reward” (0.142). In summary, the result of data analysis and finding gives the research study many useful and practical results.

4. Conclusion

The result indicated that there is no positive relationship between Health and Improve Wellbeing with travel motivation of senior citizens. Also, the finding results of the recent study about the travel motivations of European baby boomers has supported for underestimating these two factors as health and well-being were only being to regard as secondary motivations, whereas the main travel motivations for baby boomers as sun and beach, social interaction, and experiencing nature adventures were the main travel motivations for baby boomers (Borges Tiago, de Almeida Couto, Gomes Borges Tiago and
In addition, the results of these six significant hypotheses provide a highlight on overall travel motivations for the older Vietnamese tourist segment. Our results present similarities to the work of Kim et al. (2003) which the findings showed that the impact of travel motivations depend on the internal – desires and external - conditions which older tourists belonged.

**Group 1: “Visit festivals and or special events” is corresponding to “Travel for holiday or cultural purposes”**

The first group, which practically represents for all retired seniors who mainly travelled accompanied to have a holiday were attracted by events and historical or artistic sites and spent a long-time doing activities at the destination, including visiting historical artistic sites, visiting museum, physical and sports activities. For them the cost of the trip and the convenience of transport are two elements make them concern most be for taking the trip.

**Group 2: “Help me feel close to nature” is corresponding to “Active learner”**

The second group was mainly composed of female respondents whose concerns are the travel partner as usual as their family members and friends. Furthermore, most of them are widowed in this group. Though seniors in this group do not have high income, the traveling expenses were paid by their own, but they were highly interested in learning and advancing themselves growth, taking new experiences and participating in activities.

**Group 3: “Provide physical exercise”**

This third group representing for male respondent with higher yearly income and higher education levels either high school or college who is the youngest seniors and usually with partner and spouse. Comparing our results to those of previous studies, Muller and O’Cass (2001) emphasized the motivations of the group of “young at heart” tourists who are likely to feel younger than their actual age that desire to make the most of their trip with physical activities as playing sports. The expectations at destination of this group are also higher than others which could get them to be disappointed in the case of lacking these elements at the final destination.

**Group 4: “Get rest and relaxation”**

Finally, the fourth group is to indicate mainly female respondents with lower level of personal income per year, most of them are widow. Travel motivation for this group includes: rest and relaxation and visiting relatives and friends. Travellers in this group are
very close to the segmentation described as Group 2 in which the main difference is the last one group has a strong travel motivation in rest and relaxation. Travelling is usually with other family members and most travellers are also widowed in this group.

5. Limitations and further research directions

Limitations still exist mainly concerning the differences among distinctive demographic may lead customer into the different way to be motived in travelling. Thus, future research may extend the research about cross-culture which draws a complete picture to make the researcher understand more about characteristic of individual. Nevertheless, the research model can be applied to other developing countries or regions to investigate the motivations and behaviours of individual in the case of the countries have experience a change in social and culture context compare to the past. Therefore, future research can explore by making comparisons among the findings of similar research in the different nations which may develop a new understanding of the influence on individual who have been through the stages of progression. The findings of this study suggest that manager should be more flexible when drawing image of older tourist rather than keep a stereotyped picture of them and target on this this segment with a variety of activities.

References


The Importance of Factors Influencing the Travel Intentions
of Chinese Sightseeing Cultural Tourists toward Foreign Countries

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Abstract

With the increasing affluence of Chinese people, more and more people plan traveling to foreign
countries for cultural sightseeing. This paper focuses on the importance of factors influencing
travel intentions of Chinese sightseeing cultural tourists toward foreign countries. In this paper,
we review five fundamental factors influencing the travel intentions, which include expenditure,
distance, cultural experience, social and public security, and infrastructure. We used the technique
of conjoint analyses to design our research and conduct online surveys to collect data. The data
were analyzed in IBM SPSS Statistics 22. Our research suggests that these five factors have
varying influence on respondents’ decision making. Overall, security is the most important factor
and distance is the least important factor. The importance from the second to fourth place
sequentially is expenditure, cultural experience, and infrastructure. We also explored the
moderating roles of some demographic factors, which include gender, age, education, and marital
status. We find meaningful results of these demographic factors on respondents’ assessing the
relative importance of the five factors. Males rated security much more highly than expenditure, and they rated expenditure and cultural experience roughly the same. Females didn’t rate security much more important than expenditure although they ranked security as more important. Married respondents rated security as far more important than expenditure. The unmarried ranked expenditure as the most important factor and ranked security as the second important factor. There are two trends among three age groups in our research. One is that expenditure becomes less important with age. The other is that security becomes more important with age. To the people with associate degrees and below, security was only slightly more important than expenditure, whereas to the people with post-college degrees, security was far more important than expenditure. Finally, managerial and theoretical implications according to our research results are given. And we also point out the limitations of our research and give some suggestions for future research.

*Keywords*: expenditure; distance; cultural experience; public security; infrastructure

1. Introduction

Maslow’s hierarchy of needs (Kotler & Keller, 2015; Robbins & Coulter, 2017; Schiffman & Wisenblit, 2018) suggested that higher level needs become a motive only after people have satisfied lower level needs. For example, when people are sufficiently economically secure to enjoy stable and secure housing and food, they might begin to consider spending disposable income on leisure activities, including travel. China has been experiencing rapid economic growth for four decades in a row after it implemented transformation and opening-up policy. Affluent Chinese are not merely satisfied with having enough food and clothes. Not only more and more Chinese people have traveled domestically, but they have also travelled internationally, which is quite common in today’s China. A report by Oxford Economics for InterContinental® Hotels
Group (IHG®) indicated that China has the largest number of outbound tourists in the world. According this report, Chinese international tourists spent more than their American counterparts. And this report also suggested Chinese will make 97 million international trips by 2023. The China Outbound Tourism Research Institute predicted that Chinese international trips will increase to reach more than 400 million by 2030 (Gebicki, 2018).

Chinese outbound tourists finished 71.31 million trips in the first half of 2018 (Travel China Guide, 2019). And top outbound travel destinations during the 2018 Chinese Lunar New Year were Thailand, Japan, Hong Kong, Macao, Taiwan, Singapore, Vietnam, Europe, Malaysia, Australia, America, and South Korea (Travel China Guide, 2019). These countries or regions include both developed and developing locations. Some destinations are relatively far away while some are relatively near. And some destinations have very different cultures and customs from those in China, whereas others have roughly similar traditions and customs as those in China to some degree. Those destinations also relate to different levels of expenditure, public security, and infrastructure. Until now, no researches explained the relative importance of these factors – expenditure, distance, cultural experience, public security, and infrastructure – in the decision making of outbound Chinese tourists.

Many academic papers have already focused on Chinese tourists or tourism and centered on different topics. Generally speaking, we suggest Chinese tourists might be less sophisticated than those from mature markets such as tourists from West European countries. When they choose foreign destinations, they might consider several very basic factors, some of which might play important roles in the decision making about travel destinations. The research results of Joshi & Poudyal et al. (2017) suggested some variables, such as policies and regulations favoring tourism, abundance of natural resources, richness in cultural heritage, and health and hygiene, had a more
positive effect than other variables, such as infrastructure, safety, price competitiveness. We propose there are some variables or factors that have an important effect on travel decision making of Chinese outbound tourists. Until now, no researcher in China has suggested what these basic factors are clearly and tested their relative importance. Furthermore, it’s very difficult if not impossible for tourists to quantitatively assess the relative importance of these factors in a direct way. But they can tell their preferences to the different level combinations of these factors. In light of this, we conducted exploratory research to examine the relative importance of some major factors influencing travel intentions of Chinese sightseeing cultural tourists toward foreign countries with the help of conjoint analysis. First, we reviewed the relevant literature of five basic factors influencing travel intention, which are expenditure, distance, cultural experience, public security, and infrastructure. We also reviewed the literature of four demographic factors that might have moderating effects. Then we designed the questionnaire with the help of the technique of conjoint analysis. And then, we conducted the online survey to collect data that were analyzed on IBM SPSS Statistics 22. This way, we could explore and analyze the relative importance of these five factors and the moderating effects of four demographic factors on influencing the travel intentions of Chinese sightseeing cultural tourists toward foreign countries.

2. Literature Review and Conceptual Framework

There are many empirical studies on the motivation of outbound Chinese tourists. For example, Jiang & Scott et al. (2015) found that there were two different motivations among Chinese international tourists. Those who valued the beauty of nature and pleasure were motivated by destinations with fame or a good environment. Those who valued experience and knowledge were motivated by a destination with differentiation. The research results of Lu & Hung et al. (2016) showed that present-time perspective and future-time perspective affected travel motivation, and
travel motivation fully mediated the effect of present and future perspectives on travel intention. Wen & Meng et al. (2018) suggested drug experiences were a motivation of some Chinese outbound tourists. In their research, they developed a six-factor scale to measure this motivation: spiritual and emotional healing; social prestige; relaxation and escape; cannabis authenticity; commercial cannabis availability; and, cannabis experimentation. Ying & Wen (2019) suggested that sex was a motivation for some male Chinese international tourists. And they developed a comprehensive scale for measuring male tourists’ motivations for overseas commercial sex.

The empirical research we cited above illustrated several motivations of some outbound Chinese tourists. But we suggest there might be a very common motivation for most Chinese traveling or to travel internationally. Unlike international tourists from mature markets, the fact of Chinese tourists traveling to foreign countries in large numbers began to happen less than two decades ago. According to the China Outbound Tourism Research Institute, there were only 10.5 million Chinese outbound tourists in 2000 which accounted for less than 1.5 per cent of all international travelers in the same year. But in 2017 Chinese people had made 145 million cross-border trips (Gebicki, 2018). The absolute number of Chinese outbound tourists has increased very quickly. Based on such facts, we suggest that compared to their foreign counterpart from mature markets, most Chinese tourists are less sophisticated and less mature in terms of both domestic and international travel. They might have a very high motivation to experience cultures and customs in other places or countries. But overall, they might do it in a very superficial way. According to McKercher (2002), there are five types of cultural tourists whom they classified on two dimensions, which were centrality and depth of experience: the purposeful cultural tourist; the sightseeing cultural tourist; the casual cultural tourist; the incidental cultural tourist; and the serendipitous cultural tourist. And we propose that most Chinese outbound tourists should be
characterized as sightseeing cultural tourists. Would-be sightseeing cultural tourists have a high motivation to experience different foreign cultures or heritage. But they do it in a superficial and entertaining way other than in a deep and serious way. And this type of Chinese outbound tourist might be the mainstream of outbound tourists in current China, so it’s meaningful to use travel intentions of sightseeing cultural tourists toward foreign countries as the dependent variable.

Next, we review five factors that might play important roles on the travel intentions of Chinese sightseeing cultural tourists separately. We will also review four demographic factors that might moderate the impact of these five factors just mentioned on the dependent variable (see Figure 1 Conceptual Framework).

![Conceptual Framework](image)

Generally, tourists or would-be tourists are supposed to be at least affluent enough so they can afford traveling. It seems that money is not a significant issue for tourists. But previous research showed the impact of expenditure on tourist travel intentions or behavior. Tourists from different countries have demonstrated different expenditure structures (Laesser & Crouch, 2006).
Laesser & Crouch (2006) found that tourists to Australia from mature markets such as some countries in Europe spent 20% to 30% less than those from less mature markets. Kim & Kim et al. (2011) empirically examined the impact of the level of expenditures by food tourists on their attitudes. Their research results suggested there’s a direct relationship between these two variables, and the expenditure on food affected tourists’ satisfaction as well as their intention to revisit. The research results of Rong-Da & Chen et al. (2013) indicated food expenditure did have an impact on tourist response to festival tourism. Their research showed the total expenditure of a tourist negatively affected their revisit intention and recommendation intention. Although a lot of research on tourist behavior were related to expenditure, no research examined the effect of expenditure on the overall travel intentions of outbound sightseeing cultural tourists. In this paper, we operate the variable expenditure at two levels: high and low.

Distance also influences tourist behavior. Research on the relationship between distance and tourist attitudes and behaviors is very revealing. Thanks to the conflicting research results about the impact of distance on duration of stay during travel, Nicolau & Zach et al. (2018) empirically tested the effect of distance on length of stay. They found that distance positively affected length of stay. Tanford & Kim (2018) found that distance moderated the impact of online reviews on travel decisions. Research data showed a complicated relationship between a resort's distance and its guest reviews (positive, neutral, or negative) (Tanford & Kim, 2018). As might be expected, regardless of a resort's distance, participants preferred neutral over negative reviews. However, a preference for positive reviews over neutral reviews declined as the distance increased. Moreover, when both resorts had neutral reviews, the distance of the location was the main factor in choosing a lodging. Still other researchers found an inverted U-shaped relationship between travel distance and tourist attitudes. The research results of Park & Yang et al. (2019) suggested
an inverted U-shaped relationship between travel distance and service satisfaction. At the beginning, distance positively influenced service quality until it reached an inflection point. Beyond that point, distance and service satisfaction were negatively related. Most of these studies focused on domestic travel and few empirical researches suggested the relationship between distance and international travel. Until now, no empirical research demonstrated the effect of distance on the overall travel intentions of sightseeing cultural tourists toward foreign countries.

In this paper, we operate the variable distance at two levels: faraway and near.

Generally speaking, Chinese outbound tourists might not be as sophisticated as those from mature market, as we mentioned above. Most Chinese might only have some fragmented information about what foreign countries and cultures look like before they travel to other countries. They have a very strong motivation to experience cultures in foreign countries. We suggest cultural experience is another important factor that might have important influence on travel intention. Fakeye & Crompton (1991) identified six pull factors that could have important influence on tourist motivation, which include social opportunities and attractions, natural and cultural amenities, accommodations and transportation, infrastructure, foods, and friendly people, physical amenities and recreation activities, and bars and evening entertainment. These pull factors had different influence on non-visitors, first timers and repeaters (Fakeye & Crompton, 1991). Furthermore, most of these factors are related to cultural experiences. Still, cultural experience might have a very unpredictable effect on the decision making of international tourists. As Bi & Lehto (2018) showed in their study, there was an inverted U-curve relationship between culture distance and tourists’ destination choice. This relationship suggested low to moderate cultural distance has a positive effect on tourists’ destination choice, whereas high culture distance has a
negative effect on tourists’ destination choice (Bi & Lehto, 2018). In this paper, we operate the variable cultural experience at two levels: high versus low.

Public security is also an important factor that can affect travel intentions of international tourists. According to Maslow’s hierarchical theory of needs, public security is a foundational hierarchical need, a basic requirement of humankind (Kotler & Keller, 2015; Schiffman & Wisenblit, 2018). Travel surveys suggest that tourists take safety and security very seriously (Poon and Adams, 2000). Floyd & Gibson et al. (2004) did a literature review on four major risk factors pertinent to tourism: war and political instability; health concerns; crime; terrorism. According to their literature review, potential terrorism attacks and political instability were the riskiest factors in influencing travel intention (Floyd & Gibson et al., 2004). Tourists chose safer destinations instead of risky places. And tourists from different countries demonstrate different risk perceptions, with American tourists having higher level perception of risk (Floyd & Gibson et al., 2004). Santana-Gallego & RossellÃ–Nadal et al. (2016) found that political and institutional instability, measured in terms of terrorism, crime and corruption, had negative effects on international tourists. The research of Deng & Ritchie (2018) utilized factor analysis and identified four main risk factors: human-induced risk, social–psychological risk, financial risk, and health risk. They also found that students from different countries or regions had different risk perceptions. But the impact of public security might not be so simple as it seems. Public security might have very complicated impact on travel intentions of international tourists. Findings of Li & Wen (2018) suggest Chinese tourists had very negative attitudes toward North Korea after its most recent series of nuclear tests. But that didn’t mean Chinese tourists gave up North Korea as their tourist destination in total. What had happened in North Korea just mystified that country. Thus, it had in fact enhanced the attraction
to revisit for some Chinese tourists. In this paper, we operate public security as a two-level variable: high and low.

Infrastructure is another important factor that can influence travel intentions of sightseeing cultural tourists toward foreign countries. In the paper, infrastructure includes transportation and communication of the destinations. Albalate & Fageda (2016) examined whether high speed rail systems affected the decision making of destination choice, especially on urban tourism destinations. Their results suggested that the Spanish High Speed Rail system had a significant effect on the tourists’ choice to visit other cities close to Madrid. But it had no influence on the choice of Madrid as a tourist destination. The research of Giap & Gopalan et al. (2016) suggested Malaysia’s government expenditures on infrastructure investments such as enhancing airport facilities had a causal effect and positively influenced the growth of travel and tourism industry. Khan & Qianli et al. (2017) examined the impact of air transportation, railway transportation, and travel and transport services on international inbound and outbound tourism. Their research indicated that inbound tourists worldwide were positively affected by the transportation sector. And the concentration of different modes of transportation would facilitate international tourism (Khan & Qianli et al., 2017). Still, no researchers directly examined the effect of infrastructure on the travel intentions of Chinese sightseeing cultural tourists toward foreign countries. In this paper, the variable infrastructure has two levels: good and bad.

In marketing and consumer behavior research, gender is an important variable because it affects consumer behavior in many ways. It’s a widely used factor that marketers use to segment markets. In studies of tourism, researchers have demonstrated the effect of gender on tourist travel intentions and behaviors. Reisinger & Crotts (2009) tested the impact of gender on travel risk perceptions and future travel intention. They surveyed respondents from Asia, Australia, Europe,
the UK, and the US. The results indicated that males and females had different levels of travel and safety perceptions, anxieties, etc. For example, the most important factor determining females’ intention to travel internationally was anxiety, whereas the most important factor determining males’ intention was perceived safety. The research results of Li & Yang (2015) found gender didn’t affect relationships among destination image, visitor satisfaction, and behavioral intentions. They concluded that visitors’ genders did not affect these relationships. Wang & Qu et al. (2016) tested a theoretical model of tourist expectation formation and examined the gender differences regarding how tourists formed their expectations toward a travel destination. The results suggested that the impacts of travel motivation and advertising on attitudes were significantly stronger for males than females, whereas the effects of WOM on attitudes were stronger for females than males. The research of Yasin & Baghirov et al. (2017) suggested that males and females used different travel information sources. Female visitors rely more on internal information sources such as friends’ suggestions and past travel experience, whereas males prefer to use external information sources like Facebook, television, blog, travel agents, newspaper and guidebooks. In this paper, the demographic factor of gender has two attributes: male and female.

Age is an important demographic factor that is valued by both researchers and marketers. Numerous studies have already demonstrated that age is a valid predictor in terms of consumer behavior. Nordlund & Westin (2013) investigated the determinants of intentions to use a new railway line under construction in the northern Sweden. The results showed that the youngest age group was more open to change and has stronger intentions to use the new railway. Yang & Lau (2015) investigated generational disparities of Chinese Generation X and Y tourists by examining their loyalty determinants in a luxury hotel setting. The results of their research did show differences between these two generations. Convenience and food are more important for Gen X,
while security is more important for Gen Y. The research results of Desivilya & Teitler-Regev et al. (2015) indicated that young tourists with strong aversion to health hazards exhibited low intentions to travel to India and those refraining from economic crisis were reluctant to travel to Egypt. Gardiner & Kwek (2017) explored Chinese Generation Y’s attitudes toward adventure tourism experiences. By qualitative research, they revealed that Chinese youth showed cultural beliefs that determined their decision making. In this paper, we operate the variable age into three age groups: 25 years old and below, 26-35 years old, 36 years old and above.

Education plays an important role in consumer behavior. People with different education backgrounds exhibit different consumer behaviors. Education is one dimension of social-class (Schiffman & Wisenblit, 2018). The children of higher education alumni and upper-class Americans often go to the most selective universities in USA, while lower-class children usually skip college education and try to find a good job (Schiffman & Wisenblit, 2018). Most college dropouts are from poorer or working-class families, whereas those from the middle and upper classes generally finish their studies (Schiffman & Wisenblit, 2018). People in the same social class are very similar to each other in terms of income and social standing in the community (Soloman, 2016). They work in roughly similar occupations and they tend to have similar tastes in music, clothing, leisure activities, and art (Soloman, 2016). They also tend to socialize with one another, and they share many ideas and values regarding the way life should be lived (Soloman, 2016). Marketers are interested in wealth distribution because they can identify their right target markets where people have enough buying power (Soloman, 2016). Although no empirical research tested the impact of educational attainment on travel intention, we suggest that the potential Chinese sightseeing cultural tourists with different education background might evaluate the five basic factors differently. In other words, educational attainment might have a moderating
effect. In this paper, the variable of education has three attributes: high school graduates or less (including current students), college graduates and current students, and post-college graduates and students.

Finally, marital status is another demographic factor that might moderate the effect of five basic factors on travel intentions of sightseeing cultural tourists toward foreign countries. Marital status is a component of the family life cycle (Soloman, 2016; Schiffman & Wisenblit, 2018). The research results of Andreasen (1984) implied that a status change of households triggered brand preferences automatically. Escobar-Rodríguez & Grávalos-Gastaminza et al. (2017) indicated in their research that marital status had moderating effects in the formation of purchase intention toward tourism products or services in the context of social media. Little research has examined the effect of marital status on travel intention internationally. In this paper, the variable marital status has two attributes: the married and the single (including the unmarried, the divorced, the widowed).

3. Research Method

In order to test the relative importance of the five factors and the moderating role of demographic factors, we resort to the technique of conjoint analysis or conjoint measurement. Since the early 1970s, conjoint analysis become acceptable among researchers and practitioners (Green & Srinivasan, 1990). The basic idea of conjoint analysis is that it’s usually difficult or impossible to rate or rank the relative importance of different attributes of an entity when those attributes are considered one by one. But it become much easier to measure the relative importance of different attributes of an entity when those attributes are considered jointly.

Conjoint analysis is in fact very popular in marketing research. For example, in the development of new product, marketers use conjoint analysis to measure consumer preferences
for alternative product concepts (Kotler & Keller, 2015). It is a method used to calculate the utility values that consumers attach to varying levels of a product’s attributes (Kotler & Keller, 2015). Conjoint analysis can also be used in other areas of marketing. The goal of conjoint analysis is to determine the attributes that respondents prefer most (Churchill & Iacobucci, 2006). With conjoint analysis, consumers are asked to make overall judgments about several sets of combinations by varying levels of attributes of a brand or product. Then with the help of statistics techniques, consumers’ preference can be inferred and the utility value of each attribute can be calculated.

Conjoint analysis or conjoint measurement is a special implementation of a dummy variable regressions (Churchill & Iacobucci, 2006). The basic model or utility function in the conjoint analysis is $Y=\alpha+\beta_1x_1+\beta_2x_2+\beta_3x_3+\ldots+\beta_nx_n+\epsilon$. In our research, the formula for the model is as follows:

$$Y_t=\alpha+\beta_eX_e+\beta_dX_d+\beta_cX_c+\beta_pX_p+\beta_iX_i+\epsilon$$

$Y_t$ is a dependent variable (the travel intentions of Chinese sightseeing cultural tourists toward foreign countries), $\alpha$ is the constant, $\beta$ is the coefficient (utilities), and $\epsilon$ is the error term. $X$ represents an independent variable. In this paper, we have five independent variables, which are expenditure ($X_e$), distance ($X_d$), cultural experience ($X_c$), public security ($X_p$), and infrastructure ($X_i$).

In our research, all five independent variables or factors have two levels. The stimulus set is the different combinations of one level of each of five independent variables or factors (see Table 1). Each set of the combination and the dependent variable and other information form a scenario (see Table 2). Theoretically, there are 32 different scenarios in total because there are 32 ($2\times2\times2\times2\times2=32$) combinations of levels of dependent variables. Fortunately, statistical techniques can reduce the burden of respondents greatly. Instead of assessing all scenarios, respondents need
only assess a proportion of all scenarios. At the same time, we can still ensure the validity and reliability of research. We use orthogonal design in IBM SPSS Statistics 22 to generate 8 combinations for the estimation of utility and generate four more combinations to use as holdouts (see Table 3). We use an 11-item scale to measure the travel intentions of Chinese sightseeing cultural tourists toward foreign countries. We also assign a value to each item from 0 to 100. Higher scores mean high level travel intentions. The score 0 means no travel intention and the score 100 means a complete travel intention. And then we designed our questionnaire online and presented these different scenarios to respondents.

Table 1. Factors (Variables or Attributes) And Levels Used in Conjoint Analysis

<table>
<thead>
<tr>
<th>Factor (Variable)</th>
<th>Attributes</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expenditure</td>
<td>HIGH</td>
<td>The expenditure on the trip is relatively high.</td>
</tr>
<tr>
<td></td>
<td>LOW</td>
<td>The expenditure on the trip is relatively low.</td>
</tr>
<tr>
<td>Distance</td>
<td>FARAWAY</td>
<td>The distance to the trip destination is relatively far.</td>
</tr>
<tr>
<td></td>
<td>NEAR</td>
<td>The distance to the trip destination is relatively near.</td>
</tr>
<tr>
<td>Cultural Experience</td>
<td>HIGH</td>
<td>You will have a very different cultural experience.</td>
</tr>
<tr>
<td></td>
<td>LOW</td>
<td>You will have a roughly similar cultural experience.</td>
</tr>
<tr>
<td>Public Security</td>
<td>GOOD</td>
<td>Public security is good.</td>
</tr>
<tr>
<td></td>
<td>BAD</td>
<td>Public security is ordinary.</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>GOOD</td>
<td>Infrastructure, including transportation, communication, etc., is good.</td>
</tr>
<tr>
<td></td>
<td>BAD</td>
<td>Infrastructure, including transportation, communication, etc., is ordinary.</td>
</tr>
</tbody>
</table>

Table 2. Illustration of A Scenario in The Questionnaire

You are supposed to travel to a foreign country as a sightseeing cultural tourist. You have the following information:

- The expenditure on the trip is high.
- The distance to the trip destination is near.
- You will have very different cultural experience.
- Public security is good.
Infrastructure including transportation, communication, etc. is ordinary.

How likely would you travel to this country?
(There are 11 choices from A to K; the increasing scores indicate the degree of likelihood. A indicates definitely would not travel, K indicated definitely would travel.)
A0  B10  C20  D30  E40  F50  G60  H70  I80  J90  K100

Table 3. Card List

<table>
<thead>
<tr>
<th>Card ID</th>
<th>Expenditure</th>
<th>Distance</th>
<th>Experience</th>
<th>Security</th>
<th>Infrastructure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>HIGH</td>
<td>FARAWAY</td>
<td>HIGH</td>
<td>GOOD</td>
<td>GOOD</td>
</tr>
<tr>
<td>2</td>
<td>LOW</td>
<td>FARAWAY</td>
<td>LOW</td>
<td>BAD</td>
<td>BAD</td>
</tr>
<tr>
<td>3</td>
<td>HIGH</td>
<td>FARAWAY</td>
<td>LOW</td>
<td>GOOD</td>
<td>BAD</td>
</tr>
<tr>
<td>4</td>
<td>HIGH</td>
<td>NEAR</td>
<td>LOW</td>
<td>BAD</td>
<td>GOOD</td>
</tr>
<tr>
<td>5</td>
<td>LOW</td>
<td>NEAR</td>
<td>LOW</td>
<td>GOOD</td>
<td>GOOD</td>
</tr>
<tr>
<td>6</td>
<td>LOW</td>
<td>FARAWAY</td>
<td>HIGH</td>
<td>BAD</td>
<td>GOOD</td>
</tr>
<tr>
<td>7</td>
<td>LOW</td>
<td>NEAR</td>
<td>HIGH</td>
<td>GOOD</td>
<td>BAD</td>
</tr>
<tr>
<td>8</td>
<td>HIGH</td>
<td>NEAR</td>
<td>HIGH</td>
<td>BAD</td>
<td>BAD</td>
</tr>
<tr>
<td>9*</td>
<td>HIGH</td>
<td>FARAWAY</td>
<td>HIGH</td>
<td>BAD</td>
<td>BAD</td>
</tr>
<tr>
<td>10*</td>
<td>HIGH</td>
<td>NEAR</td>
<td>HIGH</td>
<td>BAD</td>
<td>GOOD</td>
</tr>
<tr>
<td>11*</td>
<td>HIGH</td>
<td>NEAR</td>
<td>LOW</td>
<td>BAD</td>
<td>BAD</td>
</tr>
<tr>
<td>12*</td>
<td>HIGH</td>
<td>NEAR</td>
<td>LOW</td>
<td>GOOD</td>
<td>BAD</td>
</tr>
</tbody>
</table>

a. Holdout

We used an online survey to collect data. We released our questionnaire on a website (wjx.cn) owned by an online survey company that provides free questionnaire design and other free services. The pinyin (Chinese version of phonetics) of this online survey company is wenjuanxing (which means “questionnaire star” literally.). There are two sources of respondents in our research. One source is students who major in business or economics from two four-year universities in Guiyang and Nanning separately in China. The other source is from the online survey company that provides the paid service and can collect data according to requirements of subscribers. We suggest that rational people should prefer low expenditure to high expenditure, prefer high public security to low level security, and prefer good infrastructure to bad. We suggest
that the preference for distance and cultural experience among tourists or would-be tourists is highly situational and individualistic, so we don’t propose the preferred attribute of these two variables or factors. We excluded responses that didn’t meet our standards just mentioned and any invalid responses.

We collected 282 valid questionnaires in total, of which 89 responses were from the students of the two universities. Males accounted for 34.8% with 98 valid responses and females accounted for 65.2% with 184 responses. See Table 4, Table 5, Table 6 and Table 7 for detailed information related to gender, age, education, and marital status.

Table 4. Gender

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>Male</td>
<td>98</td>
<td>34.8</td>
<td>34.8</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>184</td>
<td>65.2</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>282</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 5. Age

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>Under 18 Years Old</td>
<td>4</td>
<td>1.4</td>
<td>1.4</td>
</tr>
<tr>
<td></td>
<td>Between 18 and 25 Years Old</td>
<td>145</td>
<td>51.4</td>
<td>51.4</td>
</tr>
<tr>
<td></td>
<td>Between 26 and 35 Years Old</td>
<td>94</td>
<td>33.3</td>
<td>33.3</td>
</tr>
<tr>
<td></td>
<td>Between 36 and 45 Years Old</td>
<td>24</td>
<td>8.5</td>
<td>8.5</td>
</tr>
<tr>
<td></td>
<td>Between 46 and 60 Years Old</td>
<td>14</td>
<td>5.0</td>
<td>5.0</td>
</tr>
<tr>
<td></td>
<td>61 Years Old and above</td>
<td>1</td>
<td>.4</td>
<td>.4</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>282</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Table 6. Education

<table>
<thead>
<tr>
<th>Valid</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School and below</td>
<td>6</td>
<td>2.1</td>
<td>2.1</td>
<td>2.1</td>
</tr>
<tr>
<td>Associate Degree</td>
<td>32</td>
<td>11.3</td>
<td>11.3</td>
<td>13.5</td>
</tr>
<tr>
<td>Bachelor’s Degree</td>
<td>217</td>
<td>77.0</td>
<td>77.0</td>
<td>90.4</td>
</tr>
<tr>
<td>Post College Degree</td>
<td>27</td>
<td>9.6</td>
<td>9.6</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>282</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Table 7. Marital Status

<table>
<thead>
<tr>
<th>Valid</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td>120</td>
<td>42.6</td>
<td>42.6</td>
<td>42.6</td>
</tr>
<tr>
<td>Unmarried</td>
<td>162</td>
<td>57.4</td>
<td>57.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>282</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

4. Results

The data we collected were entered onto the sheet of SPSS. Because SPSS doesn’t have the function to run conjoint analysis directly, we needed to write a short program on the Syntax window in SPSS in order to run the conjoint analysis. After finishing writing the program, we ran that program to complete conjoint analyses.

The results of conjoint analysis suggest that overall security is the most important factor that influences travel intentions. The ranking of the other four factors from more important to less important sequentially is expenditure, cultural experience, infrastructure, and distance. (See Table 8, Table 9, Table 10, and Figure 2 for more information.)

Table 8. Importance Values

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Expenditure</td>
<td>23.709</td>
</tr>
<tr>
<td>Distance</td>
<td>13.263</td>
</tr>
<tr>
<td>Experience</td>
<td>17.989</td>
</tr>
</tbody>
</table>
Table 9. Utilities

<table>
<thead>
<tr>
<th>Utility</th>
<th>Utility Estimate</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expenditure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIGH</td>
<td>-7.895</td>
<td>.472</td>
</tr>
<tr>
<td>LOW</td>
<td>7.895</td>
<td>.472</td>
</tr>
<tr>
<td>Distance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FARAWAY</td>
<td>-1.600</td>
<td>.472</td>
</tr>
<tr>
<td>NEAR</td>
<td>1.600</td>
<td>.472</td>
</tr>
<tr>
<td>Experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIGH</td>
<td>3.276</td>
<td>.472</td>
</tr>
<tr>
<td>LOW</td>
<td>-3.276</td>
<td>.472</td>
</tr>
<tr>
<td>Security</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GOOD</td>
<td>9.331</td>
<td>.472</td>
</tr>
<tr>
<td>BAD</td>
<td>-9.331</td>
<td>.472</td>
</tr>
<tr>
<td>Infrastructure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GOOD</td>
<td>5.111</td>
<td>.472</td>
</tr>
<tr>
<td>BAD</td>
<td>-5.111</td>
<td>.472</td>
</tr>
<tr>
<td>(Constant)</td>
<td>61.405</td>
<td>.472</td>
</tr>
</tbody>
</table>

Figure 2  Overall Importance Summary

Table 10. Correlations

<table>
<thead>
<tr>
<th>Value</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson's R</td>
<td>.999</td>
</tr>
</tbody>
</table>
Kendall's tau | 1.000 | .000
Kendall's tau for Holdouts | 1.000 | .021

a. Correlations between observed and estimated preferences

We ran the data from male and female respondents separately and compared the relative priorities of the five factors between male and female. The results indicate that the overall rankings of the five factors are the same regardless of the gender. Both genders ranked security as the most important factor and distance as the least important. Both genders ranked expenditure, experience, and infrastructure in the same order from more important to less important. But males and females do display some differences. Males rated security much more highly than expenditure, and they rated expenditure and cultural experience as roughly the same in relative importance. Females didn’t rate security much more important than expenditure, though they ranked security as the more important. Compared to males, females ranked expenditure much more important than cultural experience. (See Table 11, Table 12, Table 13, and Figure 3 for more information.)

Table 11. Importance Values (Gender)

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expenditure</td>
<td>20.422</td>
<td>25.460</td>
</tr>
<tr>
<td>Distance</td>
<td>14.287</td>
<td>12.718</td>
</tr>
<tr>
<td>Experience</td>
<td>19.007</td>
<td>17.447</td>
</tr>
<tr>
<td>Security</td>
<td>29.700</td>
<td>27.718</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>16.585</td>
<td>15.570</td>
</tr>
</tbody>
</table>

Averaged Importance Score

Table 12. Utilities (Gender)

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th></th>
<th>Female</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Utility Estimate</td>
<td>Std. Error</td>
<td>Utility Estimate</td>
<td>Std. Error</td>
</tr>
<tr>
<td>Expenditure</td>
<td>HIGH</td>
<td>-6.696</td>
<td>.594</td>
<td>-8.533</td>
</tr>
<tr>
<td></td>
<td>LOW</td>
<td>6.696</td>
<td>.594</td>
<td>8.533</td>
</tr>
<tr>
<td>Distance</td>
<td>FARAWAY</td>
<td>-1.849</td>
<td>.594</td>
<td>-1.467</td>
</tr>
</tbody>
</table>
The results showed that the relative importance of the five factors demonstrated both differences and similarities between the married and the unmarried. Both the married and the unmarried rated cultural experience, infrastructure, and distance as third, fourth, and fifth in importance.
importance sequentially. They also assigned very similar values to the relative importance of each factor. But the most important factor to the married was security and second most important was expenditure. And the married rated security far more important than expenditure. The unmarried ranked expenditure as the most important factor and ranked security as the second important factor. And the unmarried rated the expenditure and security as roughly the same in importance, though they rated expenditure a little more important than security. (See Table 14, Table 15, Table 16, and Figure 4 for more information.)

Table 14. Importance Values (Marital Status)

<table>
<thead>
<tr>
<th></th>
<th>Married</th>
<th>Unmarried</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expenditure</td>
<td>19.728</td>
<td>26.657</td>
</tr>
<tr>
<td>Distance</td>
<td>13.446</td>
<td>13.128</td>
</tr>
<tr>
<td>Experience</td>
<td>18.187</td>
<td>17.843</td>
</tr>
<tr>
<td>Security</td>
<td>32.570</td>
<td>25.322</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>16.069</td>
<td>15.815</td>
</tr>
</tbody>
</table>

Averaged Importance Score

Table 15. Utilities (Marital Status)

<table>
<thead>
<tr>
<th></th>
<th>Married</th>
<th>Std. Error</th>
<th>Unmarried</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expenditure</td>
<td>HIGH: -6.594</td>
<td>.792</td>
<td>LOW: 6.594</td>
<td>.792</td>
</tr>
<tr>
<td>Distance</td>
<td>FARAWAY: -1.094</td>
<td>.792</td>
<td>NEAR: 1.094</td>
<td>.792</td>
</tr>
<tr>
<td>Experience</td>
<td>HIGH: 2.115</td>
<td>.792</td>
<td>LOW: -2.115</td>
<td>.792</td>
</tr>
<tr>
<td>Security</td>
<td>GOOD: 10.948</td>
<td>.792</td>
<td>BAD: -10.948</td>
<td>.792</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>GOOD: 5.115</td>
<td>.792</td>
<td>BAD: -5.115</td>
<td>.792</td>
</tr>
<tr>
<td>(Constant)</td>
<td>64.115</td>
<td>.792</td>
<td>59.398</td>
<td>.792</td>
</tr>
</tbody>
</table>
Figure 3 Importance Difference between the Married and the Unmarried

Table 16. Correlations\(^a\) (Marital Status)

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Sig.</th>
<th>Value</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson's R</td>
<td>.997</td>
<td>.000</td>
<td>1.000</td>
<td>.000</td>
</tr>
<tr>
<td>Kendall's tau</td>
<td>.929</td>
<td>.001</td>
<td>1.000</td>
<td>.000</td>
</tr>
<tr>
<td>Kendall's tau for Holdouts</td>
<td>.667</td>
<td>.087</td>
<td>1.000</td>
<td>.021</td>
</tr>
</tbody>
</table>

\(a, \text{Correlations between observed and estimated preferences}\)

The results showed that age played a significant role in assessing the importance of these five factors. Different age groups display both differences and similarities when rating the relative importance of the five factors. To those 35 years old and below, cultural experience, infrastructure, and distance were the third, fourth, and fifth important factor in sequence. They all assigned a similar value to each of these three factors. But to those 36 years old and above, expenditure, infrastructure, and distance were the third, fourth, and fifth important factor in sequence. But to those 25 years old and under, the most important factor was expenditure and second important factor was security, though this age group didn’t rate expenditure much more important than
security. To those people between 26 and 35 years old, security was the most important factor and expenditure was the second most important factor. To those 36 years old and above, security was the most important factor and culture experience was the second most important factor. At the same time, people above 25 years old rated the factor security far as more important than expenditure. There are two trends among these three age groups. One is expenditure becomes less important with aging. The other is security becomes more important with aging. (See Table 17, Table 18, Table 19, and Figure 5 for more information.)

Table 17. Importance Values (Age)

<table>
<thead>
<tr>
<th></th>
<th>25 and Under</th>
<th>26 to 35</th>
<th>36 and above</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expenditure</td>
<td>26.505</td>
<td>21.748</td>
<td>17.753</td>
</tr>
<tr>
<td>Distance</td>
<td>13.309</td>
<td>13.640</td>
<td>12.181</td>
</tr>
<tr>
<td>Experience</td>
<td>18.102</td>
<td>17.779</td>
<td>18.063</td>
</tr>
<tr>
<td>Security</td>
<td>24.691</td>
<td>31.553</td>
<td>35.021</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>16.051</td>
<td>15.280</td>
<td>16.982</td>
</tr>
</tbody>
</table>

Averaged Importance Score

Table 18. Utilities (Age)

<table>
<thead>
<tr>
<th></th>
<th>25 and Under</th>
<th>26 to 35</th>
<th>36 and above</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expenditure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIGH</td>
<td>-8.884</td>
<td>-7.101</td>
<td>-6.026</td>
</tr>
<tr>
<td>LOW</td>
<td>8.884</td>
<td>7.101</td>
<td>6.026</td>
</tr>
<tr>
<td>Distance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FARAWAY</td>
<td>-2.039</td>
<td>-1.303</td>
<td>-.641</td>
</tr>
<tr>
<td>NEAR</td>
<td>2.039</td>
<td>1.303</td>
<td>.641</td>
</tr>
<tr>
<td>Experience</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIGH</td>
<td>4.287</td>
<td>1.543</td>
<td>3.590</td>
</tr>
<tr>
<td>LOW</td>
<td>-4.287</td>
<td>-1.543</td>
<td>-3.590</td>
</tr>
<tr>
<td>Security</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GOOD</td>
<td>7.810</td>
<td>10.239</td>
<td>12.949</td>
</tr>
<tr>
<td>BAD</td>
<td>-7.810</td>
<td>-10.239</td>
<td>-12.949</td>
</tr>
<tr>
<td>Infrastructure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GOOD</td>
<td>5.109</td>
<td>4.840</td>
<td>5.769</td>
</tr>
<tr>
<td>BAD</td>
<td>-5.109</td>
<td>-4.840</td>
<td>-5.769</td>
</tr>
<tr>
<td>(Constant)</td>
<td>60.126</td>
<td>62.420</td>
<td>63.846</td>
</tr>
</tbody>
</table>
According to our research results, people with different educational attainment demonstrated differences and similarities in assessing the relative importance of the five factors. In our research all three educational attainment groups rated security as the most important factor and rated distance as the least important factor. To people with associate degree and below, expenditure, infrastructure, and culture experience were the second, third, and fourth important factor in sequence. To people with bachelor degree, expenditure, culture experience, and infrastructure were the second, third, and fourth important factor in sequence. To people with bachelor degree, infrastructure, expenditure, and culture experience were the second, third, and
fourth important factor in sequence. These three groups assigned a very similar value to the factor distance. But to the people with associate degrees and below, security was only slightly more important than expenditure, whereas to the people with post-college degrees, security was far more important than expenditure. There is also a trend that shows the factor expenditure becomes less important for people with the higher academic degrees.

Table 20. Importance Values (Education)

<table>
<thead>
<tr>
<th>Factor</th>
<th>Associate Degree and below</th>
<th>Bachelor’s Degree</th>
<th>Post-College Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expenditure</td>
<td>26.832</td>
<td>23.709</td>
<td>18.015</td>
</tr>
<tr>
<td>Distance</td>
<td>11.915</td>
<td>13.263</td>
<td>11.305</td>
</tr>
<tr>
<td>Experience</td>
<td>14.495</td>
<td>17.989</td>
<td>16.405</td>
</tr>
<tr>
<td>Security</td>
<td>29.214</td>
<td>28.407</td>
<td>34.686</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>17.544</td>
<td>15.923</td>
<td>19.589</td>
</tr>
</tbody>
</table>

Averaged Importance Score

Table 21. Utilities (Education)

<table>
<thead>
<tr>
<th>Factor</th>
<th>Associate Degree and below</th>
<th>Bachelor’s Degree</th>
<th>Post-College Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expenditure</td>
<td>HIGH -8.651</td>
<td>.943</td>
<td>-7.895</td>
</tr>
<tr>
<td></td>
<td>LOW 8.651</td>
<td>.943</td>
<td>7.895</td>
</tr>
<tr>
<td>Distance</td>
<td>FARAWAY -1.414</td>
<td>.943</td>
<td>-1.600</td>
</tr>
<tr>
<td></td>
<td>NEAR 1.414</td>
<td>.943</td>
<td>1.600</td>
</tr>
<tr>
<td>Experience</td>
<td>HIGH 1.678</td>
<td>.943</td>
<td>3.276</td>
</tr>
<tr>
<td></td>
<td>LOW -1.678</td>
<td>.943</td>
<td>-3.276</td>
</tr>
<tr>
<td>Security</td>
<td>GOOD 10.099</td>
<td>.943</td>
<td>9.331</td>
</tr>
<tr>
<td></td>
<td>BAD -10.099</td>
<td>.943</td>
<td>-9.331</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>GOOD 5.691</td>
<td>.943</td>
<td>5.111</td>
</tr>
<tr>
<td></td>
<td>BAD -5.691</td>
<td>.943</td>
<td>-5.111</td>
</tr>
<tr>
<td></td>
<td>(Constant) 64.309</td>
<td>.943</td>
<td>61.405</td>
</tr>
</tbody>
</table>
Figure 6 Importance Difference among Three Educational Attainment Groups

Table 22. Correlations\(^a\) (Education)

<table>
<thead>
<tr>
<th></th>
<th>Associate Degree and below</th>
<th>Bachelor’s Degree</th>
<th>Post-College Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Value</td>
<td>Sig.</td>
<td>Value</td>
</tr>
<tr>
<td>Pearson's R</td>
<td>.996</td>
<td>.000</td>
<td>.999</td>
</tr>
<tr>
<td>Kendall's tau</td>
<td>1.000</td>
<td>.000</td>
<td>1.000</td>
</tr>
<tr>
<td>Kendall's tau for Holdouts</td>
<td>.667</td>
<td>.087</td>
<td>1.000</td>
</tr>
</tbody>
</table>

\(^a\) Correlations between observed and estimated preferences

5. Conclusion and Implications

Although there are numerous empirical studies on the motivation of Chinese international travelers, no paper in the past examined the relative importance of the basic factors that can influence the travel intentions of Chinese sightseeing cultural tourists toward foreign countries. We explored the relative importance of five basic factors on the travel intentions of Chinese sightseeing cultural tourists toward foreign countries and four demographic factors that might have moderating effects on the relationship between them. Overall, security is the most important factor, and distance is
the least important factor. And mostly, the importance from the second to fourth place sequentially is expenditure, cultural experience, and infrastructure. We also find meaningful effects of the demographic factors on respondents’ assessing the relative importance of the five factors. Males rated security much higher than expenditure, and they rated expenditure and cultural experience in roughly the same relative importance. Female didn’t rate security much more important than expenditure, though they ranked security the more important. The married rated security far more important than expenditure. The unmarried ranked expenditure as the most important factor and ranked security as the second important factor. There are two trends among three age groups in our research. One is that expenditure becomes less important with aging. The other is that security becomes more important with aging. To the people with associate degrees and below, security was only slightly more important than expenditure, whereas to the people with post-college degrees, security was far more important than expenditure. Our research has both theoretic and managerial implications.

5.1 Theoretic Implications

Many researchers were focused on the motivations of Chinese outbound tourists. But they tended to focus on some special motives and ignored some universal motivations of outbound Chinese tourists. Generally speaking, Chinese outbound tourists are less sophisticated. We suggest that most of them are sightseeing cultural tourists. They are eager to know what other cultures look like but in a somewhat superficial way. When they make their decisions to travel to foreign countries, they might consider a few factors. Our research has made three contributions. First, we are the first to have explored the several basic factors influencing a common motivation of Chinese outbound tourists. Second, we have explored the relative importance of the five factors on a universal motivation of Chinese outbound tourists and found people have different priorities
among these five factors. Third, we have also explored the moderating effect of four demographic factors and gotten meaningful results. We did find that people in different segments demonstrate both similarities and differences. Finally, our research indicates that overall but not absolutely people we tested ranked cultural experience, infrastructure, and distance the same way, which are in the third, fourth, and fifth places sequentially. They all ranked security and expenditure the top two important factors. But different segments ranked security and expenditure quite differently in terms of which was the most important factor.

5.2 Managerial Implications

Our research has several managerial implications. The results of our research show that the most important factor is security. Thus, it means foreign countries and tourist agencies should assuage the security concerns of Chinese tourists. Some countries, for example those in Middle East or in northern Africa, have splendid cultures and histories. But social security is not as good or even risky. If those countries want to attract Chinese tourists, they should promise they can deliver security. Overall, expenditure is the second most important factor. Tourist agencies and foreign countries should try to reduce the cost for Chinese tourists. Moreover, they should emphasize the value of the travel so that Chinese tourists would have a high value perception and are willing to assume high expenditure. Distance is the least important factor, so it seems that travel agencies and foreign countries needn’t worry about how far or how near the destination is. Based on our research, distance is not a selling point. Infrastructure is not so important either. But we suggest that infrastructure quality should exceed some threshold and should not be inferior. However, we are surprised that cultural experience is in the third place. We suggest that travel agencies and foreign countries should do more to promote cultures and customs so that cultural experience can play a more important role in the decision making of tourists.
Our research also suggests that males pay more attention to security and females pay roughly the same attention to security and expenditure. This means that when targeting male or female tourists, travel agencies should emphasize security. But travel agencies should also reduce the cost of travel or emphasize the value of travel when targeting female tourists. Second, when targeting the unmarried people, travel agencies should emphasize cost and provide a value tour. But when targeting married people, travel agencies should promote the security of the destination. Third, travelers with high educational attainment pay more attention to security than to expenditure, whereas low educational attainment travelers pay more attention to expenditure than to security. Travel agencies should adapt their communication strategy accordingly when targeting different educational groups. Lastly, our research shows that young adults and mature adults have different priorities in terms of expenditure and security. Young adults take expenditure more seriously whereas mature adults take security more seriously. Travel agencies should also design their travel product mix differently depending on the different age target markets.

6. Limitation and Future Research

Because our research reported here is exploratory, there are several limitations in this paper. First, we chose five important factors based on the context of mainland China, so they might not be suitable to other countries or regions. Tourists in different countries might have different priorities. There are also other factors that might be of the same importance as the five factors in our research. Secondly, some factors in our research have several dimensions. For example, cultural experience includes food, folk traditions, performing arts, crafts, historical heritage, people, cities, etc. It is almost certain that different dimensions might have different effects. In our research, we didn’t isolate their different effects. One or more dimensions may contribute more than the other dimensions in terms of importance. Thirdly, although in our research subjects are from different
genders, educational attainment groups, age groups, and marital status groups, we used online surveys to collect data, so we have excluded those people who cannot access the Internet. Finally, we didn’t conduct significance tests so we cannot tell how confident we can be about the differences revealed in our research.

We suggest that future research be conducted in several aspects. Researchers in the future can examine the relative importance of these factors in different cultural backgrounds. Other factors that might also have an important influence on travel intentions should be considered and examined. Future researchers should isolate the effect of different dimensions of a factor so that they can make sure how different or similar are the effects of different dimensions. It’s also important for researchers in the future to include both online and offline respondents so that the samples will have a high level of representativeness.

7. Acknowledgments

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Special thanks to Prof. Ruiqian Liang (梁儒谦).
梁儒谦（1971—），男，广西南宁人，澳门科技大学博士生，研究员，广西财经学院工商管理学院院长，研究方向：企业文化、营销管理、旅游管理。

Reference


Analysis on the Problems and Countermeasures of Digital Resource Construction in Library

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Abstract

In the text of "the 13th five-year plan of the ministry of culture for the construction of public digital culture", a lot of requirements have been put forward for the current construction of public digital culture, many of which put forward specific requirements for the construction of public digital cultural resources. For example, in the guiding ideology in part to "rich service resources," referred to in the aim of "rich", referred to in the key task "to strengthen the construction of local public digital culture resources, strengthening the construction of minority nationality digital culture resources, strengthen the development of digital culture creative products and promotion", and the construction of "national art popularization based repository, local characteristic culture resource, the foundation of the public library database", and so on, all of these "target", "task" reflects the current our country digital culture, the diversity of digital resource in the construction of higher requirements, but in the process of the actual survey found that There are some problems in the digital resources construction of many libraries. Based on the analysis of these problems, the author puts forward some countermeasures to promote the digital resources construction of libraries in China.

Keywords: Digital resources; Problem analysis; Countermeasures

1. The introduction
Library is the public welfare cultural service unit with the largest number in China, and it is also the main force in the construction of China's public digital culture, which is both a development opportunity and a challenge for libraries. "Much starker choices-and graver consequences-in" period is the period of public digital culture rapid development, in 2015 China's new six countries public culture research base, 2016, 13.006 billion general public budget funds to improve the basic system of public cultural services, held in December 2016, the Shanghai library "plan for public digital culture development direction and countermeasures" seminar, the library how to make their own infrastructure, service ability to get quality, technical ideas on keep up with the pace of The Times, achieve the aim of public service system construction of the digital culture, is the present library need to solve the problem.

2. The main content of digital culture construction of library

Ministry of culture "much starker choices-and graver consequences-in planning" in the cultural construction of the public figures in the specific task has a clear requirement: preliminary built public digital cultural service network built hierarchical distributed resources, basic system, significantly improve public digital culture service efficiency, significantly enhance the degree of social forces to participate in, perfect public digital culture security mechanism, etc. Planning also puts forward the key tasks in the construction of the public digital culture system, including building public service innovation way to improve the service efficiency, promoting the construction of key public digital culture project as a whole, digital culture (raga to strengthen resources
security, build public digital culture service network connectivity, widely absorbs the social strength, to strengthen the construction of the digital culture management, etc.

According to public in "much starker choices-and graver consequences-in planning related tasks of the construction of the digital culture, and the conditions of library own properties, the author summarizes the library in the public need to bear in the construction of the digital culture of basic tasks, mainly divided into the following four aspects: one is the construction of digital library, including the website construction, the construction of digital library, information construction, etc.; Secondly, the construction of public digital culture resources, such as digital resources, local characteristics, the paper resources digitization, the government information publicity, etc., the third is geared to the needs of the masses to provide basic public services digital culture, including open public electronic reading room, to provide information consultation, training, seminars, public digital culture promotion activities, etc., four is the public cultural service system in digital and service platform construction, such as building information sharing platform between library, digital library marketing, etc.

3. Analysis of the problems existing in library digital resource construction

3.1 Digital culture construction is not enough

There are few types of digital culture resources, which limits the characteristic development of digital culture. The cultural characteristics mentioned here are that the
digital culture of the construction of the index word culture should have its own uniqueness and fully display the elegant demeanor of local culture. In the author's investigation and research, it is found that a large part of the cultural resources that can be obtained through library websites can be found directly on the Internet, and in the content of digital resources, compared with those provided by the library, the resources on the Internet have great advantages in freshness, richness and quantity. Digital cultural resources have no characteristics, exclusive, can not arouse users' interest in browsing, ultimately leading to the idle and waste of digital cultural resources.

3.2 Chaotic management of digital cultural resources

Because both the cultural sharing and dissemination of digital library projects in the presence of partial overlap in the field of construction process, the author discovered that many library of digital culture resources management is chaotic, there are three main kinds of circumstances, one kind is no library, digital library digital resources built a separate section, usually displayed on the library web site for a name is called digital resources section; The second is to build a digital library, all digital resources in the library into the scope of digital library resources; The third one is that there are separate sections of digital resources, some have built digital libraries, and there are digital resources in the digital library. This inconsistency in the construction mode does not cause a big problem when libraries provide digital resource services alone, but it will inevitably affect the cooperation if the cooperation between libraries is required to provide services.
3.3 Less inter-pipe interaction in digital resource construction

Most libraries have low interactivity in digital resource construction. As China's public digital culture construction adopts a hierarchical and distributed construction mode from top to bottom, the construction units at the same level are relatively independent with few connections and relatively independent construction process. The author found that many library websites have reference module, most of the library web pages have reference function is set, the reader can view of the problems in the process of sent to the responsible for reference librarians in written form, or in the librarians' working hours in the form of online real-time communication. But generally speaking, this kind of communication will not happen during the construction of digital resources in the library. In other words, there is no link involving ordinary people in the construction of digital cultural resources, so readers can only determine whether they can meet their own needs when they use resources after the completion of the construction of resources. There is a lack of interactivity in the process of resource construction, and the selection of digital resources is mainly based on the idea of librarians who are responsible for the construction of digital resources, rather than the broad masses of people that digital resources will serve. In addition, the author raised a number of questions through the reference consulting system during the preliminary investigation, but received no response. Many library reference modules fail to submit questions at all, symbolically more than practically. In the process of digital resources construction, if the construction process of digital resources can be reasonably designed, the needs of the masses for public digital culture can be fully understood, and the supply structure of
digital resources can be optimized, it will play a better role in the construction of public digital culture system.

3.4 Digital cultural service quality supervision system is missing

The author in the process of investigation found that a lot of the library in the construction of digital culture exists the phenomenon of "heavy construction, light service", while the library can provide a variety of cultural services of public figures, but in the service effect, or feedback on the quality of our service there is very little attention, many libraries in an organization after a public digital culture promotion activities, the activities of the few focus on the user experience, the author investigation also found no materials related to the user experience, the majority of the public library in the focus of the propaganda activities in the specific contents of the digital culture activities, Less attention is paid to user experience or user satisfaction, which can reflect users' intuitive feelings of public digital cultural services.

4. The countermeasure exploration of digital culture construction of library

4.1 Improve the utilization level of digital cultural resources comprehensively

Digital culture construction is an important symbol of national cultural construction. In terms of its nature, it is a kind of public welfare cultural service, and a very important feature of public welfare cultural service is non-profit, namely free. All the facilities and services of digital culture construction are free to the public. But, like digital culture
contains digital resources or cultural services, such as the culture of some for-profit companies can also provide digital cultural services, and services tend to be better than the quality of public services, digital culture such as hownet, ten thousand party, VIP commercial resource database, while providing services for a fee, but direct access to the web site can access to digital resources than by the library to provide the same kind of resource is more full update. Therefore, the public digital resources provided by libraries often lack sufficient attraction and have low utilization rate. Improving the quality of public digital cultural resources is one of the necessary ways to improve its core competitiveness.

4.2 Improve the quality of digital cultural resources

The focus of digital resources construction should be changed from quantity construction to quality construction, and various means should be adopted to increase and enrich the types of digital resources, expand the coverage of digital resources, conduct in-depth research on the actual needs of users, and conduct digital cultural resources construction to improve the overall quality of digital resources.

Discovered in the investigation of children's digital resources and special digital resources for the disabled, the circumstances of less should speed up the construction, can often contacts with these special group of organizations or individuals, such as kindergarten, primary school, welfare and service center for people with disabilities, research this kind of what kind of digital culture resources, the user needs to have for construction. At the same time, combining local characteristics, the construction of
characteristic resources.

4.3 Strengthen the overall management of digital cultural resources

Public digital resources of library, some are distributed by the upper center, such as culture sharing project provides the digital resources, according to the actual situation, some libraries will these resources and purchase of digital resources and digital resources of library self-built mixed together, but there is no good draw the boundaries between the two, cause incompatibilities between different databases, using some inconvenience to the reader. Separate the resources provided by different construction subjects and attach accurate instructions and indexes, or reasonably integrate them together to fully share the digital culture.

4.4 Promote the publicity of digital cultural resources

Strengthen the construction of library website, mark public digital culture in prominent position on the website, print and distribute publicity materials, publicize through media, hold various digital cultural activities, invite local celebrities to participate and increase popularity, etc., constantly improve the popularity of the website, so that more people know and understand public digital culture. For example, zhejiang's "digital culture lecture group" mode, hebei's "quyi into the campus" mode and dongguan's "culture weekend" activity can expand the social influence of public digital culture.

4.5 Innovation public digital cultural service model

Compared with libraries, social forces have more advantages in the construction of
public digital culture. They are superior to libraries in terms of capital, talents, technology, marketing, etc., and they have a better understanding of users' needs and can accurately provide digital cultural services. If social forces, such as foundations, enterprises, local organizations and individuals, can be introduced, they will not only solve some financial problems, but also provide richer digital cultural resources. Library, for example, the raise of crowdsourcing model can be used, will be a year of public digital culture resources of the construction of the task to distribute to all kinds of social forces, that not only can gain more close to the demand of public digital culture resources, and libraries can in this way, will their work emphasis has shifted from the digital cultural resources for the construction of the public on the promotion of the digital culture, improve the utilization rate of public digital culture resources and the influence of public digital culture.

4.6 Build up the digital cultural service supervision and management system

Check and evaluate the achievements of digital culture construction of libraries at all levels, establish multi-level evaluation mechanism for different libraries, including expert evaluation, resource acceptance, user evaluation and other comprehensive indicators, and comprehensively evaluate whether the achievements of public digital culture construction meet the expected requirements. Digital cultural construction must pay attention to actual effect, the multi-dimensional comprehensive judgment, the actual construction process results in better increase the intensity of construction, the effect is not obvious, or no effect in practice and to adjust to multiple perspectives,
multi-level and variable construction to complete the assessment of the resources of the judgment, the user experience as important evaluation indexes into the evaluation system, to ensure that the judgment objectively and accurately reflect the reality of the resources construction performance. In addition to establishing a reasonable and effective evaluation mechanism, in order to improve the enthusiasm of library construction of public digital culture, we can also mobilize the active construction consciousness of library by establishing a reward mechanism. The library that completes the digital culture construction task well will be rewarded, while the library that completes the poor quality will be punished to urge them to complete the expected task.

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The Formation Mechanism of Internet Popular Tourist Destination—Research Based on The Content Characteristics of Weibo

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Abstract

It finds out the relationship between the formation of Internet popular tourist destination and the content characteristics of social media communication, which provides theoretical support for the in-depth understanding of the phenomenon of Internet popular tourist destination, and also provides theoretical reference for tourism destination marketing promotion. Through the quantitative analysis of the content of travel destinations’ Weibo and the reader's perception survey, the characteristics of weibo which posts with good communication effects are analyzed. The results show that the content of tourism weibo posts makes people feel “beautiful”, “peculiar”, “funny” and “nostalgic”, which have the best dissemination effect; traditional popular spots should possess the characteristics such as “cultural atmosphere”, “artistic atmosphere”, “grandeur” and “magnificence” are difficult to express via social media. Therefore, the destination with strong and direct sensory or emotional stimulation is more likely to be Internet popular tourist destination.

Key words: Internet popular tourist destination; weibo post; formation mechanism
1. Introduction

Internet celebrity refers to those who become popular in the real or online society due to certain behaviors and events that are followed by broad netizen\textsuperscript{[1]}. Network celebrity exert an important influence on the netizen group, many netizen may imitate their behaviors or purchase the same product. Network celebrity culture plays an important role in encouraging individual personality release, driving Internet culture and Internet economy development\textsuperscript{[2]}. The birth of the Internet popular tourist destination has a great relationship with the development of tourism, internet and culture\textsuperscript{[3]}. In recent years, many cities or scenic spots have become so-called Internet popular tourist destinations, and Internet popular tourist destinations refer to a place holds a certain image that have been widely spread on the Internet with a short time. Internet popular tourist destination is essentially a phenomenon of network communication.

When a destination becomes popular on the Internet, huge flow of people can be attracted in a short period of time. Therefore, how to become an Internet popular tourist destination has become the focus of tourism destination planning and management. Many tourism managers are exploring the path to creating an Internet popular tourist destination.

How to become a popular destination on Internet, there are some main viewpoints on the network: uniqueness and creativity are the determining factors. The WeChat Official Account of Henan Tourism Dafeng thinks that it should introduce the channels with recognition, creativity and characteristics, and build a network popular scene through creative empowerment to create a network popular scenic spot\textsuperscript{[4]}. History and culture are the determining factors of Internet popular tourist destination. Wang Jinfeng believes that
the personalized tourism products and the support of history or multi-culture are the vitality of the Internet popular attractions\(^5\). In the view of “Chuangxing Leisure Agriculture Creative Center”, in addition to the cultural creativity, the more important element of the network popular scenic area is the beautiful scenery which is suitable for young people to take good pictures. Now in the era of "the wine is not afraid of deep alley", the sharing of economic models makes it possible for scenic spots become Internet popular tourist destinations\(^6\). According to the Guangzhou Daily, the rapid spread of the network and the editing of filters are the reasons why attractions attract many tourists to become net popular spots\(^7\). From the articles reprinted by Internet marketers, a popular spot must first have the potential to become popular on Internet, either the design of the scenic spot is extremely shocking, or the scenic scene activities are interesting and fun, and then promoted\(^8\). Culture and travel business advisory agency “New Travel Boundary” believes that the key to the creation of the network popular scenic spot is uniqueness and serialization, and then the spot is detonated by the copywriting to become Internet popular spot\(^9\). Based on the above viewpoints, the creation of Internet popular tourist destination relies on the following aspects: novel and unique design, strong historical and cultural atmosphere, highly experienced scene activities, meticulous operation and promotion, perfect copywriting and filter editing, serialized content production and high quality photo shooting venues\(^10\).

However, most of the above opinions and contents are subjective speculation or empirical speculation, lacking of systematicity and basis, and these views often only point out an important feature of the Internet popular tourist destination, but whether these features have a decisive influence has not been studied in depth.
This paper holds that the formation of Internet popular tourist destination is closely related to the content characteristics of destination network communication and the characteristics of communication platform. A series of hypotheses are put forward through quantitative analysis of the content of tourism destination's micro-blog communication and survey of readers' perception, the formation mechanism of Internet popular tourist destination is found.

2. Literature review

2.1 Research on the formation mechanism of Internet celebrity

Internet celebrity refers to the fact that those who are constantly magnified under the influence of social media platforms because of their own characteristics, stimulating the psychological needs of the majority of netizen, such as aesthetics, ugliness, entertainment, curiosity, etc., and are concerned about Internet users intentionally or unintentionally[1].

At present, the research on the formation mechanism of Internet celebrities is mainly based on the specific reasons, different platforms, development process and influencing factors of the formation of internet celebrities, and specific case studies of the formation of different types of Internet celebrities from different research perspectives. Zhang Pengxia thinks that Internet celebrity can be divided into two categories: active and passive[11]. Zhou Dongmin feels that the formation of Internet celebrity is to quickly establish its own image through various media platforms to attract netizen to watch, interact and spread, and is sought after[12]. Ao Peng believes that the formation of "Internet celebrity " has been more than ten years of accumulation period, which has realized the change of "Internet celebrity" phenomenon and enrichment of connotation[2].

In Xu Zhao's view, the formation of Internet celebrity is not only the influence of
technology to promote media change, but also the role of endogenous power of social culture\textsuperscript{[13]}.

There are many studies on the phenomenon of Internet popular and its influence and related research such as Internet popular economy. There are few studies on the specific mechanism of Internet celebrity formation, but we can still draw some lessons from the study on the formation mechanism of Internet popular.

\textbf{2.2 Research on the Strategy of Internet Popular Tourist Destination Construction}

The construction of the Internet popular tourist destination is mainly concentrated in two aspects: First, the characteristics and the activity design of the scenic spot. For example, Lu Feng believes that a destination needs to be a Internet popular tourist destination by selecting a theme or designing a storyline\textsuperscript{[14]}. Zhou Ning feels that the destination needs to be excavated through cultural connotations to become an Internet popular tourist destination\textsuperscript{[15]}. The second is in the operation and promotion of the destination, the promotion method of the destination, and the post-production processing of copywriting. For example, Lu Chunhui believes that short video is the reason why some tourist destinations become Internet popular\textsuperscript{[16]}. Xu Yingzi believes that Hongya cave has become Internet popular tourist destination can not without the three factors of “Tianshi, Dili, and Renhe”. These three factors combine the above two aspects, Hongya cave Hongyadong has become a Internet popular tourist destination by TikTok platform to show its unique design and superior geographical position\textsuperscript{[17]}.

In the strategy of constructing Internet popular tourist destination, it mainly puts forward the novelty and uniqueness of scenic spot design in a general way, or the activities with a strong sense of experience, or the perfect words and filters. There is no specific research
on the characteristics of communication in tourist destination.

2.3 Destination Internet Word of Mouth

Internet popular tourist destination is a new concept in recent years. In fact, the study of tourism destinations and networks has always been a hot topic in academic research, and the research in this area is mainly focused on Internet word of mouth. The main research contents of Internet Word of Mouth include: the communication mechanism and recommendation mechanism of word-of-mouth, the influence of Internet word-of-mouth on tourism behavior, and the influence of word-of-mouth communication on the image construction of tourism destinations\[18\]. Relevant research on the content of word-of-mouth communication in tourist destinations from content, media and mechanisms. However, there are few studies on the phenomenon and the formation mechanism of Internet popular.

As a phenomenon, the Internet popular tourist destination has been widely concerned. How to create an Internet popular tourist destination has become a very important issue for tourism practitioners, but the formation mechanism of the Internet popular tourist destination lacks of systematic theoretical research.

3. Research design

3.1 Research ideas

The research ideas in this paper are shown in Figure1

Figure1. Research ideas
Whether the destination becomes popular or not is determined by whether the destination's online media content has achieved good results. In other words, the better effect of the content transmitted by the destination media, the more the destination is the Internet popular. Therefore, the analysis of the destination Internet popular formation mechanism is essentially an analysis of what kind of media content transmission effect is good.

Weibo is one of the most important social media and has a wide range of influences. At the same time, Compared with media such as WeChat and TikTok, Weibo content has the advantages of wider content sources and easy access. In Weibo, each post has its
corresponding number of like, comment, repost, and the number of views. These are the best indicators for analyzing the effect of Weibo communication.

In the research of this paper, it is found that the number of comments is a better indicator for evaluating the dissemination effect of Weibo content than the number of like, repost, views and other indicators. Because the number of comments and the content of the comments are relatively unmanageable, the comments need the readers spend more time and energy, therefore, compared to like, repost, views, etc., comment is a better indicator to measure the effect of Weibo communication.

Therefore, this paper adopts the number of comments as an indicator to measure the effect of Weibo communication; the characteristics of Weibo content are determined by designing the corresponding scale and by expert scoring. The weibo content feature scale is shown in Table 1:

Table 1. Weibo Content Feature Scale

<table>
<thead>
<tr>
<th>index</th>
<th>problem</th>
<th>Very much agree</th>
<th>agree</th>
<th>Not sure</th>
<th>disagree</th>
<th>strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Novelty</td>
<td>Q1: The content of this post feels very trendy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>artistry</td>
<td>Q2: The content of this post feels very literary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>culturality</td>
<td>Q3: The content of this post has a strong cultural atmosphere.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aesthetic feelings</td>
<td>Q4: The content of this post makes people feel beautiful.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Q5: The content of this post feels magnificent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Q6: The content of this post feels very</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3.2 Source of data

This study selects weibos with a certain influence on the tourism-related travel destinations of the travel bloggers on Sina Weibo. The four accounts are: “全球旅游攻略”、“我是驴友 Ben 哥”、“猫力 molly”、“旅游约吗”。

As of July 2018, the followers of each account was around 5 million. The number of posts per day was stable, and the fields involved in posting were basically the same. Using the weibos of the four accounts as the data source can greatly reduce the attractive factors of the bloggers of the performance evaluation, avoiding the high repost and high comments phenomenon that may occur in any post of the popular star. These accounts are professional bloggers of tourism. By analyzing their post-production posting behavior and fan interaction behavior, these bloggers rarely have malicious posting behaviors, such as the online water army.
We have obtained a total of 572 Weibo posts from these 4 bloggers. The characteristics of these Weibos are shown in Table 2.

**Table 2. Blog Owners Weibo Feature Table**

<table>
<thead>
<tr>
<th>Blogger</th>
<th>Destination involved</th>
<th>Number of weibos</th>
<th>Minimum number of comments</th>
<th>Highest number of comments</th>
<th>time</th>
</tr>
</thead>
<tbody>
<tr>
<td>全球旅游攻略</td>
<td>Russia, Zhangjiajie, Wuzhen, etc.</td>
<td>325</td>
<td>7</td>
<td>3945</td>
<td>2017.7-2018.6</td>
</tr>
<tr>
<td>我是驴友 Ben</td>
<td>Daocheng Aden, Dubai, Chongqing,</td>
<td>49</td>
<td>8</td>
<td>417</td>
<td>2017.7-2018.6</td>
</tr>
<tr>
<td>貓力molly</td>
<td>Amazon Rainforest, New Zealand, Dalian,</td>
<td>47</td>
<td>152</td>
<td>1200</td>
<td>2017.7-2018.6</td>
</tr>
<tr>
<td>旅游约吗</td>
<td>Paris, Lijiang, Qinghai Lake, etc.</td>
<td>151</td>
<td>24</td>
<td>942</td>
<td>2017.7-2018.6</td>
</tr>
</tbody>
</table>

3.3 **Research hypothesis**

H1. The weibo post of the destination makes people feel new, and the post spreads well;

H2. The weibo post of the destination makes people feel very literary, and the post spreads well;

H3. The weibo post of the destination makes people feel that the cultural atmosphere is strong, and the post spreads well;

H4. The weibo post of the destination makes people feel beautiful, then the post spreads well;

H5. The weibo post of the destination makes people feel very thrilling, then the post spreads well;
H6. The weibo post of the destination makes people feel very nostalgic, and the post spreads well;
H7. The weibo post of the destination makes people feel very strange, then the post spreads well;
H8. The weibo post of the destination makes people feel very funny, then the post spreads well;
H9. The weibo post of the destination makes people feel very humorous, then the post spreads well;
H10. The weibo post of the destination makes people feel very local, and the post spreads well;
H11. The weiboging post of the destination can trigger people's good memories, then the post spreads well;
H12. Although the Weibo of the destination feels magnificent, the post spreads generally;
H13. Although the Weibo of the destination feels majestic, the post spreads generally.

3.4 Statistical results

After obtaining the data scoring results based on the Weibo content scale, we used the spss data statistical analysis tool to perform the split-half reliability test and the chi-square test. The split-half reliability test result table 3 shows that the reliability of the data is very high. The chi-square analysis results are shown in Table 4.

| Table 3. Split-half reliability test results (reliability statistics) |
|-------------|-------------|-------------|
| Cronbach's Alpha | Part 1       | Numerical value | 0.997 |
|               | Number of items | 286\textsuperscript{a} |
|               | Part 2       | Numerical value | 0.995 |
|               | Number of items | 286\textsuperscript{b} |
Total number of projects | 572
---|---
Correlation between reports | 0.957
Spearman-Brown coefficient Equal length | 0.978
Unequal length | 0.978
Guttman's half-fold reliability coefficient | 0.961

Table 4. Analysis of chi-square statistical results (chi-square test P value)

<table>
<thead>
<tr>
<th>Serial number</th>
<th>Content characteristics indicator</th>
<th>Number of comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Very trendy</td>
<td>0.063</td>
</tr>
<tr>
<td>2</td>
<td>Very literary</td>
<td>0.781</td>
</tr>
<tr>
<td>3</td>
<td>Cultural</td>
<td>0.985</td>
</tr>
<tr>
<td>4</td>
<td>Feel beautiful</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>Very thrilling</td>
<td>0.041</td>
</tr>
<tr>
<td>6</td>
<td>Very nostalgic</td>
<td>0.478</td>
</tr>
<tr>
<td>7</td>
<td>Very strange</td>
<td>0.039</td>
</tr>
<tr>
<td>8</td>
<td>Very funny</td>
<td>0.013</td>
</tr>
<tr>
<td>9</td>
<td>Very humorous</td>
<td>0.007</td>
</tr>
<tr>
<td>10</td>
<td>Very local</td>
<td>0.032</td>
</tr>
<tr>
<td>11</td>
<td>Trigger good memories</td>
<td>0.025</td>
</tr>
<tr>
<td>12</td>
<td>Very magnificent</td>
<td>0.489</td>
</tr>
<tr>
<td>13</td>
<td>Very majestic</td>
<td>0.514</td>
</tr>
</tbody>
</table>

Note: (P is shown as significant below 0.05)

4. Results and conclusions
In this study, 572 weibo data of 4 typical travel accounts were selected as samples, establishing a weibo content feature evaluation quantitative analysis index system by Weibo's pictures and short videos. Through the chi-square analysis of the obtained evaluation results, the following findings are obtained: Whether a weibo post has a good communication effect is related to the following characteristics: whether the content has aesthetics or whether it can trigger beautiful Memories; or whether it is thrilling; or whether it is peculiar; or whether it is funny or humorous; or whether it has local characteristics.

Among the six indicators that affect the formation of the Internet popular tourist destination, the aesthetic index has the greatest influence on the dissemination effect. However, it is generally considered that the influence of the magnificence and majesty on the communication effect is not obvious, and the overall feeling of beauty is the most important factor.

The sense of humor is another important reason for the dissemination effect of weibo posts. Its role is second only to "beauty"; sense of humor, whether general sense of humor or funny, is conducive to enhancing the communication effect of Weibo; In addition, the three indicators of locality, odd characteristics and thrilling are also important reasons for the influence of weibo posts spread. In the indicator of impression reproduction, the influence of nostalgic factors on the dissemination effect of Weibo posts is not as significant as the impact of trigger people's good memories.

Based on the above findings, the following conclusions can be drawn further:

(1) Deeper emotions are more difficult to form Internet popular tourist destination than shallower emotional experiences. The cultural atmosphere of the tourism weibo post...
content and the artistic characteristics of the deep emotional experience such as artistic, majestic and magnificent and nostalgic are not as effective as the spread of the emotional experience of the shallow emotions with thrilling and strange, humorous or obvious local differences. The difference between them often makes it easier for some tourist destinations micro-blog posts with shallow emotional experience content to form Internet popular.

(2) The above phenomenon occurs because the deep emotional experience is difficult to express through small screen, short time, short length of modern social media; short time, small screen, short length expression, suitable for strange, exquisite beauty, thrilling, exciting and other strong intuitive feelings. With the development of media technology, people's channels for receiving information are increasingly dependent on mobile terminals, and small screens are a significant feature of mobile terminals. And with the development of society, people's time is more fragmented, short-term and short-length expressions are more in line with people's needs. In summary, some strong and direct emotional experiences (such as surprise, funny, humor) are flooding.

(3) The deep emotional experience is more suitable for presentation through books, paintings, film and television works. Books, paintings, and film and television works often contain more and richer meanings, which need to be carefully studied to understand the essence of them. Deep emotional experience is also often a subjective experience impression through the tempering of time and long-term accumulation.

(4) There are significant differences between the popular scenic spots in the age of traditional media and those in the age of network media (especially social network media). The main media communication characteristics of different eras are shown in
Table 5:

Table 5. Main media communication characteristics of different eras

<table>
<thead>
<tr>
<th>Media age</th>
<th>Means of communication</th>
<th>Media communication characteristics</th>
<th>Examples of attractions</th>
</tr>
</thead>
<tbody>
<tr>
<td>traditional</td>
<td>Books, paintings, film</td>
<td>Long length, large picture, and slow speed</td>
<td>Guilin, Zhangjiajie, etc.</td>
</tr>
<tr>
<td>media</td>
<td>and television works</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internet</td>
<td>Mobile app, self-media</td>
<td>Short length, small picture and fast speed</td>
<td>Hongya cave, Yongxingfang, etc.</td>
</tr>
<tr>
<td>media</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. Revelation and discussion

The phenomenon of Internet popular is often superficial and direct. Internet popular phenomenon benefits from the development of media technology, which directly arouses people's strong interest or willingness to experience through simple visual perception and shallow emotional experience. This way of mobilizing human senses or simple emotional experiences is very straightforward and simple, and they often fail to form a sustained attention.

Internet popular is difficult to last because it lacks of deep emotional experience. Deep emotional experiences often leave a deep impression, and this emotional experience often has a lasting effect on one person. However, the phenomenon of Internet popular only through strong sensory stimulation, it is difficult to touch the most primitive and deep experience of human emotions. Therefore, the phenomenon of Internet popular is difficult to last.
The creation and promotion of tourist destinations should not be Internet popular for Internet popular. Many of the Internet popular tourist destinations are just "a flash in the pan" and cannot form lasting vitality. Some of the Internet popular tourist destinations have the phenomenon that tourists go with expectations and return with disappointment. In the marketing and promotion of tourist destinations, it is more important to strengthen the construction and management of tourist destinations based on their own resource endowments and landscape features to achieve sustainable attraction.

This study only explores the formation mechanism of the Internet popular tourist destination through the content characteristics of weibo posts, which has certain limitations. The formation of the Internet popular tourist destination also has a certain relationship with the resource endowment, the public infrastructure construction, the traffic conditions and the marketing of the scenic spot. Subsequent research on the Internet popular tourist destination can be studied from multiple angles and all directions.

References


Research on Coordination and Optimization of Sustainable Emergency Supply Chain under Uncertain Environment

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Abstract

This paper studies the coordination and optimization mechanism of the uncertain environmental sustainable supply chain, and mainly takes the national emergency mechanism as the research object. This national emergency mechanism is used by China as an institution that applies emergency supply chain computing technology to uncertain environmentally sustainable supply chain management, which has a large number of rich data bases and can contain detailed information under emergencies. Through the data collection of uncertain environmental sustainable emergency supply chains collected by human detection, this paper mines the data features that can represent the safety level range of supply chain management parameters, and thus establishes a reasonable and uncertain environment model for sustainable emergency supply chain with unconventional emergency coordination.

Keywords: Uncertain environment; Emergency supply chain; Coordination and optimization

Introduction

In recent years, supply chain emergencies have occurred frequently, and each incident has caused panic in the community. By carefully observing the consequences of the
unforeseen emergency sustainable supply chain outbreak, it can be found that the supply chain that mainly occurs in the uncertain environment sustainable supply chain belongs to the supply chain, but it is uncertain about the whole. The most direct impact of the environmentally sustainable emergency supply chain has occurred at the end of the consumer segment where consumer demand has changed rapidly. The impact of a flood hitting a traffic hub in a certain area and the impact on the uncertain environmental sustainable emergency supply chain is reflected in the change in supply at each supply link, which in turn affects the consumption of consumers and the products during the period. This shows that once an outbreak of a supply chain has a huge impact, and it will spread or shift along with the supply chain, ultimately affecting the entire uncertain sustainable environmental emergency supply chain.

2. Research on coordination and optimization of sustainable emergency supply chain under uncertain environment

2.1 Emergency supply chain model construction

The theory of emergency supply chain model takes stochastic mathematics and fuzzy mathematics as the theoretical background, and it is used to describe the randomness and fuzziness of language values with a method of their relevance. Through this method, the uncertainty transformation between qualitative concepts and quantitative data can be achieved. Let U be the quantitative domain of a set of exact values, and C be a qualitative concept on U. If the quantitative value x belongs to U, and x is a random realization of the qualitative concept C, and the membership degree u of x to C belongs to 0~1, which is a random number with stable tendency, and then the distribution of x on the universe U is called emergency. In the supply chain, each x is called a supply point (x, u).
(1) Analysis of main features of emergency supply chain

The emergency supply chain has the following main properties:

① The form of the U domain can be either one dimension or multiple dimensions.

② The so-called "random realization" in the definition of supply point is based on the realization of probability, and the degree of certainty is based on the degree of membership under fuzzy theory, and has a distribution in the sense of probability. These mainly reflect the randomness and blurring in the emergency supply chain model.

③ For any x-determination is a probability distribution, the mapping on the x-to-interval [0,1] is a one-to-many transformation, and the x-to-C emergency supply chain is composed of many supply points, and the supply points are randomly arranged. The supply point represents a random realization of qualitative concepts in the quantitative data domain.

Digital features are measurement data that reflect the uncertainty of the emergency supply chain. The numerical characteristics in the emergency supply chain model are composed of three numerical quantities of expected value $Ex$, entropy $En$, and hyper-entropy $He$. Hyper entropy $He$ is an uncertain measure of entropy. The size of the super-entropy indirectly represents the degree of dispersion and thickness of the emergency supply chain, and its relational expression is as follows:

$$[Ex, En, He] = \left[ x_{i}(i), x_{2}(i), x_{3}(i), x_{4}(i) \right].$$  \hspace{1cm} (1)

In the application of this paper, the value of emergency management parameters is represented by the concept of supply point. The expectation is used to represent the central value of the qualitative emergency management parameter supply point group, the entropy is the ambiguity and probability of the emergency management parameter, and the hyper-entropy is the emergency management. Parameterized emergency
supply chain has dispersion and thickness. In the specific conversion process, according to the emergent supply chain's production mechanism and calculation direction, there are a positive emergency supply chain source and a reverse emergency supply chain source. As shown in Figure 1 below, the source of the forward emergency supply chain launches the supply point from a digital feature, and the source of the reverse emergency supply chain launches digital features from the supply point.

**Figure 1.** The digital characteristics of the supply point of the emergency supply chain

(2) Forward supply chain and reverse supply chain model of emergency supply chain

Let U be a quantitative universe of n-dimensional exact values with U={x₁, x₂, ..., xₙ}. C is a qualitative concept on U. The degree of membership u of U in U belongs to 0~1, which is a random number with a stable tendency. Given that the dimension vectors of the domain are independent of each other, and the n-dimensional emergency supply chain can be represented by the following numerical characteristics:

\[
U = \frac{1}{2\pi} \int dt \frac{dx(t)}{dt} = C + \mu \frac{B}{T_s}. \tag{2}
\]

From the source of the emergency supply chain, we can know that the source of the forward emergency supply chain is launching the supply point from the digital characteristics, and the source of the reverse emergency supply chain is the
introduction of digital features from the supply point. The difference in the source of the emergency supply chain is that the expectations and variances of the production random numbers are multidimensional. We can take the source of the emergency supply chain as an example, as shown in the following formula:

\[ K = \sum_{j} v_j \cdot 2^j \]  
(3)

From the above analysis, it can be concluded that the coordination and optimization of supply chain emergencies requires real-time monitoring of the supply management parameters, which leads to the big data characteristics of the emergency supply chain parameters. Therefore, in order to convert certain qualitative management parameters for quantitative parameters, and to avoid the complexity and redundancy of directly processing raw big data, this paper first processes the original data through the emergency supply chain model. The processing method is as follows:

\[ s (t) = e^{i(2\pi t)} s_m (t) \]  
(4)

(3) Analysis of emergency supply chain model parameters
The parameters of the emergency supply chain model are real-time and historic, and the national emergency mechanism on the market has a complete system for the detection and storage of its own supply chain management parameters. The research is mainly based on the current popular emergency supply chain storage. Emergency supply chain storage emerged with the development of big data. It is a new concept extended and developed in the concept of emergency supply chain. Compared with the storage of databases, emergency supply chain storage has a large capacity, and at the same time has more security, reliability, scalability, etc. The emergency supply chain storage can be set according to the size of the storage capacity required by the user, and the traditional storage method is shown in formula (5):

\[ \bar{t}_R = \frac{1}{k} \sum_{i=1}^{k} t_R (n) / k \]  
(5)
From formula (5), it can be seen that the construction cost and operating cost of emergency supply chain storage are the lowest compared with other storage modes, and the utility of resources and the versatility of functions are quite large compared with other storage forms. Through the interface connection to achieve the sharing of various types of data, there are more interface connections. Under the premise that the network is connected, the data in the data pool can be achieved at any time, and the shortcomings of the business suspension will not occur, so that the reliability and usability of the data are enhanced. Due to the implementation of data sharing technology, the same data information can only be saved for use by multiple users. Reducing a large amount of duplicate data is as shown in formula (6):

$$f(x_1, \ldots, x_4) = \frac{x_i(n+1) - x_i(n)}{\tau}.$$  \hspace{1cm} (6)

Emergency supply chain storage is an expansion of some of the functions of supply chain computing. The emergence of emergency supply chain storage mainly provides basic data support for emergency supply chain operations. Emergency supply chain processing is all about the processing of big data, and big data is the main component of processing. In this paper, for the judgment of uncertain environmental sustainable emergency supply chain emergencies, we mainly select several parameters for management and supervision of the stability of the supply chain, which are manifested in the burst rate of information major accidents that can reflect changes in information links, and products can reflect system risks. Qualified rate can reflect the demand change rate of demand changes, and can reflect the product delivery delay in the process of logistics and product failure rate. The data is obtained by formula (7) as follows:

$$\bar{x}_i(n+1) = \bar{x}_i(n) + \tau(a(\bar{x}_2(n) - \bar{x}_1(n)) + k\bar{x}_2(n)\bar{x}_3(n))$$  \hspace{1cm} (7)
2.2 Data fusion and processing method in the coordination and optimization of sustainable emergency supply chain under uncertain environment

(1) Data fusion in the coordinated optimization of sustainable emergency supply chains in uncertain environments

This paper mines data areas with uncertain environmental sustainable emergency supply chain safety data mining through the data mining of model parameters, and defines these areas as coordinated optimization intervals. However, due to the large amount of data in historical data, there are many duplicate data with the same meaning in these data. A large amount of duplicate data may lead to drowning of important data. Therefore, before clustering, data fusion of the emergency supply chain model algorithm is first performed on the data, as shown in Figure 1.

**Figure 1.** Data fusion effect diagram of emergency supply chain model algorithm

In the figure, the random sampled emergency supply chain end data of model parameters contain historical data of uncertain environmental management parameters. These data contain a wealth of data information. Scientifically and reasonably analyzing these data can yield a lot of useful information, but because there will be a large amount of data stored in the original data, and if we directly input the raw data into the program, it will consume a lot of time to do useless work. In order to avoid this shortcoming, this paper first of all emergency supply chain end of the original
data for emergency supply chain model processing, and retain based on the original data information, and reduce the interference of useless data, as shown in formula (8) as follows:

\[ \phi = \frac{q_c}{q_c + q_d} \]  

(8)

The data in the emergency supply chain end of the information is divided into equal blocks and divided into \( n \) equal-capacity small blocks, and random sampling operations are performed in each small block. The specific process is shown in Figure 2. Each sampling data is input to the source of the reverse emergency supply chain to generate the emergency supply chain digital characteristics. In order to prevent missing data information in the subsequent iterative process, samples are added to the previous sample, and the generated emergency supply chain digital characteristics are compared with the previous emergency supply chain digital characteristics. We can retain emergency supply chain digital features with different digital information. The emergency supply chain model of the sampled data is processed after the sampling of each emergency management parameter data is carried out through the emergency supply chain model. The source of the reverse emergency supply chain in the source of the emergency supply chain is used. Emergency management parameters supply point production emergency management parameters of digital characteristics, as shown in formula (9) as follows:

\[ \text{Num}(Q) = \begin{cases} 
  m, & P_0 \neq \emptyset \\
  m.1, & B_0 \neq \emptyset \\
  m.2, & C_0 \neq \emptyset \\
  \infty, & N_0 = \emptyset 
\end{cases} \]  

(9)
The digital features of the emergency supply chain obtained through the above methods are merged. The central supply point will incorporate the emergency supply chain digital features into the supply point of the source of the forward emergency supply chain. The supply point at this time is called the central supply point. The resulting central supply point is a small sample of the original recovery of uncertainty in big data. The generated supply point carries the important information of the original data in the concept granularity. The small sample feature of the central supply point improves the clustering effect and saves storage space. The updated supply points processed by the emergency supply chain model are input to the supply point database for convenient recall.

(2) Emergency supply chain processing in uncertain environment

The real-time parameters are data that reflect the current operation of the uncertain environmental sustainable supply chain. The coordination and optimization model trained through historical data is mainly to coordinate and optimize whether real-time data at the current moment is in a safe range. This ensures that supply chain managers can accurately determine the operation of the supply chain in a timely manner and
take appropriate measures. Assume that the real-time parameters of the uncertain environmental sustainable supply chain are $n = m$ matrix, where the rows represent different uncertain environmental sustainable supply chain management parameters, the columns show the current uncertain environmental sustainable supply chain of $m$ Real-time parameter values. The supply point value $x$ of the real-time parameter is being obtained from the source of the emergency supply chain. The real-time supply point value is used as the data characteristic of the uncertain environmental sustainable emergency supply chain management parameter at the current moment, and is compared with the safety grade interval obtained by clustering the historical data, as shown in formula (10) as follows:

$$m(2^{SF} - K) \leq n \leq m \cdot 2^{SF} - 1$$

(10)

2.3 Experimental analysis of coordination optimization of sustainable emergency supply chain under uncertain environment

(1) Construction of a coordinated optimization model for coordinated optimization of emergency supply chains

After these random sampling, we can input the emergency supply chain model and get updated supply of each parameter. The numerical interval is divided into two parts, one part is the product qualification rate, which belongs to high-probability events, and the other is the rate of major accidents. In view of this situation, if the data is directly input into the clustering program, there will be two levels of differentiation, resulting in unclear clustering effect, which is not conducive to the division of detailed classification intervals. In order to change this limitation, this paper will affect the high-probability events in the supply chain security factors and uniformly convert them into small-probability events. In the parameters selected in this paper, the product qualification rate is converted into the product failure rate. The converted supply point data table is shown in Table 1.
Table 1. Updated indicators after conversion

<table>
<thead>
<tr>
<th>Supply chain parameters</th>
<th>Supply risk</th>
<th>Information risk</th>
<th>Logistics risk</th>
<th>Need risk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Product failure rate</td>
<td>Major accident rate</td>
<td>Product damage rate</td>
<td>Product delay rate</td>
</tr>
<tr>
<td>1</td>
<td>0.074</td>
<td>0.034</td>
<td>0.0036</td>
<td>0.084</td>
</tr>
<tr>
<td>2</td>
<td>0.0083</td>
<td>0.035</td>
<td>0.083</td>
<td>0.0063</td>
</tr>
<tr>
<td>3</td>
<td>0.095</td>
<td>0.073</td>
<td>0.0037</td>
<td>0.074</td>
</tr>
<tr>
<td>4</td>
<td>0.062</td>
<td>0.093</td>
<td>0.038</td>
<td>0.035</td>
</tr>
</tbody>
</table>

(2) Inspection of uncertain environment coordination optimization model

In order to ensure the accuracy of the coordination and optimization effect, the current real-time data at the current moment is detected while the current real-time data is detected. The data of the emergency supply chain model fusion method is used to process the two groups of uncertain environmental sustainable emergency supply chain coordination optimization parameter data. Finally, two processing data values are obtained, and compared with the coordinated optimization interval obtained after training based on the historical data, the corresponding coordination optimization interval is found out, and coordination and optimization are carried out. The specific data processing is as follows. Through market research, we obtained sample data for the inspection and coordination optimization model.
Figure 3. Effect of coordinated optimization model for uncertain environment

This paper mainly focuses on the big data nature of the parameters of the coordination and optimization of uncertain environmental sustainable supply chain, and proposes the data fusion processing of uncertain large-scale environmental sustainable supply chain data parameters through the emergency supply chain model algorithm. In the research process, the parameters of the uncertain environmentally sustainable emergency supply chain are divided into two parts, one part is used to train the model parameter data of the coordination optimization model, and the other part is the real-time monitoring data of the inspection coordination optimization model. Due to the large amount of data, the model parameter data makes the historical data occupy the main data with duplicate data information. The process of emergency supply chain model processing with homogeneous sampling and random sampling reduces the amount of duplicate data, while retaining key useful data information.

3. Conclusion

This paper studies the structural model and parameter design of the uncertain environmental sustainable supply chain, and analyzes the storage of the parameters and the number of parameters under the uncertain environmental sustainable supply chain, and compares it with the traditional supply chain parameters. There are obvious features of coordinated optimization. The research of big data has been comprehensively and deeply developed in other fields, but it has not been involved in the supply chain. This paper analyzes the impact of external environmental emergencies on uncertain environmental sustainable supply chain management parameters, and finds that the direct role of external emergencies is precisely these large supply chain management parameters. Through the analysis and mining of these big data parameters, the paper obtains an emergency coordination optimization model
represented by these parameters. The coordinated optimization model for the uncertain environmental sustainable emergency supply chain constructed in this paper has good practicability and rationality.

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Research on the Realization Path of Tourism Ecological Compensation in Nature Reserves

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Abstract

Based on the requirements of the coordination of ecological and economic interests among different subjects under the tourism background, the implementation of tourism ecological compensation based on the relevant loss situation caused by tourism development and utilization activities is an important way to realize the multiple coordinated development goals of tourism development and utilization in nature reserves, ecological environment protection and community construction. In reality, based on the above objectives and requirements, the number of nature reserves carrying out tourism ecological compensation activities relying on capital, manpower, material resources and other factors formed by tourism development is on the rise. Currently, most of China's nature reserves have some problems in the implementation path of tourism ecological compensation, including the absence or ambiguity of the operation mode of tourism ecological compensation covering the elements of the compensation mechanism, the lack or unscientific implementation standards for compensation for different objects, and the inadequacy of the management system and
policy measures supporting the compensation work. Different nature reserve in terms of tourism ecological compensation basic goals and requirements of commonality or similarity, and the nature reserve for their sexual problems in most domestic tourism ecological compensation practices in the objective existence, can think, although different regions, different types of reserve tourism reality problem facing ecological compensation and compensation concrete work content is different, but based on the reserve tourism basic goals and requirements of the compensation for ecological compensation route choice, there are also some common requirements. Shall include compensation, in general, the basic operation mode to build implementation, compensation standard and compensation support security system set up and so on, therefore, based on the general demand, put forward some universal significance of natural reserve tourism basic paths for ecological compensation, for most of the tourist ecological compensation practices in the nature reserve should have certain reference value and guiding significance.

**Key words**: Nature Reserve; Ecological Compensation; The Path

1. Reserve Tourism Ecological Compensation Basic Operation Mode

As an important part of the construction of tourism ecological compensation mechanism, the compensation operation mode mainly answers the question of "how to implement tourism ecological compensation", which includes the definition of the compensation subject and object, the definition of compensation scope and object, the choice of compensation way and mode, the establishment of compensation implementation and feedback mechanism, etc. Therefore, the key to the successful implementation of tourism ecological compensation is to construct a scientific and
reasonable compensation operation mode based on the reality of the research area and
the characteristics of compensation demand.

1.1 Subject and Guest Compensation

In essence, the subject of tourism ecological compensation is an organization or
individual that not only has the right to enjoy the external economy of ecosystem
services in the process of tourism development, but also undertakes the obligation of
compensation for the external non-economy caused by its own behavior (tourism
development, operation, consumption, etc.). In this sense, the main body of tourism
ecological compensation in nature reserves mainly refers to the winners of ecological
economic benefits in the process of tourism development and utilization in nature
reserves, and the related parties who cause loss or damage to the ecological resources
and environment of nature reserves or damage to the ecological economic interests of
other main bodies due to their own behaviors.

From the perspective of the current tourism development practices in China's natural
reserves, three types of stakeholders should be the main responsibility subjects for the
implementation of tourism ecological compensation, namely, tourism development
and operators, tourists, local governments and management departments of the
reserves. Among them, the tourism development and operators through development
and utilization of the nature reserve ecological resources utilization for tourism
economic benefits, tourists are through to the ecological landscape appreciation and
relying on the ecological resources development experience of other products to meet
the demand of the tourism, both for the nature reserve of ecosystem service value of
Arthur and ecological benefits of beneficiaries; At the same time, tourism development and operators' unscientific development ideas, unreasonable utilization methods, tourists' uncivilized consumption behavior and so on are the important reasons that lead to the loss of ecological and economic interests of the main body such as the ecological resources and environment destruction and community residents in reality. For the local government and relevant administrative departments of the protected area, promoting the coordination of the interests of related subjects under the background of tourism and maintaining the service value of the ecosystem of the protected area are the basic requirements of playing its role as the public manager of ecological resources and the public maintainer of ecological interests. What's more, many local governments and management departments have become the winners of ecological and economic benefits in the context of tourism in protected areas by exercising the right of control and revenue of public resource scenic spots. At the same time, its unscientific tourism development decisions and inappropriate management behaviors are also likely to lead to the destruction of the resources and environment of the reserve or the damage to the interests of relevant subjects (zhang yiqun and Yang guihua, 2012).

In addition, some ecological protection organizations, charitable foundations and other social organizations or environmentalist individuals often participate in the ecological protection and construction of nature reserves and the poverty alleviation and development of communities by means of publicity, donation, labor, training and other activities. In terms of the structure of benefit main body relations, the ecological
protection organizations and individuals with natural reserve tourism development involves the economic interests of the ecological distribution does not have direct connection, and reserve tourism ecological compensation between core stakeholders and no direct rights and obligations relations, but the active implementation of ecological environment protection behavior, is the concrete transformation in the field of social responsibility consciousness in the nature reserve and reflected; From the perspective of implementation effect, its main body behavior can not only directly or indirectly promote the production of tourism ecological and environmental benefits, but also have a positive impact on the coordination of interests involved in tourism ecological compensation in the protection zone. Based on this, it can be included in the

The object of ecological compensation is the loss situation related to ecological interests suffered by the related subjects in the process of economic activities. The loss situation involved in the tourism ecological compensation of nature reserves mainly includes three aspects: first, the loss and damage of the ecological environment of nature reserves used or relied on by tourism projects in their development and operation; The second is the loss caused by the restriction and deprivation of the right of the owner or user of the ecological resources in the protection zone by the development of tourism industry. These three aspects are also the main embodiment of the tourism ecological compensation object in nature reserves.

According to the attributes of compensation objects, the implementation of tourism
ecological compensation can be divided into two basic aspects: one is the compensation for the natural environment; Second, compensation for people (zhang yiqun et al., 2012). The compensation of the former aims to promote the comprehensive maintenance and improvement of the natural ecosystem protection, scientific research, education, recreation utilization and other service functions of tourist destinations through biological measures, engineering measures and other ecological environment maintenance and management means. The purpose of the latter is to correct the injustices in the process of tourism development and utilization by adjusting the ecological and economic interest relations between different subjects around tourism resource development and utilization and environmental protection, and to form incentives for various tourism ecological protection behaviors. With the development of tourism ecological compensation in nature reserves, more and more scholars have paid attention to the importance of compensation standard and the establishment methods. In the practice of ecological compensation for tourism in protected areas, there are many subjects of compensation and objects of compensation, and the forms and degrees of their benefits or losses are different. Combining tourism under the background of nature reserve, the purpose and requirement for the implementation of ecological compensation, the previous article described the positive and negative externalities under the perspective of tourism ecological compensation standard established basis and content as the foundation, to the current ecological compensation standard accounting commonly used ecological method, cost method for reference, can be established respectively according to preserve the natural
environment and tourism ecological protection and builders, community residents and other objects of natural reserve tourism ecological compensation standard accounting model, for related to nature reserve tourism ecological compensation practices provide a reference basis.

1.2 Compensatory and Formula

In a narrow sense, tourism ecological compensation belongs to a market-oriented ecological compensation mechanism. However, in the existing practice of ecological compensation for natural protection areas, the ways of public compensation and social compensation can usually form synergistic and symbiotic effects with market-oriented compensation methods. Therefore, in a broad sense, some public compensation and social compensation methods related to the development of tourism in nature reserves can be incorporated into the tourism ecological compensation operation system, and play a role in promoting the protection and construction of tourism ecological protection areas together with market compensation means.

2. Accounting Method for Ecological Compensation in Nature Reserves

According to the attributes of compensation objects, the implementation of tourism ecological compensation can be divided into two basic aspects: one is the compensation for the natural environment; Second, compensation for people (zhang yiqun et al., 2012). The compensation of the former aims to promote the comprehensive maintenance and improvement of the natural ecosystem protection, scientific research, education, recreation utilization and other service functions of
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3. Suggestions on Tourism Compensation System and Policy in
Nature Reserves

3.1 Establish the Compensation Management System

The establishment of multi-level management system is an important guarantee for the standardization and scientific development of tourism ecological compensation. The establishment and practice of tourism ecological compensation mechanism in China's nature reserves are still in the exploratory stage. Before this, all regions lacked the administrative measures for the implementation of tourism ecological compensation in nature reserves formulated and promulgated in the form of formal legal documents. This study argues that tourism in nature reserve, necessity and related on the basis of ecological compensation has been fully clear, on the basis of national and all levels of administrative area, ecological protection and construction related to nature reserve on the basis of the laws and regulations, policy, regulations and other aspects, can the tourism ecological compensation as the foundation, to establish the system of multi-level management system has been carried out or is about to develop tourism on nature reserves, as soon as possible to make a suit local economic and social development and ecological protection and construction requirements of the tourist ecological compensation measures for the management, puts forward the compensation funds collection, use and management policy regulation, As the policy basis of tourism ecological compensation practice in related protected areas; At the same time, under the guidance of the compensation management method, the detailed rules for the implementation of tourism ecological compensation in line with the actual location of the nature reserves shall be
formulated to promote the smooth implementation of the work of tourism ecological compensation in the nature reserves.

3.2 Policy Suggestions on Compensation Fund Management

Set up a corresponding level of tourism ecological compensation fund (or to set up within the framework of regional ecological compensation fund), led by financial department and protection management departments at all levels, through the enterprise pay, funding, social donations, establish to government, market and social compensation diversified fund raising mechanism, as a reserve, the natural environment and the community the important foundation of ecological compensation funds. The use of tourism ecological compensation fund, should be in the provinces, cities and so on all levels of management department of the ministry of finance and protection etc., under the management and supervision of the special management, separate accounting business accounting, in accordance with the relevant natural reserve tourism ecological compensation object reality and development needs, for conservation, ecological protection, scientific research, popular science education, the development of the community to provide financial support.

In addition, a reasonable mechanism for evaluating the use effect of compensation funds should be established. Effect assessment is to make compensation for the funds The motivation to use efficiency is especially reflected in the use of compensation funds in the form of projects. From the reality

In this case, the lack of a corresponding mechanism for monitoring and evaluating the use process and effect of compensation funds is a problem for the tourism students
There are common problems in the practice of state compensation in nature reserves.

As a nature reserve tourism ecological compensation policy system

The establishment of an evaluation mechanism for the effect of the use of compensation funds should include the following aspects:

The project construction plan shall be put forward by the implementing unit of the tourism ecological compensation project in the protection zone, and then the protection administration department shall make a meeting to evaluate and approve projects with local financial departments (directly declared and implemented by units in charge of protection and management of protected areas). Compensation projects shall be evaluated and approved by their superior departments in charge together with local financial departments. Secondly, for the implementation of the compensation project and the effect of the use of funds, in addition to the undertaking unit to do a good job in the performance evaluation of the project in accordance with the relevant provisions (such as the submission of project implementation and related financial and benefit statements), the protection management department should

In accordance with the principle of "follow-up for effectiveness", the company will cooperate with local financial departments and invite relevant business management units to carry out regular activities.

In accordance with the relevant provisions of the state "measures for the acceptance of completion of construction projects (projects)",

Undertake the compensation agreement signed between the unit and the protection
management department, and evaluate the implementation effect of the project; The relevant departments shall make public the use and evaluation results of compensation project funds in a timely manner, and take them as the following

The important basis of annual compensation project fund arrangement. In addition, a reasonable mechanism for social participation evaluation should be established.

Tourism enterprises, community residents, tourists and representatives of relevant social organizations are widely invited to participate in the inspection and verification of compensation projects

To evaluate and form a pattern of multiple social forces supporting the ecological compensation of tourism in the reserve.

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Market Research on the Influencing Factors of College Students' Data Usage

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Abstract

In the research design, firstly, the research objects are clearly defined. Through consulting a large number of literatures and in-depth interviews, the factors affecting the use of mobile phone data by college students are determined, and relevant models are constructed. Then the questionnaires are designed and distributed, data is collected, and factor analysis is used to conduct empirical tests. The main research conclusions include the main factors affecting the use of college students' data are subjective factors, such as personal consumption ability and flow package price, network quality factors, such as WIFI signal, operator signal quality. The purpose of use in the data analysis results seems to have uncertainty on the impact of college students' data usage. These conclusions have sufficient practical enlightenment for operators to correctly grasp the consumption needs of college students, develop flow packages that meet market demand, and enhance market competitiveness.

Keywords: mobile phone data; model; empirical research; college students

1. Introduction

In recent years, China’s mobile internet industry has developed rapidly. According to the 43rd Statistical Report on China's Internet Development Status released by CNNIC,
as of December 2018, the number of Internet users in China has reached 829 million, with a penetration rate of 59.6%, an increase of 3.8 percentage points from the end of 2017. 55.53 million. In 2018, the coverage of the Internet has further expanded, the “digital divide” has been further closed, the mobile data tariff has fallen sharply, the threshold for residents to enter the network has been further reduced, and the efficiency of information exchange has been further improved.

In the mobile Internet field, mobile Internet access data consumption reached 71.11 billion GB in 2018, an increase of 189.1% from the end of 2017. As of December 2018, the proportion of Internet users using mobile phones in China was as high as 98.6%, an increase of 1.1 percentage points from the end of 2017. This shows that the mobile Internet will be a major trend in the development of China's Internet.

According to the analysis of the characteristics of netizens in China in this report, the netizens in China are mainly young and middle-aged, and continue to penetrate into the high age. As of December 2018, the 10-39-year-old group accounted for 67.8% of the total Internet users. Among them, the number of Internet users in the 20-29 age group is the highest, reaching 26.8%. On the professional structure, the student group accounted for the largest proportion of all occupations, up to 25.4%. Although college students only account for 9.9% of all student groups, college students have a higher degree of personal time, they have their own unique personality, and daily life is highly associated with mobile phones, so they can be regarded as mobile phone users when they are at school. The force is strong, and when they graduate into the workplace, they may become the main force of mobile phone users.

As the new force of mobile phone users and the main students of the future, their data usage preferences have a significant impact on the marketing decisions of enterprises. However, the existing research mainly investigates and analyzes the basic situation of
data usage or package purchase behavior and lacks in-depth research on its influencing factors. This has caused the products launched by the three major mainstream operators in the university student segment market to not meet the needs of target customers. According to the theory of consumer behavior, only by grasping the consumer's consumption motivation can we understand its consumption behavior and formulate effective marketing strategies. The main content of this study is to deeply understand the factors that are affected by college students in the daily use of mobile phone data through in-depth interviews, focus group interviews and questionnaire surveys. Is the use of college students' mobile phone data related to gender, family economic status, animation or game preferences, daily study or lifestyle? Through surveys and data analysis to answer relevant questions, build a factor model that affects college students' mobile phone data. In this way, the company is targeted to truly develop product portfolio strategies and marketing strategies based on the behavioral characteristics of consumers, rather than continuing to adopt traditional product-oriented marketing strategies.

All in all, with the rapid development of the Chinese Internet, especially the mobile Internet, the use of mobile phone users has received special attention. At the same time, with the further implementation of “speed-up and fee reduction”, it is increasingly difficult for operators to win the market by relying on traditional marketing strategies and homogenization competition. It is necessary to change the way of thinking and accurately develop product portfolios that meet the needs and corresponding marketing models. As the mobile phone user's new force and the future main force of college students, their data usage preferences have a significant impact on the operator's marketing decisions. The expected goal of our research is to understand the daily use of mobile phone data among college students, especially the motivation behind it, that
is, in-depth interviews and questionnaires on the factors affecting data usage, thus helping operators to be market-oriented and to meet customer needs. The product portfolio, while improving its marketing level, win customers and create value for customers.

2. Research Design

With the opening of the mobile Internet era, operators must do a good job in data management for college students. They must have an insight into customer needs. The focus is on user behaviour analysis, establishing a database of customer behaviour characteristics, and fully exploiting the data security with sufficient depth. The customer's behavioural characteristics, in-depth analysis and understanding of users, better maintain and serve users, provide support for the search for business entry points and target customer groups. To this end, this study attempts to use empirical research methods to explore the factors affecting the extent of customer data usage. In the research design, firstly, the research objects are clearly defined. Through consulting a large number of literatures and in-depth interviews, the factors affecting the use of mobile phone data by college students are determined, and relevant models are constructed. Then the questionnaires are designed and distributed, data is collected, and factor analysis is used to conduct empirical tests.

2.1 Research Content

The research content focuses on the market survey of the factors affecting the use of mobile phone data by college students, including: What factors are affected by college students in the daily use of mobile phone data? Whether it is related to gender, family economic status, animation or game preferences, daily study or lifestyle habits.

2.2 Research Methods

This study compiled relevant factors to influence the use of college students' data, and
designed interview outlines for one-on-one in-depth interviews. According to the interview results, the pre-test was conducted by designing the questionnaire of the online survey. This study used the questionnaire star design questionnaire to publish the final version of the questionnaire after pre-testing.

Research Method. Through the papers and periodicals websites such as China Knowledge Network and Wanfang Data Knowledge Service Platform, the existing domestic and international mobile phone data usage status is searched and reviewed, and literature review work is carried out through extensive reading of relevant literature. The summary summarizes the item pool that affects the use of mobile data, preparing for further interviews and questionnaires.

In-depth interview. The interview method was conducted in the early stage of the questionnaire preparation, mainly for the preparation of the questionnaire service, and also supplemented the survey results, and interviewed some college students. The main content of the interview is which factors are influenced by college students in the daily use of mobile phone data. A total of 56 students were enrolled in the 18th, 17th, 16th and 15th grades.

Questionnaires design and issuing. According to the needs of the research, the investigation and analysis of the factors affecting the use of mobile phone data by college students are carried out. The student questionnaire is specially formulated, and the teacher has repeatedly guided and revised the questionnaire. A total of 319 undergraduate, graduate, and doctoral students were randomly selected, of which 312 were valid.

2.3 Data Analysis

This study mainly used exploratory factor analysis (EFA) and confirmatory factor (CFA) analysis methods to analyse the data. Since the questionnaire was filled by students
from South China University of Technology, the school accounted for 56.09%. Therefore, two samples of Huagong and non-Chinese workers were added for T test before EFA analysis. Since this study involves a large amount of research data, descriptive statistics can help the data collation, and some rules are initially found. In the study of the influence of gender, age, grade and professional on the use of mobile phone data by the dependent variable, crosstab analysis and chi-square test were used for discrete variables, and one-way ANOVA was used for continuous variables. To further investigate the relationship between the independent variable and the dependent variable, a confidence analysis of the determined factor structure was performed after EFA was performed. Data statistics and analysis were implemented using SPSS software.

3. Literature Review

With the maturity of mobile Internet technology and the continuous iterative updating of smartphones, the use of mobile phone data has received continuous attention from scholars and has made certain research progress.

In the earlier literature research, scholars mainly studied mobile phone tariff packages, and did not conduct special research on mobile phone data. For example, Qin Xiaoan in the "Data Mining-based College Mobile Phone Fees Package" (2014) [2] study is based on the operator's campus package, based on the actual use of students, based on the decision tree ID3 algorithm in data mining, put forward reasonable suggestions To improve the package content to be closer to the needs of students. Through the analysis of the decision tree, the study finds which settings will exceed the package usage and gives a plan to improve the package. The research mainly involves local long-distance local callers, SMS, WIFI, family number and other factors. Only the mobile phone data is studied as a factor, and no in-depth special research is conducted.
With the development of smart phones, scholars began to pay attention to the importance of mobile phone data and began to carry out related research. He Yang in the "user terminal type and data data usage analysis research" (2012)\textsuperscript{[21]} mainly through data analysis to study mobile user terminal types and data data usage, leading to mobile operators thinking under such a big change. The article begins with a big change in the terminal and shows the changes in the mobile terminal market in recent years, indicating that it has brought huge impact to the communication industry. Smartphones are becoming more and more popular, and different groups have different preferences for terminals (and individuals are in the same place). The background of the times and personal economic conditions are also related. Then, the data usage change caused by the big change of the terminal is described. By comparing the consumption of the smart machine with the non-intelligent machine, it is concluded that the consumption of the smart phone is mostly high-viscosity and high-flow application. Next, the impact of the terminal type on data data will be explained. The data consumption of personalized applications of some terminals is significantly different. Finally, it is concluded that operators should recognize the huge influence of the terminal and should pay attention to the use of data.

Liu Jieying and Liu Man used the method of fuzzy clustering analysis to study the influence of age, occupation and Internet destination on mobile phone data in "Mobile Data Sales Plan Based on Fuzzy Cluster Analysis" (2013)\textsuperscript{[3]}. The 25 -year-old student is the one with the most demand for mobile phone data, because students have more spare time, keep up with the pace of the times, and the speed of mobile phone replacement is very fast. Smartphones are very common among students. Most people in the 26-35 age group go to work. Their preferences for mobile Internet access vary from person to person. They can order data packets themselves to solve the problem of
lack of data. People under the age of 18 and 36-50 years old are increasingly demanding mobile data, and it is necessary for minors under the age of 18 to limit their use of data. Operators are advised to design student packages suitable for minors. So as not to affect their studies. The 36-50-year-old population will soon become the mainstay of mobile phone data consumption as technology advances.

Yan Guoxing and Qi Jingmin tried to use the empirical research method to explore the factors affecting the use of customer data in “What is affecting customer usage flow” (2016) [9]. Finally came to four conclusions. First, the development of customer data habits is composed of many factors, including tariffs, policies, applications, and network speeds. These factors affect the duration, frequency, and cost of customer data online. Customers of different age groups and different groups have different perceptions of tariffs, policies, applications, and network speeds. Second, tariff preferences, policy preferences, application preferences, and network speed preferences are significantly related to data revenue. Reasonable tariffs, preferential policies, a wide variety of application software, and high-quality data Internet environments can significantly increase data revenue. Third, tariff preferences, policy preferences, and network speed preferences are significantly related to the length of time that data is used online. In the case that the opening of the preferential activities leads to an increase in the total amount of data, the duration of data usage will increase. In the environment of high-quality network speed, the use of data will not appear stuck, not smooth, and the data time will increase. Fourth, tariff preferences, application preferences, and network speed preferences are significantly related to the frequency of Internet data usage. The frequency of data usage is the number of times the data is repeatedly connected to the network during the same time period. The more frequently used application software increases the frequency of data usage. In a good online
environment and when the package includes more data, users use the data more frequently.

Liu et al. wrote in the "Research Report on Mobile Data (Mobile Data) - Based on Guangzhou Sample Survey Data" (2016) \(^{[14]}\) that with the development of mobile data networks, 2G gradually evolved to the current WLAN and The 4G network, while bringing high network speed to consumers, also makes the demand for mobile terminals of mobile terminals rise a step. The article does not directly explain the reasons that affect the use of data but investigates the usage and expectations of consumers. From this, we extracted two types of influencing factors, one of which is the tariff preference (the amount of mobile phone consumption, the problem of the overlay package and the package selection). The second is the operator policy. In the "Gansu Mobile Data Management Strategy Research" (2014) \(^{[15]}\), Guo Jie mainly studies how to continuously increase the data scale and data value from the company's business strategy. The article mentions the factors affecting consumer usage data as data operations. The promotion and preferential offers of the business can further summarize two factors, one is the preferred mobile terminal software/network behaviour habits (various APP application preferences), and the other is the tariff preference (mobile phone consumption amount, overlay package problem) And package options).

The above research on mobile phone data has brought us some inspirations about the factors affecting mobile phone data, but because the targeted population is relatively broad, rather than specifically targeted at college students, we continue to look for some mobile phone data related research for college students. Cao Wenji and Zhu Jie used the method of fuzzy clustering analysis using transitive closures in the analysis of the usage of mobile phone data based on fuzzy clustering analysis (2016) \(^{[4]}\) to different occupations, different mobile phone types and college students. The mobile phone APP
consumes mobile phone data and analyses it. It is found that the students consume more data on the QQ app. The total amount of mobile phone consumption consumed by the smart phone far exceeds the non-intelligent machine. The business unit and the business service personnel are relatively Students use less data, and the people who use the most mobile data are concentrated in the students, and the data demand is concentrated in the two ranges of 200M-300M and more than 300M. In the Exploring Influencing Factors towards Intention and Use of Mobile Internet for Youth Consumers in Bangladesh (2017) [19], 413 students from five universities were used as samples, and based on previous studies, eight hypotheses were proposed. Six of the assumptions are performance expectations, effort expectations, social impact, perceived risk, personalization, and usability that influence behavioural intent. The other two assumptions are convenience conditions, and behavioural awareness affects the actual use of the Internet. Then, it uses the UTAUT (unified theory of acceptance and use of technology) model to verify these hypotheses, explore the significance of these factors, the results found that performance expectations, hard work expectations, social impact, perceived risk, personalization five factors Among the six factors affecting behavioural intentions, the significance is strong, and the convenience and behavioural awareness have a significant impact on the actual use of the Internet.

In summary, the research on the influencing factors of college students' mobile phone data usage is constantly developing and improving, but due to the rapid development of mobile Internet, the previous literature research cannot represent the current mobile phone data usage factors, such as In the 2016 survey, mobile phone data was concentrated in 200-300M, but now it has been concentrated in 2-4G and above. Therefore, based on the current development status of mobile Internet, we conduct research on factors affecting mobile phone data usage. At the same time, our research
uses SPSS for EFA analysis, which can analyse more accurately and help to better mine mobile phone data for college students. Influencing factors.

4. Model Building

4.1 Conceptual Model

Through comprehensively collating a number of references on the influencing factors of mobile phone mobile data usage of college students and several interviewers to obtain the relevant research measurement indicators through in-depth interviews, and according to the frequency mentioned by each index. Under various circumstances that may affect the use of mobile phone mobile data by college students, most scholars mentioned the age and gender, professional schools, network behaviour habits, Internet time, tariff preferences, operator policies and application data consumption and The characteristics and other factors indicate that this is a factor that scholars agree with and conduct in-depth research to influence the mobile phone mobile data usage of college students. It can be roughly divided into three categories: personal background factors, online habit factors, network quality factors, and tariffs and package factors. Wait. Mutaz M. Al-Debei, Enas Al-Lozi (2014) refined the influencing factors into skill factors, unique factors, social factors, knowledge factors, technology in the literature explaining and predicting the intent of mobile data services. Factors, economic factors and entertainment factors can also be summarized into the above four types of influencing factors. After consulting the relevant literature, the project team sent interviewers to each of the ten undergraduate students in the first to fourth year, as well as an additional intensive interview with more than ten graduate students and those who have already worked and recalled 58 valid interview records. Build and verify the impact of online habits,

![Four Factors Influencing College Students’ Data Usage](image)

- Personal Background
- Internet Habit
- Network Quality
- Data and Packages
network quality and tariffs and packages on the mobile phone mobile data usage of college students and generate new detailed measurement indicators when in-depth questionnaires are used to inspire the questionnaire. In summary, this paper will divide the influencing factors of college students' mobile phone data usage into three dimensions: online habit, network quality, tariff and package. The data collected through questionnaire survey will be screened for empirical test, as shown in Figure 1.

In summary, based on the regression model, this paper studies the use of mobile phone mobile data by college students, assuming that the use of mobile phone mobile data by college students is affected by four inherent factors. These three factors are: personal background (X1), Internet habit (X2), network quality (X3), tariffs and packages (X4). Since the degree of influence of various factors on college students is inconsistent, the distribution of these three factors does not take the form of equalization. In this experiment, when setting up the questionnaire, the number of each factor is adjusted according to the ratio to more accurately determine the influence of different factors on the usage of mobile data.
The personal background includes 4 items, and the online habit involves 6 items. Network quality There are 5 options for 2 items, 1 item for tariffs and 1 item, 2 items for other basic information.

5. Data Collecting and Testing

5.1 Sample Characteristics Analysis and Item Analysis

This study uses a five-point Likert scale from very important to not very important. The factors that affect the use of college students' data (named Q8–Q11, Q20–Q30). A total of 319 student questionnaires were distributed, 319 were collected, and 316 were valid, with an effective rate of 97.8%.

The sample mainly comes from universities in Guangdong Province including SCUT (58.0%), SYSU(1.9%), JNU(1.6%), SCNU(1.3%), SCAU(2.2%), SZU(3.5%), GDUT(2.6%), GDUFS(1.6%), GZU(2.2%). male was 46.8% and female was 53.2%. China Telecom users were 11.5%, China Unicom users were 17.0%, China Mobile users were 47.8%, and the other were used by two or more operators. The data usage interval of 8G-18G accounted for a maximum of 23.7%, followed by 4G-8G, which accounted for 21.8%, 4G or less, 21.2%, and 18G-30G, which accounted for 18.6%, while 30G and above accounted for 18.6%. This shows that the value of modern college students using mobile phone data has reached more than 8G, and the interval value is on the rise. Among the undergraduate students surveyed, 70.5% said that the monthly data package was sufficient, while 33.6% of the students who did not use it indicated that they would open the overlay package, and 29.5% said that they would continue to use the data without opening the data package, only 1.3% of the sample. Indicates that it will stop using mobile phone data.

In the survey, the scales of various mobile phone data usage scenarios and uses were also tested. In the usage scenarios, the total scores during school hours, before going to
bed, waiting in line, and dining at the restaurant were 898, 1153, 1292, and 1049 respectively. The difference in the total score is small, but the distribution of the degree of use is quite different. The sample finds that the highest level of mobile phone data is used in this scenario, with an average of 4.14 (the highest level is 5), followed by the evening. Before going to bed, the average is 3.70 (the highest level is 5). In use, the total scores of social software, entertainment, reading software, and learning software are 1276, 1073, 964, and 784, respectively. The difference in total score is small, but the distribution of usage is quite different. The highest level of social software is used, with an average of 4.09 (maximum of 5), followed by recreation, with an average of 3.44 (maximum of 5).

5.2 Comparative Analysis of Chinese and Non-Chinese Workers' Data

Since 58% of the samples were from students of South China University of Technology, in order to ensure the validity of the data and prevent deviations, the main research variables of the two groups of samples from South China University of Technology and non-South China University of Technology must be compared before the factor analysis. After inspection, it was found that there were significant differences in the scores of the two items of Q11 (various data packages recommended by the business hall and the latest package attention) and Q26 (consumption ability). The scores of the other 13 items were not significantly different. Although the scores of the two samples are significantly different between the two items, it can be seen from the previous statistic that the students of South China University of Technology and the students of non-South China University of Technology are very similar in their importance to the importance of these two projects. So in general, it can be said that the students of South China University of Technology and the students of non-South China University of Technology are very similar in their perception of the factors that affect the daily use
of mobile phone data. It can also be proved that although the data of this questionnaire are mostly the students of South China University of Technology, the students of South China University of Technology and the students of non-South China University of Technology have the same perception of the survey project, so it can be inferred that the data of this questionnaire can represent the level of perception of the majority of college students.

5.3 Order of Importance

In the questionnaire, all the students who filled out the questionnaire scored 15 factors that may affect their usage flow (5 points are very important, 1 is very important) and a score is made for these scores.

First, the highest item in the college student's score is Q21 (mobile phone data speed), and the lower one is Q11 (various data packets recommended for the business hall and the latest package attention). It is said that the most important thing for college students to use data is the speed of the network speed, and it is not concerned about the various packages launched by the business hall. This also reminds companies in the communications industry to pay more attention to the speed of network speed in the development of college students.

Second, the lowest standard deviation is Q10 (Internet access control), and the highest is Q23 (the use limit of the school network). Explain that the students have the least difference in cognition affecting data due to “online self-control”; the difference in the use of data affecting the use of “school network restrictions” is the biggest difference, of course, it is because the speed of different schools is different.

5.4 Validity and Reliability Analysis

In order to ensure the normal analysis of the data of the research questions, we must first analyse the data obtained, and remove the factors that affect the use of college
students' data Q8~Q11, Q20~Q30, which are not significant in order to ensure all items. Both can identify the degree of response of different subjects. The project analysis of the data shows that only the t value of the item Q10 is not significant, and the others are significant, all of which can identify the different degrees of response of the subject, so only Q10 is eliminated.

This study used exploratory factor analysis to determine the structural validity of the use of college students' data. That is, it consists of four levels: subjective and objective factors, network speed and signal, and purpose of use. Further reliability analysis is performed on each factor and its items to test the consistency, stability and reliability of the measurement results, and then determine the final factor structure.

Table 1. Rotation component matrix

<table>
<thead>
<tr>
<th>Item</th>
<th>Component</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q26 spending power</td>
<td></td>
<td>.839</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q27 package price</td>
<td></td>
<td>.798</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q22 coverage of public Wi-Fi in living areas</td>
<td></td>
<td>.634</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q23 school network usage restrictions</td>
<td></td>
<td>.606</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q21 mobile phone data speed</td>
<td></td>
<td>.836</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q20 WIFI network speed</td>
<td></td>
<td>.708</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q29 network speed</td>
<td></td>
<td>.705</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q25 Social Hot Events</td>
<td></td>
<td></td>
<td>.821</td>
<td></td>
</tr>
<tr>
<td>Q24 learning needs</td>
<td></td>
<td></td>
<td></td>
<td>.768</td>
</tr>
</tbody>
</table>

First, the item Q10 which is not significant in the above T-test is removed, and then
factor analysis is performed. The data is subjected to four factor analysis processes to obtain the final factor structure. There are no special project factors that do not meet the requirements, so it is appropriate to extract three factors.

Next, a separate reliability analysis is performed for each factor. From the results of the reliability analysis, in the exploratory analysis, the Cronbach's $\alpha$ of the first factor is 0.750, which is greater than 0.6, and the reliability of the test is good, the reliability of the test is relatively high; The corrected item-total correlation is greater than 0.4. The reliability of the first factor can be considered to be high. The same analysis can obtain the second and third factors with high reliability.

After the above validity analysis and reliability analysis, the factors are named:

The first factor includes the public WIFI coverage rate of Q22 living area, the use limit of Q23 school network, Q26 consumption ability, Q27 package price, which can be regarded as subjective and objective factors;

The second factor includes Q20WIFI network speed, Q21 mobile phone network speed, Q28 signal stability, Q29 network speed, can be regarded as network quality;

The third factor includes two items, Q24 learning needs and Q25 social hot events, which can be regarded as the purpose of use.

The above three factors can be used to analyze the influencing factors of college students' mobile phone data usage, and the reliability and stability of the analysis are better.

Table 2. Data analysis of first group
5.5 Confirmatory Factor Analysis

In order to ensure the objectivity and effectiveness of data analysis, we used the sample tool in the data analysis software to randomly group the 316 questionnaires collected. One set of data completed the exploratory factor analysis process and the other completed the confirmatory factor analysis process.

A second set of data is used to verify the reliability and stability of the above factor structure. The final result is shown in Table 3 below.

Table 3. Data analysis of second group

<table>
<thead>
<tr>
<th>Factor</th>
<th>Item</th>
<th>Correlated Item-Total Correlation</th>
<th>Cronbach’s α if Item Deleted</th>
<th>Cronbach’s α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subjective and objective factors</td>
<td>Q22</td>
<td>0.431</td>
<td>0.759</td>
<td>0.750</td>
</tr>
<tr>
<td></td>
<td>Q23</td>
<td>0.517</td>
<td>0.714</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Q26</td>
<td>0.666</td>
<td>0.630</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Q27</td>
<td>0.610</td>
<td>0.665</td>
<td></td>
</tr>
<tr>
<td>Network quality</td>
<td>Q20</td>
<td>0.509</td>
<td>0.776</td>
<td>0.780</td>
</tr>
<tr>
<td></td>
<td>Q21</td>
<td>0.587</td>
<td>0.727</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Q28</td>
<td>0.619</td>
<td>0.710</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Q29</td>
<td>0.650</td>
<td>0.698</td>
<td></td>
</tr>
<tr>
<td>Purpose of usage</td>
<td>Q24</td>
<td>0.441</td>
<td>--</td>
<td>0.612</td>
</tr>
<tr>
<td></td>
<td>Q25</td>
<td>0.441</td>
<td>--</td>
<td></td>
</tr>
</tbody>
</table>

In the results, the first factor has a Cronbach's α of 0.766, which is greater than 0.6. It
is considered that the consistency reliability is good, and the reliability of the test is relatively high; and the corrected item-total correlation of the factor items is greater than 0.4. The reliability of the first factor can be considered to be high. The same factor analysis shows that the second factor is also highly reliable. However, the Cronbach's α of the third factor is 0.381, less than 0.6, the consistency reliability is poor, and the reliability of the test is not high. Moreover, the corrected item-total correlation of the factor items is less than 0.4, and the third factor can be considered reliable. Poor sex.

5.6 Final Results

Based on the results of the above exploratory factor analysis process and the confirmatory factor analysis process, the main factors affecting the use of college students' data are subjective factors (such as personal consumption ability and flow package price) and network quality (such as WIFI signal and operator signal quality). The purpose of use in the data analysis results seems to have uncertainty on the impact of college students' data usage.

6. Research Conclusions and Practice Implication

6.1 Research Conclusions

Through literature search, data collection model construction and questionnaire survey, the data sample characteristics analysis, reliability and validity analysis, comparative analysis and other analytical methods were used to construct and test the influencing factors model of college students' use flow. The main factors that affect the use of data by college students are as follows.

First, subjective and objective factors. The factors of subjective and objective factors include the public WIFI coverage rate in the living area, the use restriction of the school network, the consumption ability and the package price. First, through in-depth interviews and questionnaires, we learned that most college students are more inclined
to use public WIFI rather than mobile phone data in places with public WIFI. Therefore, we speculate that the public WIFI coverage rate in college students' living areas will directly affect whether they use mobile phone data. After data analysis, the results show that the item is reliable, which confirms that this influencing factor exists. Secondly, because college students need to be restricted by the school rules and regulations, the restrictions on the use of the network by college students will lead to an increase in the demand for data. For example, South China University of Technology has regulations prohibiting the opening of a freshman student. The frequency of mobile phone data used by freshmen at South China University of Technology increased, and the demand for mobile phone data increased. Thirdly, because college students do not have a stable source of income, most of them rely on their parents. Therefore, their spending power often restricts their ability to purchase high-priced products. College students are generally sensitive to the price of the data package. In the order of importance of the items, the package the price ranks third, indicating the importance that college students attach to the package price.

Second, Network quality. The network quality factor includes three items: mobile phone data speed, WIFI network speed, and signal stability. The data package is a product of the communication company, and the speed and signal reflect the quality of the product. As one of the main consumers of the data package, college students will naturally pay attention to the speed and signal quality of the carrier when they choose the data package. The network speed is fast, and the signal-stabilized data package is often more popular with consumers. The importance ranking shows that the mobile phone data speed is the first, the WIFI network speed is the fourth, and the signal stability ranks sixth, reflecting the college students' high attention to network quality.

Data and WIFI will show an alternative relationship more often. When the network
quality of WIFI (including network speed and signal) is higher than data, more college students will choose to use WIFI, which leads to the use of data by college students. cut back.

Third, purpose of use. Factors of use purpose include learning needs and social hot events. First of all, because college students are still in the learning stage of accumulating knowledge, the demand for using the network in learning will be stronger. For example, in in-depth interviews, we learned that many students have the habit of watching online classes. It is very convenient to use the data to watch online classes anytime and anywhere, so most students will choose to use the Internet to data, which increases the flow of college students on mobile phones. Usage amount. Secondly, college students are worthy of youth, curiosity, curiosity, and wide interest. The occurrence of social hot events often attracts their attention. For example, during the World Cup, many college students stayed up late to watch the ball. Another example is the news of the British Brexit and other political news will also attract the attention of college students, triggering its follow-up incidents. As a result, the frequency of college students using the Internet will increase, indirectly affecting the use of college students' mobile phone data. In the confirmatory factor analysis, we found that the reliability of the factor of use was poor, and we speculated that it was due to the difference between the individual samples. The reason is that the purpose of use varies from person to person, and the purpose of each person's use of data is not the same, which affects the reliability of the factor.

6.2 Practice Implication

It has sufficient practical enlightenment for operators to correctly grasp the consumption needs of college students, develop flow packages that meet market demand, and enhance market competitiveness.
First, analysis of College Students' data Demand. Through research, we found that the speed of the network, the signal, the price of the package, and the spending power are the main factors that affect the flow of college students. The main pain points of college students' data usage behaviours are that the network speed is too slow, the signal quality is poor, the package price is too high, and the consumption power is not high. Therefore, the demand for college students is mainly due to their desire to increase the speed of mobile phone data; Moderately low-priced, packages that match their spending power, and a more stable source. Therefore, in the future, the behavioural changes in the use of college students' data may pretend to be characterized by the pursuit of services with low prices, high network speeds, and stable signal sources.

Second, predicting the future development of the industry. Therefore, for the communication industry, with the adjustment of the industry chain, it is necessary to adopt a series of strategic adjustments to meet the needs of relevant groups in response to changes in the relevant behaviours of the subsequent college student population. Here, the future development of the communications industry is prejudged based on changes in subsequent customer data usage behaviours.

First, accelerate the speed increase and decrease: In 2019, on March 5, Premier Li Keqiang made a report on the government work at the second meeting of the 13th National People's Congress, "This year, the average tariff for SMEs will be reduced by 15%. The average tariff of mobile network data is reduced by more than 20%. The implementation of 'portable number transfer' in the country, the standard package is set, so that the fee reduction is real, and the consumers understand clearly."

Therefore, accelerating speed-up and fee-reduction is not only the general demand and tendency of objective college students, but also the characteristics of their age group's pursuit of cost-effective tariff packages and low consumption power. It also responds
to Premier Li's government work report. The objective requirements for speeding up the fee reduction are conducive to promoting the “real” reduction of fees and the “clear understanding” of consumers.

Of course, relevant operators, such as Mobile, are also actively responding to the requirements of government work reports and have implemented corresponding measures in promoting the upgrading of broadband network equipment, the accurate expansion of 4G networks, further improving the user's online experience, and further reducing network tariffs. Relevant requirements actively promote business transformation services and provide more convenient and rich communication information services with better network and better service.

Second, speed up the 5G layout. 5G is the fifth-generation mobile technology, and it is also an extension after 4G. It has the characteristics of high speed, large capacity and low latency. According to the "2018 China 5G Industry and Application White Paper" forecast, the penetration rate of 5G mobile phones will reach 30% in 2020, and the number of 5G mobile phones will reach 1 billion in 2024. Domestic mobile phone manufacturers Huawei, XIAOMI, OPPO and VIVO have expressed A 5G mobile phone will be launched in 2019. Therefore, accelerating the layout of 5G is not only a response to the college students, but also to the general needs of the society (pursuing high speed) and an objective requirement for the development of communication technology. This requires the three major operators to continuously innovate and develop, promote the network technology revolution, promote the development of 5G, coordinate the development of network cloud, actively promote the application of big data and artificial intelligence, and continuously strengthen the construction of innovation system.

Third, strengthen brand building. With the opening up, continuous development and
interconnection of China's telecom market, the network technology quality and service
differences of telecom operators will gradually shrink, and the competition for service
innovation will become more intense. The fast-changing telecommunications market
makes it easy for services provided by telecom operators to be imitated and improved
by the rest of the competition. Therefore, how to standardize and brand the services
provided by enterprises can become a strong player in the competition of current and
future telecommunications services, which is an urgent problem faced by various
operating enterprises. At the same time, the mature telecommunications market needs
brands, and successful companies also need strong brands. Compared with general
services, telecom service brands have higher customer satisfaction and added value,
and their added value is characterized by functional value, social value, emotional value,
cognitive value and conditional value. Therefore, creating a strong service brand is
beneficial to both consumers and businesses.

From the perspective of customer value, it is not the best result to shape the corporate
brand, because everyone has a deep understanding of the major domestic telecom
operators, and it is not easy to understand the technical brand consumers. Therefore,
the most Jia's telecom brand portfolio promotion strategy is: to promote business brands
and customer brands in different market segments in different periods; to serve the
brand throughout the brand building process, as a driving force for business brands and
customer brands; It is transformed into a business brand or a customer brand, and the
technical elements are emphasized in the specific propaganda, and the dissemination of
the corporate brand is used as an auxiliary means as a symbol to distinguish it from
other businesses.

With the personalization of customer needs and the differentiation of different customer
groups, customer brands will become brands that can create greater value for operators.
Therefore, in the future, by subdividing target customers and providing personalized services to deal with seemingly saturated markets, to meet the individualized needs of the college students' groups and other social groups, the package can be more attractive.

Brand image.

First, operator's corresponding measures. Improve the speed of the network, improve the technology, and actively promote the “speed increase and fee reduction”. As the result of the research conclusions, the college student customer group's demand for speed-up and reduction of mobile phone data speed is still the demand for speed-up and reduction in the 2019 government work report, or the objective of comprehensively advancing the 5G layout and the development of technological progress. Needs, all relevant operators are required to actively improve the network speed, improve communication technology, and implement the “speed increase and fee reduction”.

Second, promote low-cost packages suitable for college students. As a result of the survey, the objective status quo of college students' spending power and the value of modern college students' data flow have reached 8G or more, and 70.5% of the surveyed college students indicated that the monthly data pack is sufficient. It is known that college students will pay more attention to the price when using the package. Factors, and basically do not need additional flow products outside the package as a supplement, so operators can provide more cost-effective products for college students when launching related products, and appropriately reduce the promotion of products outside the package and reduce promotion costs.

Third, advance the construction of communication base stations and stabilize signals. Because of the conclusions in the survey, signal quality is also an important factor affecting the choice of college students' data usage behaviour. Therefore, promoting the construction of communication base stations, achieving signal coverage throughout the
campus, and stabilizing signal quality are conducive to solving the problem of unstable data signals. At the same time, if you can focus on the stability of the communication base station for some specific WIFI signal unstable areas (such as Huagong 32-34 building, WIFI, unstable data, very slow network speed, etc.), it will be beneficial to promote. Related data products are more deeply rooted in people's minds, and even become an alternative to unstable WIFI and other carrier-related data products, becoming the choice of more college students.

Forth, combine the restrictions on the use of the school network to make a specific analysis and then launch the product according to local conditions. According to the research conclusions, the school network restriction is also an important factor affecting the flow behaviour of college students. Therefore, when launching the products such as campus fees and packages, if it can be combined with the actual situation of each school, different targeted products can be launched. It will be more conducive to promoting related products into the student group and become their choice. For example, some university WIFI schools cover, then operators can reduce the proportion of data and increase the proportion of other services when launching products for these schools; some universities fail to achieve full-school coverage, then operators launch products for these schools. , can increase the proportion of data in the package.

Fifth, marketing means: Because of the third factor “purpose of use”, factors such as “learning needs” and “social hotspots” are uncertain, that is, for relevant learning needs and concerns about certain social hotspots. For students, these factors influence their behavioural choices of using data. For students who do not have the relevant needs, these factors have little effect on their choice of behaviour using data. Therefore, operators can selectively cooperate with some learning software apps frequently used by college students or APPs that focus on social hotspots (such as IQIYI, VIBRATO)
to launch certain specific free-oriented data products and sell them together with the tariff package. This will make the tariff package more popular with students who have specific "learning needs" and social hotspot needs, and can receive a small business promotion fee and advertising promotion fee from the relevant partner APP, or Advertising and promotion of their products through the APP also saved a lot of advertising promotion fees.

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A Summary of Research on Evaluation of Bicycle-Sharing Business Model

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Abstract

With the rapid development of the sharing economy, bicycle-sharing has become a popular riding tool, which has brought great convenience to people and exposed potential problems. Many scholars hope to screen out the most competitive bicycle-sharing business model by evaluating it, but it has produced little results. This paper summarizes the evaluation of the bicycle-sharing business model and finds that more scholars are ambiguous evaluation of the business model elements, as well as the specific evaluation of the value network and evaluation indicators, but less in the comprehensive evaluation system of bicycle-sharing business models. Some scholars carry out research. In view of this, selecting appropriate indicators, grasping the focus of evaluation, using reasonable evaluation methods, and constructing a sound evaluation system are the focus of many scholars in the future.

Keywords: Sharing economy; Business model; Bicycle-sharing; Business model evaluation

1. Introduction

The demand for "last mile" of consumers and the rapid development of mobile
information technology have prompted bicycle-sharing to remain hot today. During this period, the bicycle-sharing of various brands were short-lived due to various shortcomings in the business model, and most of the survivors struggled. Due to the unclear sharing of bicycle profit model and the imperfect legal system, the development of bicycle-sharing is seriously restricted. Therefore, many scholars are attracted to research and evaluate the business model of bicycle-sharing, hoping to improve the shortcomings in the bicycle-sharing business model. At present, the evaluation of the bicycle-sharing business model is focused on the main body and evaluation indicators of the bicycle-sharing value network. Although the problem of the business model can be found relatively intuitively on the main body of the bicycle-sharing value network, the research results of such descriptive evaluation are not scientific. The research setting of the evaluation index of the bicycle-sharing business model is also relatively simple and not comprehensive. At the same time, most scholars use factor evaluation to evaluate the business model of bicycle-sharing. When the factors are divided, the standards are different, resulting in bias in evaluation. There is no reasonable evaluation system when evaluating the business model of bicycle-sharing. Most of them are based on qualitative perspectives. The evaluation process is not detailed enough. The reasons for the problems in the bicycle-sharing business model cannot be deeply explored. To summarize the research on the evaluation model of bicycle-sharing business model: First, it is possible to improve the current method and system for evaluating the bicycle-sharing business model. The evaluation of the bicycle-sharing business model can select a system or
method that can reasonably evaluate its business model based on its characteristics.

Second, it is able to find out through the evaluation research that there are drawbacks in the bicycle-sharing business model that encounters bottlenecks in today's development. Targeted solutions to problems in the bicycle sharing business model. Therefore, it is very urgent to solve the practical and theoretical problems by reviewing the evaluation of the business model of bicycle-sharing.

2. Evaluation path

After analyzing and researching related theories such as business model definition and business model evaluation, the path of an evaluation is shown in Figure 1.

Figure 1. Evaluation path

The basis of this path is: from left to right, the evaluation of the bicycle-sharing business model is from the ambiguity evaluation of the elements to the specific evaluation of the main value network main body and indicators. In the evaluation of the business model, the elements are evaluated first. The elements of the business
model are the abstract expression of the business model. The various elements of the business model form a complete business model. The evaluation of the business model is the first. The evaluation of value network and evaluation indicators is based on the specific business activities of the business model. In the value network and evaluation indicators, the summary can always be divided into the elements of the business model, so put the two To the back of the element. Both the value network and the evaluation indicators are based on the evaluation of specific links in the business model, but from different perspectives.

3. Feature-based fuzziness evaluation

3.1 Element evaluation

From the perspective of sharing the business model of bicycles, scholars use the factor evaluation method to conduct a simple descriptive analysis of the business model of bicycle-sharing, and to summarize and divide the business model elements of bicycle-sharing. Ge Wenjing (2017) mainly grasped the profit model of the bicycle-sharing business model when evaluating the bicycle sharing business model, and fully integrated this factor with the bicycle-sharing startup period, development period and maturity period for evaluation analysis. Although it is a single factor analysis of bicycle-sharing, it summarizes the matching of profit models in different periods. A single element cannot fully evaluate bicycle-sharing. Luo Xiu (2017) combines Morris's division of business model elements and analyzes the business model of bicycle-sharing into strategic layout, customer level, and analysis of the characteristics of bicycle-sharing business models. Marketing model, partnership, cost
structure and profit model. In the evaluation of the elements, it is innovative, and Jin Fanlu, who has similarities with him, also uses Osterwalder's division of business model elements to divide the bicycle-sharing business model elements into nine parts: value propositions, customer segmentation, distribution channels, customer relationships, revenue sources, core resources and capabilities, key businesses, key partners, cost structure. In the process of evaluating the elements, Jin Fanlu and others directly applied the nine elements of the business model to the elements of the business model of bicycle-sharing, so that while retaining the essence of the excellent business model elements of the predecessors, but in the sharing of bicycles business model elements may not be suitable for evaluation. Improvements in this area are Lai Lei and Jiang Nongjuan (2017), who use the rooted theory to extract the three key elements of the value-creation-based customer value proposition, key resources and process design, and profit model fostering this bicycle-sharing business model. Make full use of the advantages of grounded theory to divide and evaluate the elements of the bicycle-sharing business model, and the results of the evaluation are closer to the actual situation of bicycle-sharing.

When evaluating the status quo of a business model through the factor evaluation method, the division of factors is more important, because the factors determine the essence of a thing, only the most appropriate elements can be found to fully express the things, so that they can be close in the evaluation. The nature of things is studied, but the evaluation of elements is an abstract expression of the specific business activities of the business model. The disadvantage is that it is not intuitive.
4. Specific evaluation based on value network main body and indicators

4.1 Value network main body evaluation

Some scholars evaluate the value subjects that exist on the bicycle-sharing value network from the perspective of the value network of bicycle-sharing. The value network members of bicycle sharing mainly include value entities such as investors, platform operators, users sharing bicycles, third-party payment institutions, and government regulatory units. In the value network, financial activities, legal support, government relationship maintenance, corporate culture construction and other value activities support the entire value network.

4.1.1 Single value subject evaluation

Duan Xinsheng (2017) found the “irrational” behavior of investors when evaluating investors in the bicycle-sharing value network. However, due to the phenomenon of herding, overconfidence and psychological accounts, the “irrational” behavior of investors is reasonable. Chen Kang (2017) evaluated the platform operators of bicycle-sharing, and mainly grasped the evaluation of the impact of the three key parts of government infrastructure, enterprise operation management and personal cultivation on the operation platform. At the same time, he made recommendations on these three aspects. Zhang Junying (2017) studied the psychological and behavioral patterns of the value subject of users sharing bicycles under shared economic conditions. He evaluates the user's subject from four aspects: the perception of the convenience of sharing bicycles, the perception of environmental protection, the
perception of psychological enjoyment and the perceived use cost. When evaluating the subject of the user, he uses empirical analysis to make the results of the evaluation more scientific. On the user's body, Wang Yan (2017) combines this value subject with profitability to evaluate bicycle-sharing. He proposed a strategy centered on users and profit models for the decline in the profitability of major companies caused by the fierce competition of users in various bicycle-sharing companies.

In addition to the value subjects such as investors, platforms and users in the value network, scholars also evaluate the bicycle-sharing business model from the perspectives of finance and legal protection. Zhou Guoguang (2017) started with the financial aspects of shared bicycles, evaluated the financial problems in the bicycle-sharing business model, and pointed out the measurement of the sharing bicycle finance. A major problem in the bicycle-sharing business model is the loophole in the legal system for sharing bicycles. Fu Rui (2017) studied the problem of traffic accidents in children riding a small yellow bike in the bicycle-sharing business model, personal possession of shared bicycles, and theft of shared bicycles. Yuan Mengyang (2017) studied the safety issues of bicycle-sharing payment, riding safety issues, vicious competition problems, shared bicycle damage, theft, identity verification loopholes, and bicycle-sharing deposits. He believes that in the evaluation, it is necessary to seize the responsibility that the parties should assume and compensate according to law. At the same time, Song Yuning (2017) made recommendations and evaluations on the relevant legislation that the government should formulate. She pointed out the chaos in the industry, and the slowness of
government legislation is the main responsibility. At the same time as legislation, Liu Tianxin (2017) emphasized that the public should enhance its security awareness while the government should popularize civilized propaganda.

In the value network, the driving force is also very important. Zhang Yingqiang (2017) made a research evaluation on the driving force of shared bicycles, and analyzed the development status and the dilemma of bicycle-sharing in China. He believes that when the shared bicycles enter the market, they mainly rely on a large number of users in the market. With the fierce competition in the bicycle-sharing market, the market alone can no longer promote the advancement of bicycle sharing. Therefore, he pointed out that the development of bicycle-sharing in the future should mainly rely on technology. First, accurate management through positioning system is the basic requirement; second, artificial intelligence can effectively improve the level of scientific management; third, big data is the core competitiveness of future bicycle-sharing companies; fourth, bicycle-sharing development boosts the level of intelligent manufacturing in China; It is the inevitable way to promote the development of bicycles in China.

4.1.2 Evaluation of multi-value subjects in value network

Since the evaluation of a single value activity cannot fully describe the current state of the business model of bicycle-sharing, it is obviously far-fetched to evaluate a business model. Under the constraints of this problem, some scholars have evaluated from the perspective of multiple value subjects in the value network.

In the evaluation of multi-value subjects, Lai Huaqiang and Sheng Di (2017) mainly
evaluated the driving forces of social, economic and technological aspects, as well as consumers, merchants, platform operators, third-party payment service providers, mobile operators, Mobile terminal providers, software providers, and supervisory agencies. Su Baizhang (2017) is similar to Lai Huaqiang in his understanding of the driving force of the bicycle-sharing business model. He also evaluated the value subjects such as consumers, merchants, operating platforms, third-party payment and mobile platforms. In the process of evaluation, the two scholars only evaluated each value activity separately. Zhong Meng and Fan Yiyang (2017) mainly grasped the three value subjects of transaction subject, transaction object and third-party trading platform. And they use the logic of “idle resources + value + corresponding return” to link these three value subjects together. Ma Guangqi and Wei Mengyu (2017) also evaluated the value activities in multiple value networks during the evaluation. Different from the value activities in the three value networks of investors, bicycle-sharing companies and legal systems, they found that they should ensure the safety of consumer deposits from both the enterprise itself and the government supervision. Thereby preventing the risks brought by the "funding pool". Investors need to raise risk awareness and be alert to capital bubbles. Chang Jiarui (2017) pointed out that a value network must be able to withstand the test of five problems if it wants to survive: First, what are the target user groups and markets that you target, and what are their characteristics? Second, is the market and group that you are targeting large enough? The third is who will create the benefits of this model, and who has conflicts of interest and competition? Fourth, is your model easy to copy or
copy? Fifth, what profit do you rely on? From these five questions, he conducted an evaluation study of the entire business model of shared bicycles, which basically covered the value activities of the entire value network.

**4.2 Value network main body evaluation**

In the evaluation of the bicycle-sharing business model, scholars analyze the characteristics of the bicycle-sharing business model, extract the indicators and conduct qualitative evaluation research. They evaluate the indicators to achieve the purpose of evaluating the bicycle-sharing business model. Their research on indicators mainly focuses on the descriptive analysis of indicators. Most scholars have not deepened the indicators to find more suitable indicators that can measure the bicycle-sharing business model.

**4.2.1 Single indicator evaluation**

In the evaluation of the bicycle-sharing business model, Li Minlian (2017) used the NPVJRR system to summarize the “profitability” indicator by using ofo and Mobai. In the evaluation of this indicator, the profitability of the bicycle-sharing business model can be judged in more detail. After studying the three parts of the supply-side, demand-side, and Internet-sharing platforms in the shared bicycle business model, Liu Shengzhong and Tang Qishan (2017) found the indicator of “clearness of property rights”. He believes that in the bicycle-sharing business model, property rights are divided into ownership, management rights, and income rights, and each of the subjects in the value chain is evaluated by using this indicator. When evaluating the sharing of bicycles, He Tao (2017) compared the characteristics of the sharing
economy with the bicycle-sharing and obtained the indicator of “social idle resource utilization”. Through the evaluation of this indicator, we can understand to some extent the problem of the existence of bicycle-sharing. Lu Zhengying and Li Xiang (2017) also recognized the importance of the utilization of social idle resources. They believe that using this indicator to evaluate bicycle-sharing can clearly understand the pros and cons of their business models and identify the most valuable parts of the business model.

Incomplete evaluation in a single indicator evaluation is one of the important factors leading to unreasonable evaluation results. It is difficult to completely cover the business model of bicycle sharing with only one indicator. The advantage is to capture the key parts of the bicycle-sharing business model for evaluation.

4.2.2 Multiple indicator evaluation

After studying the problem of bicycle-sharing business model, Wang Guangrong (2017) summarized three indicators that can be specifically evaluated: economic ability, traffic capacity, and comprehensive effect ability. These three capabilities can evaluate the current status of bicycle sharing to some extent. In the evaluation of the bicycle-sharing business model, Zeng Shishi (2017) not only evaluated the economic ability of bicycle-sharing, but also attached importance to the evaluation of the “public welfare” indicator.

In the research of indicators, the characteristics of the business model of bicycle-sharing can be more intuitively displayed. When evaluating the bicycle-sharing business model, we can grasp the indicators for quantitative or
qualitative analysis. However, scholars did not choose the appropriate evaluation method after summarizing the evaluation indicators, but only in the qualitative analysis and evaluation, which greatly reduced the evaluation results. Therefore, in the future evaluation, we must select the appropriate evaluation method and combine it with the indicators, so that the evaluation results are more reasonable.

5. Conclusion

According to the review of bicycle-sharing business model evaluation research, scholars' research on the evaluation of bicycle-sharing business model does not form a relatively complete system, and the evaluation of the specific enterprise sharing bicycle is too simple. The evaluation mainly focuses on the aspects of content evaluation and evaluation indicators and methods of bicycle-sharing business model. Although such an evaluation method can simply evaluate the business model of bicycle-sharing, most scholars have studied qualitative analysis. In the evaluation of the value net body of shared bicycles, attention should be paid to the weight of each subject in the evaluation. Starting from the value activities and support activities in the value network of bicycle-sharing, the evaluation is more intuitive for each value activity. When we study the evaluation index of bicycle-sharing, we should comprehensively and meticulously select the appropriate evaluation indicators for the characteristics of the bicycle-sharing business model, and can fully display its business model. When evaluating the bicycle-sharing business model using the factor evaluation method, it is not easy to separate the various elements of the business model for evaluation, and also pay attention to the logical structure between the
elements.

When evaluating a new business model, we must not only grasp the comprehensive evaluation of the business model, but also grasp the focus of its business model evaluation. Through a literature review of the research on the evaluation of bicycle-sharing business models, I found that we should pay attention to the evaluation of the profit model bicycle-sharing when evaluating bicycle-sharing. The profit model of bicycle-sharing determines the late development potential of bicycle-sharing. This has a huge force for the continued survival of bicycle-sharing. In the early stage of the development of bicycle-sharing, we must consider the key evaluation of the profit model. We also need to pay attention to the evaluation of the legal system for sharing bicycles. The legal system of bicycle-sharing can protect the development of bicycle-sharing. This is an important link that restricts the development of bicycle-sharing. It is necessary to improve the laws in its business model in the process of evaluation. In addition, we must pay attention to the evaluation of scientific and technological innovations in bicycle-sharing, and increase scientific research on the supply of bicycle-sharing.

In the future research, we should focus on the construction of the system for evaluating the bicycle-sharing business model and conduct a comprehensive and logical evaluation of its business model. From the evaluation of the bicycle-sharing business model, the indicators are scattered and the method is single. To make a more objective and reasonable evaluation of its business model, it is necessary to use a more reasonable system evaluation method. We need to link the content and indicators
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References


Insight Into the Decision-Making Process of Young Adults with Focus on Impulsivity

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Abstract

There is a hidden logic in consumer decisions. Great efforts have been taken to explain and organize the consumer behavior, however, there are still questions left to clarify (Platz – Veres, 2014). The study describes the surprising outcome of a qualitative, exploratory research. It seems to be a contradiction, but mainly conscious consumers can sometimes act impulsive in certain buying situations. This impulsive appearance from a conscious consumer is limited to a certain situation. It can be assumed that it mostly based on a primary conscious decision or the buying situation is so safe that even the conscious consumer can be tempted, as s/he feels safe that his/her decision does not have any negative consequences.

Keywords: consumer behavior, purchase decisions, decision making process, consciousness, impulsivity
1. Introduction

The study focuses on the conscious consumer. The main question is if a conscious consumer can provide impulsive buying behavior. If yes, under what circumstances or why. It is almost impossible to find such segmentation variables which are valid in 100% of the situations. Once a researcher gains a deeper insight into the nature of a certain variable, h/s does manage to define a 100% reliable segmentation variable, even though there will be contexts, where it can be expected, that the behavior – on a short term or under specific circumstances or in an exceptional state of mind – does not meet the segmentation variable’s criterion on the surface.

Consciousness is a such a flexible segmentation variable, which can lead the consumer to impulsivity: however, in this case, impulsivity is a choice of the conscious consumer, not a reaction.

2. Impulsivity

Impulsiveness is a tendency to act quickly without consideration of consequences. (Dalley and Robbins, 2017) Earlier the phenomenon has also been defined as the predisposition to act with a low or inadequate degree of deliberation, forethought, or control. (Moeller et al., 2001) Operationally, impulsivity is considered to be a multidimensional construct, with impulsive behavior potentially arising from several different mechanisms, underpinned by distinct neural, and cognitive systems. (Husain and Mehta, 2011) In spite of the fact that impulsivity is frequently used to refer to a dysfunctional state, it has been argued that an impulsive style of responding does not always have negative consequences. Such observations led Dickman (1990) to propose that there might be two general classes of impulsivity and formulate them as “dysfunctional” and “functional”. Dysfunctional is understood as a lack of forethought
and deliberation when this is a source of difficulty - classical views of impulsivity. Barratt’s (2000) definition as non-planning impulsivity refers to self-control and cognitive complexity; to decreasing in orientation towards future, resembles on the content of dysfunctional impulsivity.

In contrast with it, functional impulsivity refers to the tendency to act quickly with little forethought when this way of responding might be appropriate, a trait is optimal. The researcher believed that dysfunctional impulsivity is related to disorderliness, a tendency to ignore hard facts while making decisions, acting without forethought; at the same time, functional impulsivity is related to enthusiasm, adventurousness, activity. This definition has various features, that can be useful and helpful in understanding of impulsivity. According to Bakhshani (2018), impulsivity understands as a potential which could be considered itself as a part of a behavioral pattern. Secondly, impulsivity incorporates an unplanned, immediate action that takes place when there has not been enough chance for thinking over the consequences. Thirdly, impulsivity indicates acting with no consideration for its consequence.

2.1 Impulsive buying behaviour

Every day consumers make a lot of decisions relating to every sphere of their daily life. However, a big amount of these decisions are made without thinking over and proper planning, also, ignoring consequences of a particular buying decision. Applebaum (1951) has defined impulsive buying as an outcome of promotional stimuli. Also, the researcher states that purchasing items are not decided in advance in consumer’s mind before starting a shopping trip. Impulse buying is also defined as “an unintentional purchase” that is characterized by relatively fast decision-making and a subjective bias in favour of immediate possession. (Gardner and Hill, 1988).
Taking into consideration the nature of impulse buying, there is a model that was created to describe the impulse buying process through reclassifying influencing factors and leaving out several steps, such as need recognition, information search, and alternative evaluation (Figure 1). (Kim, 2003)

Figure 1. A model of impulse buying process (Kim, 2003)

The first step of the impulse purchasing process is product awareness. Impulse consumers start surveying products in a leisurely and casual way without any intentions or aim to buy something specific in a particular store. During this process, customers experience an influence of the stimuli, which is a trigger of prompting to purchase on impulse. Usually, consumers with a desire to make a purchase will make a buying decision without searching for information or evaluating alternatives (Kim, 2003). After that buyers may face consequences caused by the post-purchase evaluation which takes place after the purchase, this consequences may be positive or negative and take place after the purchase. In this process, customers are influenced by internal factors, such as mood, hedonic pleasure, cognitive/affective evaluation, and external factors such as visual merchandising, window display, promotional signage (Kim, 2003).
Hausman (2000) stated that customers buy products or services not only for economic reasons, they also do it for fun, emotional satisfaction, entertainment and these reasons let them ignore the negative consequences of impulse buying. Retailers understand that this phenomenon is significant, they do a lot of efforts to get consumers to be impulsive in stores through store layouts, product packaging, and in-store promotions. Impulsive buying behaviour when it is related to emotional preferences in shopping. There are a big variety of factors ranging from internal to external and other situational factors that trigger impulsive buying predispositions.

There is preliminary evidence that impulse purchasing is increasing in a virtual environment. The Internet gives a set of circumstances that makes the buying process easier and makes customers' purchasing opportunities extended; as a result, Internet customers can be more impulsive than conventional customers (Brashear et al., 2008). According to Koski (2004), impulsive buying happens quite frequently in an online context. The researcher named certain stimulating factors such as: anonymity, easy accessibility, wider range of goods, promotion of buying, direct marketing, usage of credit cards.

Also, he defined some limiting factors which can prevent customers from purchasing such as referred satisfaction, bigger self-control, poor feeing of purchase environment, possibility to compare prices and goods easily.

Wood proposed that retailers should not focus only on the purchasing behaviour in retail environment, but also care about consumers purchasing experience and characteristics of shopping environment, understand consumer’s society. With an aim to satisfy individual social needs, a customer would make more impulse purchasing that makes them feel gratified and excited (Wood, 2005).

It is presumed that process of communication among people would make buying more
impulsive, also it was found that purchasers touch more with salesmen, who has an ability to increase the possibility of impulse purchasing. (Helmefalk, 2019)

Wu (2006) made a comparison of excessive, compulsive and impulsive buying. It shows that impulsive buying differs from excessive and compulsive ones in two ways. The first one is a consumer’s motivation; in case of impulsive buying a consumer tries to satisfy hedonistic demands, get a positive effect. The other difference relates to psychological processes; in case of impulsive buying a consumer feels positive effect, focus on good proximity and loses the ability to control themselves, in particular their emotions and desires.

To sum up it can be concluded that the most important characteristics of impulsive buying behaviour is that:

• it appears as a consumer’s response to a stimulus, experienced in a purchase environment;
• it is immediate decision and after purchase a consumer feels emotional and/or cognitive reactions.
3. Research question and design

The central question is if consumers with conscious traits can also be impulsive. In the frame of the study a qualitative, exploratory approach was applied. Firstly, the in-depth interview was conducted. The in-depth interview questions were created with the aim of clarifying the decision-making process of customers in the connection with consciousness and impulsivity. Later on, the output of the in-depth interview will support the hypotheses development, for a future quantitative research.

The sample of the in-depth interview consists of 5 people: 3 female, 2 males, 23-33 years old, with different level of education. Respondent 1 is a female, 23 years old, with the postgraduate level of education. Respondent 2 is a female, 24 years old, with the undergraduate level of education. Respondent 3 is a male, 29 years old, with the undergraduate level of education. Respondent 4 is a male, 24 years old, without a university degree. Respondent 5 is a female, 33 years old, with undergraduate level of education.

4. In-depth interview

The results of the in-depth interviews are summarized in Table 1.

The analysis of qualitative data from the in-depth interview gives evidence to assume that in this sample women have a tendency to be more conscious than men. Furthermore, this sample let us assume that if the level of education is higher the level of consciousness is higher as well, it is visible in the case of ecological consciousness. There are contradicting results about impulsivity: both genders of this sample show more or less similar tendency to be impulsive and deliberative. It can be assumed that conscious consumers sometimes decide fast, which might be understood as a form of (functional) impulsivity.
Table 1 Overview of the in-depth interviews (authors’ own edition)

<table>
<thead>
<tr>
<th>Respondent 1</th>
<th>Respondent 2</th>
<th>Respondent 3</th>
<th>Respondent 4</th>
<th>Respondent 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>(female, 23 y. o., postgraduate)</td>
<td>(female, 24 y. o., undergraduate)</td>
<td>(male, 29 y. o., undergraduate)</td>
<td>(male, 24 y. o., without a university degree)</td>
<td>(female, 33 y. o., undergraduate)</td>
</tr>
<tr>
<td>1st bloke</td>
<td>ecological consciousness</td>
<td>lack of ecological consciousness</td>
<td>lack of ecological consciousness</td>
<td>lack of ecological consciousness</td>
</tr>
<tr>
<td>2nd bloke</td>
<td>health consciousness</td>
<td>health consciousness</td>
<td>lack of health consciousness</td>
<td>lack of health consciousness</td>
</tr>
<tr>
<td>3rd bloke</td>
<td>price and value consciousness</td>
<td>price and value consciousness</td>
<td>price and value consciousness</td>
<td>price and value consciousness</td>
</tr>
<tr>
<td>4th bloke</td>
<td>brand consciousness</td>
<td>brand consciousness</td>
<td>lack of brand consciousness</td>
<td>lack of brand consciousness</td>
</tr>
<tr>
<td>5th bloke</td>
<td>motor impulsivity</td>
<td>motor impulsivity</td>
<td>lack of motor impulsivity</td>
<td>motor impulsivity</td>
</tr>
<tr>
<td>6th bloke</td>
<td>lack of attentional impulsivity</td>
<td>lack of attentional impulsivity</td>
<td>slight attentional impulsivity</td>
<td>attentional impulsivity</td>
</tr>
<tr>
<td>7th bloke</td>
<td>lack of non-planning impulsivity</td>
<td>lack of non-planning impulsivity</td>
<td>lack of non-planning impulsivity</td>
<td>non-planning impulsivity</td>
</tr>
<tr>
<td>8th bloke</td>
<td>future-oriented</td>
<td>future-oriented</td>
<td>present-oriented</td>
<td>future-oriented</td>
</tr>
</tbody>
</table>
5. Consequences

As the primary research shows the generally conscious consumers tend to be impulsive, under certain circumstances. The empirical findings support the conclusion that this type of impulsivity among conscious consumers is different in many ways: the motivations for impulsive behavior, the internal factors so as the environmental stimuli can differ. Actually, these are three types of factors that have an influence on impulsive buying behavior in case of conscious consumers. They can be called as internal plus demographic, which is defined by the individual, so as external and situational, which are environmental factors. (See Figure 2 below.)

Figure 2. Factors influencing impulsive buying behavior (authors’ own edition)
This classification of the authors can be well-embedded in the literature, and other findings support the authors’ ideas. The research findings, due to the size of the sample and the research’s exploratory characteristic cannot be generalized nor able to explain this phenomenon in all its complexity. In this research context the findings can show numerous fresh research directions.

Related to the internal factors, which are characteristics of a consumer rather than the shopping environment, which can influence impulse buying behavior. A potential future research could be conducted on how the impulse purchasing behavior symbolizes the customers’ internal traits that persuade purchasers to interact in impulse buying, knowing that they face a conscious consumer. Can they be tempted by their value systems and beliefs?

Another classic is example is according to Beatty and Elizabeth Ferrell (1998) an individual’s affective state or mood is an important variable that has an effect on impulse buying. If customers are in a good mood, they tend to pamper themselves and consequently, tend to be more impulsive. Is this valid in case of a conscious consumer? Shopping enjoyment is another variable, whereby individuals consider shopping as a form of leisure, do not follow to a buying list, so tend to make many impulsive purchases. Also, presence of others increases the likelihood of impulse purchase – is there a relevant reference group for conscious consumers?

Demographic factors of customers such as age, gender, income level have an influence on impulsive buying behavior as well as internal ones. How do they correlate with consumer consciousness? Or, can we claim there is demographic profile for conscious consumers? The authors believe that a complex demographic character, which would represent the conscious consumers do not exist.

External factors are such factors that marketers and storeowners use to attract
consumers by implementing marketing tools and placing marketing cues. In-store atmosphere refers to the factors within the store’s presentation (for example, noise intensity, lights, the level of the hot or cold atmosphere in the store, colors). Does all of this work, if the consumer is conscious? If the environmental factors align with the conscious consumers beliefs and preferences, do they work? The authors afraid, that, in such case, can support fast purchase decisions, which can be impulsive. Situational factors that can affect impulse buying behavior include real or observed availability of time and the expenditure ability the consumers possess (Nishanov and Ahunjonov, 2015). Can a conscious consumer resist?

The empirical findings did not show, but the authors suppose that the product or the service characteristics can form an individual category. It goes without saying that some products are bought more impulsively than other. The probability that a certain product will be purchased on an impulse depends on the product category and the product price. According to marketing there are two types of products: hedonic products or functional products. Hedonic products are generally consumed to get hedonic benefits, while functional products are generally consumed to get utilitarian benefits. A certain product or service attribute is the price (an individual P in the marketing mix as well; furthermore, on the second place) is an important determinant of impulse buying. In particular, customers have a tendency to be more impulsive in situations when there are product discounts or sales, short product life, smaller sizes, and ease of storage (Nishanov and Ahunjonov, 2015), so it would be reasonable to see if it is valid for a conscious consumer.

The current research findings contribute to the understanding of the occasional impulsive buying behavior of conscious consumers. The above listed suggestions might be potential research directions, which support a deeper insight into the conscious
consumers’ behaviors. The suggestions require further empirical analyses, mostly on a quantitative basis.

**Acknowledgments**

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of Applied Economics and Business. 2:1, 105-119.


Appendix

Appendix 1. In-depth interview questions

The first block of questions: “Think about your regular shopping day. When you go to a grocery shop do you take your own bag, or you buy plastic one at the cashier desk? Do you think about the packaging of products (in what way)? Do you usually pay attention is the product eco-friendly?”

The second block of questions: “Do you look at the labels to check the ingredients of products you buy and why? Do you pay attention to the effects of some products on your health (for example sugar, milk, etc.) and why?”

The third block of questions: Do you compare prices of interchangeable, to choose the cheapest one? Do you pay attention to sales and discounts? How do you usually make a decision which product or service to buy? Do you pay attention only to price, but also on product characteristics, and how long term is it?

The fourth block of questions: “Think about a brand. In your opinion, is brand a sign of quality?”

The fifth block of questions: “Think about your last 5 years. Tell me please about your work, the place you live, about your hobbies within this time”.

The sixth block of questions: “Think about your school years. How did you feel during lessons? Were you restless? Was it easy to concentrate or you usually had extraneous thoughts?”

The seventh block of questions: “Think about traveling. Do you usually plan it in advance? How do you do it?”

The eighth block of questions: “Are you more future-oriented or you more interested
in the present? Do you save regularly, do you think that it’s important to do?”

The ninth block of questions: “Think about multitasking. Can you think or do several things simultaneously? Are you a steady tinker, or you do actions without much deliberation?”
ABSTRACT (IN ENGLISH)
The Role of Manufacturer’s Overconfidence on Supplier’s
Product Innovation with Wholesale Price Contract

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Abstract

Overconfidence is considered to be one of the most persistent, powerful, and universal cognitive biases. It is known from the existing operations management studies that overconfidence has a significant impact on supply chain members’ operational strategy and reallocates the profit between the manufacturer and supplier. As to the supply chain innovation research, the related literatures have involved the decision makers’ irrational behavior such as fairness concerns, risk averse. However, the role of manufacturer’s overconfidence on the supplier’s product innovation does not attract much attention. In this paper, we consider an innovative supply chain consisting of a single overconfident manufacturer and a single supplier who provides the innovative assembly unit. The manufacturer sets the retail price and offers a wholesale price contract as a form of cooperation while the supplier decides the investment on innovation in the presence of manufacturer’s overconfidence. The objectives of this study are to investigate the influence of manufacturer’s overconfidence on the supply chain members’ expected profits and their operational strategies, especially the supplier’s innovation level. By comparing the equilibrium results, we obtain the following results: (1) the manufacturer's overconfidence brings detrimental effects to the level of supplier’s innovation investment which also hurts the product upgrade finally; (2) compared with rational situations, the manufacturer's
expected profit will increase when the manufacturer's overconfidence is low, but when
the overconfidence exceeds a certain threshold, the expected profit will fall. (3) As for
the supplier, overconfidence is always bad for its expected profit. Finally, the above
conclusions are verified by numerical simulation. The results have theoretical and
practical significance for the game models in terms of supply chain and
overconfidence.

**Keywords**: Supplier’s innovation; Overconfidence; Wholesale price contract;

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Effect of Short Video Ads with Moderation Role of Content-Generators: Evidence from “Douyin” Platform

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Abstract

With the repaid development of internet, advertising walks into a generation where advertisers and consumers can communicate to each other in real time (Voorveld et. al 2018). Most of the advertising expenditures are spent on online advertising and advertising through mobile phones are increasing (Barnard 2016). User-generated short video ads, for instance ads on “Douyin” platform, become popular through social media. However, the unique elements and phenomena for the use-generated short video ads through mobile platforms have not yet been investigated. Compared to offline media, social medial platforms provide high level of attractiveness and sociability for their users (Swani et. al 2016, Wu et.al 2016). Su et.al (2015) categorizes user socialization behavior into active behavior and passive behavior, where active behavior means that internet users’ comment, like and share other person generated contents online. The number of comments has significant positive effect on product sales (Li et.al 2018, Zhang and Yang 2016). Ad vividness reflects the richness of the advertising or how consumers responses
to the stimulation of the advertising richness (Luarn et.al 2015). De Vries et. al (2012) suggest that different level of advertising vividness has different stimulations for consumers. Therefore, the research objective is to investigate the impact of short video ad sociability and vividness on product sales with the consideration of who are the short video generators.

A theoretical framework has been proposed, followed by an empirical study with panel models using the data from “Douyin” (e.g. TikTok) videos and Taobao e-commerce platform. A total of 16,337 individual short video ads at 260 product level data were collected every day between December 16, 2018 and January 11, 2019. Results show that the number of comments as one of the advertisement sociability attributes, female vividness and couple vividness as two of the advertisement vividness attributes, have consistently positive effect on product sales. At the same time, different ad content-generators have different moderation effect on the relationship between advertising attributes and product sales. Advertisements generated by influencers could positively moderate the relationship between the number of comments and product sales, and the relationship between female vividness and product sales. Advertisements generated by buyers or sellers could negatively moderate the relationship between female vividness and product sales, positively moderate the relationship between couple vividness and product sales. Thus, the best strategy to promote products through user-generated short video ads on mobile short video sharing platforms is to have influencers to publish short video ads with female character inside the video, and to attract a large number of comments as possible to increase product sales.
This study fills in the research gap of analyzing the impact of user-generated short video advertising on product sales especially from the sociability and vividness attributes, with the consideration of different moderation role of advertising generators. Thus, the main contribution is to be the first examining the effect of user-generated short video ads through social media apps on other platform’s product sales.

**Keywords:** Short video ads; Content-generators; Advertisement sociability;
Advertisement vividness

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Research on the Influence of Relationship Management Capability on Service Innovation Performance of Enterprises: The Moderating Effect of Relationship Learning and Competition Intensity

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Abstract

Enterprises can obtain innovation resources from external relationship networks by relationship management capabilities, which can promote service innovation and improve service innovation performance. This study constructs a theoretical framework of the relationship management capability, relationship learning and service innovation performance, and conducts an empirical test through 298 sample data in China. The following conclusions are drawn: (1) Relationship management capability can promote the service innovation performance of enterprises; (2) Relationship learning negatively moderated the relationship between relationship management capability and service innovation performance of enterprises. Relationship learning can be divided into three dimensions: information sharing, common understanding and specific relationship memory. The negative adjustment of common understanding and specific relationship memory is more significant; (3) Competition Intensity can inhibit the negative adjustment of relational learning.

Keywords: Service Innovation; Relationship Management capability; Relationship
Learning; Competition Intensity; Service Innovation Performance

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Is My Own Design Better?
– How Online Customer Value Co-Creation Influences the Symbolic Attribute of Luxury Product Design

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Abstract
Customers have various choices of products but get less satisfaction. Armed with new tools and dissatisfied with available choices, customers are willing to interact with firms to “co-create” value (Prahalad and Ramaswamy, 2004), which is believed to have coincided with the mass use of the Internet. Drawing on customers rather than internal designers in customer value co-creation activities benefit firms because the resulting products effectively satisfy consumer needs (Fuchs et al., 2013). Customers today are exposed to various types of online customer value co-creation activities, they have their creative potential to make contributions in certain production stages from online discussion to virtual design (Nambisan, 2002), however, some researchers argued that the customer value co-creation cannot be fully applied to the all fields, especially luxury industry. The authors consider online customer value co-creation behaviors into four categories by using the two dimensions – idea innovativeness and behavioral intensity: feedback, test, share and exert. Four studies were conducted in the context of the fashion industry, uncovering important moderating and mediating conditions of online customer value co-creation
effects. The results indicate that the effects of the two dimensions differ depending on the product category. For ordinary fashion product, idea innovativeness positively influences the symbolic attribute of product design, whereas behavioral intensity has a negative impact, however, in the luxury sector, the performance of idea innovativeness and behavioral intensity act the opposite. Both of the two dimensions of online customer value co-creation have interaction effects on symbolic attribute of product design. Drawing upon construal level theory (CLT), the mechanism of online customer value co-creation effects on symbolic attribute of luxury products is explained by the psychological distance of customers. Customer knowledge and community feedback moderate the effects of online customer value co-creation on symbolic attribute of luxury products.

**Keywords:** Customer Value Co-creation; Idea Innovativeness; Behavioral Intensity; Product Design; Luxury Product

**References**


Hand-writing or Machine-writing? Effect of Handwriting Price Display on Purchase Likelihood

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Abstract

Price Display is a critical issue that has always been concerned in marketing practices. Although there are many studies focusing on the price display, none of them are related to the effect of hand-writing price display on purchase likelihood. To address this gap, this article examines the effect of hand-writing price display (vs. machine-writing price display) on purchase likelihood. In the experiment 1a, we used different price display (hand-writing vs. machine-writing) on the same product (smartwatch), and the results demonstrated that consumers tended to show higher purchase likelihood with handwriting price display than the machine-writing. Meanwhile, product category (hedonic product vs. utilitarian product) moderates the effect of price display (hand-writing vs. machine-writing) on purchase likelihood. The result of the experiment 1b (smartwatch was categorized as both hedonic and utilitarian product), experiment 2 (toothpaste vs. chocolate), the experiment 3 (laptop
vs. tour package) and the experiment 4 (reference book vs. fashion magazine) provided us more evidence about how product categories influenced the effect of price display in different fonts on purchase likelihood. Specifically, for the utilitarian product, consumers showed a higher purchase likelihood when the price display using hand-writing than machine-writing. While in the case of the hedonic product, consumers showed higher purchase likelihood when the price display using machine-writing than hand-writing. In addition, we proved more credible and reliable in these experiments by using meta-analysis.

**Keywords:** Price display; Hand-writing; Hedonic product; Utilitarian product; Purchase likelihood

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Research on the Impact of Employees Innovative Behavior on Enterprise Service Innovation Performance: Based on Comparative Analysis of Manufacturing and Service Industries

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Abstract

As the concrete implementer of service innovation activities, employees' innovative behavior in enterprises will directly affect the service innovation and performance of the enterprise. In order to reveal the relationships, this study builds a theoretical framework among employee innovation behavior, service innovation performance, innovation culture, and redundant resources. The empirical results, by 86 samples in manufacturing industries and 179 samples in service industries, showed that: (1) In the service industries and manufacturing industries, employee innovation behavior has a positive impact on service innovation performance; (2) In service industries, innovation culture negatively moderated the positive relationship between employee innovation behavior and service innovation performance. In manufacturing industries, the innovation culture positively moderated the relationship between the two; (3) In the service industries, redundant resources inhibit the role of negative moderation of
innovation culture in employee innovation behavior and service innovation performance; in manufacturing industries, redundant resources promote the positive moderation of the relationship between innovation behavior and service innovation performance of innovation culture. The conclusions of this study suggest the managers of enterprise in service and manufacturing industries should focus on the innovative behavior of employees at the individual level, and should pay attention to the different roles of innovation culture and redundant resources in improving innovation performance.

**Keywords:** Employee Innovation Behavior; Innovation Culture; Redundant Resources; Service Innovation Performance

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Research on Telemedicine Service Efficiency of a County Hospitals Based on Data Envelopment Analysis

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Abstract

Objectives: To study the telemedicine service efficiency of the clinical departments of a county hospital in Sichuan Province from 2017 to 2018, identify the main factors affecting the efficiency of telemedicine services, and provide suggestions for improving the efficiency of telemedicine services in county hospitals.

Methods: Data envelopment analysis method was used to determine the input and output indicators of telemedicine services, and the comprehensive technical efficiency, pure technical efficiency and scale efficiency of telemedicine services in each clinical department were evaluated.

Results: The efficiency of telemedicine services in clinical departments is generally at a high level, and the input and output of telemedicine services in most departments are in a relatively reasonable state. Among them, the DEA value of the telemedicine service in the internal medicine one and pediatric departments deem as effective, telemedicine services in the outside two branch and obstetrics departments are weakly effective, telemedicine services in the second internal medicine and the outside branch are ineffective.
Conclusions: The number of superior experts is the main factor affecting the efficiency of departmental telemedicine services. Scale efficiency is one of the major reasons that restrict the clinical department's telemedicine service to reach the effective DEA state.

Keywords: Telemedicine; DEA; County hospital; Clinical department; Efficiency

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Firm-Generated Contents on Social Media: Measurement and Cross-Platform Effect

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Abstract

Social media platforms have become one of the main marketing instruments for enterprises (Naylor, Lee & Park, 2012). Companies publish a large number of product and service information on their social media official account pages, which are called Firm-Generated Contents (FGC) for their current and potential customers (Kumar, Bezawada & Rishika, 2016). FGC are different from traditional advertisements where a FGC can be a soft text, an activity promotion, or a product promotion. Due to the diversity of FGC, existing literatures focuses on different ways to measure FGC including content classification (Lee, Hosanagar & Nair, 2013), sentiment analysis (Kumar, Bezawada & Rishika, 2016) and user engagement (Weiger, Wetzel & Hammer, 2017). However, the measurements of FGC are relatively simple especially for a real time communication of social media platforms. Therefore, the objectives are to incorporate FGC vividness with receptivity and affectiveness together to be a new FGC measurement, and to further examine the effect of FGC across different social media platforms using the new measurement.
Brand FGC Data for a total of 99 products at 9 brand levels including electronic products and cosmetic products which are considered as search and experience products, respectively (Li, Oh & Wang, 2017), were collected for both Weibo and WeChat social media platforms. Sales data were collected from Tmall's official flagship stores which most of the FGC by brands have a link to click through to. The original big data at each FGC level were collected from December 10, 2018 to February 3, 2019 with Octopus reptile software. Final aggregate sample size at product-day level is 4890 Weibo platform, and at product-week level is 558 for WeChat platform. Thus, FGC measurements of affectiveness is calculated using sentiment analysis method to be positive, neutral, or negative (Seshadri and Tellis, 2012). Receptivity is the sum of likes, comments and shares for all FGC at product level. Vividness is categorized as none, low, Medium and high (Vries, Gensler & Leeflang, 2012) based on the level of all FGC texts, pictures, videos and links at product level. A panel model is further used to estimate the effects.

The results show that FGC on both Weibo and WeChat platforms have positive effects on product sales. For Weibo platform, FGC receptivity has more significant impact on product sales. Whereas, for Wechat platform, FGC affectiveness is more significant. Interestingly, the effect of FGC on product sales could last for continuously five days for Weibo platform. But no lag effects have been found for Wechat platform. In addition, the number of FGC and product type also have significant impacts on product sales. Therefore, the main contributions include: (1) theoretically measure FGC from three levels of text, content vividness and user response, (2) reveal the across platform effects from different Social
media platforms to e-commerce platform sales, (3) significant lag effects for Weibo but not for Wechat empirically even that both immediate effects are found for both platforms.

**Keywords:** Social media; Firm-Generated Content (FGC); Product sales; Receptivity; Vividness; Affectiveness

**References**


A Qualitative Research on Adaptation of Paternalistic Leadership in Cross-cultural Context

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Abstract

With the expansion of Chinese companies in Africa, there appears to be a need for the adoption of leadership perspectives that are suitable in multicultural settings (Robinson & Harvey, 2008). This research study using the qualitative research method investigated the experiences of Chinese managers who are working in South Africa to understand and explore the adjustment and improvement of Chinese paternalistic leadership in the cross-cultural context. Semi-structured, in-depth interviews was adopted, and 30 Chinese managers participated in the study. The data were analyzed by Colaizzi's procedure. The results indicated that characteristics of Zulu employees were very different from Chinese employees. Meanwhile, the Chinese managers mentioned the difficulties and challenges they were confronted with in South Africa. They also recommended to enhance relationship and communication with Zulu employees as measures to improve the way in which they lead in South Africa. The study of challenges to paternalistic leadership in cross-cultural context, as well as the differences of cultural values, is of great practical significance to the improvement of management and leadership effectiveness of Chinese organizations.

Keywords: Paternalistic leadership; Adaptation in cross-cultural context; Qualitative study
References


Why Am I Willing to Spend Money on Experiences That Are Dependent on Others?

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Abstract

We are moving into an experiential economy, much of our experiential consumption resulting from participation with others and group interactions. We know little about the unique nature of shared experiential consumption, as every experience depends on others involved. To this end, this research explores the motivations of shared experiential product consumption in the context of in-game purchasing. Twenty-five game players participated in the qualitative interviews, with data analysis following Wetherall, Potter, and Antaki (1988) and Spiggle (1994). In contrast to solitary experiential consumption, the research findings suggest four distinctive characteristics of shared experiential consumption in the MMORPGs (massively multiplayer online role-playing games) context: (1) singular and less interchangeable; (2) narrative in nature; (3) co-experience; (4) social in nature. Marketing messages should be designed to reflect the above identified characteristics of shared experiential consumption, emphasizing the sociality, narrative nature and unchangeability of consumer consumptions.

Keywords: Shared experiential consumption, MMORPGs, in-game purchase

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Brexit and Brand Origin: National Branding in Times of Crisis

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Abstract
Since the momentous UK decision to leave the European Union in 2016, this unfolding crisis has dominated international news headlines for almost 3 years. This study seeks to investigate whether and how Brexit impacts on UK's national image amongst Chinese consumers. Country of Origin (COO) research in the past 40 years has widely established the origin of product will affect product evaluation and purchase intentions( ). More recent studies started to highlight the importance of brand origin. Thakor and Kohli (1996) defined brand origin as the place, region or country to which the brand is perceived to belong to by its target customers. Koubaa (2008) and Thanasuta et al. (2009) confirmed that that brand origin have significant impact on consumer perception of foreign products. It has also been established that country of manufacture (COM) has become less relevant, (Phau and Chao 2008, Samiee 2010 and Usunier 2011). Magnusson et al. (2011) and Magnusson et al. (2013) concluded that brand origin is becoming a more important information cue than COM and 'Made in' labels. Roth and Romeo (1992) argued that national branding should match product category and country image perceptions. Verlegh and Steenkamp (1999) suggested that country image could have a strong impact on purchase intention. Wang et al. (2012) concluded that affective country image has a direct influence on purchase
intention. Le et al. (2014) argued that country image on consumer purchase intention is mediated by general and category product image. Paswan and Sharma (2004), Chansarkar and Kondap (2006) and Tjiptono (2016) concluded that accuracy of brand-country of origin is important, inaccurate knowledge leads to confusing and somewhat negative national image. A qualitative questionnaire was distributed to a group of 70 Chinese students studying at a UK university. They were asked to use 3 key words to describe the UK and write short sentences to explain what they actually mean. Without any promptings, Brexit and associated negativity dominated the responses, with over 60% responses used the word 'Brexit' or associated phrases, such as 'confusing', 'divided', 'chaotic', 'unwelcoming' and 'confusing', as a defining quality associated with UK. It appears that 'Brexit' has already caused some significant damage to the UK's national image. This is particularly worrying that the UK will be even more reliant on attracting people around the world for its leading industries, such as tourism and education. Negative associations such as 'unwelcoming' and 'chaotic' will drive potential business away. It is also contradict with the previous UK government's GREAT campaign and 'Global Britain' pledge post-Brexit to establish the country as a open and attractive destination.

Keywords: Brand Origin, Brexit, National Branding, Country of Origin

References


Are Happy Males Less Fair: The Implication of Positive Emotion on Consumer’s Moral Judgment?

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Abstract
We conducted three studies to explore the impact of incidental positive emotion on human’s costly penalty intentions on the third-party punishments and its implications on marketing, especially gender differences in this effect. Convergent results confirmed that the altruistic punishments increased with the growth of the level of unfairness, and the incidental positive emotion leaded males accept more unfairness than women. Study1 presented interesting results that although there was no significant gender difference in human’s third-party punishment intentions, men in positive mood would accept more unfair allocations than women. Study2a further tested the potential mechanism underlying this difference and found the ability of emotion regulation might play a crucial role on it, as a mediator. Study2b provided evidence that this process occurred unconsciously. Study3 revealed this effect worked validly in marketing as well-- men in positive emotion were inclined to choose the lower normal product/serve, but women’ intentions didn’t.

Keywords: Incidental Positive Emotion; Costly Punishment; Gender Difference; Third-party Dictator Game; Purchase Intention.
References


Research on Consumer Behavior of Social E-Commerce
—Take ‘Pingduoduo’ As an Example

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Abstract

With the further advancement of the mobile Internet, the consumption habits and psychology of e-commerce consumers are changing, and a social-based e-commerce model has emerged. The well-known domestic one is ‘pingduoduo’. In less than four years, it completed its listing and made some achievements. But at the same time there are still many problems. This paper proposes suggestions and countermeasures for the development of ‘pingduoduo’ by studying consumer behavior and psychological status.

Keywords: Social e-commerce; ‘pingduoduo’; Consumer Behavior;

References


Bundle or Partition? The Influence of Partitioned Goodwill on Consumer Participation in Caused-related Marketing

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Abstract

Enterprises hope to establish a good social image through caused-related marketing (CRM) to practice corporate social responsibility (CSR) and increase consumers' positive attitude towards the company. In existing marketing campaigns, companies mostly use traditional ways that bundling the price of the products and donations and promise to donate a certain percentage or amount of sales. However, since the perceived participation of consumers in the traditional form of donation is getting lower, which makes the cause of marketing has gradually lost its effect, and enterprises cannot achieve the purpose of establishing a social image. This paper combines the partition pricing theory, proposes a new form of donation, “partitioned goodwill”, to separate the donation from the product price, and further explore the impact of different forms of donation (partitioned goodwill vs. bundled goodwill) on consumer perception of participation and psychological reactance and the role of good cause familiarity to the regulation of this mechanism.

Keywords: Cause-Related Marketing; Partitioned Goodwill; Cause Familiarity; Perceived Participation; Psychological Reactance
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Confucian Green Innovation Thoughts and Its Practical Significance

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Abstract

This paper defines and analyzes the connotation of Confucian green innovation thoughts. It expounds the traditional Qin Confucian thought of "harmony between man and nature", the benevolence thought of "love things while being kind to the people", and the thought of "unity of heaven and earth and all things" in the Confucianism of Song and Ming dynasties. The paper respectively summarizes the green innovation ideas of Confucianism based on the relationship between human and environment. These green innovation thoughts include the unity of nature and human, the love of people and things, the people-oriented, the strong and economical use of things, the nature of things, and the new and new. It holds that the Confucian green innovation thought is the moral requirement of contemporary technological innovation and the basic concept to solve the dilemma of sustainable development between man and nature. And Confucian green innovation thoughts is of great practical significance to promote people to take the social responsibility of saving and caring for heaven and earth in green innovation and promote the harmonious coexistence of all things.

Keywords: Confucian; Green innovation; Confucian green innovation thought; Practical significance
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The Dating Failed, Blaming to Dining Room? Effect of Social Exclusion on Online Reviews

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Abstract

More and more consumers are using an online platform to order meals, tickets of movies and games, and hotel, etc., and then spending offline and giving reviews on the online platform after consumption. How do consumers' offline consumption experience affects online reviews? The results of three experiments using restaurant scenarios show that when consumers are socially excluded having a meal in the booking restaurant, whether from restaurants itself or consumers' partner for dating, which will result in negative reviews on the online platform. This is because consumers attributed being excluded to offline consumption scenarios, and blamed to the restaurant. Furthermore, brand awareness moderates the effect of social exclusion on online reviews. Specifically, if the restaurant is less-known, comparing with social inclusion, consumers will give more negative reviews to the restaurant on the online platform when they are in social exclusion; while being well-known, there is no significant difference on the reviews between social exclusion and social inclusion. Theoretical and practical implications are discussed in this article.

Key words: Social exclusion; Online review; Self-protection; Self-serving bias; Popularity
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The Application of fMRI and ERPs in Framing Effects: A Systematic Review

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Abstract
Framing effect refers to human’ preference or choices shift when information is described in terms of gains (positive frame) or losses (negative frame). As a common cognitive bias, framing effect uncovers the true appearance of people's decision-making in real life. Numerous scholars have empirically examined its role in all walks of life, such as marketing, investment, health, etc. Especially recent years, the applications of neuroscience technology like fMRI and ERPs have promoted underlying neural mechanism of framing effect, however, a systematical review of its spatial and temporal basis has been ignored. Thus, this study selected around 69 articles from web of science to be analyzed. For functional magnetic resonance imaging(fMRI) studies, we found out several regions of interest highly related to framing effect, which are insula, amygdala and anterior cingulate cortex (ACC). The activation of these brain areas varies under positive or negative frames and scholars consistently argued that cognitive effort and emotion play a key role in framing. For event related potentials (ERPs) approach, most studies focus on consumer’s information processing and purchase decision under attribute framing effect. Results show that four components (N2, P2, LPP and FRN) matter in framing, which are stimuli -induced, attention or decision-related. In all, the application of neuroscientific approaches to
marketing, management, (i.e., neuromarketing, neuro-management) is promising. More attention could be paid to framing effect in various new conditions.

Keywords: Framing effect; fMRI; ERPs; Insula; amygdala; ACC; N2; P2; LPP; FRN

References


The Effect of Place Attachment on Pro-Environmental Engagement: The Mediating Role of Perceived Responsibility

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Abstract

Previous research shows that urban Chinese residents are not actively engaged in pro-environmental behaviors despite the increasing environmental concern in China in recent years (Zhao & Hu 2017). One possible reason for this attitude-behavior gap is that Chinese residents tend to believe that it is the responsibility of government authorities, not the residents, to tackle these problems (Harris 2006; Zhao et al. 2014). Given the importance of public participation in pro-environmental management, it is thus of theoretical and practical significance to explore the antecedents to urban residents’ perceived responsibility and pro-environmental engagement.

In this research, we examine the role of place attachment and perceived responsibility in promoting urban residents’ pro-environmental engagement. First, drawing from social dilemma theory and place attachment literature, the paper proposes that urban residents’ attachment to their city has a positive impact on their adoption of pro-environmental behaviors. We posit that, although individual’s self-interest may hamper civic participation (Messick & Brewer, 1983), the affective bond people have with a place (i.e.
place attachment), can motivate residents to behave for the interest of the place instead of personal interest (Lewicka, 2011). Second, this paper hypothesizes that urban residents’ perceived responsibility for the local environment partially mediates the relationship between place attachment and pro-environmental engagement. Literature in environmental psychology shows that attachment to a place generates sense of commitment and responsibility for that place (Relph, 1976; Tuan, 1977; Ramkissoon, Smith & Weiler, 2013). Since individual’s sense of responsibility for the environment is one of the key drivers for pro-environmental behaviors (Hines, Hungerford & Tomera, 1986; Kaiser & Shimoda, 1999), we hence posit that urban residents who are attached to the city tend to feel more responsible for taking care of the city and thus are more likely to behave environmentally.

Drawing on a survey in Beijing, China, the research finds that: (1) urban residents’ attachment to the city significantly affects their pro-environmental engagement; (2) perceived responsibility for the environment is a partial mediator between place attachment and pro-environmental engagement. Thus, our findings demonstrate the importance of place attachment in engaging residents to participate in environmentally friendly activities. In particular, this research contributes to the literature by exploring the mechanism behind the link between place attachment and pro-environmental engagement, and demonstrating the importance of applying place attachment as an instrument tool to promoting residents’ perceived responsibility and pro-environmental behaviors.

**Keywords:** Environmental engagement; Place attachment; Perceived responsibility
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A Study on the Collaborative Innovation of Micro-Enterprises in Taiwan

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Abstract

With the uncertain recovery prospects of the global economy, the turmoil in the international political and economic environment, and the continuing slump in domestic employment and salary levels, valuing and supporting micro-enterprises with stable employment has become imperative. This study had three primary objectives: (1) examining how technological micro-enterprises can engage in effective collaborative innovation, (2) identifying the factors that influence the development of collaborative innovation of micro-enterprises with their partners, and (3) investigating the benefits that micro-enterprises can gain from collaborative innovation. We performed multiple case studies, analyzing 64 technological micro-enterprises participating in the government's guidance program. The results revealed the collaborative innovation of technological micro-enterprises and their partners focused on knowledge acquisition and exchange, new product and service development, joint promotion, market access expansion, and co-brand marketing. The internal factors that influence the development of collaborative innovation in micro-enterprises and their partners include number and scope of cluster members, differences among cluster members, leadership of leading manufacturer, learning abilities of cluster
members, profit sharing mechanisms among cluster members, and information transparency within cluster. The external factors include the geographic concentration of the cluster, opportunities in the target market, policy direction, and resources. The benefits that can be obtained from collaborative innovation include improved quality, enhanced technical capabilities, increased business opportunities, and the introduction of external resources. Finally, we put forward the following suggestions for relevant policies: (1) the development of technological micro-enterprises should be greatly supported; (2) collaboration with external networks such as incorporated organizations can enhance the collaborative innovation of micro-enterprises and their partners; (3) efforts should be made to develop the leadership skills of learning manufacturers in micro-enterprise clusters.

*Keywords:* Micro-enterprise; Collaborative Innovation; Technology Innovation
Exploring the Role of Decision-Making Factors in International Student Marketing Engagement: A Comparison Study

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Abstract

Internationalization of higher education and the increasing mobility of college students in the global higher education service marketplace lead to increasing research scrutiny on international student study experience in host countries (Altbach & Knight, 2007). The ongoing research attention on international students originate from the increasing enrollment of foreign students in USA universities and institutions. According to the Institute of International Education (IIE, 2018), there were 1,094,792 International students in USA in 2017/18 academic year, a 1.5% increase compared with those in the previous year. Specifically, the international students from China represented the largest group among all international students in USA (33.2%), with 363,341 in 2017/18, while the international students from India was the second largest group with 196,271 in 2017/18, representing 17.9% of all international students in USA. These two groups represent over half of all international students in USA (51.1%) and the number of international students from these two countries was increasing in the recent couple of years. Despite of the fact that majority of international students in USA are from China and India, there is no existing study to compare these two groups to the best of our knowledge. In addition, few studies in the extant literature explore the consumer decision-making factors in the customer
marketing engagement (CME) in the post-acquisition stage. Since the entire customer experience and manifested engagement begin with pre-purchase stage of the customer journey (Lemon & Verhoef, 2016), it is worthwhile to explore these aspects of international students (Van Doorn et al., 2010) and compare the variations among different international student groups. Therefore, this study intends to bridge this literature void and connect the international student decision-making factors with their CMEs with the higher education service providers.

The context of this study is USA higher education service marketed to international students. A total of 174 schools with international student enrollment of at least 1,000 were identified from the directory prepared by the Institute for International Education in New York, NY. Collectively these schools enroll almost 563,100 international students. The International Student Office (ISO) or equivalent at these schools were contacted via email and invited to participate in a national survey of international students. Twenty-two schools accounting for nearly 75,000 international students agreed to participate. The data collection was conducted in the 4th quarter of 2016 and finalized in February 2017. The survey resulted in a total of 670 valid responses that reported home countries, among which China (170 or 25.4%) and India (109 or 16.3%) are the top two home countries of survey participants. This study adapted existing scales to measure the pre-consumption decision making factors and post-consumption engagement factors (Paswan & Ganesh, 2005, 2009; Paswan et al., 2007).

One-way ANOVA analyses were utilized to show the different emphases of the pre-consumption decision making factors between Chinese and Indian international students. The results show that both Chinese and Indian international students considered the value or the reputations of U.S. universities an important determinant factor for their study-abroad decisions. But Chinese students valued the influence or recommendations more than Indian students (MChina = 3.60
vs. MIndia = 3.17; p = 0.025), while Indian students focused more on employment opportunities (MChina = 4.30 vs. MIndia = 5.11; p = 0.000). Additional multiple regression analysis on pre-consumption factors and post-consumption engagement factors between Chinese and Indian international students discloses that for Indian students, the influence factor is positively related to all engagement factors except CME interactive. For Chinese students, the program factor negatively affects all engagement factors except CME benevolent, value factor is positively related to both persuasive and benevolent engagement, influence factor is positively related to cognitive engagement, and employment factor is positively related to benevolent engagement. The theoretical and managerial implications, as well as the limitations and future research directions for international higher education service marketing were discussed at the end.

**Keywords:** Chinese International Students; Indian International Students; Pre-consumption Decision Making Factors; Post-consumption Engagement Behaviors

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Research on Connotation and Evaluation Index System of Residents' Green Consumption Upgrading

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Abstract

This paper summarizes the research literature at home and abroad, analyzes and defines the concept and connotation of residents' green consumption and residents' green consumption upgrading. Drawing lessons from the common experience of consumption upgrading in the United States, South Korea, Japan and other developed countries, and combining with the characteristics of China's national conditions, this paper analyzes the significance of further expanding green consumption in China and promoting green consumption upgrading. Only by cultivating green consumption in key areas, attaching importance to the phenomenon of green consumption classification and stratification, and strengthening the supply-side reform of green consumption and improving residents' willingness to consume green, we can jointly promote the upgrading process of green consumption in China.

Paper analyses the factors influencing the residents' green consumption upgrade, build the evaluation index system of residents' green consumption upgrade, the index system by the primary index layer and secondary indexes; and the primary index is mainly composed of green traffic consumer upgrades, green household consumption, green consumption upgrade social activities such as three dimensions. Finally, an application case of evaluation index system is given.
Keywords: Residents' green consumption; Consumption upgrading; Evaluation index

References


Research on the Formation Mechanism of Social Exclusion on Airbnb Advertising Appeal Preference of Consumers — Mediating Role of Threat of Needs

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Abstract

As a new form of accommodation, Airbnb implements a differentiated marketing approach that attracts users primarily through two online advertising strategies. The former emphasizes “a unique accommodation experience” (uniqueness appeal) and the latter emphasizes “feel at home” (belongingness appeal). However, which advertising strategy is more attractive? It still lacks of in-depth research.

Studies have shown that individuals have different psychological characteristics in different interpersonal situations, which leads them to have a preference for specific types of advertising appeals. Therefore, how to choose appropriate advertising strategy according to the psychological characteristics of different consumers is particularly important. Previous studies have shown that social exclusion as a special experience will affect individual consumption behavior and different types of social exclusion have different effects on consumer behavior.
In such a context, this study aims to complement the existing literature and reach the following specific objectives: (1) will different social exclusion experiences affect consumers’ preferences for Airbnb advertising appeals? and (2) if it does, what is the mechanism? This article attempts to explain it from the perspective of consumer psychological needs and based on this theory, we propose the research path of “being ignored-threatening efficacy needs-uniqueness appeal” and “being rejected-threatening relational needs- belongingness appeal” to provide references for enterprise marketing.

A total of three experiments are required. Experiment 1 aims to examine the impact of different types of social exclusion on consumers’ Airbnb advertising appeal preferences. The experimental design of the subjects was adopted using 2 (social exclusion: being ignored vs being rejected) × 2 (Airbnb advertising strategy: uniqueness appeal vs belongingness appeal). Experiment 2 and experiment 3 are based on the mediation test of the psychological threat of self-test and manipulation respectively. Adopt 2 (social exclusion: being ignored vs being rejected) × 2 (psychological needs threat: efficacy needs threat vs relational needs threat) × 2 (Airbnb advertising strategy: uniqueness appeal vs belongingness appeal) inter-group experiments.

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How Different Money Tagged with Money Influence Dashang

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Abstract

With the rise of social media, dashang has developed markedly in recent years. Dashang refers to a behavior in which online content viewers reward content suppliers (e.g., online broadcast presenters or essay authors) with money or virtual gifts. Drawing on emotional accounting and cognitive appraisal theories, this research examined the effects of pride-tagged money and surprise-tagged money on dashang. It also examines the mediating role of self-inflation and the moderating role of the perceived importance of money in the relationship. Four experimental studies were conducted to test its hypotheses using ANOVA and bootstrap analyses. The results reveal that pride-tagged money leads to higher self-inflation than surprise-tagged money, which in turn leads to increased willingness to engage in dashang. The results also illustrate that when a person’s perceived importance of money is low, pride-tagged money (vs. surprise-tagged money) results in increased willingness to engage in dashang. By contrast, when the perceived importance of money is high, no significant difference is observed in dashang between pride-tagged money and surprise-tagged money. In addition, this research reveals that pride-tagged money (vs. surprise-tagged money) leads to
increased willingness to provide online tips of larger amounts, whereas perceived
importance of money moderates this relationship. Practically Web-based marketing
managers should design programs (e.g., content that encourages users to feel pride in
their achievements or bonuses) that cause users to emotionally tag their money with
pride as a means of increasing their willingness to engage in dashang and to increase
the amount of such tips.

**Keywords:** Dashang; Pride-tagged money; Surprise-tagged money; Self-inflation

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Do Consumers with Higher Goal Specificity More Reluctant to Migrate from Online towards Offline?  
— Goal Specificity, Product Information Intensity and Channel Migration Intention

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Abstract
This research mainly investigates the extent of consumers’ channel migration intention from online towards offline in response to goal specificity, as well as the mediating role of consumers’ online channel usage attitude. Furthermore, the moderating effect of product information intensity on the relationship between goal specificity and channel migration intention is also studied. Results from a study adopting 240 questionnaires show that goal specificity has a negative effect on consumers’ channel migration intention. Moreover, attitude acts as a mediator on the effect of goal specificity on channel migration intention. Product information intensity acts as a negative moderator on the relationship of goal specificity and channel migration intention. That is, under the condition of low product intensity, higher goal specificity causes lower channel migration intention; under the condition of high product intensity, no differences were found in channel migration intention between high and low goal specificity. Attitude
still acts as a mediator when product information intensity moderates the relationship between goal specific and online migration intention.

**Keywords:** Goal specificity; Channel migration intention; Product information intensity; Channel usage attitude

**References**


Supply Chain Collaborative Innovation
With the Manufacturer's Altruism

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Abstract
Innovation is one of the key drivers in the creation of high-technology products, more and more research is focused on supply chain innovation, but much of the research on decision making in an innovative supply chain has assumed that the agents in the supply chain are risk neutral, fairness et al, but not altruism. In this paper, we consider a two-echelon supply chain where an upstream supplier sells through a downstream manufacturer with altruistic preference. The supplier is accountable to invest effort in an innovation, and the manufacturer who embodies the channel power sets the product price and sells to consumers. We study the profit/investment implications of collaboration between two parties for upstream innovation by scrutinizing two types of contracts: Wholesale price contract and cost sharing contract. Applying the equilibrium analysis, we obtain the following results: (1) For the wholesale price contract manufacturer's altruistic preferences can increase the level of innovation and supplier profits, but for the utility of the manufacturer, is not always good; (2) While Cooperating through cost sharing contract, the level of innovation and the effectiveness of the manufacturer reach an optimal level, and are not affected by altruism; (3) Compared to wholesale price contracts, the level of innovation in the supply chain of cost-sharing contracts and the effectiveness of manufacturers are always better. But altruistic preferences will weaken the advantages of cost-sharing contracts and reduce the willingness of manufacturers to cooperate by cost sharing contract; (4) with the
wholesale price contract, higher altruistic preferences will greatly improve the level of innovation in decentralized decision-making situations which is better than the centralized case. These findings have important implications for enterprises to make innovative decisions.

*Keywords*: Supply chain innovation; Altruistic preference; Cost sharing contract; Wholesale price contract

**References**


Systematic Business Model Innovation

Mr Iftekhar Mahfuz

Independent University, Bangladesh

Abstract

There are problems with implementing business model innovations across companies. In this paper we investigate the similarities and differences between product innovation and business model innovation process so that best practices and insights can be transferred or applied. We put together the key findings of product innovation management into a framework which is then used to analyze 10 cases of business model innovation. This paper aims to contribute towards a better understanding of different types of business model innovation based on the analysis of the cases. Deeper understanding of improved management of business model innovation is derived from the cases. Potential benefits of a more structured and holistic approach to innovation process is realized through the findings of this paper.

Keywords: Business model innovation; product innovation management

References


Nostalgia Decreases Green Consumption: The Mediating Role of Past Orientation

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Abstract

Nostalgia, a sentimental longing for one’s past, can influence consumption behavior. The present research investigates how nostalgia affects green consumption. Specifically, we propose that high nostalgia, chronic or primed, can lower consumers’ preference for green (vs. regular) products. Results across four studies show that high-nostalgia consumers have lower preference for green products compared to low-nostalgia consumers. This effect is mediated by past orientation, such that high-nostalgia consumers tend to dwell on the past, which brings preference to the older products, usually regular rather than green ones that have future connotations, they grew up with. In addition, we find that mortality salience moderates the effect of nostalgia on green product preference, such that the negative effect of nostalgia on the preference for green products would be enhanced (vs. mitigated) when mortality salience is high (vs. low). Implications for research and practice are discussed.

Keywords: Nostalgia; Green Consumption; Past Orientation

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Whose Customer Satisfaction Matters?
— Evidence of Stock Returns from the Perspective of Industry and Competitors

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¹ City University of Hong Kong
² Hong Kong Baptist University
³ Chinese University of Hong Kong.

Abstract
Previous research has examined individual firm’s customer satisfaction and its impact on firm’s abnormal return on the stock market but found mixed results. This paper offers a new perspective for examining the link between customer satisfaction and short-term stock market reactions by considering two confounding factors – industry-level and rival’s customer satisfaction. Results show a significant positive relationship between firm’s customer satisfaction and focal firm’s abnormal return in a 5-day event window. However, this relationship is significantly weakened when adding industry average level of customer satisfaction and rivals’ customer satisfaction in the model, indicating that investors placed particular emphasis on industry benchmark and rivals’ customer satisfaction when evaluating focal firm’s customer satisfaction. In highly competitive industries, rivals’ growth in customer satisfaction has a stronger negative impact on focal firm’s abnormal return. When investors access more information about the focal firm, the impact of rivals’ growth in customer satisfaction on focal firm attenuates. The present study solves a puzzle in the literature and advances extant knowledge in evaluating the link between customer satisfaction and
stock returns.

*Key words:* customer satisfaction, stock returns, industry, rival
Make Me Pretty: From Selfie Apps Usage to Cosmetic Surgery

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¹International University – Vietnam National University

Abstract

Would there be a relationship between selfie app usage and the positive attitude toward cosmetic surgery? Yes, there would be. The Tripartite Influence Model of Body Image was adapted to examine the role of body satisfaction, perceived pressure to have cosmetic surgery, and selfie app usage in understanding cosmetic surgery attitudes. 1048 participants were; men (N=245) and women (N=803) college students from Vietnam who completed a range of measures that assessed levels of body satisfaction, perceived appearance pressures, selfie app usage behavior, and cosmetic surgery attitudes. A structural equation model was used to test hypothesized relations independently for men and women. Results indicated a good fit to the data, with both selfie app usage and body satisfaction mediating the effect of perceived pressures on cosmetic surgery attitudes. Invariance testing revealed significant differences in pathway estimates between samples of men and women. The findings offer further support for the Tripartite Influence Model of Body Image and indicate potential factors that may influence cosmetic surgery attitudes.

Keywords: Selfie App Usage; Body Satisfaction; Cosmetic Surgery; Consumer Behavior

References


28. Wang Lianzhang (2019), A Surgically Sculpted Face, the Newest Back-to-School Necessity, Sixth Tone
Promotion Strategy of Competing Sellers on Online Marketplace

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¹School of Business Administration, Zhongnan University of Economics and Law, Wuhan 430073, China

Abstract

On online marketplace, promotion activities have become a powerful means for sellers and platforms to cope with competition and gain higher returns. We build a multi-stage game model to study whether the sellers will participate in the platform-initiated promotion while they have their own in-store promotions in a supply chain with two competing sellers selling on an online retail platform, and how the equilibrium strategy of sellers and the optimal rebate values of both sellers and platform vendor are affected by parameters such as participation cost, market size, regular prices of products, cost of products, commission rate and competition coefficient. The analysis indicates that, if participation cost is quite small, the best choice of both sellers is to join the platform-initiated promotion, otherwise, the equilibrium choice of sellers changes as participation cost differs. And the equilibrium strategy distribution is also related to commission rate. Further, the analysis leads to some interesting conclusions: when the seller participates in the platform-initiated promotion, it will set a lower in-store rebate value, thus weakening the competition among the sellers; more sellers participate in platform-initiated promotion leads to
higher revenue of the platform vendor; in general, the more intense the competition between sellers, the lower the revenue of sellers and the higher revenue of platform vendor, but in the promotion scenario it isn’t always like this because the equilibrium strategy changes.

**Keywords**: Online marketplace; Platform promotion; Rebate; Competition; Game theory

**References**


FULL PAPER (IN CHINESE)
A Study of Consumers’ Purchase Intention of Brand Extension

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Abstract
Managing brand extension is a challenge for every business. Getting to know driving factors that influence consumer’s purchase intention is important for businesses. This paper studies what factors may influence consumers’ purchase intention of extended products and their overall brand loyalty. By using a combination of theoretical basis and empirical survey, this study results showed that perceived fitness and similarity between parent and extended brands, parent brand awareness, parent brand satisfaction, brand communication significantly and positively impact consumers’ purchase intention of the extended products, and finally, the purchase intention of extended products also significantly impact overall brand loyalty.

Keywords: Brand Extension; Consumer Purchase Intention; Brand Loyalty
消费者对延伸产品购买意愿影响因素的研究

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摘要

本文从消费者的视角出发，研究了品牌延伸过程中什么样的因素会影响消费者对延伸产品的购买意愿以及对整体品牌的忠诚度。在理论分析与实证研究结合的基础上，本研究以“旺旺”品牌为例，构建了消费者对于该品牌延伸产品购买意愿的理论模型。通过回收259份有效问卷，以及采用结构方程模型进行验证后，研究结果显示感知契合度、延伸品牌与母品牌相似度、母品牌认知、母品牌满意度和品牌营销能力均会显著正向影响消费者对延伸品牌的购买意愿，与此同时，消费者对延伸品牌的购买意愿又显著影响整体品牌的忠诚度。

关键词：品牌延伸；消费者购买意愿；品牌忠诚

1. 引言


本研究在品牌延伸理论及消费者购买意愿的基础上，以旺旺集团为例，通过实证检验，提出消费者感知契合度、延伸品牌与母品牌相似度、母品牌认知、母品牌满意度和品牌营销能力这六大因素会影响消费者对延伸品牌的购买意愿，并进一步影响消费者对品牌整体的忠诚度。研究结果为企业在实施延伸战略时提供有益的参考信息和品牌扩展策略，避免企业在运营过程中存在盲目性延伸，从而提升消费者的整体忠诚度。

2. 文献回顾与研究假设

2.1 品牌延伸的相关研究
从20世纪70年代出现品牌延伸的概念以来，学术界对于品牌延伸相关的概念非常丰富。Keller（1992,1997）认为，品牌延伸是将现有品牌名称应用于另一种新的和不同类别的商品，并利用原有品牌的影响来推广新产品的过程。Volckner & Sattler（2006）也提出品牌延伸就是借助母品牌名称的市场效应去宣传新的产品。我国学者范秀成和高琳（2002）将品牌延伸的定义理解为，企业借助消费者对母品牌产品爱屋及乌的心里表现，继续推出新的产品或服务，这样有利于企业降低拓展新产品造成经济损失或对母品牌形象的破坏，也有利于企业节省资源和成本。

Kim, Lavack & Smith（2001）提出了品牌延伸的两种方式：横向延伸和纵向延伸。横向延伸是指延伸产品与产品线延伸的相似性，纵向延伸是指同一类别产品的延伸，其质量水平和价格不同。Sheinin & Schmitt（1994）发现品牌延伸可以分为两种类型。一个是产品类别扩展。原始产品与扩展产品具有相似的特性。例如，宝洁公司将原来的佳洁士牙膏产品延伸到牙刷上。二是新产品概念的延伸，在原有的产品类别中形成新的竞争属性。例如，佳洁士牙膏是新推出的一种茉莉花茶味牙膏，同时也在市场上销售新的和原装的牙膏。

2.2 影响品牌延伸的因素

（1）感知契合度

Tauber（1988）提出感知契合度就是消费者对母品牌的认知与延伸产品的认知具有相似性及一致性。Aaker & Keller（1990）提出感知契合度对品牌延伸的成功至关重要，如果两种产品的契合度过低，消费者受母品牌的感知的影响，对延伸产品的移情效果不仅会降低，还会对延伸产品产品消极的联想，甚至对整个品牌造成伤害。Volckner & Sattler（2006）提出感知契合度是影响企业是否将品牌延伸策略发展成功的重要因素。因此，我们提出如下假设：

H1：消费者感知契合度正向影响消费者对延伸产品的购买意愿。

（2）延伸产品与母品牌的相似性

Ruyter（2000）认为产品的相似性指的是母品牌的产品与延伸后的产品之间有着相似的特征。Klink & Smith（2001）将品牌延伸相似性分为三种：类型相似性、技术相似性及渠道相似性。类型相似性是指扩展产品与原产品是否属于使用中的相似或相似类型。技术相似性是指延伸产品的制造技术与原产品相同或相似。渠道相似性是指当母品牌的商品与延伸的产品通过利用共同的渠道和推广模式时，不仅可以节省成本、人力和资源，减少渠道障碍，使经济效益提升，还能减少消费者对新产品了解的时间，获得更多熟悉品牌的机会。当母品牌现有的技术和资源能够满足客户的一般需求时，具有高度相似性的延伸产品更有可能成功。因此延伸产品与母品牌的产品有越相似的属性，则品牌延伸的成功率就越大。

H2：延伸产品与母品牌相似性正向影响消费者对延伸产品的购买意愿。

（3）母品牌产品形象

品牌实力是品牌延伸十分重要的因素。Broniarczyk & Alba（1994）认为消费者对母品牌认知和母品牌的产知名度都是影响品牌延伸成功的重要条件。消费者对于品牌的认知指的是顾客是否在第一次或多次购买的经历，在脑海中可
以记录和识别出某种品牌是哪一类产品的能力，进而在顾客的潜意识里构建起
品牌与产品间的关联，明白该品牌的产品可以满足顾客的哪些需求。消费者对
品牌的认同和满意是指消费者对品牌的认可、信赖。消费者对母品牌越认同越
满意，品牌延伸战略的实施也就越容易被消费者接受。综上所述，母品牌的产
品形象越正面，可转移的品牌资产就越大，那么消费者对延伸的品牌购买意愿
也会越强。因此，我们提出如下假设：

H3：消费者对母品牌的认同度正向影响消费者对延伸产品的购买意愿。
H4：消费者对母品牌的品牌认知正向影响消费者对延伸产品的购买意愿。
H5：消费者对母品牌的满意度正向影响消费者对延伸产品的购买意愿。

（4）品牌营销能力

营销能力对品牌延伸能否成功实施既有直接关系，也有复杂的间接关系。
Aaker & Keller(1990) 提出如果延伸产品可以有充足的资金投入到广告和促销等
营销方面的支持，那么消费者越容易接触到延伸产品，并与产品建立联系。当
企业对营销的支持力度越大，企业的分销商也更容易接受和销售新的产品，消
费者也能从分销商那边获得更好的服务，从而使消费者更直接获得延伸产品。因
此，我们提出如下假设：

H6：品牌的营销能力正向影响消费者对延伸产品的购买意愿。

（5）消费者购买意愿与品牌忠诚度的关系

品牌忠诚是一个涵盖了认知、态度、行为等多种维度的复杂领域。
Oliver(1980) 提出了品牌忠诚指的是消费者对于所喜爱产品有再购买的倾
向及实质地购买行为。当消费者选择反复购买该品牌的产品，这样购买行为说明
消费者已与产品建立了联系，形成了品牌的忠诚。这个阶段的顾客通常会忽略
来自同行业竞争对手的诱惑，可以为企业创造巨大的收益。同理，消费者
如果对延伸品牌产生积极地购买意愿，这反映出消费者与品牌整体之间建立了
积极正向的联系，那么进而会影响消费者对母品牌的忠诚度。因此，我们提出
如下假设：

H7：消费者对延伸品牌的购买意愿正向影响消费者对母品牌的忠诚度。

综上，本文构建了影响消费者对延伸品购买意愿的概念模型如图2-1所示：

图 2-1 研究模型
3 研究设计

3.1 量表设计

本研究所有题项均参考前人学者已有的成熟测量量表，各变量测量均采取Likert 7级量表，答案从“1 非常不同意”到“7 非常同意”。表3-1 为量表题项汇总。

3.2 数据收集

以往文献对品牌延伸的研究主要采用情景假设模拟实验法（Aaker and Keller, 1990），本文也使用假设情景来设计调查问卷。在情景假设中，本文选择广为熟知的旺旺品牌作为研究对象，旺旺品牌从最初的食品类，已经延伸到不同类别的其他产品。通过测量消费者对旺旺品牌的认知度、满意度、忠诚度、以及对旺旺品牌新延伸产品的购买意愿，来分析什么样的因素可能影响消费者对延伸品牌的购买意愿及对母品牌的品牌忠诚度。

本次调查问卷主要以网络调查方式获得，总共向调查对象发放了286份问卷，删减掉错误及无效的问卷27份，最终的有效问卷为259份，有效回收率约为91%。其中，男性占比39.4%，女性占比为60.6%；年龄分布中，小于25岁占比13.9%，26-45岁为70.7%，大于45岁为15.4%。

表3-1 测量题项

<table>
<thead>
<tr>
<th>变量的维度</th>
<th>具体测量的题项</th>
<th>参考文献来源</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2. XX品牌推出XX（延伸后的新产品）是合理的，一点也不奇怪</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. XX产品（延伸后的新产品）与母品牌的品牌形象是匹配的</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. 延伸产品与母品牌可以满足消费者类似的需求</td>
<td></td>
</tr>
<tr>
<td>母品牌认知</td>
<td>1. 您对XX品牌是喜欢的</td>
<td>Aaker &amp; Keller, 1990</td>
</tr>
<tr>
<td></td>
<td>2. 您对XX品牌的产品感到满意</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. XX品牌的产品让您感觉安全</td>
<td></td>
</tr>
<tr>
<td>母品牌认同度</td>
<td>1. 您信任XX品牌</td>
<td>Chaudhuri, 2002</td>
</tr>
<tr>
<td></td>
<td>2. 您认为XX品牌是可靠的</td>
<td></td>
</tr>
</tbody>
</table>
3.您认为 XX 品牌使您感到放心

| 母品牌满意度 | 1. 您确定认为购买 XX 品牌是个正确的决定  
| | 2. XX 品牌总体来说，让您满意  
| | 3. 在购买 XX 品牌的产品过程中一直很好  
| 品牌营销能力 | 1. 您认为 XX 品牌的营销方式很好  
| | 2. XX 品牌的销售方式令您满意  
| 延伸品购买意愿 | 1. 我会愿意尝试购买 XX 品牌的 XX 产品  
| | 2. 在选择购买 XX 产品类别时，您会考虑 XX 品牌的 XX 产品  
| | 3. 下次您需要该物品的时候，您还会选择 XX 品牌的 XX 产品  
| 品牌忠诚度 | 1. 您很拥护该品牌  
| | 2. 您会告诉您的朋友 XX 品牌有多好  
| | 3. 您会推荐其他人购买该品牌产品  
| | 4. 下次买同类产品时，该品牌的产品是我的第一考虑选择  
| | 5. 您打算持续购买该品牌产品  

Lau & Lee, 1999; Oliver, 1980;  
Aaker & Keller, 1990; Reddy, 2001  
Dacin et al., 1994; Fullerton, 2005.  

### 3.3 数据分析与假设检验

本研究所有变量的 Cronbach’s alpha 系数如表 3-2 所示，说明问卷具有较高的可信度。模型通过验证性因子分析验证，问卷效度及维度设置合理，具体信息详见表 3-3。因子模型的适配指针结果如表 3-4 所示，所有指标均达到适配标准，总体上模型拟合情况良好，模型结果较有说服力。

<table>
<thead>
<tr>
<th>变量</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>品牌认知</td>
<td>0.894</td>
</tr>
<tr>
<td>母品牌认同度</td>
<td>0.858</td>
</tr>
<tr>
<td>品牌满意度</td>
<td>0.9</td>
</tr>
<tr>
<td>营销能力</td>
<td>0.957</td>
</tr>
<tr>
<td>品牌忠诚度</td>
<td>0.941</td>
</tr>
<tr>
<td>变量</td>
<td>Cronbach's Alpha</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>感知契合度</td>
<td>0.886</td>
</tr>
<tr>
<td>延伸品牌相似度</td>
<td>0.967</td>
</tr>
<tr>
<td>购买意愿</td>
<td>0.798</td>
</tr>
</tbody>
</table>

表 3-3 验证性因子分析

<table>
<thead>
<tr>
<th>潜变量</th>
<th>测量项</th>
<th>因子载荷</th>
<th>组合信度</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>母品牌认知</td>
<td>品牌认知 1</td>
<td>0.827</td>
<td>0.895</td>
<td>0.74</td>
</tr>
<tr>
<td></td>
<td>品牌认知 2</td>
<td>0.866</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>品牌认知 3</td>
<td>0.887</td>
<td></td>
<td></td>
</tr>
<tr>
<td>母品牌认同度</td>
<td>母品牌认同度 1</td>
<td>0.898</td>
<td>0.864</td>
<td>0.679</td>
</tr>
<tr>
<td></td>
<td>母品牌认同度 2</td>
<td>0.771</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>母品牌认同度 3</td>
<td>0.798</td>
<td></td>
<td></td>
</tr>
<tr>
<td>母品牌满意度</td>
<td>品牌满意度 1</td>
<td>0.886</td>
<td>0.9</td>
<td>0.75</td>
</tr>
<tr>
<td></td>
<td>品牌满意度 2</td>
<td>0.836</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>品牌满意度 3</td>
<td>0.875</td>
<td></td>
<td></td>
</tr>
<tr>
<td>品牌营销能力</td>
<td>营销能力 1</td>
<td>0.94</td>
<td>0.957</td>
<td>0.918</td>
</tr>
<tr>
<td></td>
<td>营销能力 2</td>
<td>0.976</td>
<td></td>
<td></td>
</tr>
<tr>
<td>感知契合度</td>
<td>感知契合度 1</td>
<td>0.872</td>
<td>0.886</td>
<td>0.722</td>
</tr>
<tr>
<td></td>
<td>感知契合度 2</td>
<td>0.856</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>感知契合度 3</td>
<td>0.821</td>
<td></td>
<td></td>
</tr>
<tr>
<td>延伸品牌与母品牌相似度</td>
<td>品牌相似度 1</td>
<td>0.953</td>
<td>0.967</td>
<td>0.935</td>
</tr>
<tr>
<td></td>
<td>品牌相似度 2</td>
<td>0.981</td>
<td></td>
<td></td>
</tr>
<tr>
<td>延伸品购买意愿</td>
<td>购买意愿 1</td>
<td>0.868</td>
<td>0.81</td>
<td>0.589</td>
</tr>
<tr>
<td></td>
<td>购买意愿 2</td>
<td>0.735</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>购买意愿 3</td>
<td>0.688</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 品牌忠诚度

<table>
<thead>
<tr>
<th>品牌忠诚度</th>
<th>品牌忠诚 1</th>
<th>0.909</th>
<th>0.941</th>
<th>0.762</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>品牌忠诚 2</td>
<td>0.823</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>品牌忠诚 3</td>
<td>0.857</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>品牌忠诚 4</td>
<td>0.861</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>品牌忠诚 5</td>
<td>0.912</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 表 3-4 结构方程模型拟合优度

<table>
<thead>
<tr>
<th>指标</th>
<th>CMIN/DF</th>
<th>RMSEA</th>
<th>SRMR</th>
<th>GFI</th>
<th>CFI</th>
<th>IFI</th>
<th>PNFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>标准</td>
<td>&lt;3</td>
<td>&lt;.08</td>
<td>&lt;.08</td>
<td>&gt;.9</td>
<td>&gt;.9</td>
<td>&gt;.9</td>
<td>&gt;.5</td>
</tr>
<tr>
<td>模型</td>
<td>1.5</td>
<td>0.04</td>
<td>0.06</td>
<td>0.9</td>
<td>0.97</td>
<td>0.98</td>
<td>0.77</td>
</tr>
</tbody>
</table>

### 3.4 模型结果讨论

模型变量间的相关性系数如表 3-5 所示，研究结果显示各变量均有显著的正向相关关系。路径系数如表 3-6 所示，除母品牌认同度对延伸品牌购买意愿不显著外，其他路径系数均显著正向影响消费者延伸品牌购买意愿及母品牌忠诚度。

### 表 3-5 变量相关系数

<table>
<thead>
<tr>
<th>变量</th>
<th>品牌认知</th>
<th>母品牌认同度</th>
<th>品牌满意度</th>
<th>营销能力</th>
<th>感知契合度</th>
<th>品牌相似度</th>
<th>购买意愿</th>
<th>品牌忠诚</th>
</tr>
</thead>
<tbody>
<tr>
<td>品牌认知</td>
<td>0.86</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>母品牌认同度</td>
<td>0.32**</td>
<td>0.82</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>品牌满意度</td>
<td>0.22**</td>
<td>0.21**</td>
<td>0.87</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>营销能力</td>
<td>0.19**</td>
<td>0.03**</td>
<td>0.08**</td>
<td>0.96</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>感知契合度</td>
<td>0.23**</td>
<td>0.17**</td>
<td>0.106**</td>
<td>0.21**</td>
<td>0.85</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>品牌相似度</td>
<td>0.24**</td>
<td>0.18**</td>
<td>0.119**</td>
<td>0.11**</td>
<td>0.17</td>
<td>0.97</td>
<td></td>
<td></td>
</tr>
<tr>
<td>购买意愿</td>
<td>0.48**</td>
<td>0.28**</td>
<td>0.329**</td>
<td>0.32**</td>
<td>0.38</td>
<td>0.31**</td>
<td>0.77</td>
<td></td>
</tr>
<tr>
<td>品牌忠诚</td>
<td>0.36**</td>
<td>0.36**</td>
<td>0.38**</td>
<td>0.2**</td>
<td>0.20</td>
<td>0.18**</td>
<td>0.45**</td>
<td>0.87</td>
</tr>
</tbody>
</table>
注：对角线知为相应变量的 AVE 正平方根，对角线下方为各潜变量之间的相关系数。

### 表 3-6 模型标准路径系数表

<table>
<thead>
<tr>
<th>路径关系</th>
<th>标准路径系数</th>
<th>标准误差</th>
<th>C.R.</th>
<th>假设结果</th>
</tr>
</thead>
<tbody>
<tr>
<td>购买意愿&lt;---感知契合度</td>
<td>0.22***</td>
<td>0.06</td>
<td>3.47</td>
<td>H1 成立</td>
</tr>
<tr>
<td>购买意愿&lt;---延伸品牌相似度</td>
<td>0.14*</td>
<td>0.05</td>
<td>2.37</td>
<td>H2 成立</td>
</tr>
<tr>
<td>购买意愿&lt;---母品牌认同度</td>
<td>0.1</td>
<td>0.06</td>
<td>1.56</td>
<td>H3 不成立</td>
</tr>
<tr>
<td>购买意愿&lt;---品牌认知</td>
<td>0.31***</td>
<td>0.07</td>
<td>4.61</td>
<td>H4 成立</td>
</tr>
<tr>
<td>购买意愿&lt;---品牌满意度</td>
<td>0.22***</td>
<td>0.06</td>
<td>3.54</td>
<td>H5 成立</td>
</tr>
<tr>
<td>购买意愿&lt;---营销能力</td>
<td>0.19**</td>
<td>0.05</td>
<td>3.29</td>
<td>H6 成立</td>
</tr>
<tr>
<td>品牌忠诚度&lt;---购买意愿</td>
<td>0.5***</td>
<td>0.07</td>
<td>7.37</td>
<td>H7 成立</td>
</tr>
</tbody>
</table>

注：***表示 P 值小于 0.001；**表示 P 值小于 0.01；*表示 P 值小于 0.05

### 4 结语

本文通过研究何种因素会影响消费者对延伸品牌的购买意愿的过程中，通过实证分析发现感知契合度、消费者对母品牌的认知及满意度、品牌的营销能力、母品牌与延伸品的相似度会显著影响消费者对延伸品牌的购买意愿，而消费者对延伸品牌的购买意愿又会显著影响整体品牌的满意度。基于以上实证检验的结果，我们为品牌延伸策略提供以下建议：

第一，品牌延伸时避免推出契合度和相似度低的产品。在品牌延伸时，企业应谨慎考虑推出延伸契合度和相似度低的产品。如果新延伸产品与原先的产品相似度和契合度过低，母品牌的信誉度和竞争力也会受到损害。因此盲目的产品延伸会为企业带来潜在风险。

第二，强化品牌形象，增强品牌整体满意度。企业在运营过程中，一定要努力强化消费者对母品牌的认可和满意。母品牌的核心价值包括是否被普遍消费者所熟知，是否有很好的认同和满意。当顾客对母品牌产品感到满意时，消费者才会对延伸产品产生购买意愿，并同时影响品牌忠诚。

第三，运用良好的营销策划。好的营销策划，如广告宣传、促销活动、还有产品试用等，都有利于延伸产品快速进入市场，能让消费者快速直接接触到该产品，从而逐渐建立消费者品牌关系，最终形成品牌购买意愿及忠诚。
致谢: 该文章获澳门科技大学基金会支持 (FRG-19-002-MSB)。

参考文献


24. .


The Implication and Value of Microfilm Advertising

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¹ Macau University of Science and Technology

Abstract

Microfilm advertising underscores the dawn of a new era in marketing and advertising. After significant revolutionary changes in traditional advertising, microfilm advertising has become a daring attempt to develop attention economy by the marketing professionals in the new media era. This paper presents the keys ideas surrounding microfilm advertising based on the results of the latest research. Based on the psychological understanding of consumers’ memory and attraction, the paper explores the implications of microfilm advertising to both marketers and its target audience. In terms of advertising effects, microfilm advertising can stimulate emotions of its target audience temporarily and help them memorize the profound values embedded in the films, but its effect on the purchasing behaviors is not significant. However, as an advertising technique to control one’s emotions and memory, microfilm advertising can broaden one’s noosphere and to a certain degree serves as a venue for cultural appreciation. The commercial nature of microfilm advertisements prevent them from bringing out full effects as those of public welfare advertisements do. Behind the target audience’s fondness towards microfilm advertisements lies the human pursuit for implications and values, but unfortunately the mismatch between the brand and story lines and the commercial nature of microfilm advertising, it has become more difficult to accommodate the needs of both
marketing professionals and the target audience. When the marketers ever want to change their one-way advertising thinking and to consider the needs and expectations of the target audience, the future of the advertising techniques will become broader and more popular.

**Keywords:** Microfilm advertisements; Marketing Techniques; Media Ethics; Memory of Consumers

微电影广告的意义和价值

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¹澳门科技大学商学院

**摘要**

微电影广告的出现标志着广告营销进入一个全新的阶段。大众传播的广告方式经历了重大演变后，它是营销者在碎片化的新媒体时代中发展注意力经济的一大尝试。本文以微电影广告的概念和最新研究结果为基础，结合心理学对吸引力和记忆的解释，探索微电影广告对营销者和受众的意义。从广告的效果来看，微电影广告的作用只限于短暂地激发受众的情感并对隐含在电影中的价值观产生深刻的记忆，但对于观众购买行为的影响力不明显。然而，这种以人的情感和记忆为控制对象的广告形式，能扩宽人的思想空间并具有一定的文化鉴赏价值，但碍于广告的商业性质又达不到公益广告的效用。从受众喜爱微电影的背后可以看出人对价值观和意义的追求，可惜在品牌与情节错配和微电影的商业性质之下，微电影广告难以同时满足营销者与受众的要求。若营销者改变单向的广告传播思维，并考虑受众的需求和期望，未来的广告形式将会更广阔更受欢迎。

**关键词：**微电影广告；营销手法；传媒伦理；消费者记忆

1. **引言**

在 1995 年最早的微电影是以连续剧的形式在各大美国网站上播放，而微电影广告自 2001 年出现以来，不到 20 年之内成为全球蓬勃发展的广告形式。百度百科把中国最初引入微电影广告的时间定为 2010 年，定义为：

...新兴的广告传播形式，是为了宣传某个特定的产品或品牌而拍摄的叙事广告，时长一般在 5-30 分钟，且以电影为表现手法。它的本质，依旧是广告，
具有商业性或是目的性。微电影广告，采用了电影的拍摄手法和技巧，增加了广告信息的故事性，能够更深入地实现品牌形象、理念的渗透和推广，能够更好地实现“润物细无声”的境界。

目前国内对微电影广告的研究集中在与传统广告的比较，探究其传播的过程和广告效用，也有不少学者对影片中的内容做深入的分析，例如叙事手法、语言、音乐和效果等。此外，有部分研究集中在微电影广告的营销策略。有学者留意微电影广告的商业性和文化价值，认为这两种特性有助于微电影广告的发展，应该以发展文化创作的角度看待。关注新兴事物的价值和意义本身就是人的本能，微电影广告的价值和意义受到学者的关注不多。只有王永红（2013）敢于质疑“微电影除了赚足经济效益，是否还应关注为社会、为观众留下什么？”王永红断言，传播力度和强大的影响理应使微电影广告承担传播社会文化的责任。这种把微电影视为主流道德观念载体的观点，无疑是对微电影一厢情愿的崇高要求，但值得社会各界考虑商业广告能担当什么样的社会功能。

本文主要是探究微电影的意义和价值。在讨论某事物的意义和价值时，赋予事物价值的受众是探讨的对象，这就涉及到营销者和微电影广告观众的期望和投入、广告的效力、注意力的特点、品牌的记忆以及将来购买行为。这有必要结合相关心理学的原则进行讨论。本文从微电影广告的性质开始，分析其特点和产生的价值和意义问题。

2. 微电影植入广告的问题

根据微电影广告的概念可以拆分为两部分：电影和广告。张琰 et al (2019)认为这种介于影视娱乐与市场营销之间的微电影广告略显“尴尬”，原因是视频媒体上愿意付费看广告的受众并不是多数，吸引受众的是微电影广告剧情或某些当红明星。张琰看到当存在大量巨资、制作精良的纯影视作品时，受众的选择或受其影响。然而，正如常规的电影中有植入的广告（例如主角所用的汽车），关键在于广告若是“短小精悍”并带有娱乐成分，观众还能勉强接受短暂的广告骚扰。

2.1 受众的广告倦怠与免疫力

微电影的长度一般不超过30分钟，通常有一定的故事情节和主题。作为一种以娱乐观众为目的的电子媒体，电影一直广受欢迎。从2010年开始随着互联网和移动终端的广泛应用，国内的微电影广告诞生并发展迅速。微电影本来是无可非议的：一般电影观众都期望得到娱乐，微电影采用的夸张渲染的手法也是观众预料之内的。随着广告数量的增多，受众厌倦传统广告和电子媒体内不受欢迎的广告滋扰，对微电影广告产生了“免疫力”。由于这种观众的厌烦心理，微电影中的广告不宜过多过长，以免影响“电影”的播放效果。纵观现代的广告形式，我们可以看到类似的情况：广告在被刻意地植入媒体内容中，资讯性的广告被放置在所谓的新闻报导内，品牌有意无意地显现在观众没有预想到的地方，例如新闻网页内的含蓄而吸引人的小把戏（Teasers）。像新闻之类的资讯性内容本来不属于商业信息，不应该得到广告赞助商的支持，但却成为了现代营销者推销的常用手法。

2.2 区分商业讯息的难题
根据美国广告伦理协会（Institute for Advertising Ethics）颁布的9项广告伦理原则，其中一项就是要保持商业信息（Commercial Communications）与新闻和娱乐之别（Snyder, 2011）。广告伦理协会指出这两种信息的差别模糊不清。如果消费者不知道所看的新闻或娱乐节目原来是广告的话，他们会被误导，这种做法有违商业道德。若消费者以为所看的内容是新闻，误解内容的可能性就增大。若未被告知广告信息受众就毫无心理准备，难以以商业思维（business mode）评估所看的内容。对广告类的商讯，西方社会认为媒体有责任提示观众，把商讯与新闻和娱乐内容分开处理。然而，现时新闻和娱乐节目遍布广告，受众也习惯于各种各样的广告插件，也明白背后是广告商付费播放的。因此，付费的假新闻（Fake news）大行其道，网上用户对任何信息都不敢轻信，广告的效力进一步降低。消费者不敢轻信任何的广告，微电影要产生广告效果就变得困难重重。

3. 微电影广告的价值意义分析

微电影广告产生不少的难题，首先是营销者和受众都难以区分广告与新闻或娱乐信息。区分两者是重要的营销伦理原则，但若预先提示受众商业信息的话就大大降低了广告的效果。消费者厌烦没有“意义”的广告，并且微电影本身要达到的悬疑刺激的效果就不适宜预告。这样就容易理解当下的微电影广告的特点：追求观感上的刺激、疑虑、生动，而且品牌若隐若现，但点到为止。

营销者往往忽略受众投入的时间和精力（体力），也罔顾他们的注意力和期望，这些期望包括赋予电影内容一定的价值和意义。由于受众从旁观者的地位转变为参与剧情，把虚拟的存在变为在场景中的共同在场（福蒂亚德，2018）。这种代入感是电影产生影响的前提，但在营销者眼里，虚拟的场景和故事只是营销的手段而并非最大的关切。营销者所关心的是如何把受众的共鸣转化为对品牌的的支持和认同。因此，受众和营销者之间存在目标的不一致，实现不了共赢。营销者往往不重视这些电影受众的投入与期望，这种受众与营销者的期望落差造成两者都达不到各自的目标。

| 表格1. 微电影广告的受众与营销者的投入与期望比较 |
|---|---|---|---|
| 投入 | 具体内容 | 期望关注点 | 后续影响 |
| 受众 | 专注力、体力、时间、期望 | 几分钟至30分钟欣赏时刻；媒体内容的碎片化，消遣娱乐，有“意义”的内容 | 代入情节产生欢愉、兴奋、惊奇和教育、美感、文化伦理教诲等。对品牌引出的价值观认同和情感得到释放改善；满足感；若期望与体验有落差会失望；把个人“收获”合理化 | 产生价值认同，留下深刻记忆，回味故事情节，觉得值得观看，达到消遣娱乐功能 |
| 营销者 | 市场调研、广告策划与费用 | 顾客调查、媒体选择、广告制作、演员费用、媒体关系 | 广告效力、品牌形象提升、销售业绩、购买形式 | 透过网民的评论增强与受众的互动，检讨广告效果需求 |
微电影广告被称为营销的终极形式——宣扬共同的价值观但品牌被遗忘。营销者所面对的终极难题是：在广告铺天盖地无孔不入的网络时代，消费者避之则吉，营销者只能不断尝试新的广告形式。由于电影要达到的特殊效果，在故事情节中穿插品牌的宣传。微电影广告最大的特点，是在电影观众故事情节中稍微展现品牌即止，表面上电影的焦点仍然是剧情而不是品牌。由于微电影以一种攻陷人的情感和激励道德情操的方式出现，它是处于公益广告与销售广告之间的一种宣传。以下是微电影广告产生的问题分析。

3.1 推崇价值观的优缺点

微电影中展现出的价值观一般有：爱国爱民情操、亲情孝道、友谊友爱、沟通诚实、勤劳积极和环保保育。为了吸引新一代的受众，以崇尚自由和个性表达为主题的微电影比比皆是。这些都可以称得上是中国传统的美德和现代社会的核心理念，而令受众回味的是展示出这些价值观的故事情节。微电影的真正价值，在于给予受众思考回味故事的空间并把其中的价值观进行细腻地品味并记忆。根据道德哲学，我们可以把这些价值观称为善（Goodness），而善的保持及运作使我们能够获得一些好处，而这些好处是内在所感受的，缺乏了善则阻止了我们获得这些好处（MacIntyre, 1981）。所谓的善处，其价值并不在于其明显的功利主义（如增加市场占有率），而在于对人性价值的提升，丰富了生活使生存更具价值（杨镇维、苏子炘, 2007）。此外，电影广告中积极的价值观能短暂地感染受众，使他们抱有一种乐观的生活态度，这都是电影广告带来不经意的益处。

微电影中以价值观为卖点并不是没有风险的。原因是价值观对观众有即时的情感影响，但最终消费者记得的是价值而不是品牌。同时，由于广告激发受众产生共鸣，但价值与品牌往往错配，难以体现品牌真正的特色。由于微短片的播放时间和受众对广告的厌倦，突出品牌的特色不能太多，只能轻描淡写地与情节配搭。情景与品牌传达的理念若配搭的合适，对受众的说服力就高。但事实上任何同类的产品都可能代替广告中的产品，所以诱导的说服力不强。因此，微电影广告不算是突出品牌特色的最佳形式。

善意的价值观可以植入在微电影中，但行销者植入善意的目的并不是完全为了善（若是的话就变成公益宣传了），而是为了博得观众对价值观的品牌的认同，提高品牌的形象，正所谓的爱屋及乌的心理。影音类的广告的信息必须有震撼力，使商品信息合法合理化，同时激发人的灵感并肯定自我的价值观（Kendall, 2019）。微电影具有把积极观念和传统价值观转入观众心中并内化的功能。比较起来，微电影的成本相对其他形式的广告要低，其中一个原因是少用广告效力突出的明星，而较多地使用专业或非专业演员。这除了有成本优势外，更展现出品牌与公认的价值观并不需要鼎盛的明星阵容。

3.2 不像广告的广告的虚假问题

以电影为广告的传播形式容易被误解：电影就是一种重要的娱乐方式，所以受众对微电影广告多少还有一种期望：广告的剧情要有娱乐成分。当今最吸引眼球的不再是像广告的广告，而是不像广告的电影情节。微电影广告有助于扭转观众对现代广告的观感：商业广告越不像传统广告越好，而且最好的推销
手法不能太突出品牌，应该“自然含蓄”地出现。吸引眼球仍然是营销者卖广告的手段。有些不良的营销者以不道德方式吸引观众，假新闻属于其中之一。假新闻通常都是以一种专家或新报道的形式展现出来。假新闻发布者“利用复杂的算则和无穷的数据库接触数百万的订阅者，这种商业模式只有一个驱动目标——通过传播“病毒信息”的点击量来赚取广告费。时下的文化认为，信息是否道德，真实或诚实并不重要，重要的是该信息是否具有煽动性，是否吸引眼球（怀特，2017）。所以，对于任何吸引受众的媒体内容，我们不得不加一个伦理标准，这些信息是真的还是假的？微电影广告容易被视为一种假新闻。

微电影广告难以以一种完全诚实的方式面向观众，这是由于电影广告的特性和剧情要求所造的。广告总是以故事为开始，以尽量“自然”的方式从情节过渡到品牌，但是品牌的出现往往令一部分受众摸不着头脑。花了这么多时间代入故事情节，得到的不是情感上的满足，而是又一个广告。这种意外感令受众有受骗的感觉。

微电影广告有一个致命的逻辑问题是，营销者既要透过电影片段展示品牌正面受欢迎的形象，但问题出在电影的媒体性质：人们相信电影本身就带有娱乐性质，所以以电影展示品牌美好正面的特性就显得不够严肃。取悦观众以赢得好感和改善形象有很多种方式，但以娱乐的方式并要达到宣传的效果显然难以兼顾，同时也会有风险。其中一种风险就是吸血鬼效应(Vampire Effect)：为了吸引眼球和产生心理特效，营销者在广告中运用了幽默、性、名人时会令观众的注意力发生偏差，却无意间丧失了对广告商品本身的关注（杨彼得，2015）。吸血鬼效应特别容易在电影广告中产生，因为电影吸引之处就是有太多吸引注意力的地方。

3.3 注意力转向的问题

微电影的吸引之处在于隐含在故事情节中的价值观和信息在受众的脑海中开拓出广阔的想象空间。吸引注意力的方式是一个问题，但把观众的注意力由故事情节转向品牌又是另外一个问题。

对品牌记忆最广为引用的一项Kuvita & Karlíček（2014）所做的广告印象调查。受试者看了三种不同组合的广告图片：第一个是品牌与一个不相关的名人的图片，第二个是品牌与一个相关名人的图片，第三种是只有文字描述的图像。该调查发现受试者观看图片广告后对品牌的记忆都很低（20%），而对整个广告的记忆根据品牌与明星的关联程度而有所不同：相关明星的广告图片能够被75%的受试者记住，不相关明星的有70%，而只有文字没有明星的只有45%受试者记得。这说明明星的效应只限于对整个广告的记忆，但对品牌记忆的影响普遍都低。明星确实能吸引观众注意力，但要转移观众注意力至品牌就显得无能为力。

心理学对这个结果有合理的解释：由于人的观感倾向寻找外界刺激，其身体机能和神经系统只允许在同一时间关注一个小范围内的事物，而越生动逼真的事物就越吸引人的注意力。品牌对受众的吸引力受到品牌以外的吸引物挤压，使观众最终只记得最吸引眼球的事物而忽略了广告中主角——品牌。

这项研究与微电影广告有一定的关联性。尽管该研究对象是静态的商标广告，研究结果不一定适用微电影受众，但原则却是相通的：受众的注意力随着吸引物（例如明星或剧情）的增多而严重减弱了品牌的吸引力，结果关注度低。
这种吸血鬼效应在微电影中，随着震撼的音效和逼真的画面深深地把观众注意力引到剧情中，而对品牌的注意就少之又少。就算有注意到品牌的，也因品牌与情节的错配和品牌出现的短暂时间而达不到预期的效果。在微电影中品牌难以成为关注的中心重点。

有单一焦点的简单图片广告比图文并茂和声色俱备的电影广告有更佳的广告效力。原因之一是受众在短暂的时间内容易迅速聚焦在唯一的图片重点。微电影广告的问题是容易把观众引导到与品牌不相关的情感和焦点，使品牌的显著性和重心作用大大降低。从这点来看微电影广告本身就是矛盾的：既要透过电影夸张渲染的手段引起受众对品牌的注意，但最后这些“干扰物”又把对品牌的注意力转移了。

3.4 叙事广告的意义和消费者记忆

微电影广告本质就是一种叙事广告(Storytelling advertising)，这种方式比其他传统的广告媒体有优胜之处。首先，电影声色俱备容易令受众产生记忆。短片比其他媒体有更高的媒体丰富度(Media Richness)在于它有超过一种方式进入受众的观感内：声音和图像，再加上故事的情节，这使记忆和精细体会短片内容成为可能。简短故事的完整性和单一的主题(Theme)有助观众有焦点地回忆和提升对内容的整体正面观感，而这正是微电影广告对受众最大的影响：简单有重点的故事情节容易产生记忆，而且越鲜明越能使受众投入更大的个人的情感。这是因为受众对其感受的记忆特别牢固，称为闪光灯记忆(Flashbulb Memory)。

观众认为影片的某一场景极具重大意义时，之后他们不单能记住此事件，也能记起与这相关的信息，例如当时那里看到电影，与谁在一起以及在做的活动等细节。电影场景的生动逼真性能震撼观众的观感，从而相信故事的其他细节和身边的事物。

消费者记忆(Memory of Consumers)，就是对某品牌留下美好的记忆，一直是营销者的主要目标。短片的长度决定了故事内容和打动观众的方式。几分钟的短片与 20 秒黄金时段的广告的区别是：短片不单止挑动潜在顾客的情感，更重要的是透过故事让他们了解品牌背后的意义。被受众认为有“意义”的电影往往被记住的机会就更大，这就是所谓的意义记忆(智库百科)。对意义和内容的追求是人性的一大特征，因此没有“意义”和“内容”的电影被视为较差的电影，而留下美好回忆的电影通常是那些被认为有意义的电影。
微电影广告的基本作用是在于挑起观众的情感共鸣和认同，并留些深刻的印象。这印象在消费者将来要决定购买时会变得极为关键。人们都是活在过去的记忆中，印象由记忆产生，是记得对观看过微电影后产生的主观感受和认知。心理学对记忆的研究成果丰富，其中有许多研究结果和现象值得参考。例如，越是意义深刻的和有完整精彩情节的影片就记得越深刻。此外，记忆的形成与人对过去发生的事件的演绎有很大的关联。

综合上述原因，微电影广告即时的效果较为明显。根据张晓（2017）的调查发现，接近一半的受访者看完微电影后产生购买意向，对品牌的好感更高达80%。微电影广告对于改变品牌态度和提高购买意愿的即时作用较大。然而，当观众认真考虑购买决定时展示出一般消费者的理性：74.8%先考虑价格，其次是产品功效（72.2%）和需求（56.3%）。

受众若能记起与故事情节有关的品牌，那么对品牌的记忆就牢固。这也是所有广告的基础——把品牌与消费者的需求连接起来，叙事广告的效果就显著。然而，叙事广告中的品牌效果并不突出。例如不少人与朋友分享一个视频时都形容为一个动人有趣的故事，鲜有说是一个动人的广告，品牌往往被忘得一干二净。这说明一个深刻的事实：营销者追求品牌的记忆，但得到的只是观众对故事情节的认同，品牌很快就被消费者抛诸脑后。

因此，叙事广告唯一的作用应该就是在消费者脑海中产生正面的记忆，但对维持购买产品服务的情感就显得无能为力。考虑到人的情感来去匆匆，叙事广告占用的时间不宜很长。另外，专攻消费者的情感是不适宜的，这只能留下“美好的”回忆，但这种回忆与现实可以是毫无关系的。在欣赏一个广告的创意时，观众其实是欣赏艺术般的画面和动人情节。营销者想让品牌在消费者心中产生深刻印象，就必须要了解受众如何记忆。

4 结论

营销者想要塑造一个深刻且能回忆的正面品牌形象，而电影叙事就是其中一种最容易被记忆的方式。对消费者需求的把握可以透过市场调研和其他方法进行，但大部分的故事情节想催动情感和鼓舞精神，但要使消费者从这转变为购买产品服务的决定还不明显。故事的结局必须有戏剧性，否则会大大减弱情节的吸引力。引人入胜的故事效果在于结局能冲破传统的限制，从而给观众全新的故事体验（Rhimes & Stivers, 2017）。

4.1 微电影广告的意义和价值

哲学中的几个价值观念可以在微电影中体现：

1. 价值就是回归到真实美、愉快正义和快乐，这些是人类的共同追求的价值观，给人带来传统和非传统的价值。电影反映了人们对美好的追求。

2. 情感的价值：情感是人类的感觉所释放的，能支持我们感知世界和辨认价值。微电影广告宣扬爱国情操和审美价值。爱国之情和感知某种事物之美本身是主观的，但尊重这些受人喜爱的价值观本身就是一件美事，能提升人对生命意义的理解。电影给予受众疏通情感的机会，这被认为是电影广告的意义所在。
3. 关系和效用的价值：微电影向受众注入文化价值观的时候，代表了电影和受众之间的相互关系。电影与观众的关系在于给予和传递。即任何有联系的事物之间都可能存在关系上的价值。此外，电影与受众可以建立一种互利共赢的关系，也就是营销者把价值观带给观众，同时也依赖观众的参与——观看电影。

除了经济方面的价值外，微电影还有其他方面的价值。在电影广告没有直接的交换过程就表明受众与营销者之间有非经济的价值交换，所以这些是可以用价值来表达。人们对于营销的理解除了从狭义的经济角度审视外（例如购买意愿和决定等），更应该从更加广阔的价值观看待微电影的价值作用。

微电影广告对于营销者的价值在于其能说服观众购买产品，然而我们要看到其影响购买决定（不是购买意愿）的效果不大。这从观众在看完广告后再次以理性消费者的心理考虑购买可以看出。微电影广告对营销者的价值是工具性的，播放微电影只是为了达到目的。对于观众来说除了工具性质，微电影广告也有投入情感并自我肯定等额外的价值收获。

对于受众来说，微电影内容（而非广告本身）能满足个体的需求与期望。无可否认微电影对受众是有价值的，特别是对于肯定文化价值观和发展想象的空间。然而，受众非物质的价值显然不是营销者设计和规划微电影广告时的初衷，也肯定不是他们最重要考量。这种对观众“意外的”价值是不经意衍生成的副产品，但这正是受众所看重并认为最有价值的东西。

4.2 微电影的局限性

微电影广告的局限性主要由于其媒体特点造成的：

1. 广告中故事的情节和情感价值观的元素使广告的效力只限于改善或提高品牌的形象，但对具体品牌的某种产品的销售贡献没有即时直接的影响。
2. 把价值观和个人情感与品牌精神捆绑呈现固然是广告的手段，但消费者往往记得故事的情节和意义多于品牌，所以广告的效果适得其反。
3. 专攻观众的情感产生的反效果是受众对这类广告产生情感免疫，微电影广告产生的即时效果越高（例如挑起受众即时的情感），但随着时间的推移效果逐渐失效。反之，企业将来就会遇到这样的困境：对品牌的希望越大，失望越大。经长时间建立良好的形象只需要一件丑闻，商誉就被毁于一旦。因此，要在受众心目中营造一个良好的品牌印象，重点还是放在平时的经营和防范企业道^{-}失的防范。

微电影广告诞生在一个互联网高速发展、自媒体盛行、消费者广告倦怠的时代。营销者结合电影引人入胜的叙事情节，连接文化价值和品牌精神，提高品牌在受众心目中的形象和喜悦程度，以影响将来消费者的购买决策。然而，微电影受众之所以代入故事情节，主要是期望获得观感的刺激和价值观的体现，以肯定自我和表达情感。从微电影广告的效果可以看出营销者与受众的目标不一致。虽然品牌形象得到即时的提升，但对未来的购买决策的影响甚微。然而，微电影广告的积极之处是向受众提供一个表达情感和文化价值的出口和暂时的思想空间。从受众喜爱微电影的背后可以看出人对价值观和意义的追求，可惜在品牌与情节错配和微电影的商业性质之下，微电影广告难以同时满足营销者与受众的要求。若营销者改变单向的广告传播思维，并考虑受众的需求和期望，未来的广告形式将会更广受欢迎。
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A Study on Customer Commitment in Online Brand Community

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Abstract

With the rapid change of economic development and social environment, the network has achieved great development, and the online community has become an important place for people to learn information and establish relationships. Although there are many researches on customer commitment and related theories in the academic area, there are a few researches on customer commitment in the online brand community, and the widely accepted theories have yet to emerge. With the increasingly fierce competition in China's internet industry, it has become increasingly important for brands to establish a relationship with consumers through online communities. Therefore, how to establish a long-term and continuous communication and trading relationship with customers in online communities is an issue that managers attach great effort to nowadays. This study is expected to help managers understand how to improve customers' commitment to the online brand community, so as to ensure the establishment and maintenance of their relationships.

This paper studies the relationships among information quality, system quality,
interactivity, team cohesion and customer commitment in online brand community. Based on literature review, the authors proposed a research model and hypotheses, then collected 203 users to test the hypotheses in online brand community. Through data analysis, the results of this study are as follows:

First, information quality is positively related to customer commitment in online brand community.

Second, system quality is positively related to customer commitment in online brand community.

Third, interactivity is positively related to customer commitment in online brand community.

Fourth, team cohesion is positively related to customer commitment in online brand community.

Fifth, gender doesn’t moderate the relationship between team cohesion and customer commitment in online brand community.

**Keywords:** Information Quality; System Quality; Interactivity; Team Cohesion; Customer Commitment; Online Brand Community;
网络品牌社区的顾客承诺研究

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摘要

随着经济发展及社会环境的快速变迁，网络获得了巨大的发展，而网络社区也成为了人们了解信息建立关系的重要场所。虽然学界对顾客承诺及相关理论的研究众多，但是对于网络品牌社区的顾客承诺研究较少，并未形成广泛认同的理论。中国网络产业竞争越加激烈，品牌通过网络社区建立与消费者之间的关系变得越来越重要，因此如何建立与顾客对网络社区长期且持续的沟通及交易关系，是现今管理者所重视的问题。本研究期望能帮助管理者了解如何提高顾客对网络品牌社区的承诺，进而保证其关系的建立和维持。

本文研究了网络品牌社区中信息质量、系统质量、互动、团队凝聚力和顾客承诺之间的关系。在文献综述的基础上，作者提出了研究模型和假设，并收集了203名网络品牌社区的用户对假设进行了检验。通过数据分析，得出本研究结论如下：

1. 信息质量越高，网络品牌社区的顾客承诺越高。
2. 系统质量越高，网络品牌社区的顾客承诺越高。
3. 互动越高，网络品牌社区的顾客承诺越高。
4. 团队凝聚力越高，网络品牌社区的顾客承诺越高。
5. 性别不能调节团队凝聚力与社区承诺的关系，不能证明女性对其影响比男性更强。

关键词：信息质量；系统质量；互动；团队凝聚力；顾客承诺；网络社区

1. 引言

随着上世纪 90 年代以来，网络经济的浪潮席卷全球。通过互联网，顾客可以轻而易举地获得关于产品、服务以及厂商的大量信息，从而拥有更多选择权利（吴敏华，2004）。美国著名的在线社区咨询公司 Forum one 的调查结果显示，1997 年各类网络虚拟社区共有 9 万个，而到 2000 年底这一数字增加到了 80 万个，其中 85%的虚拟社区是由商业组织围绕着某个品牌经营的。可以看到，公司受互联网影响因素的影响，使得品牌的发展超越了地理的限制，从而在互联网上获得新的平台来吸引数以亿计的网络用户。这些网络用户同时也是具有相当规模购买力的潜在消费群体，不难判断，网络品牌社区可以为企业带来无限的商机。因此
越来越多的公司将品牌社区的建立主战场放到了网络。从而形成线下线上双互动的品牌社区。

在关系营销框架下，它建立在使用某一品牌的消费者之间的一整套社会关系的基础上，强调了品牌与消费者以及消费者之间的关系等（Muniz & O’Guinn, 2001）。通过品牌在线社区能够将尽可能多的该品牌现实用户与潜在用户集中起来，从而建立集社区成员之间、成员与社区之间，以及成员与品牌之间的关系网络，进而为该品牌带来更多的忠诚顾客，最终为拥有该品牌企业带来效益（Fishcher & Gainer, 1994）。

加之，中国属于人情社会，由人情维系带来各种社会关系，是中国社会文化的重要特征（董路和崔芳芳，2010）。因此，在中国市场环境下，如何才能顺应互联网发展的趋势，提高顾客对社区的承诺，继续发挥品牌社区维系和发展顾客关系方面的积极作用将是本研究的研究重点。

2. 理论框架

通过相关文献回顾，得知信息质量、服务质量、回报、成员互动（Lee & Kim, 2005）、用户之间的友好、信息的可信性、品牌声誉和活动回报（Seo, 2005）等对社区承诺产生积极影响，且互动与奖励影响因素居多（Jang et.al, 2007），本研究依据上述文献，建立本研究之架构。其中本研究之社区顾客承诺概念的建立采用 Dansal et.al（2004）所提出之承诺的三项衡量维度之一的情感性承诺，先探讨信息质量、系统质量，以及互动等硬件及软件方面对其的影响，同时结合现在社区发展的状况，研究通过线下活动而产生的成员之间的凝聚力是否影响顾客对社区的承诺。此外，由于男女本身的差异性，比如女性更加关注集体利益和他人的感受（赵育春，2003），女性比男性与所有群体维系更加紧密的关系（Johnson & Marini,1998），探讨性别是否对团队凝聚力与社区承诺之间的关系有调节作用。本文决定采用如下理论框架，如图1所示。

图1. 研究模型

2.1 信息质量与网络品牌社区顾客承诺的关系

Becker（1960）是最早将承诺作为学术概念加以探讨的，他认为承诺是利益驱动下的一贯性行为，是一种行为主张，但是现在绝大多数学者将承诺视为一种

基于我国国情及文献回顾相关内容，本研究主要探索顾客对社区的情感性承诺。组织行为学中，情感承诺被认为是强烈希望与某个组织有关联的愿望，因此，本研究定义社区顾客承诺为顾客对社区的情感性承诺，是基于对社区及社区用户的感情而继续使用该品牌产品或服务。

信息质量是指信息满足企业信息用户需求的反映，其满足的程度体现了企业信息质量的水平（English, 1999），信息质量通常被认为是一个多维概念（Klein, 2001），其特征取决于不同使用个体的认识视角。研究人员对信息系统研究中的12种被广泛接受的信息质量维度框架进行了总结，并指明它们之间呈现出一些相同的质量维度，包括诸如精确性、一致性和有效性、可操作性和相关性等维度（Knight & Burn, 2002）。对网络社区，因此我们定义信息质量为网络社区的提供信息水平对消费者需求的满足程度。

信息质量代表着网络社区的可访问性和可操作性，是顾客对信任与否的关键因素，研究表明信息质量对于社区成员的满意度有极高的影响（Zeithaml, Berry & Parasuraman, 1996; Anderson & Srinivasan, 2003），大量实证研究也表明顾客信任度与顾客的满意度呈正相关（Bloemer et al., 2002）。因此本文提出假设：

H1: 信息质量越高，网络品牌社区的顾客承诺越高。

2.2 系统质量与网络品牌社区顾客承诺的关系

本文系统质量主要指对网站的评价，根据互联网信息资源产生、组织、传递与使用的独特性，网站评价以及具体指标包括网站内容、操作使用和成本（黄微等, 2003）。基于文献分析，系统质量主要进行速度、操作以及接口设计三个维度的测量（McKinney, Yoon & Zahedi, 2002）。与信息质量一样，系统质量同样代表着网络社区的可访问性和可操作性，是顾客对其信任与否的关键因素，研究表明系统质量对于社区成员的满意度有极高的影响（Zeithaml, Berry & Parasuraman, 1996; Anderson & Srinivasan, 2003）。因此本文提出假设：

H2: 系统质量越高，网络品牌社区的顾客承诺越高。

2.3 互动与网络品牌社区顾客承诺的关系

互动，是一种沟通方式，Steuer (1992) 认为在计算机媒介沟通模式下，互动是用户可以对媒介环境的形式及内容做实时参与以及修改的程度，他认为消费者与网站的互动，是消费者利用网站中的各种结缕来查询以及获得其所想要的内容（Bauer et al., 2002），其沟通的特征包括参与者平等、沟通的动态性、信息控制性以及达成相互了解的目的（卢艳萍, 2005）。通过互动沟通，参与者之间达到信息
交换的目的，而信息交换不仅仅是取得符合目标的信息或与信息系统的互动，还是一种社会互动，网络社区中的信息交换行为既是一种主动的信息寻求行为，又是一种沟通的行为。

互动是营销者与成员之间信息交流和沟通的方式，是企业与受众相互之间的信息传递、信息甄别、信息回馈、情感交流以及在此基础上各自的行为调整，最终形成双方在品牌理念和品牌价值上的高度契合以及彼此信赖的关系，互动的重要性在于可以增加消费者对沟通交流的承诺（Mcmillan, 1995），促进社区成员对社区产生积极影响（Kang et al., 2004），而对有用的信息进行奖励可以加快促进对社区的承诺（Sheth & Atul, 1995）。因此本文提出假设：

H3：互动越高，网络品牌社区的顾客承诺越高。

2.4 团队凝聚力与网络品牌社区顾客承诺的关系


本研究发现，在众多的凝聚力研究中，并没有明确的区分真实环境的团队凝聚力和虚拟社区的凝聚力的差别，忽视了虚拟社区可以由于避免成员间的直接交流而减少摩擦，利于团队凝聚力的发展，或者因为没有直接交流而使成员间产生理解偏差，从而加大摩擦破坏凝聚力的可能性。凝聚力可以使成员之间产生吸引力、向心力、凝聚力（杨丽可, 2005），凝聚力越高，成员归属感越强，因此凝聚力与社区成员离开的意愿显著负相关（O’reilly, Caldwell & Barnett, 1989）。因此本文提出假设：

H4：团队凝聚力越高，网络品牌社区的顾客承诺越高。

2.5 性别对团队凝聚力与网络品牌社区顾客承诺之间的调节作用

人口统计变量是常见的调节变量，通常包括性别、收入、受教育程度等等，但本研究认为在同一社区中的成员有着相同的价值观或者兴趣爱好，从而形成一个社区，那么收入、受教育程度等在社区成员中的差异较小，因此本研究选择性别作为调节变量。

H5：团队凝聚力与社区承诺之间呈正向影响，且对于女性而言这种影响更强。

3. 研究方法

3.1 变量的衡量


本研究所有变量的衡量题项均采用李克特 (Likert) 量表五点尺度衡量，以「非常不同意」～「非常同意」，分别给予 1 ～ 5 分，1 代表非常不同意，5 代表非常同意。

3.2 抽样设计

Gorsuch (1983) 认为题项与受试者比例最少为 1：5，作为取得样本数的参考。本研究的问卷共计 26 个题项，考虑到无效问卷的影响，故拟定本研究之样本数量为 200 个。

本研究采用判断抽样的方法，根据总体的结构分派定额给调查员，以取得一个与总体结构大体一致的样本。本研究在网络品牌社区用户的协助下，通过访问用户，完成问卷收集。首先将研究目的、问卷内容、填写方式告知受访者，然后请受访者填写问卷，采取网络回收的方法。经过一个月的努力，共计收回问卷 221 份，其中有效问卷 203 份，回收率为 91.8%。

4. 资料分析

本次研究之数据分析是采用 SPSS22.0 统计软件分析问卷数据。

4.1 问卷基本信息

本项研究以中国地区使用过网络品牌社区的用户作为调查对象，主要通过新浪问卷星，四川花友会，大众车友会等途径收集问卷，之所以选择他们是因为问卷星是一个专业的在线问卷调查网站，其覆盖面广，影响较大，而花友会和车友会是因为平衡性别，以方便进行调节变量的调查，减少偏差，并采用判断抽样的方法，以是否使用网络品牌社区为标准，共发出问卷 260 份，收回 221 份，删除无效问卷 18 份，共收回有效问卷 203 份，回收有效率为 91.8%。

针对 203 个有效样本，进行个人资料之描述性统计分析，主要利用频次分析方法，项目包括受访者性别、年龄、受教育程度、及使用网络品牌社区的时长。

（1）使用网络社区时长。在 203 个有效样本中，使用网络社区 3 至 6 年的使用者人数最多，共 82 人，占总样本数的 40.4%；其次为 6 至 8 年，共 59 人，占总样本数 29%；第三是 3 至 5 年，共 35 人，占总样本数 17.2%；然后是 8 至 10 年。
年，共20人，占总样本数9.9%；10年以上（不包括10年）的使用者人数最少，共7人，仅占总样本数的3.4%。（2）性别。在203个有效样本中，男性有103名，占总样本数的50.7%；女性则有100名，占总样本的49.3%。（3）受教育程度。在203个有效样本中，受教育程度在研究生有10人，占总样本数4.9%；本科最多，共79人，占总样本数39%；其次是大专，共63人，占总样本数31%；接着是高中或中专，共51人，占总样本数25.1%。（4）年龄分布。在203个有效样本中，年龄在20至29岁最多，共83人，占总样本数41%；其次是30至39岁，共78人，占总样本数38.4%；接着是40至49岁以下，共32人，占总样本数15.7%；然后是50至59岁及以上，共8人，占总样本数3.94%；年龄在60岁及以上的受访者最少，仅有2人，占总样本数得0.99%。

4.2 信度与效度

本次研究共有信息质量、系统质量、互动、团队凝聚力、网络品牌社区顾客承诺以及性别六个变量。其中信息质量、系统质量、互动以及团队凝聚力四个变量的Cronbach’s α系数均介于0.5至0.7之间，此区间最为常见，也属于可信区间。另一网络品牌社区顾客承诺的Cronbach’s α系数均介于0.7至0.9之间，这表明问卷信度较高，测量的结果是稳定可靠的，并且量表的再现性、一致性和稳定性都很好，测量数据真实有效。

本研究问卷之构面的题项综合了过去学者的研究成果，包括文献和量表，并且通过了对不同网络品牌社区的用户访问得到信息质量、系统质量、互动、团队凝聚力以及网络品牌社区顾客承诺，之后经由指导老师和专家学者筛选与修正，因此量表具有相当程度的内容效度。

本研究依据Kaiser (1970) 理论，以主轴因子分析法(Principal Axis Factoring)对各因子进行旋转，计算各因子负荷量(Factor Loading)，得到前置变量的KMO值为0.725，且除去信息质量的其中一个题项，其余题项因子负荷量均大于0.3；网络品牌社区顾客承诺的KMO值为0.801，题项因子负荷量均大于0.5，具有足够的建构效度。

4.3 假设验证分析

经上一节之信度与效度分析得知本研究问卷资料具足够的信度及效度，本节首先以相关分析信息质量、系统质量、互动、团队凝聚力以及网络社区品牌顾客承诺的总体情况，再以回归分析信息质量、系统质量、互动、团队凝聚力对网络品牌社区顾客承诺之相关性，再通过回归进行调节分析。

4.3.1 信息质量、系统质量、互动、团队凝聚力与网络品牌社区顾客承诺之状况

本研究先计算信息质量、系统质量、互动、团队凝聚力与网络社区品牌顾客承诺的平均值及相关性，以了解各变量的总体情况。

通过表1发现，本研究采用五点尺度计分，从表中计算出的结果可以看出受访者对信息质量、系统质量、互动、团队凝聚力和网络品牌社区顾客承诺的平均值均超过3，表示受访者认为信息质量、系统质量、互动、团队凝聚力的评价以及网络品牌社区顾客承诺均在平均水平之上，证明不同社区的信息质量、系统质量、互动、团队凝聚力较好，网络品牌社区的顾客承诺也相对较高。同时，信息质量、系统质量、互动、团队凝聚力与网络品牌社区的顾客承诺在0.01水平上也
显著相关，分析结果如表 1 所示。

表 1. 各变量之基本状况与相关性

<table>
<thead>
<tr>
<th>变量</th>
<th>平均值</th>
<th>标准差</th>
<th>信息质量</th>
<th>系统质量</th>
<th>互动</th>
<th>团队凝聚力</th>
<th>网络品牌社区</th>
<th>顾客承诺</th>
</tr>
</thead>
<tbody>
<tr>
<td>信息质量</td>
<td>3.48</td>
<td>.62</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>系统质量</td>
<td>4.08</td>
<td>.46</td>
<td>.286**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>互动</td>
<td>3.51</td>
<td>.57</td>
<td>.069</td>
<td>.225**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>团队凝聚力</td>
<td>3.57</td>
<td>.63</td>
<td>.342**</td>
<td>.366**</td>
<td>.375**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>网络品牌社区</td>
<td>3.29</td>
<td>.69</td>
<td>.500**</td>
<td>.340**</td>
<td>.242**</td>
<td>.380**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>顾客承诺</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*在.05 水平(双侧)上显著相关 **在.01 水平(双侧)上显著相关

4.3.2 信息质量、系统质量、互动、团队凝聚力与网络品牌社区顾客承诺之假设分析

为验证 H1、H2、H3、H4 假设，本研究首先计算信息质量、系统质量、互动、团队凝聚力与网络品牌社区顾客承诺的平均值。将信息质量、系统质量、互动、团队凝聚力作为自变量，把顾客的社区承诺作为因变量进行回归分析。

结果显示假设 H1、H2 和 H3、H4 成立。F 值为 22.835，调整判定系数 Adj R² = .321，对社区承诺而言，信息质量、系统质量、互动和团队凝聚力可达 33.4% 的解释量，表示模型适度一般，与社区承诺成正相关。由回归系数可知信息质量对社区承诺的影响性最高，分析结果如下表 2 所示。

表 2. 信息质量、系统质量、互动、团队凝聚力与网络品牌社区顾客承诺之回归分析

<table>
<thead>
<tr>
<th>因变量</th>
<th>自变量</th>
<th>回归系数</th>
<th>标准误差</th>
<th>t 值</th>
<th>P 值</th>
<th>模式评估</th>
</tr>
</thead>
<tbody>
<tr>
<td>网络品牌社区</td>
<td>常量</td>
<td>-.232</td>
<td>.415</td>
<td>-5.59</td>
<td>.577</td>
<td>相关系数 R=.578</td>
</tr>
<tr>
<td></td>
<td>信息质量</td>
<td>.402</td>
<td>.070</td>
<td>6.349</td>
<td>.000***</td>
<td>判定系数 R²=.334</td>
</tr>
<tr>
<td></td>
<td>系统质量</td>
<td>.145</td>
<td>.096</td>
<td>2.280</td>
<td>.024*</td>
<td>调整判定系数 Adj R²=.321</td>
</tr>
<tr>
<td></td>
<td>互动</td>
<td>.131</td>
<td>.076</td>
<td>2.072</td>
<td>.040*</td>
<td>F 值=22.835</td>
</tr>
<tr>
<td></td>
<td>团队凝聚力</td>
<td>.137</td>
<td>.076</td>
<td>1.986</td>
<td>.048*</td>
<td>P 值=.000***</td>
</tr>
</tbody>
</table>

* p<.05   ** p<.01   *** p<.001

4.3.3 调节作用分析

为了验证 H5 假设，调节变量为性别，属于类别变量，自变量为团队凝聚力，属于连续变量，为验证该假设，根据温忠麟、侯杰泰和张雷(2005)指出当调节变
量是类别变量、自变量是连续变量时，做分组回归分析。本研究先将性别做分组处理，再对中心化后的自变量，团队凝聚力和网络品牌社区顾客承诺做回归分析，分析结果如表3所示。

表3. 调节效应分析

<table>
<thead>
<tr>
<th>模型</th>
<th>R²</th>
<th>Adj R²</th>
<th>Sig. F</th>
<th>更改</th>
<th>系数</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00</td>
<td>.175</td>
<td>.167</td>
<td>.000</td>
<td>.419</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>2.00</td>
<td>.106</td>
<td>.097</td>
<td>.001</td>
<td>.326</td>
<td>.001</td>
<td></td>
</tr>
</tbody>
</table>

1.00 为男性 2.00 为女性
* P < 0.05  ** P < 0.01  *** P < 0.001

可以看出，男性 P < 0.001，女性 P < 0.01，由于两者差距不明显，因此不能表明性别这一变量具有显著的调节作用，男性组的回归方程解释了因变量-网络品牌社区顾客承诺 16.7%的方差变异，女性组的回归方程解释了因变量-网络品牌社区顾客承诺 10.6%的方差变异。男性组的回归方程系数为 .419, P < 0.001, 女性组的回归方程系数为 .326, P < 0.01，都具有显著性，只能表示自变量团队凝聚力具有显著的预测作用。因此我们可以认为，性别不能调节团队凝聚力与网络品牌社区顾客承诺之间的关系，更不能说明女性对其影响更强。

5. 结论及展望

5.1 研究结论及启示

经研究得出信息质量对网络品牌社区顾客承诺有正向影响，由回归系数可知，信息质量对网络品牌社区顾客承诺的影响最大，表明受访者对于网络信息品质的重视度，换言之，品牌需要注重网络社区的可访问性、完整性、相关性、权威性以及及时性，从而提高顾客承诺。系统质量对网络品牌社区顾客承诺亦有较高的正向影响，表明网络信息和系统等的硬件需求很大程度上决定了受访者使其对网络品牌社区顾客承诺的影响。本研究发现，互动与网络品牌社区承诺同样正向相关，但是相关系数较低，表明两者虽然相关，但影响并不是很显著，有可能是因为现在大部分用户是网络的原住民，接收的信息较多，更能形成自己独立的见解，不易受他人的影响。团队凝聚力与网络品牌社区顾客承诺呈正相关，但是相关系数不高，在此研究样本选取里面以20到29岁的受访者最多，占总数样本数 41%，受时间、经济等因素的影响，他们往往较少参与线上活动，由于这些原因可能导致受访者对团队的活动感受不深，因而影响不是特别显著。

此研究通过分组回归发现，性别不具有调节效应，更不能说明女性对其影响会更强。究其原因可能因为本研究在收集问卷时为了控制性别平衡，分别对大众车友会和四川花友会进行调查，其中车友会男性为主，且是由品牌管理者组织，是一个专业的社区，有着较多组织线上线下活动的经验，而花友会是由个人组织，刚刚起步，对于线上线下活动组织较少且不专业，而研究将不同的性别放入不同水平的社区进行分析，由此限制而可能产生偏差。

5.2 研究局限性

虽然本研究在借鉴前人研究的基础上力求创新，并取得了一些有实际意义的
结论。但是，在研究过程中，仍然存在一定的局限性，主要表现在如下几个方面：

1. 研究范围和对象限制
   本研究多数的样本抽取集中在三个社区平台上，而未对国内不同品牌社区的用户进行取样，因此，本研究的结论是否适合于不同品牌尚不能确证。

2. 问卷量表的限制
   本研究问卷设计均采用的前人编制的量表，问卷质量高，但是由于不同学者或专家研究的方向与角度不同，可能某些变量的还能找到更适合本研究的量表。

3. 变量选取的限制
   在变量选取方面，根据上述所提及的局限，后续研究中可增加更多的前因变量，或对网络品牌社区顾客承诺进行更多构面的研究；将本研究仅有的顾客承诺之情感性承诺，延伸到持续性承诺和规范性承诺两个方面；亦可将承诺作为中介变量，加入更多的结果产出（如顾客忠诚度和顾客转换行为等）研究产出绩效。此外还可加入其他的调节变量（如市场因素），研究其对顾客社区承诺与其前因变量的关系的影响。

4. 问卷问题的限制
   此研究问卷里的题目多为参考国外研究的量表翻译而来，由于国情及文化背景的差别，可能导致填答者对于问题的本意的理解有所偏差，最终导致问卷的科学性不是很好。

5.3 研究创新与建议
   本研究根据网络品牌社区的硬件、软件两方面着手，向管理者提供了如何提高顾客对社区承诺的方法和方式，由以上研究分析可知，在互联网快速发展的今天，越来越多的人会通过网络了解信息，在互联网上建立自己的团队群体，而由于网络社区在国内兴起较晚，线上线下活动较为单一，用户的参与性不高，那么信息质量和系统质量在网络品牌社区运行中显得尤为重要，这就要求管理者：

   1. 优化信息、系统质量，为访问者提供优质高效的信息和便利的操作模式。

   从研究中可以看到，信息质量越高，网络品牌社区顾客承诺也越高，系统质量越高，网络品牌社区顾客承诺也越高，这就要求我们的管理者提供完整、及时、权威的信息供访问者使用，满足访问者的需求，从而提高访问者对网站的依赖性，以提供访问者的对网络品牌社区的承诺。另外，本研究发现，系统质量是既信息质量之后对社区承诺影响最多的一个因素，这需要我们的管理者对网站的运行速度、接口设计和操作简便性等方向做出更高的要求，帮助访问者轻松快速愉快的获得信息，使访问者享受到在网站浏览时的乐趣、便利。

   2. 加强与访问者的互动，提高线上线下组织活动的能力，提高顾客间的团队凝聚力，从线上线下两方面抓住顾客。

   网络品牌社区的互动关系越强，顾客的社区承诺越高，因此，管理者建立社区互动机制，促进社区与社区成员以及社区成员之间在社区中的信息交换和交流互动，将有效提高成员对网络品牌社区的喜爱和信任，从而提高成员的社区承诺，
另外，本研究也发现，团队的凝聚力与社区承诺具有正相关性，表明社区的线下活动对顾客的社区承诺也是有积极的影响。这对要求管理者在现如今各社区的活动还不发达，社区成员参与积极性还不高的背景下，研究如何提高成员的积极主动性以及自身的活动的组织能力，比如：①大肆宣传品牌社区的活动，让成员充分了解活动的时间、地点和内容等，方便成员参与，结合品牌产品代言人等实际内容吸引成员参加调动其好奇心；②通过实际奖品或者虚拟积分的奖励鼓励成员参加社区的线下活动；③抓住社区成员中影响力较大的成员，通过成员之间的相互吸引来调动其他成员参与活动的积极性；④及时分享活动的具体情况，调动其他成员下次参加的热情等等。另外，管理者还应该更多提供活动本身的质量和独特性，本研究的数据源发现，被访者多集中在 20 到 29 岁之间的专科及本科学历，这部分人群大多追求个性，期待创新，因此，管理者在组织活动时切忌千篇一律，没有亮点，这样将很难吸引主要群体的眼球以达到符合期望的活动的目的，所以，如何组织有效的活动也是需要得到管理者重视。

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Buffer Mechanism of Online Social Support on Negative Effects of Media Overload

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Abstract

Based on the buffer effect of social support theory, and “Stress-Strain-Outcome(SSO)” model framework, constructs a model of buffer effect of social support, this study is to explore the influence of online social support on social media user activity and their mutual relationship, so as to provide decision-making reference for mobile social media operators to enhance users' continuous intention of using and improve user activity. The main objective of the study theoretical models and assumptions, and accordingly the design of the relevant questionnaire; An online questionnaire survey was conducted for WeChat users, and a total of 315 valid questionnaires were collected; The structural equation model (SEM) was used to test the hypothesis of variable relations in theoretical models. The results indicate that social interaction overload and information overload have positive influences on social fatigue, and then social fatigue has negative influences on user activity. Furthermore, social support plays a positive buffer role, i.e. social support buffered the positive relationship between information overload and social social fatigue, as well as the
negative relationship between social fatigue and user activity. According to the research conclusions, management Suggestions for mobile social media (WeChat) operators were proposed.

*Keywords*: social interaction overload; information overload; social support theory; user activity

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**在线社会支持对媒体超载负面效应的缓冲机制研究**

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**摘要**

社交媒体由于其过量的信息、频繁的社交互动成为当代社会人们新的压力源，影响用户的情绪（社交疲惫）与使用体验（活跃度）。本文基于“压力源-应变-结果（SSO）”模型框架，借鉴社会支持理论，试图探究社交互动超载与信息超载情境下，在线社会支持调节社交疲惫进而影响用户活跃度的缓冲效应模型。通过在线调查问卷获取了 315 份微信用户的有效数据，利用 SPSS24 和 AMOS24 对数据进行分析和验证后发现：社交互动超载和信息超载均对社交疲惫有正向影响；社交疲惫对用户活跃度有显著的负向影响；在线社会支持正向调节了信息超载和社交疲惫之间的关系、负向调节了社交疲惫和用户活跃度之间的关系，即在线社会支持缓冲了社交媒体超载带来的负面效应；同时，社交疲惫中介了信息超载与用户活跃度之间的负向关系，但并没有中介社交互动超载与用户活跃度之间的关系。此研究对社交媒体运营商通过增加在线社会支持以调节社交疲惫，增强用户粘性，提高用户活跃度提供了理论参考。

**关键词**: 社交互动超载；信息超载；社会支持理论；用户活跃度
1. 引言

近年来社交媒体如微信、QQ、微博、博客、Facebook和品牌社区等已经成为传统面对面交流方式的替代品，人们能够便捷地与全球各地的用户进行知识分享与信息交流，不再受时间地点的限制，极大地丰富和拓展了人们的社交活动。尽管社交媒体用户数量在稳步增长，但互联网的人口红利正在逐步消失，目前中国的社交媒体发展面临着两个主要问题：一是用户活跃程度低，制约了社交媒体的营销资本和盈利；二是社交媒体运营商在开发、升级应用时无法准确把握用户心理，限制了社交媒体由社交服务向社会化商业模式的转变。因此对于成熟的社交媒体来说，用户规模不再是竞争的核心，洞察用户的真正兴趣和心理需求，增强用户体验，保持和提升用户活跃度则更为重要。

同时，用户对互联网的依赖越发强烈，平均每人每天上网时长高达6小时，几乎每天花费两个小时的时间来分享、点赞或者更新动态。社交网络的扩展让用户时常处于联系之中，频繁的信息分享与交互互动可能导致沟通需求和用户认知能力的不平衡，使用户在处理信息时面临认知限制。伴随着嵌入在社交媒体中的用户社交关系数的增加，社交好友频繁的动态更新和社交请求也让用户消耗了大量认知资源，产生了疲惫心理，越来越多的用户声称对社交媒体的过度使用感到不愉快。社交媒体被视为压力的象征，因此需要一种有效的解决方案来减少疲劳，尽管已有大量研究来解释与使用社交媒体所带来的心理疲惫及其消极使用行为，但哪些因素可以缓解社交媒体过载所带来的消极影响？根据2018年中国社交媒体影响报告显示，在社交媒体中，18～25岁年轻网民的覆盖率为95%，用户会想办法降低社交媒体的负面影响，有意识地控制社交媒体的使用，如在特定场合（如会议时、陪伴家人、聚会时）、在固定时间内（如工作/休息时）不接触社交媒体，关闭各类社交APP的推送提醒等。

Cherubini认为在SNS中，个体可能会因压倒性内容和不断变化的信息而过载，因此需要一种有效的解决方案来减少疲劳，尽管已有大量研究来解释与使用社交媒体所带来的心理疲惫及其消极使用行为，但哪些因素可以缓解社交媒体过载所带来的消极影响？现有研究大多集中在对用户（不）持续使用意愿、满意度等的探讨，且对用户使用行为的度量较为单一，不能反映社交媒体用户使用的多维属性。因此本文借鉴来自医学领域的社会支持理论的缓冲效应，试图探究在线社会支持是一种帮助缓解和调节用户社交疲惫的方法，从而提高社交媒体的用户活跃度。本文在探讨在线社会支持对社交媒体超载引致的结果时引入对企业主、广告商更关注的用户活跃度来反映用户使用社交媒体的行为。并基于压力-应变-结果框架模型，提出以下研究问题：在线社会支持在信息超载、社交互动超载与用户活跃度之间是否起到了缓冲作用？即就缓冲作用而言，在线社会支持是否调节了信息超载、社交疲惫和用户活跃度之间的关系？以及社交疲惫是否中介了信息超载、社交互动超载与用户活跃度之间的关系？

2. 理论基础与研究假设

2.1 理论基础

1. 在线社会支持、社交疲惫与用户活跃度

社会支持理论的缓冲效应最早从医学领域出现，该理论假定获得社会支持的人能够更好地应对疾病或其他身体疾病。例如在运动医学方面，Mitchell等发现受伤
的运动员认为接受社会支持从而减少了不安、孤立的感觉。本文研究的社会支持为“在线社会支持”，指的是个人在在线社交互动中感受到尊重、支持和理解的程度。在线社会支持是用户从在线社区中获得的主要社会价值，指一个人感知到的可用社会资源，这些社会资源会使人觉得自己是被关心、被爱和受尊敬的。

在互联网时代，网络已成为提供和接受社会支持的重要渠道，它不仅为我们提供信息，还帮助我们获得友谊、归属感和情感支持。例如微信的互动功能，“点赞”和“评论”允许用户及时回应他人的请求，向需要帮助的人提供有形或无形的帮助；其他类似社交媒体也使个人能够即时分享他们的故事和感受，并向列表中的联系人表达他们的支持需求。

社交疲惫是指社会化媒体用户由于过量的信息、众多的好友、频繁的交互、以及为维持社交关系而过度耗费精力、时间等因素，产生厌倦和倦怠的主观和消极感受，并希望从社交网络中退出的意愿及趋势。Zhang、Zhao、Lu等发现在一个人的社交网络中为他人提供过多的反应和帮助是一种导致社交疲惫的主要压力因素。社交疲惫是一种心理概念，是对社交媒体活动的消极情绪反应，如疲倦、无聊、冷漠和低兴趣。Ravindran、Kuan、Chua等提出了“社交网络疲劳”的概念来解释用户的持续使用行为。

社交疲惫会影响用户使用媒体的活跃度。活跃度用来衡量社交媒体用户活动的频繁程度，即用户在社交媒体中主要参与的内容行为和社会交互行为(即关系行为)。一方面，社交媒体活跃用户会主动创造内容，如信息披露、发表动态、上传照片等；另一方面，社交媒体活跃用户会将他们感兴趣的内容分享、传播给好友。考虑到用户在社交网络中活跃行为的多样性及其对社交媒体维持和发展的重要性，用户活跃度可被用户活跃行为来客观衡量，根据陈爱辉等对活跃行为的研究，本文将用户活跃度分为四个维度的集合，包括内容创造行为(CCB)、内容传播行为(CTB)、关系构建行为(RBB)和关系维持行为(RMB)。

2. 压力源-应变-结果模型

本文的研究是基于心理健康和压力视角下的压力源-应变-结果(Stress-Strain-Outcome, SSO)框架模型，其中，压力源是个体受到的刺激，是环境中可以产生压力的要求、条件、事件和情境，而应变是个体在感知到压力源之后发展的反应，可以认为是压力对个体的直接作用结果，当个体意识到自己的应变时，就会采取相应的处理措施并会产生不同的结果。基于以上框架形成本文研究模型，即感知到压力源的用户会产生应变反应，从而引发相应的结果。感知超载可被看做引起社交网络疲劳和不满意的压力源；而对个体的注意力、情绪等方面产生的影响作为应变。本研究将社交疲惫作为应变的表现形式，用户活跃度是应变的结果。

2.2 研究假设

2.2.1 社交媒体超载与社交疲惫

Cao和Yu提出过度使用社交媒体的三个维度，即过度的社交、享乐和认知。林家宝、林顺芝和郭金沅的研究中探讨的三种社交媒体超载类型为信息超载、交流超载和社交超载。结合研究背景与内容，本文探索两个维度的社交媒体超载：信息超载与社交互动超载。一方面，信息超载强调用户在接收到的信息与自身认知的不平衡并使他们感到不知所措，从而对个体行为、感受和健康产生负面影响；另一方面，社交互动超载则强调由于用户过众、交互频繁导致身体和心理压力，进而
使用社交媒体的用户会感到疲惫不堪。社交媒体随时随地的将个人与家人、朋友、同事联系起来，并随着嵌入在社交网络中的社交关系数量增加，个人通过社会关系而进入社会网络，可以获得支持和帮助[12]。但为了维持庞大的社交网络，个人必须经常检查他们的社交媒体以尽快回复从好友处接收大量消息，给予好友支持和帮助[33]，这种行为可能会分散用户的注意力，并超过了用户所能维持的好友关系最高限度，因而根本无暇应付，这反而阻碍了好友之间的正常沟通交流，使得用户产生疲倦感而萌生退意[12]。因此，提出假设:

**H1**: 社交互动超载对社交疲惫有正向影响

由于信息的双向流动，基于智能手机无处不在的SNS连接创建的通信渠道，用户不仅可以在其中公开自己，还会接收大量可能无关的信息（垃圾信息），同时也带来了信息过载的问题。由于每个人的认知能力有限，过多的信息可能成为用户的负担，用户将体验到信息过载所带来的疲惫，并且他们的心理健康将受到损害[11]。综合以上分析，提出假设:

**H2**: 信息超载对社交疲惫有正向影响

2. 社交疲惫与用户活跃度

齐炳金和武忠发现，移动社会化媒体用户的情感体验与移动社会化媒体的参与水平有显著正相关[34]，而用户的使用行为恰恰反映了用户的参与水平。郭佳杭基于角色压力的三维度认知因素研究，发现用户在社交媒体的互动中，如果因角色压力而产生了疲惫情绪则会倾向于减少互动、降低活跃频率[35]。谢名家认为使用社交媒体时感觉疲乏、厌烦与厌倦的表现在于在社交媒体的停留时间变短、使用频率减少与使用热度衰退，进而对社交媒体产生负面观念及态度[36]。信息过载会使用户认为只浏览社交媒体中的信息而不表达自己的观点是较为安全的[37]，因此降低了内容创造的行为频率。Maier等研究发现，情绪耗竭在社交过载与满意度，社交过载与社交媒体不持续使用意向之间都起着中介作用[12]。因此，产生了以下假设:

**H3**: 社交疲惫对用户活跃度有负向影响

3. 在线社会支持的调节效应

Peerayuth研究发现在工作环境中用户使用社交媒体的强度与来自同事的社会支持成正相关[39]。Chen和Lee研究发现Facebook互动与自尊心降低、认知超载和痛苦情绪有关[38]。Lin等认为使用Facebook或写博客的人的社会支持水平高于未参与这些活动的人，即使用Facebook与社会支持呈正相关[39]。证据表明社交媒体在使用时并不一定会导致负面结果，在线社交支持有助于改善频繁的社交媒体使用所带来的负面影响。在“魔兽世界”游戏玩家中，更高水平的游戏内社交支持与更多的游戏参与度以及较少的焦虑相关联[40]，虽然在社交媒体中社交超载和交流超载会引发社交疲惫，但用户通过感知到的社会支持意愿增强，可能在某种程度上抵消这些不利影响。此外，社交媒体也可能提供新的社交机会，帮助用户结交更多的朋友，获得更多的社交支持来克服公共传播中的疲惫[42]。因此认为:

**H4**: 在线社会支持正向调节社交互动超载对社交疲惫的之间的作用

**H5**: 在线社会支持正向调节信息超载与社交疲惫之间的作用

**H6**: 在线社会支持负向调节社交疲惫于用户活跃度之间的作用
基于压力源-应变-结果框架模型及上述讨论，提出研究模型（见图1）：

4. 社交疲惫在媒体超载与用户活跃度之间的中介

当用户所接触到的信息和交流超过他们可以有效管理和使用的能力范畴时，信息超载和社交互动超载所引致的压力和负面情绪影响着用户的媒体使用行为，相应的就会采取适应策略，将消极影响最小化，为了减少不适和恢复情绪稳定，用户会减少其社交网络活动。Ravindran 等认为经历社交网络疲惫的个体倾向于减少社交媒体的使用强度，而这种疲惫感越强，就越可能不持续的使用该社交媒体。

H7: 社交疲惫中介了社交互动超载与用户活跃度之间的关系
H8: 社交疲惫中介了信息超载与用户活跃度之间的关系

3. 研究方法

为了验证拟议的研究模型，本研究使用在线问卷调查收集数据。考虑到在中国，微信的月活跃用户人数（monthly active users, MAU）截止 2018 年 9 月已达到 10.82 亿，相比其他社交媒体占据最大额规模，因此这项研究是通过让微信用户在线填写调查问卷进行的。本节介绍了所使用的测量变量、使用的样本和数据收集过程。

3.1 问卷设计与量表选择

<table>
<thead>
<tr>
<th>变量</th>
<th>题项</th>
<th>来源</th>
</tr>
</thead>
<tbody>
<tr>
<td>社交互动超载(SIO)</td>
<td>SIO1 关心（问候、点赞、评论）微信朋友圈中朋友的近况会耗费我很多的精力</td>
<td>牛静, 常明芝 (2018); Xiongfei Cao, Jianshan Sun (2018)</td>
</tr>
<tr>
<td></td>
<td>SIO2 去处理微信朋友圈中朋友的问题（需要我点赞、转发或投票）会花费我很多精力</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SIO3 关心（问候、点赞、评论）微信朋友圈中的朋友会花费我很多时间</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SIO4 浏览微信朋友圈中朋友转发的链接需要我投入很多注意力</td>
<td></td>
</tr>
<tr>
<td>信息超载(IO)</td>
<td>IO1 微信朋友圈中过多的信息常常会分散我的注意力</td>
<td>牛静, 常明芝 (2018); Xiongfei Cao, Jianshan Sun (2018)</td>
</tr>
<tr>
<td></td>
<td>IO2 每天微信朋友圈中会有很多好友更新的信息，浏览刷新这些信息，我有一种淹没在其中的感觉</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IO3 微信朋友圈中有很多关于朋友的动态信息，处理的时候会花费大量时间和精力</td>
<td></td>
</tr>
<tr>
<td>社交疲惫(SE)</td>
<td>SE1 我觉得刷朋友圈很耗费时间</td>
<td>牛静, 常明芝 (2018); Xiongfei Cao, Jianshan Sun (2018)</td>
</tr>
<tr>
<td></td>
<td>SE2 我刷完朋友圈感到厌烦</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SE3 我刷完朋友圈感到疲倦</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SE4 我对朋友圈中是否有新的事情发生并不是很感兴趣</td>
<td></td>
</tr>
<tr>
<td>在线社会支持(SS)</td>
<td>SS1 我的微信朋友圈好友非常关心我的生活</td>
<td>Janice Lo. (2019)</td>
</tr>
<tr>
<td></td>
<td>SS2 我通过微信朋友圈把我的问题诉说给我的好友</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SS3 我在微信朋友圈上得到了情感上的帮助和支持</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SS4 我可以通过微信朋友圈把我的喜怒哀乐分享给我的好友</td>
<td></td>
</tr>
<tr>
<td>用户活跃度(UA)</td>
<td>内容创造行为(CCB)</td>
<td>CCB1 发表动态（包括文字、图和短视频）</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CCB2 更新/编辑个人主页</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CCB3 评论/回复好友的动态</td>
</tr>
<tr>
<td></td>
<td>内容传播行为(CTB)</td>
<td>CTB1 分享好友的分享（消息、照片、动态）</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CTB2 将链接/信息分享给社交媒体好友</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CTB3 分享活动链接（动态、照片）在自己的社交媒体</td>
</tr>
<tr>
<td></td>
<td>关系构建行为(RBB)</td>
<td>RBB1 参与或创建兴趣（话题）微信群</td>
</tr>
<tr>
<td></td>
<td></td>
<td>RBB2 在微信中参与或创建活动并给朋友发送邀请</td>
</tr>
<tr>
<td></td>
<td></td>
<td>RBB3. 搜索好友，发送（或接受）添加好友申请</td>
</tr>
<tr>
<td></td>
<td>关系维持行为(RMB)</td>
<td>RMB1 查看好友的个人主页信息（动态、照片）</td>
</tr>
<tr>
<td></td>
<td></td>
<td>RMB2 和微信朋友圈好友聊天</td>
</tr>
<tr>
<td></td>
<td></td>
<td>RMB3 响应好友发给你的的活动参与邀请</td>
</tr>
</tbody>
</table>
3.2 数据收集

我们使用在线调查方法收集问卷，在问卷中，参与者被告知社交媒体指的是微信。在正式问卷投放前随机对28位社交媒体使用者进行预调研，并根据反馈对问卷进行了适当的修改，以保证准确度和精确度。本次调研均采用在线调查问卷的形式，修订后的调查问卷于2019年4月进行分发，通过扫描二维码或发送问卷链接等方式邀请微信用户答题，历时一周最终获得问卷400份，由于其中85份问卷答题时间过短（小于120秒），故洗去这些数据，最终样本由315个有效问卷组成。样本基本统计信息见表2。

<table>
<thead>
<tr>
<th>表 2 基本统计信息</th>
</tr>
</thead>
<tbody>
<tr>
<td>样本特征</td>
</tr>
<tr>
<td>性别</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>年龄</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>学历</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

4. 数据分析与模型检验

4.1 测量模型检验

信度即测量结果的一致性或稳定性，它是指采用同样的方法对同一对象重复测量时所得结果的一致性程度。本研究采用 SPSS24.0 工具，本研究利用 Cronbach’s Alpha 信度系数来检验问卷以及量表的信度。一般来说，Cronbach’s Alpha 值小于 0.35 时信度过低，应该拒绝使用该量表，在 0.35-0.7 时信度可接受，在 0.7-0.8 时则信度比较好，0.8-0.9 时则信度很好，0.9 以上则信度非常高。

<table>
<thead>
<tr>
<th>表 3 信度和收敛效度分析</th>
</tr>
</thead>
<tbody>
<tr>
<td>观测变量个数</td>
</tr>
<tr>
<td>社交互动超载</td>
</tr>
<tr>
<td>信息超载</td>
</tr>
<tr>
<td>社交疲惫</td>
</tr>
</tbody>
</table>
在线社会支持        4          0.831          0.664          0.887
用户活跃度             4          0.918          0.804          0.942

检验结果如表 3 所示，可以看出，本研究量表中所有潜在变量的 Cronbach’s Alpha 值都在 0.77 以上，表明该量表具有较好的信度。

效度检验主要从内容效度和建构效度两方面进行。首先，本次研究中的测量项都是在前人成熟量表的基础上改编而成，因此内容效度较好。其次，建构效度将从收敛效度和区别效度两方面进行检验。收敛效度的辨别根据 Fornell 等 [46] 的方法依据 AVE 值（平均提取方差）和 CR 值（组合信度）来判断模型是否具有良好的收敛效度。一般认为，AVE 值高于 0.6，CR 值高于 0.7 则具有较高的收敛效度。在区别效度检验方面，根据 Fornell 等 [46] 的方法，通过 AVE 平方根与相关潜在变量的相关系数比来检验区别效度，一般认为如果所有潜在变量的 AVE 值的平方根大于各潜在变量间的相关系数，则认为模型具有较好的区分效度，表 4 对角线上的数据为各潜在变量 AVE 值的平方根，对角线下方的数据为潜在变量间的相关系数。

表 4 区别效度检验结果

<table>
<thead>
<tr>
<th>潜在变量</th>
<th>社交互动超载</th>
<th>信息超载</th>
<th>社交疲惫</th>
<th>社会支持</th>
<th>用户活跃度</th>
</tr>
</thead>
<tbody>
<tr>
<td>社交互动超载</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.846</td>
</tr>
<tr>
<td>信息超载</td>
<td>0.667</td>
<td></td>
<td></td>
<td></td>
<td>0.875</td>
</tr>
<tr>
<td>社交疲惫</td>
<td>0.495</td>
<td>0.449</td>
<td></td>
<td></td>
<td>0.782</td>
</tr>
<tr>
<td>在线社会支持</td>
<td>0.353</td>
<td>0.284</td>
<td>0.135</td>
<td></td>
<td>0.815</td>
</tr>
<tr>
<td>用户活跃度</td>
<td>0.392</td>
<td>0.334</td>
<td>0.216</td>
<td>0.527</td>
<td>0.897</td>
</tr>
</tbody>
</table>

检验结果如表 4 所示，可以看出，本研究的问卷具备良好的区别效度。

4.2 结构模型检验

本研究整体模型适配度检验统计量见表 5。卡方（χ²）值为 307.196，卡方自由度为 2,768，小于评价标准 3，说明假设模型与实际样本数据适配程度良好。RMSEA 值为 0.075（<0.08），IFI 值为 0.921（>0.9），TLI 值为 0.902（>0.9），CFI 值为 0.920（>0.9），PCFI 值为 0.751（>0.5），PNFI 值为 0.719（>0.5），说明本文提出的因果关系模型与实际调查数据契合，图 2 的路径分析的假说模型得到了支持，模型的整体拟合度很好。

表 5 SEM 整体适配度的评价指标体系及拟合结果

<table>
<thead>
<tr>
<th>统计</th>
<th>绝对适配度指标</th>
<th>增值适配度指标</th>
<th>简约适配度指标</th>
</tr>
</thead>
<tbody>
<tr>
<td>检验量</td>
<td>χ²</td>
<td>GFI</td>
<td>AGFI</td>
</tr>
<tr>
<td></td>
<td>χ²/df</td>
<td>RMSEA</td>
<td>NFI</td>
</tr>
<tr>
<td></td>
<td>IFI</td>
<td>TLI</td>
<td>CFI</td>
</tr>
<tr>
<td></td>
<td>PCFI</td>
<td>PNFI</td>
<td>AIC</td>
</tr>
<tr>
<td>实际值</td>
<td>231.370</td>
<td>2.690</td>
<td>0.868</td>
</tr>
<tr>
<td></td>
<td>0.815</td>
<td>0.096</td>
<td>0.871</td>
</tr>
<tr>
<td></td>
<td>0.915</td>
<td>0.895</td>
<td>0.895</td>
</tr>
<tr>
<td></td>
<td>0.748</td>
<td>0.713</td>
<td>299.370</td>
</tr>
<tr>
<td>标准</td>
<td>&lt;3</td>
<td>&gt;0.9</td>
<td>&gt;0.9</td>
</tr>
<tr>
<td></td>
<td>&gt;0.9</td>
<td>&gt;0.9</td>
<td>&gt;0.9</td>
</tr>
<tr>
<td></td>
<td>&gt;0.9</td>
<td>&gt;0.9</td>
<td>&gt;0.5</td>
</tr>
<tr>
<td></td>
<td>&gt;0.5</td>
<td>愈小愈好</td>
<td>愈小愈好</td>
</tr>
<tr>
<td>结果</td>
<td>理想</td>
<td>接近</td>
<td>接近</td>
</tr>
<tr>
<td></td>
<td>接近</td>
<td>接近</td>
<td>理想</td>
</tr>
<tr>
<td></td>
<td>接近</td>
<td>接近</td>
<td>理想</td>
</tr>
<tr>
<td></td>
<td>接近</td>
<td>理想</td>
<td>理想</td>
</tr>
<tr>
<td></td>
<td>理想</td>
<td>理想</td>
<td>理想</td>
</tr>
</tbody>
</table>

986
图 2 结构方程模型路径

4.3 模型结果分析

4.3.1 社交互动超载与社交疲惫之间及社交疲惫与活跃度之间的关系检验

表 6 给出了模型假设的标准化系数、非标准化系数、标准误差、临界比率值及 P 值。结果表明，所有的理论依据都被调查问卷获得的相关数据得以证实，都通过了显著性检验。

<table>
<thead>
<tr>
<th>假设</th>
<th>标准化系数</th>
<th>非标准化系数</th>
<th>标准误差</th>
<th>临界比率值</th>
<th>P 值</th>
<th>检验结果</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: 社交互动超载对社交疲惫有正向影响</td>
<td>0.297</td>
<td>0.266</td>
<td>0.118</td>
<td>2.253</td>
<td>*</td>
<td>支持</td>
</tr>
<tr>
<td>H2: 信息超载对社交疲惫有正向影响</td>
<td>0.388</td>
<td>0.371</td>
<td>0.130</td>
<td>2.858</td>
<td>**</td>
<td>支持</td>
</tr>
<tr>
<td>H3: 社交疲惫对用户活跃度有负向影响</td>
<td>0.335</td>
<td>0.317</td>
<td>0.081</td>
<td>3.892</td>
<td>***</td>
<td>支持</td>
</tr>
</tbody>
</table>

注：临界比率值等于参数估计值与估计值标准误差的比值，如果此值的绝对值大于 1.96，则参数估计值达到 0.05 显著性水平，大于 2.58，则参数估计值达到 0.01 显著性水平。*表示 p<0.05；**表示 p<0.01；***表示 p<0.001。

4.3.2 社交疲惫的中介作用检验

为了更精确地考察中介变量的作用，本研究按照 Zhao、陈瑞等提出的中介效应分析程序[47、48]，参照 Preacher、Hayes 和 Hayes 提出的 Bootstrap 方法来验证间接效应的显著性。这种方法是通过反复随机抽样来估计中介变量的间接效应以及抽样分布特征，并且给出间接效应的置信区间。安装 PROCESS 插件后，我们将主要变量以及控制变量加入宏，并将 Bootstrap 随机抽样设置为 5000 次，在 95%置信区间下数据进行社交疲惫的中介效应检验 [49、50]。运行结果表明在社交互动超载对用户活跃度起正向作用时，社交疲惫的中介检验结果区间（LLCI=0，ULCI=0.1212）包含0，故中介效应不存在，假设 H7 不成立。在信息超载对用户活跃度起正向作用时，社交疲惫的中介检验结果区间（LLCI=0.0002，ULCI=0.1212）不包含0，中介效应存在，其值为 0.3842；控制了中介变量社交疲惫之后，自变量信息超载对因变量用户活跃度的影响不显著，区间（LLCI=-0.0417，ULCI=0.1273）包含0。因此，社交疲惫在信息超载对用户活跃度的影响中发挥了中介作用，假设 H8 得到验证。

4.3.3 在线社会支持在信息超载与社交疲惫间的调节作用
采用陈晓萍、徐淑英和樊景立[1]介绍的调节回归分析方法验证“在线社会支持”
的调节效果，分四步进行：具体如下：第一步，对信息超载组数据做简单回归分析，
回归条件均满足，信息超载对在线社会支持正向作用显著 (\( \beta = 0.449, \ t = 6.783, \ p < 0.001 \))，可见信息超载的确让用户增加了社交疲惫，假设 H2 再次得到验证；第二步，将在线社会支持取均值 (\( \sigma = 2.915 \)) 进行高低分组；第三步，构造社交互动超载和在线社会支持的乘积项后运用阶层回归发现，乘积项回归系数显著 (\( \beta = 0.251, \ t = 3.788, \ p < 0.05 \))，调节效应值 \( \Delta R^2 = 0.059 \)（详细数据见表 6）；第四步，分别对在
线社会支持高低组进行回归以直观显示调节效应，回归结果见图 3。由图 3 可知，无论在线社会支持是高还是低，信息超载对社交疲惫均表现出正向影响，但低在线社会支持水平下信息超载更容易引起用户的社交疲惫（直线更陡峭，斜率更大），可见假设 H5 成立，即调节作用存在（乘积项系数显著），且正向调节作用。采用上述方法步骤，对在线社会支持在社交互动超载和社交疲惫之间的调节作用分析，结果发现
调节作用并不显著 (P>0.05)，故而假设 H4 不成立。

表 7 在线社会支持在信息超载和社交疲惫之间的调节作用分析

<table>
<thead>
<tr>
<th>变量</th>
<th>层次一</th>
<th>层次二</th>
<th>层次三</th>
</tr>
</thead>
<tbody>
<tr>
<td>信息超载</td>
<td>0.449</td>
<td>0.447</td>
<td>0.429</td>
</tr>
<tr>
<td>在线社会支持</td>
<td>0.008</td>
<td>-0.047</td>
<td>-0.681</td>
</tr>
<tr>
<td>信息超载*在线社会支持</td>
<td>0.251</td>
<td>3.788</td>
<td></td>
</tr>
</tbody>
</table>

F 值    | 46.007 | 22.886 | 21.165 |
R²      | 0.202  | 0.202  | 0.261  |
\( \Delta F \) 值 | 46.007 | 0.013  | 14.348 |
\( \Delta R^2 \) | 0.202  | 0.000  | 0.059  |

图 3 在线社会支持在信息超载和社交疲惫之间的调节
图 4 在线社会支持在社交疲惫与用户活跃度间的调节
4.3.4 在线社会支持在社交疲惫与用户活跃度间的调节作用

当用户感受到社交疲惫感后，通过社交媒体获得的在线社会支持是否也充当了正向调节作用？用与上述相同的方法进行分析。简单回归分析结果如下：社交疲惫对用户活跃度负向作用显著（$\beta = 0.216, t=2.984, p<0.001$），社交疲惫对降低了用户活跃度，假设 3 再次得到验证。社交疲惫和在线社会支持的乘积项回归系数显著（$\beta = -0.345, t=5.545, p<0.05$），此时调节效应值 $\Delta R^2 = 0.102$，详细阶层回归分析结果见表 8。回归结果见图 4。由图 4 可知，在低水平在线社会支持情境下，社交疲惫负向影响用户活跃度（斜率为负），但在高水平在线社会支持情境下，用户活跃度与社交疲惫呈正相关（斜率为正）。综上可知，假设 6 成立，即调节作用存在（乘积项系数显著），但发挥负向调节作用而不是正向调节作用。

<table>
<thead>
<tr>
<th>变量</th>
<th>阶层一</th>
<th></th>
<th>阶层二</th>
<th></th>
<th>阶层三</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\beta$</td>
<td>$t$</td>
<td>$\beta$</td>
<td>$t$</td>
<td>$\beta$</td>
<td>$t$</td>
</tr>
<tr>
<td>社交疲惫</td>
<td>0.216</td>
<td>2.984</td>
<td>0.148</td>
<td>2.350</td>
<td>0.065</td>
<td>1.077</td>
</tr>
<tr>
<td>在线社会支持</td>
<td>0.507</td>
<td>8.080</td>
<td>0.418</td>
<td>6.912</td>
<td></td>
<td></td>
</tr>
<tr>
<td>社交疲惫*在线社会支持</td>
<td>0.345</td>
<td>5.545</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$F$ 值</td>
<td>8.903</td>
<td>38.666</td>
<td>40.263</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.047</td>
<td>0.299</td>
<td>0.402</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$\Delta F$ 值</td>
<td>8.903</td>
<td>65.283</td>
<td>30.747</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$\Delta R^2$</td>
<td>0.047</td>
<td>0.253</td>
<td>0.102</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. 讨论

在研究模型中，共提出了八个假设，其中假设 H1、H2、H3、H5、H6、H8 经验证成立，而假设 H4、H7 不成立。

5.1 结果分析

研究旨在探讨在线社会支持对媒体超载负面效果的缓冲作用，表 9 中列出了假设的成立情况。

<table>
<thead>
<tr>
<th>编号</th>
<th>假设</th>
<th>验证结果</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>社交互动超载对社交疲惫有正向影响</td>
<td>成立</td>
</tr>
<tr>
<td>H2</td>
<td>信息超载对社交疲惫有正向影响</td>
<td>成立</td>
</tr>
<tr>
<td>H3</td>
<td>社交疲惫对用户活跃度有负向影响</td>
<td>成立</td>
</tr>
<tr>
<td>H4</td>
<td>在线社会支持正向调节社交互动超载对社交疲惫的之间的作用</td>
<td>不成立</td>
</tr>
<tr>
<td>H5</td>
<td>在线社会支持正向调节信息超载与社交疲惫之间的作用</td>
<td>成立</td>
</tr>
</tbody>
</table>
5.1.1 媒体超载直接对用户情绪产生负面影响，使其感到社交疲惫，进而降低了用户活跃

研究发现，无论是社交互动超载还是信息超载，都会让用户产生疲惫心理。由于每个人的社交体验是有界限的，社交生活只是用户所有日常生活的一部分，当社交所耗费的认知资源超过时，无论是与其他用户的内容交互、信息共享，还是从社交媒体上获取信息，都会使得用户感到心理上的疲惫。作为人际交往（结识新关系、维系旧关系）和信息获取的主要媒介，当下社会对社交媒体的依赖已不可避免地使用户陷入到这一状态，这种社交疲惫是大多用户都需要经历的。

用户情绪指导了用户行为，疲惫用户的活跃度降低。一方面，社交媒体可以很好地给用户带来积极影响。如进行熟人社交，让用户随时掌握家人、朋友的动态；增长知识见闻，了解社会热点、增长知识面、拓展社交圈；但最重要的是社交媒体能帮助用户缓解现实生活中的压力。另一方面，本应发挥作为现实压力舒缓器的作用，但媒体超载又成为了用户新的压力源，当用户感到疲惫时，多数用户会采取应对措施来减少这种消极影响：①在特定场合（如参加会议、陪伴家人、朋友聚会时），不接触社交媒体；②在固定时间（工作、休息时），不接触社交媒体；③在特定事项（如健身、阅读、休闲时），不接触社交媒体；④关闭各类社交 APP 的推送提醒；⑤关闭微信朋友圈功能；⑥将对自己有干扰的社交媒体卸载；⑦将对自己产生干扰的社交 APP 主动卸载。这些行为使得用户活跃度显著降低，逐渐成为潜水用户。

5.1.2 在线社会支持缓冲了媒体超载的负面效用，调节了用户情绪与行为之间的关系

在线社会支持能够调节用户的情绪与行为，缓冲信息超载所带来的负面效应，对提高用户活跃度提供了有效的帮助。社交媒体最重要的功能就是其社交功能，在线社交既可以避免线下见面造成的时间、金钱上的浪费，提高了社交的效率，但没有时间和空间限制的高效社交也造成了一个用户可能要同时面对多个对象、不间断社交信息输入的局面，给用户认知带来了重负。但在线社会支持在这样一个社交网络中让这种社交重负和疲惫得到了缓冲，让原本单方面的社交诉求、关怀或帮助转换成了人与人之间的一种良性互动关系，让原本感知到社交疲惫的用户获取到心理上的支持与鼓励，促使其保持自己在社交媒体上的活跃，维持自己在所属社交网络中的关系，用户活跃度得以保持甚至有所提升。在线社会支持作为调节用户情绪与行为的关键，在以往研究中仅 3.14% 的研究内容涉及商业[24]，但我们应该意识到在线社会支持正在从根本上改变传统的面对面社会支持行为中支持寻求者与提供者间在社会经济方面的关系，并且这种关系对于互联网企业的影响也极为重要。用户作为情绪化的消费者，其所作所为与其意志并不完全一致，而在线社会支持通过调节用户感知到的负面效用与用户情绪，进而引导用户行为朝着向企业有利的方向转变。

5.1.3 社交互动超载带来的负面效用还可通过其他方式调节
研究发现，社交疲惫在社交互动超载——社交疲惫——用户活跃度路径的中介效应并不显著。原因可能是用户在使用社交媒体时，频繁社交互动可以由用户来主动调节，如有意识地控制社交媒体的使用：在陪伴家人、聚会时不接触社交媒体、在休息时间关闭各类社交APP等等，进而由社交互动超载所引起的负面效应在某种程度上有所减少。但这也证实了从医学领域借鉴来的在线社会支持的缓冲效应理论的确适用于当前的研究背景：在线社会支持减少用户社交疲惫并提高用户活跃度，同时进一步补充和完善了压力源-应变-结果框架模式的理论体系，对后续更加深入地研究在线社会支持有一定的参考价值。

5.2 建议

根据研究结论以及分析，对社交媒体运营商提出以下建议：

5.2.1 强化在线社会支持在社交媒体中的应用

如果社交媒体运营商可以某种方式提供允许用户选择沉浸在社交媒体使用的积极方面（例如，接收在线社会支持）同时最小化消极方面（例如信息超载）的特征，社交媒体将作为鼓励、支持的来源而不是压力源，则他们的活跃度和归属感都可以增长，从而有效地发展社交媒体社区。因此企业要重视在线社区建设，拓宽用户获取社会支持的渠道。用户对使用社交媒体的期望已经超出传统的社交意图，他们不再只为满足沟通需求，同时也在寻求在线社会支持。如果社交媒体提供商注重对虚拟品牌社交媒体的建设，让用户积极参与虚拟社交媒体的互动，那么不但能让用户获得更多的在线社会支持，也能更好地维持社交媒体的运营。随着人口红利的减弱和用户增长趋势减缓，如果能够合理和有效的建设社交媒体，必将会成为增强企业市场竞争力的有力武器。

5.2.2 更加关注社交媒体疲惫用户

随着更多的用户意识到社交媒体的消极影响，例如健康影响（视力下降、睡眠减少）、时间占用（减少纸质书籍阅读时间、过多占用私人时间）等，使社交媒体疲惫用户的比例逐年递增，因此社交媒体提供商应该注重加强用户与用户之间的联系，使用户关注点放在人与人之间的互动上，通过多种手段提高社会支持，培养用户忠诚，增强对社交媒体对用户的吸引力。

5.2.3 建立一套合理的用户奖励机制

对用户进行适当的教育，鼓励和引导用户间的相互支持。建立一套针对用户的奖励制度，使用提供的支持行为朝着对社交媒体提供商有利的方向发展。从整体来看，某些用户的推荐行为和互助行为对其他用户来说恰恰是在线社会支持的重要来源，所以提供商既要努力为用户获取在线社会支持创造条件，同时也要鼓励那些在社交媒体平台提供了在线社会支持的用户，两者是相互促进的。

5.2.4 积极引导用户使用行为

帮助用户积极管理自己的行为，以避免潜在的负面结果。提供商可利用平台帮助用户识别其社交网络中的非必要好友（如微商、陌生人等），控制和筛选这些非必要好友的动态出现在用户朋友圈的时间和频率。同时提供更加多样化的交流方式，多线勾连用户，让用户感知到更全面的在线社会支持。

5.3 后续研究

本研究探讨了在线社会支持对社交疲惫和用户活跃度的缓冲效应，并通过SPSS24.0和AMOS24.0分析数据，验证了有关假设，信息超载负向影响用户活跃度，信息超载能通过影响用户情绪（社交疲惫），进而影响其活跃度，从而揭示了信息超
载影响用户活跃度的内在机制。这与压力源-应变-结果框架模型相一致，信息超载可以看作是压力源，社交疲惫是用户的应变反应，产生了用户活跃度降低的结果。并强调了在线社会支持在社交媒体信息超载、社交疲惫和用户活跃度之间的缓冲效应的潜在机制：在线社会支持能缓解信息超载给用户带来负面结果。

本文从在线社会支持的视角，证实了在线社会支持正向调节了社交疲惫，即高水平的在线社会支持能对社交疲惫起到缓冲作用。同时验证了在线社会支持显著负向调节了社交疲惫与用户活跃度，在更高水平的在线社会支持情境中，即使用户感到疲惫，为了维护这种高水平的社会支持，用户也选择保持自己的社交媒体活跃状态，获得更多的关注，体验到自我价值和自我认同，促成了良好人际关系的建立。

本研究对企业的管理启示在于：本研究还存在一些局限：首先，本文共收集有效问卷 315 份，限于成本考量，问卷分发基于本人社交网络进行辐射，在样本的年龄和学历背景方面存在一定程度分布不均的情况，希望以后的调查能够将研究样本范围扩大，覆盖到各个年龄段和学历背景的人群。第二，篇幅所限，本文未对人口学统计变量等进行差异研究，例如在线社会支持的作用是否在性别上存在差异，各个年龄段是否都受到在线社会支持的调节，用户社交媒体使用时间（每日使用时间和使用总时长）是否在缓冲机制中产生影响。希望后续研究可以加以验证。第三，常李艳等在社交网站中在线社会支持文献综述的研究中，发现很少有学者直接利用内容分析对帖子内容进行归纳或演绎编码，研究网络社交网络交互内容的社会支持编码体系，且研究方法侧重于问卷调查，今后的研究中有必要采用更加客观的实验方法来研究在线社会支持对用户行为的干预结果，并采用主观客观相结合的更多样的研究方法。未来的研究可以使用具有多个数据源的纵向研究设计，下一步拟对用户人格特质这类长期影响用户情绪的因素采取实验或访谈法等，以更好地反映人格特质对社会支持、用户活跃度的影响。本研究被试是社交媒体（微信）用户，但社交媒体平台还有很多，如微博、QQ、虚拟社区、论坛等，不同类型的社交媒体使用行为可能存在差异，未来将进行比较研究，探讨不同类型社交媒体的使用行为与结果。

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Flow Experience, Social Currency and Repeat Viewing Intention

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Abstract

This study explored the effect of flow experience and social currency on repeat theatrical viewing of movies in film industry. The driving factors for repeat viewing are different from those for movie box office. For example, the effects of genre, media and audience comments were significant only for the latter and factors such as movie length, the comments of the film critics, and level of news coverage actually played a negative role in the repeat consumption. A research model is established using flow experience and social currency as the independent variables for the first time, movie star effect as control variable and the hedonism as the moderator variable. This will provide a basic framework for the further study on the willingness to repeat the movie, to improve single movie loyalty also increase the box office revenue. Therefore, this study has important practical value and guiding significance.

Keywords: Flow experience; Social currency; Hedonism; Movie star effect; Repeat viewing intention
沉浸体验、社交货币与重复观影意愿

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摘要
本本文旨在探讨电影产业中沉浸体验与社交货币对重复观影意愿的作用。重复观影的驱动因素不同于电影票房，例如，类型、媒体和观众评论的影响只对后者显着，而电影长度、影评人评论、新闻报道水平等实际上对重复消费起着消极作用。由于目前缺乏关于重复观影意愿的文献，通过借鉴营销领域相关研究，从消费者心理动机层面引入沉浸体验和社交货币作为前置变量，考虑到重复观影意愿的复杂性和多变性，又采用明星效应作为控制变量以及享乐主义作为调节变量建立了研究模型。这为今后重复观影意愿的进一步研究提供基础框架，也为提升单场电影忠诚度、增加票房收入提供更多思路。因此，本研究具有重要的实用价值和指导意义。

关键词：社交货币；沉浸体验；重复观影意愿；享乐主义；明星效应

1. 引言
近十年来，中国电影产业规模迅速扩大，影响力不断提升，使得电影票房引起人们更多关注。票房作为电影投资方的直接利润是衡量一部电影成功与否的关键指标。由于电影属于高风险文化产品，如何增加票房收、降低市场风险成为电影行业需要思考的问题。当前国内外学者对此研究都集中生产成本、电影类型、续集电影、上映档期、影片口碑等对电影票房的影响，忽视了重复观影意愿也是获得观众认可、增加票房收入的重要途径。

众所周知，影响电影票房不但有电影本身的先导因素，例如：影片预算，导演，演员，口碑，还有大量主观因素，如影片排片，影片宣传及发行等。本文在现有文献基础上，通过借鉴营销领域相关研究，从消费者心理动机层面引入沉浸体验和社交货币作为前置变量，探讨它们对重复观影意愿的作用。考虑到重复观影意愿的复杂性和多变性，采用明星效应作为控制变量以及享乐主义作为调节变量建立了研究模型。因此，本文在提升单场电影忠诚度以及在增加票房收入等方面为电影投资者和从业者提供更广阔的思路。

2. 文献回顾
2.1 重复观影意愿
市场营销领域中消费者购买意愿主要用于对消费者消费行为的预测。重复
购买意愿是消费者在首次购买体验后，对未来持续购买的主观意愿（Zeithaml, 1996）。美国哈佛商业研究报告指出：消费者重复购买行为比初次购买的消费者可为企业多带来20%-85%的利润。Reichheld (1996)研究表明：如果忠诚顾客每增长5%，企业利润将增加25%~95%。例如：《泰坦尼克号》全球总票房18.43亿美元，重复观影率高达20% (Collins, Hand, & Linnell, 2008)。同样，《蝙蝠侠：黑暗骑士崛起》和《盗梦空间》也出现大规模重复观影现象。


消费价值理论（Sheth et al. 1991）为重复观影意愿提供了理论基础。消费者的选择行为受五种价值观的影响：享乐/功能价值观、条件价值观、社会价值观、情感价值观和认知价值观。认知价值，即提供新颖性和激发好奇心的能力，最有可能影响电影选择行为。当一部电影产生了强烈的情感反应时，重复观影将会再现当时情感，在这种情况下，对同一部电影的情感价值将超过另外一部新电影的认知价值。Babin (1994)在此基础上研究了享乐主义和社会认同在调节相关环境因素对参与重复购买行为的影响方面所起的作用，认为享乐主义是个体评价消费体验的重要标准。例如，享乐主义态度的消费者更倾向于给消费者带来情感、乐趣、特别是对体验方面的需求满足感。准社会关系理论从关系角度解释重复观影现象（McHugh, 1987），也就是说观众与电影角色发展出一种虚假关系，重复观影为这种关系提供了延续，特别是对于由观众最喜爱的明星扮演的角色。

另外，Heider (1958)的平衡理论阐述了明星效应与票房表现之间的关系，即喜欢名人的观众往往也喜欢他们的作品或者代表物，广告代言策略便按照此逻辑诞生的。明星参与一部电影，象征着他/她对内容产品的认可，观众会期待和他们最喜欢的明星参与的电影之间产生一种关联。Nelson和Glofeshy (2012)通过用IMDB明星指数来测度明星效应，论证了排名更高的明星对票房的影响力更大，多个明星对票房的影响大于单个明星。

2.2 沉浸体验

沉浸理论（Flow Theory）由芝加哥大学心理学家Csikszentmihalyi (1975)首先提出，沉浸体验是一种正向、积极的心理体验。在沉浸体验情境之中，个体参与活动时获得最大程度的愉悦感，从而促使个体反复进行同样的活动而不会厌倦，有时甚至忘记时间和自身的存在。此后，Csikszentmihalyi (1993)提出沉浸体验的九维度，它们分别是：(1) 目标明确；(2) 即时回馈；(3) 技能与挑战平衡；(4) 知行合一；(5) 全神贯注；(6) 潜在的控制感；(7) 意识丧失；(8) 时间感扭曲；(9) 有目的的体验。Thomas (1999) 在九维度基础上，将其归纳为三类因素：第一
类是条件因素(包括明确目标、即时回馈、挑战与技能平衡)。第二类是体验因素(包括知行合一、全神贯注、控制感)。第三类是结果因素(包括意识丧失、时间扭曲、自我享受)。

随着信息技术飞速发展，学者们对互联网和影视产品沉浸体验的研究逐渐增多。他们认为，数字技术使得沉浸体验发生了变化，包括空间沉浸、时间沉浸、情感沉浸和交互沉浸等。例如：观众对《泰坦尼克号》的情感沉浸，《恐龙骨头》和《天使瀑布》X3 影院所带来的空间沉浸，《巧虎大飞船历险记》互动沉浸体验，以及《复仇者联盟 4》长达 180 分钟却感觉一晃而过等等。

根据 Murphy (2011) 的研究，沉浸体验在观影过程中产生，并不会随着电影结束而消失，也有相当一部分沉浸体验在观影后发生。观众沉迷于故事场景或者产生观影幻觉，这种幻觉所表达出强烈情绪变化，一如在经历电影情节。因此，角色的境遇或者价值观也会影响观众认知，使其产生行为变化，以至观众将这种幻觉和情绪必须延续在反复观看电影中才能得到释放。麻倩昀 (2013) 从心理层面上分析，沉浸体验提供了观众对自身的掌控感，并为在幻觉中代替角色的可能性而产生的极大愉悦感。

2.3 社交货币

社交货币 (social currency) 源自 Pierre Bourdieu (1985) 提出的社会资本理论 (Social Capital Theory)。Lobschat 等 (2013) 对社交货币进行定义，即消费者与他人分享品牌的信息、程度和方式，作为他们日常社交生活的一部分，并从与其他品牌用户的互动中获得利益。简单的说：社交货币就是一种谈资，利用人们乐于分享的心理特质塑造产品或者思想，实现口碑传播。见图 1 所示。

图 1 社交货币与谈资及共同话题的关系

社交货币包含了六个维度：(1) 社区归属 (Affiliation)，品牌消费者中拥有社区归属感的人数占比；(2) 话题讨论 (Conversation)，消费者中能够发起与品牌相关话题的人数；(3) 实用价值 (Utility)，认为与品牌其他消费者进行交流时获得了实用价值的人数；(4) 支持声量 (Advocacy)，消费者中愿意成为品牌的拥护者对品牌给予无条件支持的人数；(5) 信息交 (Information)，认为自己在与其他消费者进行有效的信息交流的人数；(6) 身份认同 (Identity)，对品牌的其他消费者拥有身份认同的消费者人数。
分享是社交货币的核心并贯穿于我们的生活之中。这些共享的思想、观点和经验成为社交媒体和网络能够流行的基础。当人们在与其他人交流时，并不仅仅是想传递某种信息，还传播与自己相关的重要信息。换言之，在人们潜意识中，想通过与他人谈论的信息来完成自我的“标签化”，成为别人眼中理想的自己。这些可以凸显自我独特性的信息，说明社交货币不仅全面地概括了人际交互的特征，也体现在社交媒体网络中的流通特性。因此，社交货币涵盖了人们在社交网络上进行的各种行为，例如：口碑传播、虚拟社区、粉丝互动、自我标签等等。

Jonah Berger 在《疯传：让你的产品、思想、行为像病毒一样入侵》中提到，为产品打造特有的社交货币，并令其在人际网络中广泛传播和流通是品牌成功的关键环节。Berger(2014)认为，让产品产生非凡吸引力的两要素是神秘性和争议性。例如：电影《布莱尔女巫计划》在拍摄前制造了神秘和具有争议性的话题，人们为此不断争论和传播并逐渐升级产生巨大的轰动效应，最终以 3.5 万美元投入获取 2.48 亿美元的全球票房收入。也就是说，通过个人的人际关系和网络传播信息将具有极大说服力和可信度（Berger，2014）。对电影而言，评判影片优劣标准，通常是以这个内容的传播量来衡量。当影评量积累到一定程度就会得到大众普遍认同，即使与个人观点不符也会向主流信息评论靠拢。从而使具有社交货币特质的影片极大程度为观众的重复观影意愿提供带倾向性选择。

3. 研究模型与假设

通过对重复观影意愿概念相关的文献回顾，根据消费价值理论(Sheth et al. 1991)并结合近几年电影产业现状提炼出影响重复观影意愿的二个主要因素：沉浸体验和社交货币，并以享乐主义作为调节变量，明星效应作为控制变量形成了本文的研究模型，如图 2 所示。

![图 2 影响重复观影意愿因素的研究框架](image)
沉浸体验包含一系列从低到高的愉悦感，也包含从低到高的能力表现水准。由此可见，沉浸体验有在个体参与到某项活动中时才会发生，是个体体力、智力、精神等的投入、能力表现后的情绪体验。根据 Murphy（2011）的研究，观众沉迷于故事情节或者在观影环境中并产生幻觉，并将这种幻觉和情绪延续在反复观看电影中才能得到释放。基于以上提出以下假设:

H1：沉浸体验对重复观影意愿具有正向影响；

Brakus（2008）曾提出的社交货币对品牌体验存在正面的相关性。Alavijeh（2017）通过实证研究发现，社交货币与忠诚度、信任度、感知质量和消费者购买意愿都存在积极影响。Sehwan等（2017）的研究证实电影预告片在网络信息的分享与票房之间存在正相关。Lee和choeh（2017）也将网络口碑与电影票房的关系拓展到与消费者重复购买行为上做进一步研究。基于以上提出如下假设:

H2：社交货币对重复观影意愿具有正向影响；

H3：享乐主义倾向越高，沉浸体验对重复观影意愿的正向影响就越强

H4：享乐主义倾向越高，社交货币对重复观影意愿的正向影响就越强

4. 总结

本文探讨了电影产业中沉浸体验与社交货币对重复观影意愿的作用。重复观影的驱动因素不同于电影票房，例如，类型、媒体和观众评论的影响只对后者显著，而电影长度、影评人评论、新闻报道水平等实际上对重复消费起着消极作用。同时，对电影票房的影响因素做出了初步分析与归纳。总体来说，目前学术界对重复观影意愿处于起步阶段，对沉浸体验和社交货币的基础性、系统性的理论框架和实证研究也比较匮乏。

总之，目前学者们对电影行业重复观影意愿的实证研究甚少，特别是电影行业极具特殊性，电影市场也存在复杂性和多变性，影响观众重复观影意愿因素随着时代发展和技术进步在不断变化。但毋容置疑的是观众的重复观影意愿能为电影投资方带来可观的商业利益，并在推动电影取得票房成功方面发挥重要作用。尽管本研究具有一定局限性，未来在营销学和心理学理论基础上做更深层次的探索性研究。
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A Measure of the Relative Preferences of Consumers in the Brand Origin

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Abstract

This paper is the part of empirical preparation for hypothesis testing. Its design and measurement determine the data effect presented by the next test. This paper mainly designs a multi-link measurement system for specific brands, which can highlight the difference of origin. Respondents in every kind of grade products of the brand should be sorted, then pairing of domestic and overseas brand according to the order of each type of product, and then each kind of product are calculated separately, and the domestic brands and foreign brands are calculated in the average scores of each measurement variables, with the average of all domestic brand, divided by the average of overseas brand multiplied by 100, by the respondents to a measuring the value of the variable of this product. This measurement method can effectively compare the difference of customer preference between domestic and foreign brands, and can reflect the difference into the whole process of the following hypothesis test.

Keywords: origin; Brand; The relative preferences
品牌原产地消费者相对偏好的测量

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摘要
本文是为假设检验做实证准备的部分，其设计和测量决定着接下来检验所呈现的数据效果。本文主要设计了针对具体品牌的、能够突出原产地差异的多环节测量体系。本研究对每位受访者在每一类产品中的品牌打分都要进行排序，再将每类产品中的境内和境外品牌按照排序配对选出，然后分别计算每类产品中被抽出的境内品牌和境外品牌在各测量变量上的平均得分，再用境内品牌的平均分除以境外品牌的平均分乘以100，得到该受访者对相关产品的某个测量变量的值。这种测量方法可以有效对比境内外品牌的顾客偏好差异，并能够将这种差异体现在接下来的假设检验的全过程中。

关键词：原产地；品牌；相对偏好

1. 方法概述
受访者需要对所有被测品牌分别给出本研究涉及的各类感知和品牌态度方面的判断并打分，测量采用Likert式7级量表。本研究对每位受访者在每一类产品中的品牌打分都要进行排序，再将每类产品中的境内和境外品牌按照排序配对选出，即，境内第一的品牌和境外第一的配成一对，第二的和第二的配成一对。根据下文列出的品牌情况，以小型车为例，虽然品牌总数有19个，但境内品牌5个，境外品牌14个，所以只能配出5对。然后分别计算每类产品中被抽出的境内品牌和境外品牌在各个测量变量上的平均得分，再用境内品牌的平均分除以境外品牌的平均分乘以100，得到该受访者对该类产品的某个测量变量的值。如果把本研究测量的各类变量看作一种对品牌某方面的喜爱程度，本研究各类变量的实际含义是：相对于境外品牌，受访者对境内品牌的偏爱程度。因为依次抽出的品牌都是受访者选择的最喜爱的品牌，如果测量数值大于100，说明受访者对最喜爱的境内品牌更偏爱，反之则说明受访者更偏爱境外品牌。为了掌握受访者对各类产品境内境外品牌的总体评价，本研究在得到每位受访者的选择值的同时，还将分别计算每类产品下各个品牌的平均值，然后再进行排序并如上文所述方法配对抽出，分别计算每类产品中被抽出的境内品牌和境外品牌在各个测量变量上的平均得分，再用境内品牌的平均分除以境外品牌的平均分乘以100，得到该类产品在某个测量变量上的值，反映的是被测试顾客群体的整体判断情况。

2. 样本选择
在正式问卷发放时，首先保证受访者性别均衡，其次是年龄的多样化，另外
通过选择不同档次的居民区和商业聚集区，来提升受访者样本收入的多样化。预
调研正式问卷发放工作是在 2015 年 6 月初开展的，包括本人在内，在导师的安
排下，从课题团队选择 2 位博士生和 3 位硕士生，一共 6 人，3 男 3 女，男女搭
配 2 人一组，每组包括 1 位博士生和 1 位硕士生，分为 3 个小组，分别在北京各
城区地铁、医院、银行、居民小区等地发放问卷。为在问卷发放过程中体现本次
测量的规范性，最主要是给予受访者一种直观感受，让他们感觉到在接受正规的
调研访问，而不是随意的街边营销让受访者感到反感，我们要求团队成员着装正
式，言谈举止礼貌规范，为此我们做了充分的准备，并在校内进行了排练。另外，
在调研过程中，我们尽可能选择在地铁、医院、银行、居民小区处于等候和休息
的人员，保证填写人有充分的时间和精力用于问卷中。在实际发放问卷时，在银
行排队等候的人群中能有一定程度的配合，而在地铁以及医院中，人们往往处于
焦急和烦躁的等待情绪中，配合填写问卷的人极少，另外在居民小区中一般是在
傍晚，晚饭后的休息时间，小区内也有一些受访者能够配合。我们对于团队成员
工作量也提出了具体要求，要求每组每天达到不低于 20 份问卷发放的工作量，
为提高团队成员工作的积极性，每天提前完成计划工作量的小组即可自由活动，
超出计划工作量的小组以增加劳务费的形式作为奖励。为提高填写质量和问卷的
吸引力，团队为每位填写者准备了小礼物。虽然团队为此做了相当多的准备，但
实际效果并不理想，连续工作 7 天，总计收集有效问卷 206 份，平均每组每天不
足 10 份。这一经历使我们认识到，要想得到数量可观并且质量较高的问卷，街
边随机发放在实际调研中的效果并不好。因此，在接下来的调研中，本人利用在
北京的人脉关系，联系到了若干所单位，采用集体发放、固定时间回收的方式。
问卷发放的单位与发放数量为：北京师范大学 60 份（不面向在校学生）、中国
政法大学 60 份（不面向在校学生）、北京曹开镛中医医院 30 份。北京航天三院
某所 40 份、北京航天五院某所 40 份，北京市人力资源和社会保障局 40 份，北
京市电力公司 40 份、朝阳区供电公司 30 份。总计 340 份问卷的回收率是 100%，
再加上之前随机发放的 206 份，在累计 546 份问卷中，去掉填写不合要求以及不
完整的问卷，回收有效问卷 520 份，有效比例达到 95.2%，样本分布如表 1 所示。

表 1 样本分布

<table>
<thead>
<tr>
<th>项目</th>
<th>级别</th>
<th>样本数量（人）</th>
<th>所占比例（%）</th>
</tr>
</thead>
<tbody>
<tr>
<td>性别</td>
<td>男</td>
<td>269</td>
<td>51.7</td>
</tr>
<tr>
<td></td>
<td>女</td>
<td>251</td>
<td>48.3</td>
</tr>
<tr>
<td>年龄段（岁）</td>
<td>20-24</td>
<td>83</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>25-34</td>
<td>163</td>
<td>31.3</td>
</tr>
<tr>
<td></td>
<td>35-44</td>
<td>182</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>45-54</td>
<td>66</td>
<td>12.7</td>
</tr>
<tr>
<td></td>
<td>55-64</td>
<td>26</td>
<td>5</td>
</tr>
<tr>
<td>初中及以下</td>
<td></td>
<td>15</td>
<td>2.9</td>
</tr>
<tr>
<td>高中</td>
<td></td>
<td>89</td>
<td>17.1</td>
</tr>
<tr>
<td>大专</td>
<td></td>
<td>169</td>
<td>32.5</td>
</tr>
<tr>
<td>大学</td>
<td></td>
<td>212</td>
<td>40.8</td>
</tr>
<tr>
<td>硕士及以上</td>
<td></td>
<td>35</td>
<td>6.7</td>
</tr>
<tr>
<td>5000 及以下</td>
<td></td>
<td>11</td>
<td>2.1</td>
</tr>
<tr>
<td>5001-10000</td>
<td></td>
<td>28</td>
<td>5.4</td>
</tr>
<tr>
<td>10001-15000</td>
<td></td>
<td>93</td>
<td>17.9</td>
</tr>
<tr>
<td>15001-20000</td>
<td></td>
<td>199</td>
<td>38.3</td>
</tr>
<tr>
<td>20001-25000</td>
<td></td>
<td>178</td>
<td>32.1</td>
</tr>
<tr>
<td>25000 以上</td>
<td></td>
<td>22</td>
<td>4.2</td>
</tr>
</tbody>
</table>
3. 原产地形象感知测量

表 2 原产地形象感知测量问项的选择

<table>
<thead>
<tr>
<th>量表</th>
<th>我是否认可品牌产地有如下的作用</th>
<th>支持</th>
<th>反对</th>
<th>支持率</th>
<th>选用</th>
</tr>
</thead>
<tbody>
<tr>
<td>关系形象</td>
<td>可以用来表达友谊</td>
<td>2</td>
<td>153</td>
<td>1%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>可以用来表达爱情</td>
<td>4</td>
<td>162</td>
<td>2%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>可以用来表达亲情</td>
<td>8</td>
<td>137</td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>可以增进与他人的亲密关系</td>
<td>7</td>
<td>121</td>
<td>3.5%</td>
<td></td>
</tr>
<tr>
<td>社会形象</td>
<td>有较高的社会知名度</td>
<td>133</td>
<td>26</td>
<td>66.5%</td>
<td>√</td>
</tr>
<tr>
<td></td>
<td>会追求生活品质的人群使用</td>
<td>29</td>
<td>155</td>
<td>14.5%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>是高品质产品的象征</td>
<td>119</td>
<td>39</td>
<td>59.5%</td>
<td>√</td>
</tr>
<tr>
<td>集体形象</td>
<td>常用来表现消费者是某群体的一员</td>
<td>9</td>
<td>169</td>
<td>4.5%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>可以表达对某个群体的认同</td>
<td>2</td>
<td>178</td>
<td>1%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>可以被看作是某个群体的象征</td>
<td>22</td>
<td>157</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>常常反映了它的消费者的个性</td>
<td>28</td>
<td>116</td>
<td>14%</td>
<td></td>
</tr>
<tr>
<td>个人形象</td>
<td>有自身的特色</td>
<td>117</td>
<td>31</td>
<td>58.5%</td>
<td>√</td>
</tr>
<tr>
<td></td>
<td>产品特色能与顾客需求相契合</td>
<td>145</td>
<td>29</td>
<td>72.5%</td>
<td>√</td>
</tr>
</tbody>
</table>

根据调研结果，对于社会形象，我们选择“有较高的社会知名度”、“是高品质产品的象征”这两个问项，但由于这两个问题的含义高度相似，我们将其整合为一个问题，为方便消费者回答，我们设定题项为：“该品牌原产地能够代表高品质产品，有较高的社会知名度。”对于个人偏好我们采用的是参考个人形象的题项：“该品牌原产地所代表的产品特色能满足顾客需求。” 题项测量采用Likert式7级量表，从“完全不同意”、“比较不同意”、“有点不同意”、“一般”、“有点同意”、“比较同意”、“完全同意”分别用1-7分来表示，计算平均分并排序如表2和表3所示。

由于涉及数据表格众多，本文仅以测量结果具有代表性和独特性的变量为例作为过程展示，其余变量的测量结果不再赘述。本节以品牌原产地社会形象感知的测量结果为例。

表 3 低介入度产品品牌原产地社会形象感知的测量
### 表 4 高介入度产品品牌原产地社会形象感知的测量

<table>
<thead>
<tr>
<th>品牌</th>
<th>电视</th>
<th>电脑</th>
<th>洗衣机</th>
<th>冰箱</th>
<th>小型车</th>
</tr>
</thead>
<tbody>
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<td>海信</td>
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<td>5.32</td>
</tr>
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<td>4.65</td>
<td>5.24</td>
<td>4.59</td>
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</tr>
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<td>5.79</td>
<td>4.21</td>
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</tr>
<tr>
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<td>4.24</td>
<td>4.57</td>
</tr>
<tr>
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<td>3.83</td>
<td>5.38</td>
<td>5.12</td>
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<td>夏普</td>
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<td>3.67</td>
<td>5.03</td>
<td>3.25</td>
<td>5.02</td>
</tr>
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<td>3.04</td>
<td>3.34</td>
<td>4.83</td>
<td>2.85</td>
</tr>
<tr>
<td>康佳</td>
<td>3.84</td>
<td>4.19</td>
<td>4.93</td>
<td>3.98</td>
<td>2.36</td>
</tr>
<tr>
<td>珀基</td>
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<td>2.53</td>
<td>3.42</td>
<td>4.28</td>
<td>2.11</td>
</tr>
<tr>
<td>方正</td>
<td>3.31</td>
<td>2.31</td>
<td>4.75</td>
<td>3.24</td>
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<tr>
<td>长城</td>
<td>2.84</td>
<td>3.11</td>
<td>3.86</td>
<td>3.65</td>
<td>1.51</td>
</tr>
</tbody>
</table>

注：灰色底纹为境外品牌
注：灰色底纹为境外品牌

根据表4的测量结果。如前文所述，我们仍将每一类产品中的境内和境外品牌按照排序配对抽出。在平板电视中可以抽出4对，在台式电脑中抽出6对，在洗发机中抽出8对，在冰箱中抽出8对，在小型车中抽出5对。最后，分别计算每一类产品中被抽出的境内品牌的平均值和境外品牌的平均值，再用境内品牌的平均值除以境外品牌的平均值乘以100。高介入度产品品牌原产地社会形象感知的测量结果的总体情况为：

社会形象感知平板电视＝\{(4.82 海信+4.79 创维+4.57 TCL+4.13 乐视) / 4 境内品牌数\} / \{(5.68三星+5.31 索尼+5.17 LG+4.16 夏普) / 4 境外品牌数\}×100=4.58 / 5.08×100=90.16

社会形象感知台式电脑＝\{(4.87 联想+4.19 ThinkCentre+3.83 神舟+3.67 清华同方+3.31 方正+3.04 海尔) / 6 境内品牌数\} / \{(5.79 苹果+5.65 谷歌+5.47 惠普+4.65 华硕+4.36 宏基+3.97 明基) / 6 境外品牌数\}×100=3.81 / 4.98×100=76.51

社会形象感知洗衣机＝\{(5.01 海尔+3.58 小天鹅+3.14 美的+3.11 小鸭+2.53 美菱+2.21 威力) / 6 境内品牌数\} / \{(5.55 西门子+5.24 松下+5.12 LG+5.03 惠而浦+4.93 博世+4.38 三星) / 6 境外品牌数\}×100=3.26 / 5.01×100=65.07

社会形象感知冰箱＝\{(5.58 海尔+5.13 奥克斯+4.59 美菱+4.24 美的+3.98 卡萨帝+3.42 新飞+3.25 海信+3.13 澳柯玛) / 8 境内品牌数\} / \{(5.56 西门子+5.32 三星+5.12 松下+4.83 LG+4.75 博世+4.17 伊莱克斯+3.86 惠而浦+3.71 日立) / 8 境外品牌数\}×100=4.17 / 4.67×100=89.29

社会形象感知小型车＝\{(4.28 奇瑞+3.65 比亚迪+3.52 中华+3.24 吉利+2.36 长城) / 5 境内品牌数\} / \{(5.79 奥迪+5.59 别克+5.32 现代+5.18 大众+5.09 福特) / 5 境外品牌数\}×100=3.41 / 5.39×100=63.27

4. 品牌态度测量

<table>
<thead>
<tr>
<th>量表</th>
<th></th>
<th>支持</th>
<th>反对</th>
<th>支持率</th>
<th>选</th>
</tr>
</thead>
<tbody>
<tr>
<td>认知性品牌态度</td>
<td>该产品很好</td>
<td>91</td>
<td>36</td>
<td>45.5%</td>
<td>√</td>
</tr>
<tr>
<td></td>
<td>该产品物有所值</td>
<td>82</td>
<td>87</td>
<td>41%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>该产品令人满意</td>
<td>73</td>
<td>107</td>
<td>36.5%</td>
<td></td>
</tr>
<tr>
<td>情感性品牌态度</td>
<td>喜欢该产品</td>
<td>89</td>
<td>54</td>
<td>44.5%</td>
<td>√</td>
</tr>
<tr>
<td></td>
<td>信赖该产品</td>
<td>113</td>
<td>37</td>
<td>56.5%</td>
<td>√</td>
</tr>
<tr>
<td></td>
<td>在同类产品中对其有强烈的兴趣</td>
<td>41</td>
<td>102</td>
<td>20.5%</td>
<td></td>
</tr>
<tr>
<td>品牌购买意愿</td>
<td>购买该产品的可能性极大</td>
<td>119</td>
<td>57</td>
<td>59.5%</td>
<td>√</td>
</tr>
<tr>
<td></td>
<td>购买此类产品时，会优先考虑该产品</td>
<td>125</td>
<td>39</td>
<td>62.5%</td>
<td>√</td>
</tr>
<tr>
<td></td>
<td>愿意以稍高一些的价格来购买该产品</td>
<td>51</td>
<td>128</td>
<td>25.5%</td>
<td></td>
</tr>
</tbody>
</table>

对于认知性品牌态度，根据调研结果，我们选择“该产品很好”这个问项，为方便消费者回答，我们在语义上除去掉一些细节限定，加上“总体上”这一文字表述，强调受访者的一般性感知，最后我们设定问项为：“总体上我认为该品牌产品很好”。
对于情感性品牌态度，根据调研结果，我们选择“喜欢该产品”和“信赖该产品”这两个问项，为方便消费者回答，我们设定题项为：“总体上我很喜欢该品牌产品，对其有很高的信任度”。

对于品牌购买意愿，根据调研结果，我们选择“购买该产品的可能性极大”和“购买此类产品时，会优先考虑该品牌”这两个问项，由于第二个问项的支持度远高于第一个问项，而且第二个问项的阐述也更为严谨，在一定程度上包含了第一个问项的含义。为方便消费者回答，我们直接采用第二个问项为品牌购买意愿的测量题项：”购买此类产品时，我会优先考虑该品牌”。

题项测量采用Likert式7级量表，从“完全不同意”、“比较不同意”、“有点不同意”、“一般”、“有点同意”、“比较同意”、“完全同意”分别用1-7分来表示，受访者根据自己的判断做出选择。本节以品牌购买意愿为例对测量结果和计算过程做出展示，如表6和表7所示。

### 表6 低介入度产品品牌购买意愿的测量

<table>
<thead>
<tr>
<th>品牌</th>
<th>均分</th>
<th>排序</th>
<th>品牌</th>
<th>均分</th>
<th>排序</th>
<th>品牌</th>
<th>均分</th>
<th>排序</th>
<th>品牌</th>
<th>均分</th>
<th>排序</th>
</tr>
</thead>
<tbody>
<tr>
<td>豆奶</td>
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<td>矿泉水</td>
<td>2.67</td>
<td>13</td>
<td>洗发水</td>
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<td>11</td>
<td>运动鞋</td>
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<td>10</td>
</tr>
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<td>体闲装</td>
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<td>柯力士</td>
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<tr>
<td>康师傅</td>
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<td>康百氏</td>
<td>4.25</td>
<td>6</td>
<td>舒蕾</td>
<td>4.67</td>
<td>6</td>
<td>拉芳</td>
<td>4.32</td>
<td>13</td>
</tr>
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<td>三元</td>
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<td>9</td>
<td>杀菌</td>
<td>5.09</td>
<td>3</td>
<td>农夫山泉</td>
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<td>10</td>
<td>阿迪达斯</td>
<td>2.35</td>
<td>14</td>
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<td>百合</td>
<td>3.27</td>
<td>11</td>
<td>冷酸灵</td>
<td>2.73</td>
<td>12</td>
<td>冰斧</td>
<td>3.51</td>
<td>10</td>
<td>以纯</td>
<td>4.16</td>
<td>8</td>
</tr>
<tr>
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<td>9</td>
<td>舒华</td>
<td>3.79</td>
<td>8</td>
<td>乔丹</td>
<td>4.92</td>
<td>5</td>
<td>以纯</td>
<td>3.92</td>
<td>6</td>
</tr>
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<td>以纯</td>
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<td>6</td>
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<td>农夫山泉</td>
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<td>舒蕾</td>
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<td>乐百氏</td>
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<td>8</td>
<td>迪彩</td>
<td>1.48</td>
<td>17</td>
<td>以纯</td>
<td>3.92</td>
<td>6</td>
</tr>
</tbody>
</table>

注：灰色底纹为境外品牌

根据表6的测量结果，分别计算被抽出境内和境外品牌的平均值，相除后再乘以100。低介入度产品品牌购买意愿的测量结果为：

品牌购买意愿=饮用水=[(5.12 + 5.03 + 4.67 + 4.34 + 4.17 + 3.14 + 2.96 + 1.71 + 1.48) / 9]×100= 79.65

品牌购买意愿=牙膏=[(4.55 + 3.79 + 3.63 + 3.27 + 3.14 + 1.71 + 1.48) / 7]×100= 51.86

### 表7 运动鞋品牌购买意愿的测量

<table>
<thead>
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<th>品牌</th>
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<th>品牌</th>
<th>均分</th>
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<th>排序</th>
<th>品牌</th>
<th>均分</th>
<th>排序</th>
</tr>
</thead>
<tbody>
<tr>
<td>伊利</td>
<td>3.71</td>
<td>9</td>
<td>乐百氏</td>
<td>3.14</td>
<td>12</td>
<td>阿迪达斯</td>
<td>2.35</td>
<td>14</td>
<td>以纯</td>
<td>4.16</td>
<td>8</td>
</tr>
<tr>
<td>康师傅</td>
<td>4.57</td>
<td>5</td>
<td>乔丹</td>
<td>4.92</td>
<td>5</td>
<td>以纯</td>
<td>3.92</td>
<td>6</td>
<td>以纯</td>
<td>3.92</td>
<td>6</td>
</tr>
<tr>
<td>伊利</td>
<td>3.71</td>
<td>9</td>
<td>不来梅</td>
<td>2.96</td>
<td>13</td>
<td>舒蕾</td>
<td>2.62</td>
<td>10</td>
<td>迪彩</td>
<td>1.48</td>
<td>17</td>
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<tr>
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<td>11</td>
<td>乐百氏</td>
<td>3.79</td>
<td>8</td>
<td>迪彩</td>
<td>1.48</td>
<td>17</td>
<td>以纯</td>
<td>3.92</td>
<td>6</td>
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<tr>
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<td>乐百氏</td>
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<td>迪彩</td>
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<td>17</td>
<td>以纯</td>
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<td>6</td>
</tr>
<tr>
<td>康师傅</td>
<td>4.57</td>
<td>5</td>
<td>乔丹</td>
<td>4.92</td>
<td>5</td>
<td>以纯</td>
<td>3.92</td>
<td>6</td>
<td>以纯</td>
<td>3.92</td>
<td>6</td>
</tr>
<tr>
<td>西藏</td>
<td>4.17</td>
<td>8</td>
<td>不来梅</td>
<td>2.96</td>
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<td>舒蕾</td>
<td>2.62</td>
<td>10</td>
<td>迪彩</td>
<td>1.48</td>
<td>17</td>
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<tr>
<td>昆仑山</td>
<td>3.71</td>
<td>9</td>
<td>乐百氏</td>
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<td>8</td>
<td>迪彩</td>
<td>1.48</td>
<td>17</td>
<td>以纯</td>
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<td>6</td>
</tr>
<tr>
<td>冷酸灵</td>
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<td>7</td>
<td>冰斧</td>
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<td>6</td>
<td>迪彩</td>
<td>1.48</td>
<td>17</td>
<td>以纯</td>
<td>3.92</td>
<td>6</td>
</tr>
</tbody>
</table>

注：灰色底纹为境外品牌

根据表7的测量结果，分别计算被抽出境内和境外品牌的平均值，相除后再乘以100。低介入度产品品牌购买意愿的测量结果为：

品牌购买意愿=运动鞋=[(4.55 + 3.79 + 3.63 + 3.27 + 3.14 + 1.71 + 1.48) / 7]×100= 45.58
品牌购买意愿运动鞋：\[\frac{[(5.26 + 4.19 + 5.19 + 4.64 + 3.59) + 4 / 5]}{[(5.35 + 5.33 + 4.23 + 3.94 + 4.71) / 5]} = 99.15\]

品牌购买意愿休闲装：\[\frac{[(5.14 + 5.11 + 5.03 + 4.16 + 3.74 + 3.53)}{6 / 5}}\]

表 7 高介入度产品品牌购买意愿的测量

<table>
<thead>
<tr>
<th>品牌</th>
<th>平板电视</th>
<th>电视</th>
<th>洗衣机</th>
<th>冰箱</th>
<th>小型车</th>
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<td>4.73</td>
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<td>5.33</td>
<td>2</td>
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</tr>
<tr>
<td>乐视</td>
<td>4.88</td>
<td>3</td>
<td>4.71</td>
<td>6</td>
<td>LG</td>
</tr>
<tr>
<td>LG</td>
<td>4.74</td>
<td>3</td>
<td>4.13</td>
<td>9</td>
<td>三星</td>
</tr>
<tr>
<td>夏普</td>
<td>4.17</td>
<td>7</td>
<td>3.88</td>
<td>10</td>
<td>方正</td>
</tr>
<tr>
<td>长虹</td>
<td>3.53</td>
<td>10</td>
<td>3.37</td>
<td>12</td>
<td>康佳</td>
</tr>
<tr>
<td>康佳</td>
<td>3.62</td>
<td>9</td>
<td>4.43</td>
<td>7</td>
<td>飞利浦</td>
</tr>
<tr>
<td>摩托罗拉</td>
<td>4.50</td>
<td>8</td>
<td>3.34</td>
<td>12</td>
<td>新飞</td>
</tr>
<tr>
<td>方正</td>
<td>3.62</td>
<td>11</td>
<td>3.18</td>
<td>13</td>
<td>华为</td>
</tr>
<tr>
<td>长城</td>
<td>3.13</td>
<td>13</td>
<td>3.52</td>
<td>11</td>
<td>联想</td>
</tr>
<tr>
<td>联想</td>
<td>3.94</td>
<td>10</td>
<td>3.33</td>
<td>12</td>
<td>联想</td>
</tr>
<tr>
<td>宏基</td>
<td>3.94</td>
<td>10</td>
<td>3.33</td>
<td>12</td>
<td>联想</td>
</tr>
<tr>
<td>中华</td>
<td>3.11</td>
<td>16</td>
<td>3.32</td>
<td>14</td>
<td>中华</td>
</tr>
</tbody>
</table>

注：灰色底纹为境外品牌

根据表 7 的测量结果，分别计算被抽选中境内和境外品牌的平均值，相除后再相乘以 100，高介入度产品品牌购买意愿的测量结果为：

品牌购买意愿平板电视：\[\frac{[(4.74 + 4.73 + 4.33 + 4.13 + 3.87) / 5]}{[(5.14 + 5.04 + 4.85 + 4.17 + 3.88) / 5]} \times 100 = 98.52\]

品牌购买意愿台式电脑：\[\frac{[(5.41 + 4.43 + 4.13 + 3.88 + 4.13) / 5]}{[(5.33 + 5.26 + 5.03 + 4.71 + 4.50) / 5]} \times 100 = 82.97\]

品牌购买意愿洗衣机：\[\frac{[(5.37 + 4.52 + 3.71 + 3.52 + 3.34) / 5]}{[(5.15 + 4.77 + 4.46 + 4.27 + 3.89) / 5]} \times 100 = 82.97\]

品牌购买意愿冰箱：\[\frac{[(5.42 + 4.95 + 4.58 + 4.15 + 3.88) / 5]}{[(5.13 + 5.09 + 5.03 + 4.81 + 4.55) / 5]} \times 100 = 82.97\]

品牌购买意愿小型车：\[\frac{[(3.66 + 3.19 + 3.04 + 2.73 + 3.11) / 5]}{[(5.13 + 5.09 + 5.03 + 4.81 + 4.55) / 5]} \times 100 = 82.97\]
数 \( \left( \frac{5.19 \text{ 奥迪} + 5.03 \text{ 别克} + 4.87 \text{ 丰田} + 4.81 \text{ 大众} + 4.86 \text{ 现代}}{5} \right) \times 100 = 3.15/4.95 \times 100 = 63.64 \)

5. 讨论

本研究对变量测量的结果进行了整理，主要以平均值来体现。变量描述中的平均值是所有被访者的被抽出品牌的比值的平均值（见表8）。从表中可以看出受访谈者对各类产品境内与境外品牌的总体评价情况，同时也是本研究所设定的变量的总体测量结果。

表8 变量描述：平均值

<table>
<thead>
<tr>
<th>产品类别</th>
<th>原产地产品感知</th>
<th>原产地情感感知</th>
<th>产品结果性价值</th>
<th>产品情感性价值</th>
<th>品牌态度</th>
</tr>
</thead>
<tbody>
<tr>
<td>社会形象</td>
<td>个人偏好</td>
<td>国家情感</td>
<td>社交情感</td>
<td>性价比</td>
<td>质量</td>
</tr>
<tr>
<td>水</td>
<td>123.80</td>
<td>126.57</td>
<td>128.05</td>
<td>130.49</td>
<td>90.75</td>
</tr>
<tr>
<td>牙膏</td>
<td>68.70</td>
<td>66.19</td>
<td>77.09</td>
<td>76.19</td>
<td>87.12</td>
</tr>
<tr>
<td>洗发水</td>
<td>75.00</td>
<td>72.58</td>
<td>74.82</td>
<td>75.60</td>
<td>60.26</td>
</tr>
<tr>
<td>运动鞋</td>
<td>97.58</td>
<td>97.37</td>
<td>99.37</td>
<td>98.91</td>
<td>105.49</td>
</tr>
<tr>
<td>休闲装</td>
<td>65.87</td>
<td>95.26</td>
<td>95.42</td>
<td>95.23</td>
<td>101.28</td>
</tr>
<tr>
<td>平板电脑</td>
<td>90.16</td>
<td>94.34</td>
<td>100.20</td>
<td>100.21</td>
<td>131.15</td>
</tr>
<tr>
<td>台式电脑</td>
<td>76.51</td>
<td>73.96</td>
<td>89.72</td>
<td>89.32</td>
<td>105.37</td>
</tr>
<tr>
<td>洗衣机</td>
<td>65.07</td>
<td>64.03</td>
<td>85.43</td>
<td>84.84</td>
<td>112.35</td>
</tr>
<tr>
<td>小型车</td>
<td>89.29</td>
<td>89.10</td>
<td>90.79</td>
<td>90.39</td>
<td>125.85</td>
</tr>
<tr>
<td>冰箱</td>
<td>63.27</td>
<td>60.24</td>
<td>72.47</td>
<td>71.35</td>
<td>88.45</td>
</tr>
</tbody>
</table>

注：a. 此数字表示在每一类产品中用于比较的本土和外地品牌的对数。比如“饮用水”表示在饮用水这类产品中，我们用于比较的境内和境外品牌各有7个。
灰色底纹的数字为90%左右及以上，代表境内品牌相对境外品牌没有明显劣势。
带下划线的数字为100%以上，代表境内品牌相对境内品牌具有优势。

从表8中可以看出，从产品类别来看，在低介入度产品中，境内品牌评价较好（平均值大于100）的产品以饮用水最为突出，运动鞋的休闲装的境内外品牌评价的差距也不是很大（平均值在100左右），而牙膏和洗发水的境外品牌评价远高于境内品牌（平均比值远小于100）；在高介入度产品中，平板电视和冰箱的境内外品牌评价的差距不是很大，台式电脑的境内外品牌评价的差距较大，境内品牌明显不如境外品牌，而洗衣机和小型车的境内品牌评价差距非常大，境内品牌远落后于境外品牌。从变量的角度来看，在性价比这一项，境内品牌较为占优；其它各项评价，除了饮用水以外，总体上境外品牌均在不同程度上占优。

6. 致谢

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Influence of Election Handouts on Voting Rate in the Perspective of Political Marketing: The Example of Legislative Assembly of Macau Election

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¹Macau University of Science and Technology

Abstract

In general, voters pay more attention to the image of candidates, rather than their political platforms in the election of Legislative Assembly of Macau. From the perspective of political marketing, candidates and their teams aim to attract voters' attention by introducing appropriate election handouts to gain more votes. What kind of election handout, however, in which price range and how to package are more attractive to voters? And should candidates promote their campaign message by traditional media or new media? Base on data from the election of Legislative Assembly of Macau from 2005, 2009, 2013 and 2017, our study try to discover the relationship between the performance of election handouts delivered by different team and the voting rate received, by qualitative comparative analysis (QCA) method, in terms of cross case study of the Macau Citizens' Association (as the example of Pro-Establishment camp)New Macau Association (as the example of pro-democracy camp). As result, our study argue that in the election of Legislative Assembly of Macau, the more diversity of election handout delieverd by candidates, the higher chance they can match voters' preference. As conditional variable alone, the price of election handout had no obvious effect on the result, while had possitive effect on the result comparing with other variables. Out
standing package of handout can shape the image of candidate in voters' mind. Adoption of social media in election campaign would attract more votes for those candidates, especially on the first-time voter.

**Key words:** Political Marketing; Election Handout; Voting Rate; Legislative Assembly of Macau election
政治营销中选举宣传物对组别投票率的影响
——以澳门立法会选举为例

徐劲飞, 范真源
澳门科技大学商学院

摘要
澳门选民投票比较关注候选人形象, 而候选人形象主要通过宣传物来传播。从政治营销的角度, 竞选候选人及其团队务求通过推出合适的选举宣传物吸引选民的关注, 并最终收获更高的得票。他们重要的课题, 而哪种类型、什么价格区间、如何包装的选举宣传物更能获得选民的青睐? 应该依赖传统媒体还是应该新媒体进行推广进而发挥宣传物更大的效用? 通过对回归后的第二至第五届 (即 2005、2009、2013、2017 年) 澳门立法会选举的得票情况进行分析, 应用“定性比较分析 (QCA)” 方法, 选取建制派代表组别“澳门民联协进会”与泛民派代表组别“新澳门学社” 在选举中使用的选举宣传物作为研究对象, 本研究发现, 在澳门立法会选举中, 选举宣传物的类别更多元化, 会更适合选民的喜好; 宣传物价格作为条件变量单独作用时对于结果变量的影响不明显, 而在与其他变量组合后作用比较明显, 同样也能对于结果变量起到一定的影响作用; 出彩的包装设计可在选民心中树立起候选人形象, 具有时代感的包装更可以吸引选民的眼球; 包装种类以及网络媒体的种类确实对组别占有效票百分比起到正向作用; 澳门选民特别是“首投族”的政党认同强度不高, 易受传媒的影响, 因此选举宣传利用社交媒体体会提升候选人及组别的得票率。

关键词: 政治营销、选举宣传物、投票行为、投票率、澳门立法会选举
随着立法会选举影响力日益扩大，近年来澳门经济的飞速发展，高学历的人数也在急速增长。受西方民主意识与临近地区民主发展步伐的影响，具有较强烈的民主追求，知识分子与年轻的中产阶层逐步形成追求民主发展的主要推动力。根据 2017 年澳门立法会选举管理委员会公布的最新数据，此次登记的自然人选民有 307020 人，比 2013 年第五届立法会选举时的 276034 增长 11.23%；法人选民 859 个，比 2013 年的 719 个增长 19.47%。而新增投票数达 20000 多票。尽管青年选民只占总数的 20% 左右，但是对比中老年选民，他们普遍‘两少三高’(社会经验较少、固有政治倾向较少；教育及收入水平较高、受他人影响程度较高、对现状批判及未来愿景较高)（田小艺，2017）。

学者们大致上都同意候选人因素在投票的决定上，扮演重要的角色，除了美国之外，加拿大、澳洲及英国的国会领袖或总理选举的研究，也显示候选人因素对投票决定有相当大的影响（Flanigan, Zingale, 1998）。正如 Miller、Shanks 以及 Lewis-Beck 等人所指出的，候选人因素与投票抉择的关系，不仅只与候选人形象本身有关，候选人（尤其是寻求连任的总统）过去表现，也应是需要考虑的因素。Miller 与 Shanks（Miller, Merrill Shanks, 1996）即认为民众对于候选人的印象，是由过去多年的表现或竞选时所注意的情节所构成的，这些评估可能对选民如何看待候选人会是成功或失败的总统之结论，占有重要的地位。澳门立法会选举，相对其他民主选举体系比如台湾及香港，一是选民并无特别明显根深蒂固的“蓝绿”区分或“统独”对峙，政党在选民中投票行为的作用弱化更为明显，二是选举政见容易出现边缘化的现象。某些选举政见早期看来比较合理，但是在不断进行的选举过程中，竞争逐渐激烈，貌似合理的政见也会站不住脚，特别是澳门立法会选举，选举政见非常容易出现趋同性（Shiu-Hin, 2014），因此，竞选政见在选举过程中对选民所发挥的影响非常短暂，后期各种其他方面的因素会占上风影响选举行为。而选举宣传物对于澳门立法会选举中非常容易呈现选举人的差异性，彰显选举人的个性，突出选举人的选举政见和理念，选举宣传物在澳门立法会选举中，对于选民具有一定的影响。2017 年澳门立法会
选举，“泛民主派”得票激增其中包括，“新希望”组别的高天赐、“民主昌澳门”组别的吴国昌、“民主新动力”的苏嘉豪，民主派得票数增加总票数超过 40000 票，4 个人中有 3 个都是出自擅长使用各类竞选宣传物新澳门学社。

虽然目前有许多学者致力于研究选举中选民的投票行为，但或多集中于政党认同、选举议题、候选人形象的影响研究，而对于澳门立法会选举中选民的投票行为选举宣传物影响因素鲜少涉及；同时，关于澳门立法会选举投票行为的研究更是少之又少，故此本文的研究内容分为以下五个部分：

第一，相关研究的发展现状；第二，提出理论框架和研究假设；第三，介绍研究设计，对主要的变量、数据和案例选择进行说明；第四，展示描述性统计和定性比较分析结果，检验提出的理论和研究假设；最后是我们的研究结论。

一、选举宣传物与得票率之间关系研究现状

（一）选举宣传物对候选人形象塑造影响相关研究

在投票行为研究学中，Luttbeg 与 Gant 的观点是：选民的投票行为，随着时代的改变而有所改变，其中主要改变在于政党认同衰退、政治参与减少，与政治信任降低。他们认为的政党认同度的衰退，可能与候选人形象在投票行为中角色加重有关，而选举的竞争逐渐由政党之间转向候选人之间，因此候选人因素在选举中越来越重要（Noeman Luttbeg, Michael Gant, 1995）。一般认为，在澳门立法会选举中，选民没有明显的意识形态和政党/组别认同，选举议题相对来说没有那么重要，由于在选举过程中澳门的候选人个人因素需要更加突出，而选举宣传物就对塑造个人形象起着重要作用。在选举过程中，选民心目中的人物形象是如何形成的呢？根据相关文献整理有以下四种路径：

第一种是候选人决定论（candidate-determined principle），这个理论所主张的是，选民会根据候选人所折射出来的特点，去评估这个候选人的形象；候选人会经过人物包装刻意塑造出一个想让选民看到的个人魅力和特点，经过传播后对选民心目中的候选人形象产生决定性的影响，可以提高自己的支持率和得票率，具有决定性的影响效果（王大同，1999）。
第二种是认知者决定论（perceiver-determined principle），选民有自己本身的政治立场和偏见，并且会以自我意识去评估候选人的形象这种看法是建立在认知平衡论所发展出来的，强调选民对候选人产生采取选择性的认知，发展出和自我认知和谐、无冲突的形象评估（王石番，2002）。

第三种是媒介决定论（medium-determined principle），这个理论也称刺激决定论，基本上受麦克卢汉的“媒介即信息”思想的影响，认为媒介所提供的资讯是受众获取政治信息最直接的途径，因此选民很容易受媒介讯息的影响，形成对候选人的形象认知。

第四种是媒体人决定论（journalist-determined principle），这个理论认为媒体人在制作新闻时所采用的评论取向是影响选民认知候选人形象的关键因素之一（李郁青，1996）。

而竞选宣传物作为选举工程的重要组成部分，从上述四个方面对候选人形象塑造起重要的作用：首先，选举宣传物是候选人形象包装的主观产品；其次，选民拿到的选举宣传物，其反映的一定是选民心目中想呈现在选民面前的“完美的形象”，以便让选民有意识地选择心目中印象更好的候选人，最终转化为候选人更高的支持和得票率；再次，选举宣传物的发放过程，和竞选广告播放的平台比如电视、电台、网站、社交媒体等一样，本身已经是选民了解政治资讯的重要渠道；最后，无论是“专业生成内容”（Professional Generated Content，PGC）的角度还是“用户生成内容”（User Generated Content，UGC）的角度，专业媒体人和普通选民在分享选举宣传物的相关信息时，必然扩大候选人形象的传播。在互联网2.0时代，政治选举就像是大型政治营销秀，而选举宣传物的使用促进了“政治娱乐化营销”的进程，吸引选民的眼球，提升对候选人及其形象的关注（汤乃欣，2013）。

（二）选举宣传物的政治传播效应相关研究

美国学者H·拉斯维尔于1948年在《传播在社会中的结构与功能》论文中首次提出了构成传播过程的五种基本要素，并按照一定结构顺序将它们排列，进而形成了后来人们说的“五W模式”或“拉斯维尔程序”。这五个W分别是英语中五个疑问代词的第一个字母，即：Who （谁）Says What （说了什么）In Which Channel（通过什么管道）To Whom （向谁说）With What Effect （有什么效
模式表明传播的过程是一个目的性行为过程，其目的是企图影响受众。因此说他的传播的过程是一种说服过程，其间的五个环节正是传播活动得以发生的精髓。

Benoit 的政治传播功能理论认为，选民会将票投给他们有好感的候选人，在Bermingham 研究监测政治情绪并预测选举结果也同样证实了一个观点（Bermingham, Smeaton, 2011）。候选人有三种方式来增加选民对他的好感度：(1) 自夸（Acclaims）展现自我优点； (2) 攻势（Attacks）对手让选民认为对手不适合参选； (3) 防御（Defenses）来回应攻势自己的广告或讯息，以重建可能流失的信任感。功能理论主张政治传播讯息的论述主要可分为两大类别：个人类与政治类。功能论强调政治讯息主要目的就是代价与受益（Cost-Benefit）。候选人各项讯息的发布，都是为了让自己尽量减少付出的代价，并提升受益的机会，以博取选民的青睐和选票。

关于宣传物的广告效应，Hoeffler 的研究证实了模拟和心理模拟式广告是两种有效的产品广告扩散方式，能够说明人们更加容易的了解其宣传的特性（Steve Hoeffler, 2003）。模拟是一种在给宣传品特征信息之前，个体基于已有信息进行深度加工并做出一系列联想和推理构想出宣传特性的认知过程，能够通过增强产品广告的说服力，间接地正向影响选民对宣传物的态度。与模拟式广告不同，心理模拟式的扩散方式不依赖于人们对宣传品特性的推理，而是基于一系列的刺激对自己未来将会发生事件的预想以及模拟性认知的重构，心理模拟式的扩散方式可以说明人们结合自身的切实需要（宣传品属性- 自身效益）对陌生的宣传品进行认知（Taylor, Pham, 1998），最终使人们建立宣传品功能特点的完整框架以及宣传品态度。然而这种基于推理的认知迁移往往是不够准确的（Dedre Gentner, 1997），所以对个体在认知过程中信息深度加工区域进行准确捕获成为宣传品认知研究的关键。此外，个体的注意力与信息的加工深度也存在正向的关系。

Woodruff 指出人们在体验宣传品的过程中会对宣传品形成一个评判，会感知在过程中出现的各种因素（Robert, Woodruff, 1997）。我国的宣传效应概念在不断深入，人们感知价值也受到广泛关注。白长虹对感知价值定义的概括与Zeithaml 的理念很相似，他认为感知价值是在购买活动中对得到的利益与付出的成本相互比较所形成的综合评价。范秀成和罗海成提出，消费者感知价值是对产品或服务所具有价值的一种认知能力。这种理念同时适用于对非赢利组织的宣传
与宣传品价值中（白长虹，廖伟，2001）。

（三）传统选举宣传物对得票率影响相关研究

传统宣传物在选举过程中分发给选民，以获得他们对候选人的支持或是更高投票率。这场交易的进行与否会对投票结果产生影响吗？在大多数情况下人们认为如果没有选举施舍，候选人的投票率会更低。以农村选举为例，在上任之后会有粮食、食用油分发给村民，或者是答应一票多少钱来获得选民们的支持，村民在权衡之下会选择给他们好处最多的候选人作为投票对象。传统选举宣传物对得票率影响的高低，主要还在选民的态度和意识。对于高收入高知识层面的选民来说，宣传物对于其的诱惑力不大，这一类人的选举方向更倾向于自己意愿，或者是结合实际情况和候选人的能力进行投票选举；对于低收入的家庭来说，传统选举宣传物对其具有一定的诱惑力，这类选民由于收入较低，在面对现金或实物的诱惑时往往便会选择分发的官员，从另一方面讲，往往低收入家庭的文化水平都不是很高，对于此类选民群体来说，他们对政治选举的兴趣较少，关心范畴仅限制在家里的柴米酱醋茶上，因此，通过生活必需品作为选举宣传物，候选人较容易获得选民支持，拥有更高的投票。比如在 Stokes 的研究中，在阿根廷轻度反对接受实质性礼物的人和低收入者更容易接受竞选宣传物（Stokes, Susan, 2005）。Calvo 和 Murillo 也从另外的角度证明在阿根廷政党分发选举宣传物的主要目标就是低收入群体（Calvo, Murillo, 2004）。Kramon 在肯尼亚发现摇摆不定的选民和低收入者更容易成为动员的目标（Kramon, Eric, 2016）。选举宣传物的分发当然会受到法律机制监督的影响，在严格的监督下，候选人不能随意通过分发宣传物为自己拉票，或是选民不能私自收贿，不能根据宣传物的分发情况进行选举，那么这个时候宣传物对得票率的影响就比较小；在监督系统不完善，监督松懈的情况下，分发宣传物对得票率的影响是很大的（Jenny Guardadoa, 1994）。

（四）使用社交媒体进行选举宣传对得票率影响相关研究

McManus 指出娱乐性资讯更具有感染力，政治相关的新闻属于民众较不感兴趣的硬性新闻，但在选举过程中政治人物必须尽可能地吸引群众注意，候选人也会开始接触软性议题（McManus, 1994）。比如在 2015 年台湾地区领导人的选举时，国民总统候选人朱立伦为了获得更多年轻人的选票，接受了不少软性节目的
专访，畅谈现代年轻人感兴趣电影、社交网络、美食等话题。到了 Web2.0 时代，候选人不再只是被动的接受新闻媒体的报道，会更主动地通过网络在社交媒体上释出资讯。在上述案例中，候选人竞选时为了获取群众的注目会更倾向于释出软性资讯，Harrington 认为生活政治、软性政治资讯及政治中的私领域都属于高度娱乐性资讯，指出娱乐性资讯能使民众籍著将根深的政治资讯与生活经验连接来理解政治论述，但并不能创造理性论述，更多时候只能使群众情绪激昂以及创造娱乐效果而已（Harrington，2012）。Cameron 的研究中以英国 2015 年大选为例论证了社会媒体能够预测选举的结果。现在是一个网络通讯迅速传播的时代，通过发达的网络系统可以更快更加吸引人的传播政治咨询。接收娱乐资讯之后，群众会不会把接收到的资讯反映在投票行为上，大众传播时代与社交媒体时代的研究结果有很大的不同，在报纸与电视时代，偏好接收硬性资讯的人更愿意去理解、吸收政治知识，也更倾向于去投票；然而到了网络媒体时代，群众更习惯在网络上接收软性政治资讯，社交媒体支持者的表现更像粉丝的聚集而非公民在政治领域上的活动，而在线上按赞、追随政治人物活动的政治粉丝则更容易去投票（王泰俐，2013）。Barclay 以印度为研究对象做了一个研究，将 Facebook 上的点赞作为选举结果的预测指标（Barclay, Pichandy, Venkat, Sudhakaran, 2014）。事实证明，在网络媒体的新时代，人们更愿意通过网络了解时事政治，发表自己的政治意见和候选人支持。Cosmos 关于分析社交媒体对投票的影响一文也向人们证实，在网络媒体的时代，人们更倾向通过网络了解政治资讯（cosmos, 2014）。

二、澳门政府对于立法会选举宣传物的相关法规简述

在澳门，立法会选举宣传物的相关法规可以按以下四方面进行归纳：

（一）选举宣传物类别多样性的相关法规

在澳门立法会选举中关于竞选宣传物类别量的规定，《澳门特别行政区立法会选举法》第六章第 80 条规定，立法会选举委员会须最迟于竞选活动开始前第三日
指明在特定地点而数目、大小、所在位置均适当的专用地方，供张贴海报、图片、墙报、宣言及告示。从该条可知，在法律规定的特定地点，对于宣传物类别量是有明确规定的。

在《澳门特别行政区立法会选举法》第六章第74条中，关于竞选活动的特定工具的使用有如下规定，可自由使用进行竞选活动所需的特定工具。从该条可知，只要是在法律允许范围内，立法会可以自由选取所需的特定工具。

而香港对于宣传物类别数量的相关规定更加细致，如《区议会选举程序规则》第七章第105条规定，任何演辞、告示、招贴、标语牌、海报、牌板、横额、易拉架、旗帜、旗号、色别、符号、讯息、音响、图像或图画，以及任何物品；物件或材料；录音带/碟、录影带/碟、磁碟、电子讯息、网站、传真讯息、气球、徽章、标志、提包、头饰及衣物都可以作为宣传物。候选人使用的选举广告数量并无限制。由此可见，宣传物类别和数量在香港的使用相当开放。多种宣传物在香港不限量不限种类的使用，使选举的过程更丰富，能够满足选民的对宣传物类别量的需求，为候选人进行了多样化的宣传。

（二）关于选举宣传物包装的相关法规

在澳门立法会选举中关于竞选宣传物包装种类的规定，可以参见《澳门特别行政区立法会选举法》第六章第81条，自定义定选举日期的行政命令公布之日起，禁止直接或间接透过商业广告的宣传工具，在社会传播媒介或其他媒介进行竞选宣传。以及第六章第82条，刊登有关竞选活动数据的信息性刊物，在作出有关报导时，应采取不带有歧视的方式处理，使各候选名单能处于平等的位置。从该两条可知，宣传物的包装种类上不能出现与商业挂钩，官商互惠的内容，更不能出现带有歧视性的违反法律道德和破坏社会秩序的内容。

（三）关于选举宣传物价格的相关法规

目前，澳门政府还未出台相关法律对于宣传物价格有明确规定，不过，对于损害宣传物所应当承担的赔偿责任则是有相关法规。《澳门特别行政区立法会选举法》第八章第156条规定，抢劫、盗窃、毁灭或撕毁竞选宣传品，或使之全部或部分失去效用或模糊不清，又或以任何物质遮盖竞选宣传品者，处最高三年徒
刑，或科最高三百六十日罚金。可以看出，澳门政府把宣传物视作立法会选举组织的所有财产进行保护，不管宣传物价格高低与否，公民都应自觉保护、爱惜宣传物，否则将受到法律追究。

但是《澳门特别行政区立法会选举法》第八章第 156 条中还提到，如上述宣传品张贴在行为人本人房屋或店号内而未获行为人同意，又或上述宣传品在竞选活动开始前已张贴者，则上款所指的事实不受处罚。虽然政府保护宣传物作为财产的权利，但是如果宣传物在不恰当的地方出现，这样的权利是会被剥夺的。

而在香港，根据《公众生及市政条例》第一百三十二章第 104A 条及《土地（杂项条文）条例》第 28 条第 4 条规定，候选人可以在政府或私人土地及物业上展示选举广告，但必须获得所需的书面准许或授权。

和《公众生及市政条例》第一百三十二章第 104A（1）条规定，候选人若希望在政府土地/物业和指定展示位置以外的土地/物业展示选举广告，必须先得到该地方的业主或占用人的书面准许或授权。香港政府提供免费宣传渠道，进行宣传时只需获得授权和许可即可。为选举宣传节约了成本，使候选人都有机会对自己的政见与想法进行宣传。

（四）关于选举宣传中使用网络及社交媒体的相关法规

在澳门立法会选举中关于使用社交媒体的种类规定，主要参见《澳门特别行政区立法会选举法》第六章第 74 条，即按本法律的规定使用信息性刊物、电台与电视台的播放及公共楼宇或场所是免费的。但同时我们可以参见《澳门特别行政区立法会选举法》第六章第 85 条，使用可构成诽谤罪或侮辱罪、侵犯澳门特别行政区政府机关、呼吁扰乱秩序、叛乱，又或煽动仇恨或暴力的言语或影像。

在香港关于使用社交媒体的规定可以参见《区议会选举程序规例》第七章第 106 条，候选人上载选举广告至候选人平台或中央平台，或以指明表格向选举主任递交有关资料时，应提供与其选举广告印刷发布有关的资料（即印刷人的姓名或名称及地址、印刷/发布日期及印刷数量）。候选人须确保提供的所有资料准确无误。

综上所述，相比较香港的情况，澳门关于选举宣传物的相关法规体现了四个特点：

一、选举宣传物类别量方面，目前澳门法规比较倡导竞选组别使用传统意义
上的平面宣传物，且对宣传物的发放地点及类别量有明确的规定。

二、选举宣传物包装方面，目前澳门法规比较倡导丰富、具有特色的宣传物包装，但严厉禁止带有商业色彩或破坏社会秩序的宣传物包装。

三、总体上澳门法规对选举宣传物作为财产进行保护，对破坏选举宣传物的行为追究刑事法律责任。

四、在使用网络及社交媒体宣传方面，澳门政府会提供一些信息性刊物、电视台的播放等部分免费资源，并且倡导候选人在遵守秩序的情况下积极运用多种网络、社交平台进行宣传。

一、理论框架和研究假设

本章依次说明本文所采用的研究方法，选举宣传物对选民在澳门立法会选举中投票行为影响分析的研究假设，研究设计。本文将结合研究假设和比较研究方法对选举宣传物对选民在澳门立法会选举中投票行为的影响进行分析。

综合研究现状和法规简述两部分的归纳，我们可以将立法会选举宣传的影响因素总结为以下几个方面：

（一）宣传物种类多样性

宣传物种类多样性及种类多少将影响宣传角度的不同，用各式的传播物能够体现该社团组织的多样性特色，影响到外界对其印象及认同度。一个组织想在宣传品方面具有竞争力，一方面应从需求角度审视宣传物外部多样化程度，充分考虑选民的，需求趋势、需求特点、功能需求及回馈意见，确认和消除选民认为是无用的或表面性的产品功能，力求进行有效的、有用的多样化宣传；另一方面了解宣传品带来的影响、制造成本、利润率及组别特色化，进行有针对性的改进。

（二）宣传物包装吸引力

包装即是宣传组织中显著的代表符号，又是组织参与宣传竞争的主体，是一种核心重要的无形资产。成功的包装设计，除了需要遵守包装宣传的基本原则外，还应着研究选民心理，并将其融入设计。只有在把握精准、并尽量迎合好选民心理需求的前提下进行相应的包装设计，才能使该宣传品从同类宣传物中脱
颖而出，赢得投票者的青睐。

（三）宣传中使用社交媒体种类多样性

社交媒体宣传是宣传主体经由宣传媒介将宣传内容传达给宣传对象的战略选择与具体实现的方式（张庆来，2013）。传统宣传方式如报纸、宣传单以及宣传车等在竞选宣传中的占比在逐年减小，起到的效果也在逐年降低。而新型社交媒体在非营利组织的宣传方式已受到高度认可。同时，在宣传方式起重大影响的现代社会，社交媒体已经成为了一种必不可少竞争策略。

（四）宣传物价格

合理的宣传物促销深度范围内，宣传物促销深度较高时，人们对宣传物与团队产生的知觉价值会较高。若宣传物价格超过选民的内在参考深度范围，选民便产生较强认知；此时超过的价格越多，选民的对团队的认知度越明显。相关研究结果发现，人们会习惯性在不同组织间比较优势，当宣传品价格高过于某一转折点时，会引起人们对其组织信任度的提升，所以价格对组织宣传产生正面影响。

基于以上四个方面的分析，我们提出了理论框架如下图所示：

图片 1. 理论框架图

在本文的理论框架中，宣传物种类多样性、宣传物包装吸引力、宣传中使用社交媒体多样性以及宣传物价格对于占有效票百分比均有正向影响。澳门立法会通过社交媒体宣传以及依赖于类别、包装、价格三大因素的宣传物宣传来影响选民，从而最终影响其占有效票百分比。基于以上分析，我们提出以下四个假设：

假设 1: 澳门立法会选举宣传物种类多样性对组别得票率有正向影响。
假设 2：澳门立法会选举宣传物宣传包装吸引力对组别得票率有正向影响。
假设 3：澳门立法会选举宣传中使用社交媒体多样性对组别得票率有正向影响。
假设 4：澳门立法会选举宣传物价格对组别得票率有正向影响。

三、研究设计

我们将设计方案来对四个假设进行验证。

（一）数据源：

笔者首先通过对 2005，2009，2013，2017 年选举数据进行了搜集，主要有以下五个方面：占有效票百分比，宣传物种类多样性，宣传物包装吸引力，宣传中使用社交媒体多样性，以及宣传物价格。将各类型进行了相关统计分析，既进行对两者在同一年选举中的横向比较和分析，又对同一组别在时间跨度上进行纵向比较和分析，从中挖掘该组别立法会随着时间的变化在竞选策略上的变化和趋势；然后笔者在慧科新闻数据库搜集了关于宣传物的类别和价格方面的信息，在网络上查阅了澳门日报、华侨报、市民日报等重要报纸以前关于选举的各项报导，通过百度、谷歌等搜索引擎对于与大选相关的信息进行了查找。将各数据，信息进行统计分析。

（二）研究方法：

本研究将使用的定性比较研究（Qualitative Comparative Analysis，下文简称 QCA），是 20 世纪 80 年代在社会科学研究中产生的一种针对中小样本案例研究的分析方法。QCA 最早由美国社会学者查尔斯·拉金（Charles C. Ragin）提出，在 1987 年出版的《比较方法：在定性与定量策略之外》介绍了 QCA，并将其视为是一种整合了量化和质化双重取向的研究方法。经过了近三十年的发展，QCA 已在社会科学研究中获得了广泛应用，集中在政治学、社会学、经济学领域。它接受二值化布尔变量形式的自变量和因变量，并应用逻辑推理规则来确定变量和结果组合之间的关系，从而帮助研究者验证假设或从资料中挖掘新的含义。在社会议题中，往往自变量往往没有明确的指向性，导致一个事件生存在着诸多复杂的因素，而 QCA 方法就是告诉我们，在这些变量所有的排列组合的可能中，这些变量组合是如何影响案例发生的，哪一种变量组合起到的作用更大。当它作为研究取向时，QCA 利用集合论和布尔代数开启了一种看待社会科学研究对象的新视角，并尝试融合传统的质化和量
化方法，将其作为超越两者之外的研究取向。当它作为一项软件技术，QCA 则依据不同的研究需求，开发出相应的分析软件来进行逻辑运算，既应对新的问题情境，又节省人工的运算（毛湛文，2016）。

四、描述性统计分析和定性比较分析

（一）描述性统计分析

1、占有效票百分比的描述性统计分析

图片 2 占有效票百分比数据图

表格 1 立法会占有效票百分比表
我们可以看出，新澳门学社的占有效票百分比呈逐年下降的趋势，澳门民联协进会的占有效票百分比呈波动趋势，虽然新澳门学社在 2005 年和 2009 年占据领先地位，但是澳门民联协进会在 2013 年和 2017 实现了反超，因此从总体趋势而言，新澳门学社的选举前景较澳门民联协进会而言处于相对落后的地位。

2、宣传物种类多样性的描述性统计分析

<table>
<thead>
<tr>
<th></th>
<th>平均值</th>
<th>中位数</th>
<th>标准偏差</th>
<th>极差</th>
</tr>
</thead>
<tbody>
<tr>
<td>新澳门学社</td>
<td>15.72</td>
<td>16.17</td>
<td>4.01</td>
<td>8.17</td>
</tr>
<tr>
<td>澳门民联协进会</td>
<td>15.27</td>
<td>15.52</td>
<td>2.62</td>
<td>6.02</td>
</tr>
</tbody>
</table>

图片 3 宣传物种类多样性图

表格 2 宣传物种类多样性数据表
新澳门学社和澳门民联协进会虽然在宣传物种类多样性的均数和中位数上相差不大，
但是澳门民联协进会整体呈明显的上升趋势，在未来的选举前景上更加有宣传物种类
多样性方面的优势，越有可能获得更多的宣传受众。

### 3、宣传物包装吸引力的描述性统计分析

<table>
<thead>
<tr>
<th>立法会案例类别</th>
<th>总案例个数</th>
<th>竞选胜出案例个数</th>
<th>竞选胜出案例占比</th>
</tr>
</thead>
<tbody>
<tr>
<td>新澳门学社</td>
<td>9.25</td>
<td>9.00</td>
<td>1.50</td>
</tr>
<tr>
<td>澳门民联协进会</td>
<td>9.50</td>
<td>10.00</td>
<td>3.42</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>平均值</th>
<th>中位数</th>
<th>标准偏差</th>
<th>极差</th>
</tr>
</thead>
<tbody>
<tr>
<td>新澳门学社</td>
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<td>9.00</td>
<td>1.50</td>
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<tr>
<td>澳门民联协进会</td>
<td>9.50</td>
<td>10.00</td>
<td>3.42</td>
</tr>
</tbody>
</table>

图片 4 宣传物包装种类统计图
表格 3 宣传物包装种类统计表

我们可以看出，在宣传物包装上印有口号、标语的立法会中，竞选胜出案例的占比为60%，而在宣传物包装未印有口号、标语的案例的同向比较中，竞选胜出案例占比仅为33.3%，这说明宣传物包装上印有口号、标语对于结果变量的正向取值，即占有效票百分比较高，即在当年选举中胜出的必要性高于宣传物包装上未印有口号、标语。因此，从该逻辑角度也可以说明宣传物包装上印有口号、标语确实可以对结果变量占有效票百分比起到正向促进的作用。

4、宣传中使用社交媒体多样性描述性统计分析
我们可以看出，新澳门学社在宣传中使用社交媒体的多样性数量总体比澳门民联协进会低，并且有渐渐减少的趋势，而澳门民联协进会在宣传中使用社交媒体宣传的多样性呈逐年稳步上升和保持，我们可以认为，目前澳门民联协进会在社交媒体多样性中占据了相对有利的地位。

5、宣传物价格之描述性统计分析
新澳门学社的宣传物价格呈逐年缓缓上升的趋势，澳门民联协进会的宣传物价格总体上升的趋势，增长劲头在2017年受到了遏制。新澳门学社的宣传物价格比澳门民联协进会低，并且浮动也更加小，在宣传物的发行上具有一定的价格优势。
（二）定性比较分析

表6 吻合度检验表

<table>
<thead>
<tr>
<th>变 量</th>
<th>吻合度</th>
</tr>
</thead>
<tbody>
<tr>
<td>宣传物种类多样性 (+)</td>
<td>0.80</td>
</tr>
<tr>
<td>宣传物种类多样性 (-)</td>
<td>0.29</td>
</tr>
<tr>
<td>宣传物价格 (+)</td>
<td>0.50</td>
</tr>
<tr>
<td>宣传物价格 (-)</td>
<td>0.50</td>
</tr>
<tr>
<td>宣传物包装吸引力 (+)</td>
<td>0.56</td>
</tr>
<tr>
<td>宣传物包装吸引力 (-)</td>
<td>0.33</td>
</tr>
<tr>
<td>宣传中使用社交媒体多样性 (+)</td>
<td>1.00</td>
</tr>
<tr>
<td>宣传中使用社交媒体多样性 (-)</td>
<td>0.00</td>
</tr>
<tr>
<td>宣传物种类多样性 (+) * 宣传物包装吸引力 (+)</td>
<td>1.00</td>
</tr>
<tr>
<td>宣传物种类多样性 (+) * 宣传物价格 (-)</td>
<td>1.00</td>
</tr>
<tr>
<td>宣传物种类多样性 (+) * 宣传物价格 (-) * 宣传物包装吸引 力 (+)</td>
<td>1.00</td>
</tr>
</tbody>
</table>

对于单个变量而言，仅有宣传中使用社交媒体多样性 (+) 的吻合度大于 0.85，因此可以把宣传中使用社交媒体多样性看作占有效票百分比较高即选举胜出的充分条件。于是我们后面还进行了变量组合分析，在各种各样的组合中，我们发现并提取出了宣传物种类多样性丰富和宣传物包装吸引力组合，该组合的吻合度为 1.00，大于 0.85，所以我们可以认为，宣传物种类多样性丰富和宣传物包装吸引力的条件变量组合能够作为占有效票百分比较高即选举胜出的充分条件。

同时我们还注意到，当宣传物种类多样性较丰富、宣传物价格较低廉两者相结合后，其变量组合的吻合度也达到了 1.00，大于 0.85，因此我们可以认为该变量组合同样也可以作为占有效票百分比较高即选举胜出的充分条件。总之，宣传物种类多样性虽然没有达到 0.85，但是也十分接近，该单独条件变量有一定的充分性，而宣传物价 格和宣传物包装吸引力该两项条件变量，尽管单独来看充分性不是很显著，但是经过适当的变量组合，吻合度能够达到一个非常高的水平，因此宣传物价 格越发低廉和宣传物包装印有标语确实对于占有效票百分的提高有正向作用。

表7 覆盖度检验表
<table>
<thead>
<tr>
<th>变 量</th>
<th>覆盖度</th>
</tr>
</thead>
<tbody>
<tr>
<td>宣传物种类多样性 (+)</td>
<td>0.67</td>
</tr>
<tr>
<td>宣传物种类多样性 (−)</td>
<td>0.33</td>
</tr>
<tr>
<td>宣传物价格 (+)</td>
<td>0.50</td>
</tr>
<tr>
<td>宣传物价格 (−)</td>
<td>0.50</td>
</tr>
<tr>
<td>宣传物包装吸引力 (+)</td>
<td>0.83</td>
</tr>
<tr>
<td>宣传物包装吸引力 (−)</td>
<td>0.17</td>
</tr>
<tr>
<td>宣传中使用社交媒体多样性 (+)</td>
<td>1.00</td>
</tr>
<tr>
<td>宣传中使用社交媒体多样性 (−)</td>
<td>0.00</td>
</tr>
</tbody>
</table>

宣传中使用社交媒体多样性、宣传物种类多样性丰富这两个条件变量对于结果变量的解释力最强，宣传物包装印有标语的解释力次之，而宣传物价格对于结果变量的解释力并不明显。

需要说明的是，从表7中，社交媒体的多样性丰富的覆盖度为100%这一现象可以看出，选举中胜出的组别在宣传中社交媒体的多样性十分的丰富。因此各组别宣传方面应注重社交媒体的种类多元化，建立自己强大的竞争优势。

以上“选举宣传物对组别投票率的影响分析——以澳门立法会选举为例”表明，宣传物种类多样性、宣传物包装吸引力以及宣传中使用社交媒体多样性与选举中占有有效票百分比的联系最为紧密，其中条件变量宣传中使用社交媒体多样性，在数据集中更是表现为结果变量占有有效票百分比较高的必要充分条件。同时宣传物包装印有口号和标语以及宣传物种类多样性丰富的组合能够视为提升得票的充分条件。在必要条件方面，宣传物种类多样性丰富对于结果变量占有有效票百分比较高的解释力非常强。

从描述性统计的图表中也可以观察出，澳门民联协进会的整体发展趋势是要优于新澳门学社的，而澳门民联协进会在选举中社交媒体的多样性和宣传物种类多样性上都呈现了明显的逐年上升趋势，验证了我们QCA分析的观点，社交媒体的多样性和宣传物种类多样性确实是影响占有有效票百分比的关键因素。至于条件变量宣传物价格它作为单独变量出现时和结果变量的关系不太明显，但是与其他变量组合时，即多种宣传方式并行时，也能够对占有有效票百分比的提高发挥到正向、积极的促进作用。

五、研究结论
依据上一节研究假设的验证结果，我们认为：

（一）选举宣传物种类多样性与组别投票率的关系

本研究通过定性比较分析结果发现，选举宣传物的种类多样性对选民在立法会选举投票有正向影响。宣传物的种类越丰富，贴近选民喜好，便能够激起选民的好感，获得较高得票率。由此可见，现代选民虽然具有自己的特点，但同样会受到外界影响，左右到对于选票的选择。与朱孔武的研究结果一致（朱孔武，2015），即选民参与选举是数量经济等成本考虑，投票行为受动机驱使，包括影响到选民决定去投票的内外因素。

（二）选举宣传物的包装吸引力与组别投票率的关系

本研究经过定性比较分析结果发现，选举宣传物的包装对选民在立法会选举投票有正向影响。包装往往给人直观的第一印象，同时也是选民最直接的视觉上的感受，它代表着候选人的形象，别致、亮丽的包装设计比起宣传物更能吸引选民的注意力。出彩的包装设计可在选民心中树立起候选人形象，具有时代感的包装更可以吸引选民的眼球。这与2013年张庆来的研究结果一致（张庆来，2013）。

（三）选举宣传中使用社交媒体多样性与组别投票率的关系

本研究经过定性比较分析结果发现，选举宣传中使用社交媒体的多样性对选民立法会选举投票有正向影响。社交媒体更贴近于现代选民生活，如果宣传定位新颖，则会获得选民的支持。其原因可能是澳门选民特别是“首投族”的政治意识普遍尚未明确，政党认同强度不高，且易受传媒的影响，因此选举宣传中运用社交媒体的多样性会提升候选人及组别的得票率。

（四）选举宣传物的价格与组别投票率的关系

本研究经过定性比较分析结果发现，选举宣传物的价格对选民在立法会选举投票有正向影响。当选民认为可以从宣传品中获取更高价值回报而获得优越感，价格因素对他们来说具有更高的宣传效果。立法会选举中个候选人作风廉洁，深受选民喜爱，而我们从QCA分析中发现，宣传物价格作为条件变量单独作用时对于结果变量的影响不明显，而在与其他变量组合后作用比较明显，同样也能对于结果变量起到一定的影响作用。

综上，在理论上，澳门没有明显的意识形态和政党认同，选举议题也没那么重要，因此个人因素突出，而个人形象又主要通过宣传品来架构、塑造和传播。竞选组别希望扩大对于选民的宣传影响，便应该在宣传中使用社交媒体上投入较多人力和物
力，相对适量地减少在传统宣传方式上的投入，在宣传物的内容选择上，以受众的心
理感受为先导条件，而不是盲目过分地想宣传标语和口号反而使得该宣传物对于使用
者失去了应有的美学价值和功能价值，并且应该开发一些样式新颖别具一格的宣传物,
丰富宣传物种类。

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Smile or Pity? The Impact of Network Emoticon Types on Consumers' Forgiveness from the Perceived Sincerity Perspective

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Abstract

After online shopping service failure occurs, different emoticons type to apologize used by merchants, which will express different emotion, will affect consumers' perceived sincerity and willingness to forgive on merchants. The relationship norms between consumers and enterprises will affect their perception and judgment of merchants, and will also affect their willingness to forgive. This study designed two experiments, then drew the following conclusions by SPSS20.0 software and Bootstrap method: firstly, different types of online emoticons have a significant impact on consumers' willingness to forgive. Specifically, negative emoticons can make consumers more willing to forgive than positive emoticons. Secondly, customers' perception of merchants’ sincerity mediates the influence of emoticons type on consumers' forgiveness intention. Thirdly, relationship norms plays a moderating role on the influence of emoticons type on perceived sincerity and consumers' forgiveness intentions. Specifically, negative emoticons has a more significant impact on perceived sincerity than that of positive emoticons when consumers are communion-relationship orientation; There are no significant difference on the influence of positive or negative emoticons on perceived sincerity when consumers are exchange-relationship orientation.

This paper expands the research perspective of consumer forgiveness and provides reference for enterprises to improve consumers' willingness to forgive.

Keywords: Internet Emoticons; Willingness to Forgiveness; Perceived Sincerity; Relationship Norms
赔笑脸还是表同情？网络表情符号类型对消费者宽恕意愿的影响——基于感知真诚性视角

马瑞婧 1，凡文强 1

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摘要

网购服务失误发生后，商家道歉时使用不同表情符号会通过表达出不同的情绪，从而影响消费者对商家的感知真诚性及宽恕意愿。而消费者与企业建立的关系范式会影响其对商家的感知和判断，从而对宽恕意愿产生影响。本文通过两个实验设计，运用 SPSS20.0 软件和 Bootstrap 方法进行数据分析，得出如下结论：第一，不同类型的网络表情符号对消费者宽恕意愿有显著影响。具体而言，相比于积极型表情符号，消极型表情符号能让消费者产生更高的宽恕意愿；第二，顾客感知卖家真诚性中介了网络表情符号类型对消费者宽恕意愿的影响；第三，关系范式在网络表情符号类型对感知真诚性和宽恕意愿的影响中具有调节作用。具体而言，共有关系范式下，相比于积极型表情符号，消极型表情符号的使用对感知真诚性的影响更显著；交易关系范式下，积极型和消极型表情符号对消费者感知真诚性的影响无显著差异。

本研究拓展了线上服务失误后消费者宽恕意愿的研究视角，对企业营销具有一定借鉴意义。

关键词：网络表情符号；宽恕意愿；感知真诚性；关系范式

1. 引言

误情景。但是关于网络表情符号的类型如何影响消费者宽恕方面的研究尚处于空白。


因此，本研究聚焦于网购服务失误后商家道歉情境，考察不同类型表情符号对消费者宽恕意愿的影响。具体而言，本研究试图探讨以下问题：第一，表情符号类型（积极表情/消极表情）对消费者宽恕意愿的影响；第二，感知真诚性在表情符号类型对消费者宽恕意愿影响中的中介作用；第三，表情符号类型对消费者宽恕意愿影响的可能边界条件（关系范式）。

2. 文献回顾

2.1 网络表情符号

2.1.1 网络表情符号的定义

1. 国外学者关于网络表情符号的界定，具有代表性的有：

Huffaker and Calvert (2005) 认为，表情符号也称为笑脸符号，是从单词“emotion”和“icons”混合而衍生出的词汇，由标点符号或者图形符号组成。

Xu, Yi, and Xu (2007) 在文章中引用了 Huffaker and Calvert (2005) 的界定。

Derks, Bos, & von Grumbkow (2008) 认为，表情符号是用以模仿面部表情的字符或图形符号，比如代表笑脸的 “:-)” 或 “😊”。

Ptaszynski (2011) 认为，表情符号是肢体语言在基于文本的信息中的表现形式，在文本信息中，沟通渠道仅限于字母和标点符号的传递。

Xueni LI (2018) 根据前人学者 Huffaker and Calvert (2005) 的界定，将表情符号界定为：在数字沟通情形下，作为非语言线索来传递情绪的文本符号（例如：:-) 或 ( ) 或者面部表情的图形描述（例如 “😊”、“😉”）。

Captain Patrick M. Milott (2017) 的界定：表示面部表情或手势的一系列文本字符（通常是标点符号或符号），如：与流行的黄色笑脸表情符号相比，emoticon 的推论是 “:-)” 和 “:-)” 和的组合，形成 “:-)” “笑脸”。

2. 国内学术界对于网络表情符号也还没有统一的定义。许多学者分别从符号学、语言学、视觉修辞学和传播学等不同学科的角度对网络表情符号进行了定义。

（1）符号学角度的定义。如鲁瑶、吴佳妮（2009）的定义，“网络非语言传播中的图形符号”；

（2）语言学角度的定义。如余光武和秦云（2011）的定义：网络表情符号
是在网络交际中使用的一种以简单图形或彩色图像甚至动画等形式表情达意的信息载体。

（3）视觉修辞角度的定义。如魏然（2016）的定义：“网络表情符号是网络虚拟交流中用以取得理想传播效果的视觉媒介符号, 通过表现面部或姿态的变化来实现感情态度与思想观点的表达”。

（4）传播学角度的定义。如白亚峰（2009）的定义：网络表情是指由字符、图形、文字等组成，以视觉图像为核心元素，用来替代个体身体表达的非语言符号。这个定义主要有两层含义：一是网络表情以视觉图像为核心元素来表情达意，具有直观性和形象性，明显区别于语言的表达；二是表达时不仅是在表达动作、情感的符号，“身体的不在场”导致了网络表情已成为我们在虚拟空间“另一个身体”的替代表达形式。

叶云（2013）的定义：“运用图文、动画等手段所模拟和再现的人类和动物的表情、动作，及卡通化的事物、自然现象等，在网络互动过程中起着交流情绪、传达感情的作用。” 魏玮（2014）的定义，在网络交流中，由字符、图形、文字等组成，用来模拟人的面部表情、眼神和体态、动作，表达网络所掩盖的情绪和感情的非言语符号。

张雪（2015）的定义：“在网络交流中，由字符、图形、文字组合，用来模拟人的面部表情、眼神、体态动作的，表达网络所掩盖的情绪和感情的视觉性非语言符号。” 刘胜枝等（2017）的定义：网络表情符号是指具有表情功能的图像符号形式，是网络交流过程中出现的一种补充性语言。

黄艳婷（2018）的定义：在网络互动过程中，交互双方利用字符集、表情图片等方式来表达自己的情绪、态度、情感、观念等的一种网络工具。

借鉴前人学者的定义，考虑本文的研究情景，笔者把本文中的网络表情符号定义为：在网络互动过程中，交互双方利用字符、图形、文字或其组合，用来模拟人的神情、体态动作的，用以表达情绪、感情、态度或观念等的一种视觉性非语言符号。

2.1.2 网络表情符号的类型

网络表情符号的分类并没有统一的规范和固定的标准。前人学者分别根据形式、内容、渠道来源、图像特征和作用等标准进行了分类。

1. 根据形式分类

表情符号按形式分为以下四种：一是美式 ASCII 字符，就是由键盘符号组成的表情，由于来源于古代象形造字法，这种网络表情符号也被称为现代甲骨文。二是日式颜文字。与美式 ASCII 字符相同的是两者均是键盘符号，不同的是把呈 90° 倒下的表情扶正，用人们熟悉的字形构建表情。另外不同之处在于日式颜文字通过改变眼神表达感情，比如，认真脸(・_・)、惊讶(⊙_⊙)、怀疑(→_)等；而美式 ASCII 字符主要是通过改变嘴型传达感情。三是静态图片。是用 Photoshop 等图形软件制作出来，通常为 JPEG 格式，可以由文字、照片、电影截图等组成。四是动态表情。是用 Flash 等动画软件制作的动态效果图，通常是 GIF 格式，目前通讯软件都会有自带的动态图，也可从网络下载，这一类网络表情符号使用最为广泛（鲁瑶，2009）。

2. 根据来源分类

表情符号根据来源分为系统自带的和用户定义的（Xin Chen 和 Kin Wai Michael Siu，2017）。鲁瑶（2009）根据渠道来源的不同，将网络表情符号分为
四种。一是软件自带表情，无论是QQ还是微信，或是搜狗输入法等其他通讯工具，都会有系统自带表情，例如经典表情：花心。但这些自带表情模式单一，被形象地称为官方表情。二是免费下载表情，在QQ魔法商城、微信表情库里都会有免费系列表情，可以直接下载，免费使用。三是付费购买的表情。微信表情商城中会有需要付费的表情，这一类表情多数是明星表情，需要付费6元才可使用。四是网络下载、收藏或自制表情。可以通过网络搜索表情包下载到手机，然后添加到微信等即时通讯软件中直接使用。在聊天中，可以对聊天对象发出的表情进行选择性收藏；还可以通过类似Photoshop等图像制作软件自制静态或动态表情，然后添加到通讯软件中直接使用。

3. 根据内容分类

Xin Chen和Kin Wai Michael Siu（2017）根据内容将表情符号分为人类身体的和非人类身体的。叶云（2013）根据内容将网络表情符号分为三类：一是态势语言符号。态势语言是指“人类以面部表情、身势动作、空间距离和服饰装束为物质材料的信息载体”。现实的人际交流主要依靠有声语言，除此之外就是利用态势语言进行表达，而在网络交际中，态势语言符号的出现有效地传达了使用者的感情。二是有声副语言符号。有声副语言是指语调、音高、音色、音量等辅助语言，还包括笑声、咳嗽、呼噜声等。在网络交流中，有声副语言符号的出现使得有声副语言可视化，例如，用数字表示哭泣：555~~~；用字母将呼噜声图像化：zzz~~~。目前即时通讯软件中都带有这些有声副语言符号，你总能根据交流情境找出相匹配的表情符号。三是物体卡通符号。这种网络表情符号不属于态势语言和有声副语言范畴，而是描述了现实生活中的具体形象，这些表情符号简洁直观、含蓄委婉，往往替代文字传达信息。

4. 根据作用分类

例如，Xin Chen和Kin Wai Michael Siu（2017）根据作用将表情符号分为情绪的（如 😊😊😊😊）、动作的（如 😂😂😂）和叙事的（如 🌟🌟🌟）。

5. 根据图像特征分类

例如，白亚峰（2009）根据图像特征将网络表情符号分为字符表情、头像表情、卡通表情和合成图片表情四个类型。

借鉴学者们的研究成果，本文从三个维度对表情符号进行分类：(1) 效价；(2) 格式；(3) 表现情绪（独立情绪或面部表情）。

根据效价划分，表情符号可以分为积极的（如微笑表情），消极的（如皱眉表情）和中性/模糊的类别（Derks, Bos & von Grumbkow, 2007; Derks, Bos & von Grumbkow, 2008; Luor et al., 2010; Walther & Addario, 2001）。在网络沟通中，人们通常使用积极或消极的表情符号，而中性表情符号使用频率较低（Luor et al., 2010）。此外，Luor 等（2010）发现积极和消极表情符号对信息接收者评价的影响要大于中性表情符号，而使用中性表情符号的用户对同一信息的评价与不使用相同表情符号的用户的评价差异有限。

根据格式划分，可以将表情符号分为颜文字符号或图形符号（Huang, Yen, & Zhang, 2008; Yigit, 2005）。颜文字表情符号的选择有限，它们能传达的情感线索也相对简单。相比之下，图形表情符号是使用一个很小矢量图像设计的，能表达上多种情绪或态度。目前网络沟通系统中提供的表情符号大多是基于图形的，在网络沟通的各种应用中已经创建了许多这样的表情符号实例。

根据表现情绪划分，即根据其表达的独立情绪或面部表情进行分类，例如喜
欢、不喜欢、开心、悲伤、沮丧、惊讶或讽刺(Derks et al., 2008b; Rivera, Cooke & Bauhs, 1996)。在互联网介导的反馈传递中，喜欢和不喜欢是两种最常表达的情感类型(tree & Manusov, 1998)。表达喜欢主要是通过使用笑脸等面部表情符号，而表达不喜欢则是通过使用生气或悲伤等面部表情符号。

本研究中以表现情绪为依据将网络表情符号分为积极和消极两种类型：积极型表情符号用以表达快乐、惊喜、开心等积极情绪；消极型表情符号用以表达悲伤、愤怒、焦虑等消极情绪。

2.1.3 网络表情符号研究综述

国内外关于表情符号的营销学研究都非常少。目前查阅的研究文献如下：

在国内，唯一的一篇实证论文是黄艳婷（2018）研究的网络表情符号（有 vs 无）对消费者宽恕意愿的影响——服务失误背景下。其他学者如王亚泉、刘琦、刘宁馨、王晓明等的研究都只是停留在定性分析或案例分析的层面上。


2.2 消费者宽恕意愿

2.2.1 消费者宽恕意愿的定义

业，并消除负面情绪进而原谅企业的行为意愿。

综上，本文借用马瑞婧，黄艳婷（2018）对网购服务失误发生后消费者宽恕意愿的定义：网购服务失误发生后，消费者关注点从自身转移到企业，并消除负面情绪进而原谅企业的行为意愿。

2.2.2 影响消费者宽恕意愿的主要因素

综观国内外关于消费者宽恕影响因素的研究，主要集中在以下方面：与失误本身相关的影响因素，与企业相关的影响因素以及与消费者自身相关的影响因素（见表1）。其中，有代表性的研究有：Riza Casidy 等（2015）研究了伤害的指向和企业的服务补救策略对消费者的宽恕和负面口碑意向的影响。李东进，马明龙（2018）研究了产品召回情景下，影响消费者心理宽恕的因素。孙乃娟，孙育新（2017）研究了服务补救、移情与消费者宽恕意愿的关系。任金中（2015）研究了产品伤害危机模糊情境下危机响应调节对宽恕的影响。冉雅璇，卫海英等（2017）研究了企业道歉者人数对消费者宽恕的影响。孙乃娟（2012）通过梳理文献总结指出，共情、反刍、关系质量以及企业的补救措施是影响消费者宽恕的四大关键因素，但该结果未关注失误事件本身的影响。李欣欣和訾非（2016）总结人际宽恕和消费者宽恕的文献，指出影响消费者宽恕的因素主要包括：人格和个体因素（如人格特质、自尊水平、年龄和性别等），关系因素（如关系质量和关系满意度等），情境因素（如失误的严重性、补救措施等）以及社会认知因素（如共情、反刍、归因、不公平感知等）。马瑞婧，黄艳婷（2018）研究了网络表情符号对消费者宽恕意愿的影响。

综上可以看出，对服务失误后企业如何应对才能使消费者宽恕的现有研究，除了马瑞婧，黄艳婷（2018）的研究以外，都是只局限于线下服务失误情景的研究。

表1 影响消费者宽恕意愿的主要因素

<table>
<thead>
<tr>
<th>企业相关的</th>
<th>消费者相关的</th>
<th>失误自身相关的</th>
</tr>
</thead>
<tbody>
<tr>
<td>认错态度（立即响应和道歉）</td>
<td>人格特质（宜人性、共情）</td>
<td>失误类别</td>
</tr>
<tr>
<td>补救方式（“道歉”&amp;“补偿”等）</td>
<td>消费者认知（责任归因、信息加工）</td>
<td>失误严重性</td>
</tr>
<tr>
<td></td>
<td>关系质量（密切度、信任、承诺等）</td>
<td>失误可修复性</td>
</tr>
</tbody>
</table>

资料来源：根据文献汇总整理

2.3 感知真诚性

2.3.1 感知真诚性的定义

目前，国内外学者尚未对感知真诚性的定义与计量方式达成共识。美国学者Grandey 等人（2005）认为，服务真诚性是员工的一种角色外行为，能够积极影响顾客满意度。从现有研究成果来看，大部分学者将感知服务真诚性定义为顾客在服务接触中感知的员工真诚情感的表露（Hennig-Thurau et al., 2006; Collishaw et al. 2008; Turel et al. 2013）,。也有不少学者对道歉真诚性进行研究，比如 Schmitt 等（2004）认为，道歉真诚性必须充分包含各种要素，只有进行充分的道歉才能提高道歉的有效性。

本研究基于网购服务失误情境将感知真诚性定义为：网购服务失误后顾客感受到的卖家在网络道歉时使用表情符号表达的情绪的真诚性程度。
2.3.2 感知真诚性与宽恕

针对感知真诚性的各种要素的研究，不同学者的视角也不尽相同。Gill（2000）与Orenstein（1999）分别基于人际关系、企业解决纠纷的角度提出影响道歉有效性的因素，后者更提出应尽可能对受害者进行赔偿。总结来说，有诚意的道歉应包括过错方认识错误、承担过错责任、做出某种补偿并保证不会再重复错误（Langsley, 2005）。而且Darby & Schlenker（1981）已发现道歉接收者对道歉真诚性感知要素存在累加效应，认为道歉越复杂，就越能提高对过错方道歉真诚性的感知程度。同时，道歉严重程度越高，道歉诚意对子要素的要求也越复杂，消费者对道歉真诚性的感知程度也越高。换句话说，基于道歉要素积极采取各种挽救措施，让消费者感觉到过错方的道歉具有足够的诚意，才能促使消费者更愿意选择原谅，并从内心深处宽容对方的过失。

2.3.3 感知真诚性研究综述

总结学者研究发现，目前关于真诚性的研究多集中服务真诚性对顾客态度与行为的影响。例如，Collishaw（2008）提出了服务真诚性与顾客积极情绪、顾客满意度的理论模型，认为服务真诚性能够促进顾客积极情绪的产生，进而影响顾客满意度。随后，美国学者White（2011）发现员工服务真诚性会积极影响顾客满意度，从而促进顾客忠诚度的提升。那么网络表情符号类型是否会对消费者对卖家的真诚性感知程度产生作用，从而影响宽恕意愿？这也是本文研究的重点。

2.4 关系范式

2.4.1 关系范式、共有关系和交易关系的定义


根据社会关系理论，Mills（1993）基于个体为同伴提供利益的规范模式将消费者与品牌之间的关系区分为交易关系范式（exchange relationship norm）和共有关系范式（communal relationship norm）。交易关系范式下，人们主要基于价值互换的期望和感知来开展行动，即一个人为他人提供利益的同时也期望得到同等回报，即需要补偿，类似于商业搭档之间的交往。共有关系以友谊为基础，这一范式下人们为他人提供利益是出于关心和满足他人需求的动机，而非出于利己或
者想要获取货币报酬的动机，人们不仅会关心自身的利益，还会去了解他人的需
求和利益，也会为收到的利益给予回报，但通常是由于感谢的动机。人们会对他
人的福利富有责任感，觉得自己有义务在伙伴需要时做出积极响应，并且是不求
回报的、无私的，类似于家人、伴侣和朋友之间的交往模式（Aggarwal, 2004）。相
较交易关系范式，共有关系范式下的消费者很少关注共同任务的投入产出，他
们更可能帮助他人，更可能响应他人的情绪状态。本文借鉴以上研究对两种关系
范式进行了界定：共有关系范式，是指消费者不仅是关心自己的利益，还会去了
解企业或他人的需求和利益，类似于朋友、家人之间的交往模式。交易关系范式
是指消费者给企业或他人提供利益同时期望能够得到相称利益作为回报，类似
于商业活动中交易模式。

2.4.2 关系范式研究综述

不少学者探讨了关系范式对消费者抱怨及其如何响应服务失误的影响。Goodwin
（1996）指出，如果消费者与企业是朋友关系，相较于纯粹的商业关系，他
们很少会对企业服务失误做出消极回应。黄敏学等（2009）发现在低水平服务
失误情况下，共有关系的消费者相对于交易关系的消费者更乐意对企业抱怨，主
要出于利他动机，为了帮助企业发现和改进服务中的问题，提高企业的服务质量。
Wan 等（2011）也基于关系范式探讨了其对消费者如何响应服务失误的影响，并
且发现从服务提供者角度出发考虑服务失误的共有关系范式下的消费者会降低
他们的负面情绪和反应。

借鉴这些研究，本文将关系范式引入到企业对消费者如何响应网购服务失误
的情景中。当消费者与企业建立了不同的关系，他们会根据相应关系对企业的特
定行为做出不同反应（Garbarino & Johnson，1999）。所以，本文预测在网购服
务失误情境下，与企业存在不同关系的消费者，对企业不同类型表情符号的道歉
方式也存在差异化的心理机制，相对应的宽恕意愿也会受到影响。

3. 理论基础与研究假设

3.1 理论基础

3.1.1 S-O-R 理论

“刺激-加工-响应”（S-O-R）理论认为，外界的刺激会触发个体内心的认知
加工过程，并最终影响个体的行为倾向和反应（Mehrabian & Russell, 1974）。当
遭遇冒犯或服务失误时，企业的响应形式及补救方式作为一种刺激，会触发消费
者内心对于企业认知和态度的转变，最终决定选择宽恕。在“S-O-R”模型中，
外在的刺激是关键，合适的响应和补救直接决定了消费者的宽恕倾向。具体在网
络购物服务失误下的卖家响应，选择使用何种类型表情符号，会影响消费者内心
对卖家真诚性的感知，并最终决定消费者是否选择宽恕企业。“S-O-R”模型为
本文基于网络购物服务失误后卖家使用表情符号类型（积极型 vs. 消极型）对消
费者宽恕意愿影响的理论模型提供了理论解释。

3.1.2 社会临场感理论

社会临场感（Social presence）是 Short, Williams & Christie 于 1976 年提出
的概念，指在利用媒体进行沟通的过程中一个人被视为“真实的人”的程度及与
他人联系的感知程度。社会临场感理论认为能够传达更多线索（包括表情、姿态、服饰、语言、非语言的有声线索等）的沟通媒介将会导致用户享有更高程度的社会临场感（Qiu, Benbasat & I.An, 2005）。本研究针对网络服务失误后商家-消费者的互动与所界定的社会临场感更接近于 Gunawardena 等（1997）基于心理感知视角作出的定义，即社会临场感除了是媒介的一种特性，也是人和媒体互动过程中引发的一种心理感知。多数研究都认为，网络表情符号是对网络文辞语言的补充，它的出现弥补了文辞交流的缺陷，使网络在线交流看起来更像现实场景中的人际交流（赵爽英和尧望，2013）。代涛涛、佐斌和郭敏仪（2018）通过实证研究表明，网络表情符号的使用会增加社会临场感，从而提高感知者的体验和沟通效果。社会临场感理论为本文基于网络服务失误后商家-消费者的互动中使用不同类型表情符号促进消费者对商家真诚性的感知程度和宽恕意愿提供了理论依据。

3.1.3 首因效应

首因效应由美国心理学家洛钦斯于 1957 年首先提出的，它是指最初接触到的信息所形成的印象对我们以后的行为活动和评价的影响，实际上就是“第一印象”的影响。第一印象主要是性别、年龄、衣着、姿势、面部表情等“外部特征”。心理学研究发现，与一个人初次会面，45 秒钟内就能产生第一印象。这一最先的印象对他人的社会知觉产生较强的影响，并且在对方的头脑中形成并占据着主导地位。也有学者指出，手势、面部表情、体态表情等非语言符号在人类的社会沟通中也起着重要的作用，人体各部分的动作反映出一个人的情绪，会给交往带来细微的差别（王基祥，2007）。胡东芳（2008）认为在社会认知过程中，最初接触到的信息会影响个体以后的感知以及行为意向，即首因效应。首因效应理论为本文基于网购服务失误后卖家使用不同类型表情符号（积极型 vs. 消极型）对消费者宽恕意愿产生影响的理论模型提供了理论依据。

3.2 研究模型及基本假设

本文研究的是网络购物服务失误情境下，网络表情符号类型对消费者宽恕意愿的影响，以及这一作用过程的内部机理，探讨消费者-企业的关系范式的调节作用及边界条件。本文以“S-O-R”模型以及社会临场感和首因效应为理论基础，以表情符号类型（积极型 vs. 消极性）为自变量，消费者感知卖家真诚性为中介变量，关系范式为调节变量，宽恕意愿为因变量，建立了研究模型如图 1。

图 1 研究模型

3.2.1 表情符号类型对感知真诚性及消费者宽恕意愿的影响

社会心理学中的文献认为，人们自然而然地根据个体的外貌（如吸引力，美


H1：网络表情符号类型对消费者宽恕意愿有显著影响。具体而言，相比于积极型表情符号，消极型表情符号能让消费者产生更高的宽恕意愿。

3.2.2 感知真诚性的中介作用

何美贤 (2018) 将消费者个性特征、感知道歉真诚性与宽恕意愿的联系进行研究发现，感知道歉真诚性对消费者宽恕意愿产生直接的正向作用，并在个性特征对消费者宽恕意愿的影响中起中介作用。Leanne & Gabrielle (2015) 研究表明，相比于积极的面部情绪，道歉者表达消极的面部情绪时，会提升顾客对道歉者真诚后悔的感知，从而缓解组织负面行为导致的绩效下降。本文推测网络表情符号类型会通过感知真诚性的中介作用对消费者宽恕意愿产生显著影响。因此提出假设：

H2：感知真诚性在网络表情符号类型对消费者宽恕意愿的影响中起中介作用。

3.2.3 关系范式的调节作用

社会关系理论基于个体为同伴提供利益的规范模式将消费者与品牌之间的关系分为交易关系范式和共有关系范式 (Clark & Mills, 1993)。交易关系范式下，人们主要基于价值互换的期望和感知来提供利益，为同伴提供利益的同时也期望得到同等回报，即需要补偿，类似于商业搭档之间的交往；共有关系范式下，个体为同伴提供利益则出于关心和满足他人需求的动机，对同伴的补偿没有预期，类似于家人、朋友的关系(Aggarwal, 2004)。相较交易关系范式，共有关系范式下的消费者很少关注共同任务的投入产出，他们更可能帮助他人，更可能响应他人的情绪状态。

平服务失误情况下，共有关系范式下的消费者相较于交易关系的消费者更乐意向企业抱怨，主要出于利他动机，为了帮助企业发现和改进服务中的问题，提高企业的服务质量。Wan等（2011）基于关系范式探讨了其对消费者如何响应服务失误的影响，并且发现从服务提供者角度出发考虑服务失误的共有关系范式下的消费者会降低他们的负面情绪和反应。Xueni(shirley) Li等（2018）的研究发现，当服务员工使用表情符号时，相较于交易型顾客，共有型顾客更容易推断出较高的温暖度，因此对服务的满意度更高。当共有关系范式突出时，顾客期望服务人员扮演朋友或家庭成员的角色，表现出对顾客的真诚关怀等行为。

借鉴这些研究，本文将关系范式引入到企业针对网络服务失误回应的情境中。当消费者与企业建立了不同的关系范式，他们会根据相应关系范式对企业的特定行为做出不同反应（Garbarino & Johnson, 1999）。所以，本文推测在不同关系范式下的消费者对商家不同类型的表情符号有着不同的感知评价和反应。共有关系范式的消费者更能够响应他人的情绪，而在服务失误情境下，商家表现出消极情绪更能感染消费者（Leanne & Gabrielle, 2015），因此使用消极型表情符号更能增强消费者对商家的真诚性感知，让消费者得到一种心理补偿，从而提高宽恕意愿。而交易关系范式的消费者更加关注投入产出，更在乎自己的利益是否得到满足，此时这些精神上的补偿效果不明显，因此使用何种表情符号的效果不显著。因此提出如下假设：

H3：关系范式在网络表情符号类型对感知真诚性的影响中具有调节作用。

H3a：共有关系范式下，相比于积极型表情符号，消极型表情符号的使用对感知真诚性的影响更显著。

H3b：交易关系范式下，积极型和消极型表情符号对消费者的感知真诚性的影响无显著差异。

4. 实验一：不同类型表情符号对宽恕意愿的影响

4.1 预研究

预研究的主要目的是对网购的产品及服务失误情境进行确定。考虑到网络购物群体偏年轻化特征以及情境还原的真实性和专业性，选取了10名高校在校学生被试，其中5个男生5个女生。让被试通过自陈报告的方式描述一次近期发生的印象最深刻的网络购物失误经历，并对被试描述的失误经历中的关键信息进行提取并记录失误情境和内容。最终梳理发现，其中网购运动装备所占频次最高。比如，您最近打算网购一套急需要用的运动装备，经过再三比较，您选择了一家声誉比较好的品牌，但是下单之后，卖家却迟迟不发货，到货时间远远超出了平台给出的预计等待时间，这在一定程度上耽误了您的使用。尽管运动装备的质量很不错，但是您心里还是很不满。因此，本文最终选取网购运动装备发货迟误作为研究的背景。接着，本文参考朱华伟等（2017）的研究设计，选取“网购运动装备发货迟误”作为正式研究中的具体服务失误情境。主要基于以下几个方面的考虑：

（1）网购情境中更容易出现服务失误，网购过程中到货的及时性与否是消费者关注的重要问题；
（2）消费者在购买运动装备时往往是在距离正式使用很近的时间周期内去购买，他们对因商家发货而导致的物流问题的感知更明显，更容易产生负面情绪，选择运动装备作为产品类型，更能够增加研究情景的代入性；
（3）我们通过预研究（10名大学生参与，测量了他们关于运动装备的网购经历和网购频率等）检验了男性和女性在购买运动装备经验上的差异，发现两者并没有明
显差异，因此性别差异不会对我们的研究情景产生干扰。

4.2 实验设计及过程

正式实验旨在探究表情符号类型（积极型和消极型）对消费者宽恕意愿的影响及其内在机制。采用 2（表情符号类型：积极型 vs. 消极型）组间对比设计，78 名在校学生（平均年龄 21.87 岁，56%女性）作为被试参加实验。首先将被试随机分为两组（积极型表情符号 vs. 消极型无表情符号），实验中表情符号的使用参考了 Leanne & Gabrielle（2015）对面部表情的情绪划分研究，积极表情选用“微笑”，消极表情选用“悲泣”；然后向被试展示研究材料和具体的失误情境（“网购运动装备发货迟误”）及客服人员的响应（积极型表情符号 vs. 消极型表情符号），接下来邀请被试填写相关量表。最后，让被试评价一些控制变量题项。各组问卷材料除了表情符号类型的差异，其他信息均相同。实验一共回收问卷 78 份，其中无效问卷 18 份，得到有效问卷 60 份。

4.3 变量测量

正式实验中的量表均是在借鉴国际学者的成熟量表基础上改编得到的，包括感知真诚性量表和宽恕意愿量表。其中，感知真诚性量表改编自拉扎尔（Lazare, 2005; 何美贤, 2018），有 3 个测项（如“我认为 N 官方旗舰店承认了错误”）；宽恕意愿量表包括十二条题项，采用 McCullough 等的人际侵犯动机量表（TRIM），并进行适当改编以符合本研究情境（如“我会和 N 品牌旗舰店保持距离”）。由于 TRIM 量表包括报复（Revenge）和回避（Avoidance）动机，所有题项的反向记分均值作为消费者宽恕意愿指标。

控制变量包括购买经历（“我曾经有过类似的购买经历”）、产品熟悉度（采用 Coupey, Irwin 和 Payne 的测量方法；如“我熟悉该运动装备”）、感知严重性（选取 James 的失误严重性量表，该量表包含三个问项；如“我认为这次失误让我感到非常不舒服”）。所有量表均采用李克特七点计量法进行计数（1= “非常不同意”，7= “非常同意”）。

4.4 实验结果与小结

本研究全部数据均采用 SPSS 20.0 软件进行分析。表 2 描述了变量基本信息和相关系数。其中，消费者宽恕意愿与感知真诚性（r=0.48, p<0.01）和购买经历（r=0.03, p<0.05）正相关，与感知严重性负相关（r = -0.48, p <0.01）；感知真诚性与感知严重性负相关（r = -0.11, p <0.05）；购买经历与产品熟悉度（r=-0.01, p<0.1）正相关。

<table>
<thead>
<tr>
<th>变量</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>消费者宽恕</td>
<td>5.17</td>
<td>1.08</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>感知真诚性</td>
<td>4.70</td>
<td>1.30</td>
<td>0.48*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>购买经历</td>
<td>4.48</td>
<td>1.07</td>
<td>0.03*</td>
<td>-0.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>产品熟悉度</td>
<td>4.38</td>
<td>0.92</td>
<td>0.01</td>
<td>0.02</td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td>感知严重性</td>
<td>4.70</td>
<td>1.30</td>
<td>-0.48*</td>
<td>-0.11*</td>
<td>-0.23</td>
<td>-0.01</td>
</tr>
</tbody>
</table>

1056
首先，积极型表情符号组和消极型表情符号组被试在控制变量（购买经历、产品熟悉度、感知严重性）上没有显著差异（ps>0.12），结果表明组间控制成功。然后，以消费者宽恕意愿为因变量的单因素方差分析表明：相比积极型表情符号组，消极型表情符号组的宽恕意愿更高（M 积极表情=4.54, SD=0.86 vs. M 消极表情=5.81, SD=0.89；F（1,60）=31.75, p<0.01, ƞ_p^2=24.38），假设1得到支持。独立样本T检验显示，表情符号类型对于网购服务失误情境下的消费者宽恕意愿影响显著（t(60)=36.322, p<0.001）。图2中可看出，相比于积极型表情符号，商家使用消极型表情符号进行回应对消费者宽恕意愿有显著的正向影响。

为了检验感知真诚性的中介作用，本文采用Bootstrap中介检验方法进行检验。该中介检验方法以Preacher and Hayes（2004）的研究为依据，检验程序方面参考Zhao et al.（2010）以及国内学者陈瑞、郑毓煌和刘文静（2013）等提出的中介效应分析程序及分析结果可得，间接效应区间不包含0时，变量不具有中介效应；间接效应区间和直接效应区间都不包含0时，变量具有部分中介作用。首先，将表情符号类型设置为自变量，感知真诚性为中介变量，宽恕意愿为因变量。接下来，将样本量设置为5000，选取95%的置信区间，采用偏差校正法对数据进行Bootstrap中介检验。对于感知真诚性，中介检验的结果不包含0（LLCI=-0.0103, ULCI=0.5192），表明感知真诚性的中介效应显著，且中介效应大小为0.1748。此外，控制了中介变量感知真诚性之后，不同类型表情符号（积极表情 vs. 消极表情）对因变量宽恕意愿的影响也显著，区间（LLCI=-0.6268, ULCI=1.5737）不包含0，所以，感知真诚性发挥了部分中介作用。具体结果如表3所示：

表3 感知真诚性的中介效应

<table>
<thead>
<tr>
<th>变量</th>
<th>Effect</th>
<th>LLCI</th>
<th>ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Effect</td>
<td>1.1002</td>
<td>0.6268</td>
<td>1.5737</td>
</tr>
<tr>
<td>Indirect Effect</td>
<td>0.1748</td>
<td>0.0103</td>
<td>0.5192</td>
</tr>
</tbody>
</table>

实验一验证了网购服务失误情境下卖家道歉时使用的表情符号类型（积极型表情符号 vs. 消极型表情符号）对于消费者感知真诚性及宽恕意愿的影响作用。结果表明，相比于积极型表情符号，消极型表情符号能让消费者产生更高的宽恕意愿，且感知真诚性在这一影响中有中介作用，假设1和假设2得到验证。但是
已有研究设计未考虑表情符号类型发挥作用的边界条件，在消费者与企业建立不同关系范式下使用不同类型符号可能对宽恕意愿的影响不同。因此，实验二旨在通过操纵两种关系范式，探究表情符号类型对宽恕意愿的差异化影响。

5. 实验二：不同类型表情符号对不同关系范式的消费者宽恕意愿的影响

5.1 预研究

预研究的主要目的是对网购中消费者与企业的不同关系范式进行确定。预实验选择网购某知名品牌手机后降价作为具体的网购失误产品类型。通过梳理文献，本文选用网购手机服务失误主要基于以下几方面的考虑：（1）网购情境中更容易出现服务失误，网购过程中到货的及时性是否是消费者关注的重要问题；（2）手机等电子品牌更容易使消费者与品牌形成不同的关系范式，而且可能着急使用，他们对因商家发货而导致的服务失误的感知更明显，更容易产生负面情绪，更能够增加研究情景的代入性（黄敏学等，2009）。

接下来，本研究采取经典的情境模拟来激发被试的关系范式状态（黄敏学等，2009）：选取12名高校在校学生被试（其中6名男性，6名女性），被试首先要阅读一篇自己与某电子品牌企业（为排除其他干扰因素，情景刺激中的电子品牌企业是虚拟的）关系的短文，设想自己经常购买该企业的电子产品，与之保持长期关系。共有关系范式情景中，被试和企业的关系类似于朋友间的交往；交易关系范式下，被试与企业的关系类似于商人之间的往来。然后运用改编自Aggarwal（2004）的情境操控量表对关系范式操控进行了有效检验，发现被试对不同关系范式的感知存在显著差异。共有关系情境下，消费者对共有关系的感知要显著大于对交易关系的感知；交易关系情境下，消费者对交易关系的感知要显著大于对共有关系的感知。因此，对关系范式的操控是成功的。

5.2 实验设计及过程

正式实验从表情符号和关系范围的匹配视角，来验证商家使用的不同类型的表情符号（积极型和消极型）对两种关系范式（交易关系和共有关系）下消费者宽恕意愿的影响及其内在作用机制。采用关系范式2（交易型 vs. 共有型）× 表情符号类型2（积极型 vs. 消极型）组间设计，选取全国各个高校的151名在校学生作为被试参与实验二（平均年龄21.5岁，55%女性），将被试随机分配到编号为1-4的四个研究组中，然后分别发放A-D四份问卷，要求被试在阅读图片中N官方旗舰店的网络购物失误情境以及客服人员的响应（积极型表情符号 vs. 消极型表情符号），实验中表情符号的使用参考了Leanne & Gabrielle（2015）对面部表情的情绪划分研究，积极表情选用“微笑”😊，消极表情选用“悲泣”😢；接下来邀请被试填写相关量表。各组问卷材料除了关系范式和客服使用表情符号类型的差异，其他信息均相同，接下来邀请被试填写相关量表。最后，让被试评价一些控制变量题项。

5.3 变量测量

正式实验中的量表均是在借鉴国内外学者的成熟量表基础上改编得到的，包括感知真诚性量表、宽恕意愿量表以及关系范式的情境操控量表。其中，感知真

控制变量包括购买经历（“我曾经有过相似的购买经历”）、产品熟悉度（采用 Coupey, Irwin 和 Payne 的测量方法；如“我熟悉该手机品牌”）、感知严重性（选取 James 的失误严重性量表，该量表包含三个问项；如“我认为这次失误让我感到非常不舒服”）。所有量表均采用李克特七点计量法进行计数（1=“非常不同意”，7=“非常同意”）。

5.4 实验结果与小结

首先，对被试对不同关系范式的感知进行操纵检验。运用 SPSS20.0 分析结果显示：共有关系情景下，消费者对共有关系的感知要显著大于交易关系（M 共有=5.56, SD=0.94 vs. M 交易=4.11, SD=0.76, F(1,120)=34.32, p<0.001, η_p^2=1.68）。交易关系情景下，消费者对交易关系的感知要显著大于共有关系（M 共有=4.14, SD=1.06 vs. M 交易=5.23, SD=1.25, F(1,120)=62.13, p<0.001, η_p^2=1.37）。因此，对关系范式的情操是成功的。

接下来，表 4 描述了变量基本信息和相关系数。其中，消费者宽恕意愿与感知真诚性（r=0.14, p<0.05）和购买经历（r=0.19, p<0.05）正相关，与感知严重性负相关（r = -0.13, p <0.05）；感知真诚性与感知严重性负相关（r = -0.01, p <0.05）；购买经历与产品熟悉度（r=0.04, p<0.1）正相关。

<table>
<thead>
<tr>
<th>变量</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>消费者宽恕</td>
<td>4.60</td>
<td>0.88</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>感知真诚性</td>
<td>4.46</td>
<td>1.35</td>
<td>0.14*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>购买经历</td>
<td>4.78</td>
<td>1.05</td>
<td>0.19*</td>
<td>0.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>产品熟悉度</td>
<td>4.40</td>
<td>1.10</td>
<td>0.01</td>
<td>0.02</td>
<td>0.03</td>
<td></td>
</tr>
<tr>
<td>感知严重性</td>
<td>4.46</td>
<td>1.35</td>
<td>-0.13*</td>
<td>-0.01*</td>
<td>-0.21</td>
<td>-0.01</td>
</tr>
</tbody>
</table>

另外，积极型表情符号组和消极型表情符号组被试在控制变量（购买经历、产品熟悉度、感知严重性）上没有显著差异（ps>0.18），结果表明组间控制成功。然后，以消费者宽恕意愿为因变量的单因素方差分析表明：相比积极型表情符号组，消极型表情符号组的宽恕意愿更高（M 积极表情=4.54, SD=0.66 vs. M 消极表情 =5.81, SD=0.98; F(1,120)=12.38, p<0.01, η_p^2=8.73），假设 1 得到支持。独立样本 T 检验显示，表情符号类型对于网购服务失误情境下顾客的宽恕意愿影响显著（t(120)=44.92, p<0.001）。图 3 中可看出，相比于积极型表情符号，商家使用消极型表情符号进行回应对消费者宽恕意愿有显著的正向影响。
为了检验感知真诚性的中介作用，本文采用 Bootstrap 中介检验方法进行检验。该中介检验方法以 Preacher and Hayes（2004）的研究为依据，检验程序方面参考 Zhao et al.（2010）以及国内学者陈瑞、郑毓煌和刘文静（2013）等提出的中介效应分析程序及分析结果可得，间接效应区间包含 0 时，变量不具有中介效应；间接效应区间不包含 0，直接效应区间包含 0 时，变量具有完全中介作用；间接效应区间和直接效应区间都不包含 0 时，变量具有部分中介作用。首先，将表情符号类型设置为自变量，感知真诚性为中介变量，宽恕意愿为因变量。接下来，将样本量设置为 5000，选取 95%的置信区间，采用偏差校正法对数据进行 Bootstrap 中介检验。对于感知真诚性，中介检验的结果不包含 0（$LLCI=0.1237$，$ULCI=0.7346$），表明感知真诚性的中介效应显著，且中介效应大小为 0.4050。此外，控制了中介变量感知真诚性之后，不同类型表情符号（积极表情 vs. 消极表情）对因变量宽恕意愿的影响也显著，区间（$LLCI=0.1042$，$ULCI=0.5714$）不包含 0，所以，感知真诚性发挥了部分中介作用。具体结果如表 5 所示：

<table>
<thead>
<tr>
<th>变量</th>
<th>Effect</th>
<th>LLCI</th>
<th>ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Effect</td>
<td>0.1336</td>
<td>0.1042</td>
<td>0.5714</td>
</tr>
<tr>
<td>Indirect Effect</td>
<td>0.4050</td>
<td>0.1237</td>
<td>0.7346</td>
</tr>
</tbody>
</table>

以感知真诚性为因变量，进行 2（表情符号类型：积极型 vs. 消极型）× 2（关系范式：共有关系 vs. 交易关系）的双因素方差分析。结果显示，表情符号类型 D 的主效应显著（$F(1, 120) = 4.21$，$p<0.01$，$\eta_p^2 = 0.04$），表情符号类型与关系范式的交互作用也显著（$F(1, 120) = 59.28$，$p<0.001$，$R^2 = 0.48$）。进一步组间对比图 4 显示，在共有型关系范式下，消极表情符号组的消费者感知真诚性显著高于积极表情符号组（$M_{积极表情}=3.32$，SD=0.32 vs. $M_{消极表情}=4.68$，SD=0.38；$F(1, 120) = 4.13$，$p<0.01$，$\eta_p^2 = 0.04$）；在交易型关系范式下，积极表情符号组的消费者感知真诚性与消极表情符号组无显著差异（$M_{积极表情}=3.27$，SD=0.18 vs. $M_{消极表情}=3.53$，SD=0.34；$F(1, 120) = 0.15$，$p>0.28$）。
以消费者宽恕意愿为因变量，进行 2（表情符号类型:积极型 vs. 消极型）×2 （关系范式: 共有关系 vs. 交易关系）的双因素方差分析。结果显示，表情符号类型的主效应显著（F (1, 120) = 21.186, p < 0.05, η^2_p = 8.73），表情符号类型与关系范式的交互作用也显著（F（1,120）=0.11，p <0.01，R^2=0.025）。进一步组间对比如图 5 显示，在共有型关系范式下，消极表情符号组的消费者感知真诚性显著高于积极表情符号组（M 积极表情 = 4.82，SD = 0.53 vs. M 消极表情 = 5.35，SD = 0.97；F（1, 120）= 15.18，p <0.01，η^2_p = 3.56）；在交易型关系范式下，积极表情符号组的消费者感知真诚性与消极表情符号组无显著差异（M 积极表情 = 3.83，SD = 0.34 vs. M 消极表情 = 4.08，SD = 0.74；F（1, 120）= 0.09，p = 0.573）。

实验二验证了关系范式在不同类型表情符号对消费者感知真诚性和宽恕意愿影响中的调节作用。结果表明，共有关系范式下，相比于积极型表情符号，消极型表情符号的使用对感知真诚性的影响更显著。交易关系范式下，积极型和消极型表情符号对消费者的感知真诚性的影响无显著差异。假设 3 得到验证。
6. 研究结论与管理借鉴

6.1 研究结论

第一，表情符号类型对感知真诚性及宽恕意愿的影响。研究结果发现，卖家在网购服务失误后进行道歉时，相对于积极型表情符号，使用消极型表情符号能让消费者感知卖家真实性更高进而引起宽恕意愿更高。何美贤（2018）将消费者个性特征、感知道歉真诚性与宽恕意愿的联系进行研究发现，感知道歉真诚性对消费者宽恕意愿产生直接的正向作用，并在个性特征对消费者宽恕意愿的影响中起中介作用。Leanne & Gabrielle（2015）研究表明，相比于积极的面部情绪，道歉者表达消极的面部情绪时，会提升顾客对道歉者真诚后悔的感知，从而缓解组织负面行为导致的绩效下降。而本文得出了与前人类似的研究结论：网络表情符号类型会通过感知真诚性的中介对消费者宽恕意愿产生显著影响。

第二，关系范式的调节效应。通过对关系范式边界条件的探索发现：不同关系范式会影响表情符号类型对感知真诚性和宽恕意愿的影响。共有关系范式下，相比于积极型表情符号，消极型表情符号的使用对感知真诚性的影响更显著；交易关系范式下，积极型和消极型表情符号对消费者的感知真诚性的影响无显著差异。这是因为交易关系范式下，人们主要基于价值互换的期望和感知来提供利益，为同伴提供利益的同时也期望得到同等回报，即需要补偿，类似于商业搭档之间的交往；而共有关系范式下，个体为同伴提供利益则出于关心和满足他人需求的动机，对同伴的补偿没有预期，类似于家人、朋友的关系（Aggarwal, 2004）。相较于交易关系范式，共有关系范式下的消费者很少关注共同任务的投入产出，他们更可能帮助他人，更可能响应他人的情绪状态。

6.2 管理借鉴

第一，本研究的结论表明，相对于积极型表情符号，使用消极型表情符号能让消费者感知卖家真实性更高进而引起宽恕意愿更高。因此，网络商家应该注意在道歉时使用不同类型表情符号的作用，要充分考虑使用何种类型表情符号更能促进消费者的对商家真诚性感知和宽恕意愿，建立有效的网络道歉程序和制度。

第二，网络商家提供网购服务时更应注重服务真诚性。本研究验证了感知道歉真诚性在表情符号类型对宽恕意愿的影响中的中介作用。现实中企业可以对客服进行针对性培训以提高他们的服务真诚性，这对企业发生失误后得到宽恕并留住顾客具有促进作用。

第三，商家和企业应该根据消费者与企业之间的不同关系范式，确定用不同类型的表情符号进行沟通。本研究发现，共有关系范式下，相比于积极型表情符号，消极型表情符号的使用对感知真诚性的影响更显著；交易关系范式下，积极型和消极型表情符号对消费者的感知真诚性的影响无显著差异，企业可以利用社交网络数据的可记录性和可追踪性，识别出顾客与企业所处的关系范式（黄敏学等，2016），例如哪些消费者是企业的“粉丝”，对企业的忠诚度和黏性较高；哪些消费者只是买完即走的“陌生人”，跟企业并没有深层次的情感共鸣。对于共有关系范式下的消费者，道歉时可以优先使用消极型表情符号，但是对于交易关系范式下的消费者，企业则需要采取加大补偿等其他方式才能获得消费者的宽恕。
7. 创新、研究局限与展望

7.1 创新

第一，以往表情符号的研究多集中在传播学沟通效果以及行为态度的促进作用，但鲜有研究将表情符号与服务失误等负面事件应对相联系，仅有马瑞婧，黄艳婷（2018）研究了网络表情符号（有 vs. 无）对消费者宽恕意愿的影响。本研究则创新性地研究了网络表情符号的类型对消费者宽恕意愿的影响。

第二，创新性地探讨了网络表情符号类型对宽恕意愿影响的中介机制：感知真诚性。为表情符号对宽恕意愿影响的研究提供了新视角。

第三，通过大量关系范式的文献研究，发现消费者与企业建立的关系范式会影响其判断及行为意愿，本文从不同类型表情符号与关系范式的匹配视角出发，探究了网购服务失误情境下表情符号类型与关系范式对消费者宽恕的交互影响，深化了对表情符号作用边界的探讨。

7.2 研究局限

第一，样本数量较少且范围较窄，研究结果的外部效度有限。因为研究时间和费用有限，本研究的有效样本数量仍较少。另外，为了专注于研究不同类型网络表情符号对宽恕意愿的影响，本文在选取样本的时候，将被试人群限定在了高校在校学生，以提高样本纯度，排除人群特征对实验结果的干扰。然而随着移动互联网的普及，网络购物越来越向全民化发展，上到老人下到青少年都加入到了网络购物的大军中。而年龄、身份地位等不同，对网络表情符号的态度也是不同的，所以研究结果的外部效度有限。

第二，对表情符号分类不够细致。本文通过实证，验证了消极表情（比积极表情）会让消费者产生更高的宽恕意愿。那么，具体到表达不同具体情绪（比如：尴尬、害怕、羞愧和内疚等）的网络表情符号，他们对消费者宽恕意愿的影响是否存在差异成为未来的一个研究视角。

第三，未考虑其他中介效应。本文只考虑了感知真诚性在不同类型表情符号对消费者宽恕意愿的影响中中介作用，而实验数据表明感知真诚性只起到部分中介作用，所以对主效应的解释水平比较有限。

第四，未考虑其他边界条件（如：个性特征等）对主效应的影响。本研究在考虑边界条件时，只探讨了关系范式的影响。事实上，消费者宽恕意愿还会受到个性特征等其他因素的影响。

7.3 研究展望

第一，样本群体的细分研究。消费者个性、年龄以及身份地位的不同，都会影响消费者自身的关注点和认知系统，以至于对表情符号的理解不一样。在以后的研究中可基于具体的研究情境，将研究群体基于年龄、性别或身份地位等标准进行细分，研究不同群体对网络表情符号的认知是否存在差异，从而提高网络表情符号在消费者宽恕意愿研究应用的外部适用性。

第二，具体网络表情符号的细分研究。本文通过实证研究，验证了不同类型网络表情符号的使用会影响消费者的宽恕意愿。那么，具体到表达特定情绪的网络表情符号，它们对消费者宽恕意愿的影响是否存在差异？例如，赵雪东（2017）将表情符号类型按照情绪类型划分为高兴、恐惧、愤怒、惊讶、厌恶、悲伤、平静、尴尬、内疚、自豪、羞愧，研究了表情符号对虚拟团队决策过程和满意度的影响。
影响。那么在网购服务失误情境下，具体网络表情符号的使用效果是如何体现的呢？在未来的研究中，可将网络表情符号按照情绪类型进行具体细分，进一步探讨具体表情符号对消费者心理和宽恕意愿的影响是否存在差异。

第四，探寻更多的中介机制。本文通过实证研究，验证了感知真诚性在不同类型表情符号对消费者宽恕的影响中起部分中介作用，因此，探寻影响表情符号类型对宽恕意愿的其他中介影响机制将成为未来的一个研究视角。

第四，更多边界条件的探讨。未来的研究中，可以继续探讨在其他条件一样的情形下，不同个性特征在表情符号类型对宽恕意愿的影响中是否具有调节作用。

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Research on the Influence of Brand Local Symbolism on Brand Attributes and Purchase Intention
——Based on Chinese Elements in Foreign Brands

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Abstract
This article mainly introduces the concept of local brand symbolization, and tries to explore its influence on the perceived quality of consumer brand, brand perceived reputation, perceived brand innovation and brand self-correlation. And then it further explores whether it affects the brand attitude of consumers as well as consumer purchasing intention. Further more, whether the consumer identity of localization has a positive regulating effect on brand attitude to purchasing intention.

This paper first reviewed the related domestic and foreign literature, and then listed the hypothesis and theoretical model. Then it carried out the focus group, and selected four brand products as a test brand. And then it used the spss22.0 software to carry out the reliability of the data, confirmatory factor analysis and correlation analysis as well as the linear regression analysis.

After the data analysis, results shows that the brand's local symbolism has a significant impact on the perceived quality of the consumer brand, the brand perceived reputation, the perceived brand innovation and the brand self-relevance, while the consumer brand perceived quality, brand perceived reputation, perceived brand innovation and brand Self-relevance have positive impact on the consumer brand attitude, which also have a positive impact on consumer purchasing intention.
On the whole, it is better to verify that the integration of Chinese elements in the global brand can affect the willingness of local consumers to buy.

**Key words:** Brand local symbolism; Chinese elements; Brand attributes; Purchase intention

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**Brand local symbolism for brand attributes and purchase intention research**

——Based on foreign brands in China

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**Abstract**

This article introduces the concept of brand local symbolism and explores its impact on consumer brand perception quality, brand perception reputation, brand perception innovation, and brand self-association. It further investigates whether it affects consumer brand attitude and purchase intention, and explores whether it has a mediating effect on brand attitude and purchase intention.

This article first reviews related domestic and international literature, presents hypotheses and theoretical models; then conducts focus group interviews on brands containing Chinese elements and selects 4 brands as test brands; then conducts questionnaire surveys and uses SPSS 22.0 to conduct reliability and validity analysis, confirmatory factor analysis, and correlation and regression analysis, and also verifies the mediating effect of local identity in the relationship between brand attitude and purchase intention. The conclusion shows that brand local symbolism has a positive and significant impact on brand attributes, i.e., consumer brand perception quality, brand perception reputation, brand perception innovation, and brand self-association, brand attributes then have a positive and significant impact on consumer brand attitude, and finally have a positive and significant impact on purchase intention, while local identity has a negative and significant mediation effect on consumer brand attitude and purchase intention.

**Keywords:** Brand local symbolism; Chinese elements; Brand attributes; Purchase intention

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**1. Research Background**

In recent years, global brands have become more common, and a large number of global brands have applied "Chinese elements" to their marketing activities, using Chinese elements' characteristics, cultural symbolism, and cultural meaning to guide Chinese consumers in purchasing decisions. Whether it is fast food, consumer goods or luxury goods, all have spearheaded a "Chinese wind" trend. For example, KFC launched the limited edition Beijing chicken roll and breakfast porridge; McDonald's added Chinese elements to its restaurant layout; Coca-Cola released its annual Chinese New Year series; Pizza Hut released a special Beijing roast duck pizza; Starbucks recently introduced the Chinese Dragon's Plan; Starbucks recently introduced the Chinese Dragon's Plan; Starbucks recently introduced the Chinese Dragon's Plan; Starbucks recently introduced the Chinese Dragon's Plan; Starbucks recently introduced the Chinese Dragon's Plan; Starbucks recently introduced the Chinese Dragon's Plan; Starbucks recently introduced the Chinese Dragon's Plan; Starbucks recently introduced the Chinese Dragon's Plan; Starbucks recently introduced the Chinese Dragon's Plan; Starbucks recently introduced the Chinese Dragon's Plan; Starbucks recently introduced the Chinese Dragon's Plan; Starbucks recently introduced the Chinese Dragon's Plan; Starbucks recently introduced the Chinese Dragon's Plan; 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的星冰粽；惠普推出的 HP mini TV 牡丹上网本，戴尔 Inspiron 1320 鱼漾纹饰上网本；还有 LV 的春运袋，范思哲的限量款的龙纹包等，这都引起了国内外学者们的广泛关注。随着这一类“中国元素热潮”的兴起和发展，越来越多的学者开始从营销学的角度对“中国元素”进行研究。代表学者何佳讯等（2014）[1]为了研究中国元素是否在营销活动中有效，从刻板印象一致性的视角，研究消费者对品牌态度的全球品牌本土战略影响下的情况，做出创新性的理论研究，并在其战略指引方面也做出了重要的理论贡献。学者黄海洋等（2016）[2]在研究中国消费者如何评价中国元素的全球品牌时，以认知-情感人格系统理论为框架，将真实性偏好这一概念引入研究，丰富了全球品牌使用中国元素的相关研究，同时也对企业和政府进行实践活动有一定的指引作用。

到目前为止，全球品牌的中国元素对于消费者购买意愿的影响研究已经取得了较多研究成果，但并未有人探究其对消费者品牌属性、品牌态度和购买意愿的影响路径。本文试图通过消费者的感知利益（感知质量、感知声望）以及感知品牌创新性和品牌自我关联性四个影响路径，探究中国元素对消费者品牌态度的影响，结合本土认同这一因素作为调节变量，探究其对购买意愿的影响。在现有学者相对丰硕的理论成果上试图作出创新性的贡献。

2. 国内外文献综述

2.1 关于中国元素的文献


而在学术界学者们在不同的研究领域对于中国元素有不同的定义，何佳讯等（2014）回顾了广告界、学术界和政府机构对于中国元素的定义，认为中国元素应该拓展到实物层面，并定义为“来源于中国文化传统，或者是在中国社会发展中产生的与中国文化紧密相系的符号、精神内涵或实物，被大部分中国人所认同的并且人们通过它们就能联想到中国文化”。

Wang 和 Lin（2009）对中国消费者的价值观变迁路径进行了回顾，指出当前中国消费者越来越多的关注于中国传统文化元素，强调了引用中国元素对于品牌塑造和产品研发设计的重要性。王晓珍等（2017）在现有学者的研究路上深入探究在不同情境下中国元素的作用路径，并且提出了“中国元素辨识度”这一概念，构建影响路径相关假设模型，为全球品牌如何正确使用中国元素提供了可行性建议。

2.2 关于品牌本土象征性的文献

中国学者孟繁怡等（2016）[9]在现有文献的基础上总结了感知品牌全球性与品牌本土文化象征性信号的作用，二者主要是通过对于消费者的感知质量和品牌声望等对品牌情感和购买意愿产生积极影响。外国学者 Steenkamp，Batra 和 Alden（2003）对于感知品牌全球性如何创造品牌价值研究上，得出了品牌本土象征性直接对购买可能性产生正面影响的结论；该研究将韩国与美国两地的样本进行采集，证明品牌本土象征性能够影响到消费者感知质量、感知声望。

2.3 关于本土认同的文献

文化就是按照某种方式互动和创造某种互动的方式（单波，2011）[10]，消费者的文化认同会影响到与品牌之间的互动。关于认同，即是自己把自己看作一个怎样的人以及自己觉得自己应该归属于什么群体的问题（韩霞，2010）[11]。王晓珍等（2017）认为文化认同是一种个体被群体文化影响的感觉，企业使用中国元素是希望通过构建文化认同使消费者产生共鸣，从而认同品牌价值；但其构建出的文化认同会产生差异，而这种差异性又会对其购买意愿产生不同的影响。

Tu，Khare 和 Zhang（2012）[12]认为本土认同是由消费者对当地传统风俗的信念和尊重、对当地事件的兴趣及当地地区的识别等心理表征构成，即“消费者信仰并尊重当地传统和习俗，认同当地社群的独特性，对当地活动感兴趣。后者他们对这一概念整理归纳为：即消费者感觉自己属于其当地社区，并且对当地的生活方式表示认同。

3. 研究假设与模型构建

3.1 研究假设的提出

（1）品牌本土象征性与品牌感知质量

相对于产品的具体属性来说，感知质量是更加深刻的抽象概念，是对产品属性的总体性评价，感知质量是消费者对于产品总体优越性的主观判断（ZEITHAM LVA.1988）[13]。品牌质量是商品品牌打造的基石，如果没有它，那么企业将会失去消费者市场（赵玉娇等，2014）[14]，而品牌所体现出来的质量是其在消费者心目中感受的质量，是消费者对品牌无形的、全面的感知。品牌所承载的本国文化元素具有信号作用，国外品牌在对其产品进行设计时，中国元素的融入会在某种程度上使其具有一定的品牌本土象征性；在文化启动效应下，在面对本土消费者时，国外品牌所承载的本土文化能激发消费者对其产生共鸣，能够积极地影响本土消费者对品牌产品进行一个整体优越性的判断。Steenkamp，Batra 和 Alden（2003）验证了品牌本土象征性对消费者品牌感知质量有影响。基于此，本文提出了以下假设：

H1a：品牌本土象征性对消费者品牌感知质量有正向显著影响。

（2）品牌本土象征性与品牌感知声望

望影响消费者声望价值：价格较高的全球品牌具有财富、社会地位和尊重等文化内涵，在消费的过程中人们不仅消费物，也消费了全球品牌蕴含的文化价值，用于彰显和提升消费者个人的财富、社会地位和尊重（邱琪，2010）[17]。孟繁怡等（2016）认为消费者希望通过购买声望高、价格贵的品牌产品，以此在社会中或者是在别人的眼里赢得声望、地位和得到充分认可。基于此，本文提出以下假设：

H1b: 品牌本土象征性对消费者品牌感知声望有正向显著影响。

（3）品牌本土象征性与品牌创新性

品牌创新的定义最早来自于营销学者 Schumpeter（1934）[18]，即消费者能感受到体验到品牌创造出的新奇有用的产品。目前普遍接受的定义是“赋予品牌要素以创造价值的新能力的行为，通过技术、质量、商业模式和企业文化创新来增强品牌的生命力。”文化对创新的态度具有差异性，这就意味着品牌创新对消费者承诺的影响可能因文化而异（Steenkamp，Ter Hofstede，and Wedel 1999）[19]。以往的大量研究证明，创新性在个人主义文化中比集体主义文化中更能得到积极的体现（Dwyer, Mesak and Hsu 2005; Steenkamp, Ter Hofstede, and Wedel 1999）[20]。基于此，本文提出以下假设：

H1c: 品牌本土象征性对消费者感知品牌创新性有正向显著影响。

（4）品牌本土象征性与品牌自我关联性

自我概念是一个人对其自身的能力、外表、性格以及个性的认知（元明顺，2010）[21]。以前的研究表明了品牌与消费者自我关联之间联系的可能性（Chaplin and John 2005; Eckhardt and Houston 2002; Escalas and Bettman 2005）[22]。对于中国本土消费者来说，从小对于中国文化的理解根深蒂固，大家对中国元素的认知虽然在某种程度上有主观差异性，由于个体的本身差异也会对不同的品牌产生不同的看法，甚至有人会将自己的生活、情感等与该品牌联系起来，但是中国文化博大精深、源远流长，其文化精髓是受到中国消费者广泛认可的。基于此，本文提出以下假设：

H1d: 品牌本土象征性对消费者感知品牌自我关联性有正向显著影响。

（5）品牌态度与购买意愿

品牌象征性利益和功能性利益能够满足消费者自我建构的心理需求，因而能够反映消费者自我概念的品牌更容易从某种程度上激发出消费者的情感，使得消费者产生积极的品牌态度（Carroll和Ahuvia, 2006）[23]。态度是源于社会心理学的一个重要概念，有学者在以往的研究基础上，将消费者品牌态度总结出了最基本的定义：即是一个对某个特定实体的评价中反映评价人好感程度的心理倾向（邱伟，2012）[24]。学者孟繁怡等（2016）在基于“信念—态度—行为”模型的基础上，总结出信念是形成态度的基石，态度能预测个体的行为。因此，本文提出以下假设：

H2a、H2b、H2c、H2d: 消费者品牌感知质量/品牌感知声望/感知品牌创新性/感知品牌自我关联性能对其品牌态度有正向显著影响。

H3: 消费者的品牌态度对其品牌购买意愿有正向显著影响。
(6) 本土认同的调节作用

品牌态度反映的是对于某品牌的一种心理状态和评价, 而行为则是一种外在表现形式。消费者在形成品牌态度之后对其品牌产品的购买可能性并不是绝对的，他们也有可能会受到不同文化认同的影响。已有研究验证消费者民族中心主义会负向调节品牌外国文化象征性对品牌态度的整体作用（孟繁怡等，2016）。学者何佳讯等（2014）在研究中国元素是否有效时，验证得出消费者本土认同越高，品牌本土象征性对产品购买可能性的影响作用关系越强。基于此，本文提出如下假设：

H4：消费者本土认同会正向调节消费者品牌态度对购买意愿的作用。

3.2 模型构建

本文根据现有学者的研究理论，进一步深入研究品牌本土象征性是否能够通过影响消费者品牌感知质量、品牌感知声望、感知品牌创新性以及品牌自我关联性进而影响其品牌态度，从而对于品牌购买意愿产生影响，基于此，构建了以下模型（图 1）：

图 1. 本研究模型

4. 实证研究

4.1 对测试产品的焦点小组座谈会

本次研究在开展大规模问卷调查之前对于测试品牌的选择进行了焦点小组座谈会，即通过两组焦点小组座谈会来确定具体的测试品牌产品。首先，根据近年来业界著名品牌排行榜对所有的全球品牌进行筛选，最终选取了 21 款全球品牌运用中国元素的产品。接下来进行焦点小组座谈会。

本文研究邀请到了来自武汉某高校管理学院市场营销 12 名大四学生以及 6 名专业老师分别进行两组时长约为 100 分钟的焦点小组座谈会。他们都是土生土长的中国人，平时无论在学习和生活中对全球品牌的关注度也较高。访谈主要包括以下内容：通过向他们展示备选品牌产品图片和文字介绍，让他们从中选出 4 个他们所认为品牌本土象征性较强的品牌产品并简单阐明原因。最后经过统计分
析，得出了4个最具代表性的测试品牌产品，分别是：Versace（范思哲）龙纹包、Dior（迪奥）生肖红绳、Starbucks（星巴克）星冰粽以及Air Jordan（乔丹）11“Chinese New Year”中国风球鞋。

4.2正式问卷调研的样本特征

采取线上问卷与线下拦截访问的方式进行问卷调查，问卷回收期为7天，问卷大部分向已经工作的具备一定购买力的社会人士发放（除小部分大学毕业生外），我们一共发出200份问卷，经过整理和剔除空白或不完整问卷，最后有效问卷共163份，回收率达81.5%。被访者的样本特征包括四个基本信息，性别、年龄、职业以及个人月收入情况。从分布状况看覆盖较好，符合被调查者的分布比例特征，具有较好的代表性。如表格1所示：

<table>
<thead>
<tr>
<th>表格1. 样本基本特征</th>
</tr>
</thead>
<tbody>
<tr>
<td>统计变量</td>
</tr>
<tr>
<td>性别</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>年龄</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>职业</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>月收入</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

4.3 数据分析

4.3.1 信度与效度分析

本次取样共163份问卷，满足Nunnally(1994)所提出的，有效样本数量至少是量表题项的五倍要求（问卷题项共29个）。此节中我们采用与预测试相同的方法利用Cronbach α系数来检验量表信度和使用因子分析来检验量表效度，检验
结果如下表格 2：

<table>
<thead>
<tr>
<th>变量</th>
<th>因子负荷</th>
<th>解释变差</th>
</tr>
</thead>
<tbody>
<tr>
<td>品牌本土象征性</td>
<td>0.819</td>
<td>70.923%</td>
</tr>
<tr>
<td>我认为这些产品与中国元素密切相联系</td>
<td></td>
<td></td>
</tr>
<tr>
<td>我认为这些产品具有中国特色</td>
<td>0.863</td>
<td></td>
</tr>
<tr>
<td>我认为这些产品具有与中国相关的非常好的象征</td>
<td>0.844</td>
<td></td>
</tr>
<tr>
<td>品牌感知质量</td>
<td>0.929</td>
<td>86.226%</td>
</tr>
<tr>
<td>中国元素的融入使我感觉这些品牌比之前更优质</td>
<td></td>
<td></td>
</tr>
<tr>
<td>中国元素的融入使我感觉这些品牌的整体质量很高</td>
<td></td>
<td></td>
</tr>
<tr>
<td>品牌感知声望</td>
<td>0.922</td>
<td>85.001%</td>
</tr>
<tr>
<td>中国元素的融入让我觉得这些是很有声望的品牌</td>
<td></td>
<td></td>
</tr>
<tr>
<td>中国元素的融入让我觉得这些品牌在业界更具权威性</td>
<td></td>
<td></td>
</tr>
<tr>
<td>品牌创新性</td>
<td>0.928</td>
<td>76.554%</td>
</tr>
<tr>
<td>中国元素的融入使我感觉这些品牌有很强的创新能力</td>
<td></td>
<td></td>
</tr>
<tr>
<td>中国元素的融入让我感觉这些品牌的市场辨识度很强</td>
<td></td>
<td></td>
</tr>
<tr>
<td>品牌自我关联性</td>
<td>0.854</td>
<td>74.361%</td>
</tr>
<tr>
<td>我认为融入中国元素后，产品特征与我的审美喜好一致</td>
<td></td>
<td></td>
</tr>
<tr>
<td>融入中国元素后，这些品牌能凸显我的个性</td>
<td>0.861</td>
<td></td>
</tr>
<tr>
<td>融入中国元素后，这些品牌让我更有民族自豪感</td>
<td>0.857</td>
<td></td>
</tr>
<tr>
<td>融入中国元素之后，这些品牌让我在社交场合更有自信</td>
<td></td>
<td>0.876</td>
</tr>
<tr>
<td>品牌态度</td>
<td>0.901</td>
<td>80.322%</td>
</tr>
<tr>
<td>融入中国元素会提高我对这些品牌的关注度</td>
<td></td>
<td></td>
</tr>
<tr>
<td>融入中国元素使我喜欢这些品牌</td>
<td>0.882</td>
<td></td>
</tr>
<tr>
<td>我对这些品牌有积极的看法和正向的口碑传播</td>
<td>0.906</td>
<td></td>
</tr>
<tr>
<td>本土认同</td>
<td>0.729</td>
<td>62.362%</td>
</tr>
<tr>
<td>我的心主要属于本地社群</td>
<td></td>
<td></td>
</tr>
<tr>
<td>我尊重本地传统</td>
<td>0.804</td>
<td></td>
</tr>
<tr>
<td>我将自己视为一位本地公民</td>
<td>0.832</td>
<td></td>
</tr>
<tr>
<td>购买意愿</td>
<td>0.896</td>
<td>80.360%</td>
</tr>
<tr>
<td>我肯定会购买融入中国元素的国外品牌产品</td>
<td></td>
<td></td>
</tr>
<tr>
<td>我非常可能购买融入中国元素的国外品牌产品</td>
<td>0.896</td>
<td></td>
</tr>
</tbody>
</table>
4.3.3 品牌本土象征性与品牌属性的相关分析

表格 4. 相关性分析统计表

<table>
<thead>
<tr>
<th>相关性</th>
<th>品牌本土象征性</th>
<th>品牌感知质量</th>
<th>品牌感知声望</th>
<th>品牌创新性</th>
<th>品牌自我关联性</th>
</tr>
</thead>
<tbody>
<tr>
<td>品牌本土象征性</td>
<td>1</td>
<td>.513**</td>
<td>.467**</td>
<td>.580**</td>
<td>.478**</td>
</tr>
<tr>
<td>显著性（双尾）</td>
<td>—</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>163</td>
<td>163</td>
<td>163</td>
<td>163</td>
<td>163</td>
</tr>
</tbody>
</table>

| 品牌感知质量 | 0.513**       | 1            | .651**       | .535**      | .700**          |
| 显著性（双尾） | .000          | —            | .000         | .000        | .000            |
| N              | 163           | 163          | 163          | 163         | 163             |

| 品牌感知声望 | .467**       | .651**       | 1            | .591**      | .643**          |
| 显著性（双尾） | .000          | .000         | —            | .000        | .000            |
| N              | 163           | 163          | 163          | 163         | 163             |

| 品牌创新性 | .580**       | .535**       | .591**       | 1           | .630**          |
| 显著性（双尾） | .000          | .000         | .000         | —           | .000            |
| N              | 163           | 163          | 163          | 163         | 163             |

| 品牌自我关联性 | .478**       | .700**       | .643**       | .630**      | 1               |
| 显著性（双尾） | .000          | .000         | .000         | .000        | —               |
| N              | 163           | 163          | 163          | 163         | 163             |

**. 在置信度（双侧）为 0.01 时，相关性是显著的。

表格 5. 相关性结果统计表

<table>
<thead>
<tr>
<th>变量</th>
<th>品牌感知质量</th>
<th>品牌感知声望</th>
<th>品牌创新性</th>
<th>品牌自我关联性</th>
</tr>
</thead>
<tbody>
<tr>
<td>品牌本土象征性</td>
<td>0.513**</td>
<td>0.467**</td>
<td>0.580**</td>
<td>0.478**</td>
</tr>
</tbody>
</table>

注：**P<0.001

由表格 4 和表格 5 数据可以得出：品牌本土象征性与感知质量相关性为 0.513，呈正向强相关，品牌本土象征性与品牌感知声望的相关性为 0.467，呈正向强相关，品牌本土象征性与品牌创新性的相关性为 0.580，呈正向强相关，品牌本土象征性与品牌自我关联性的相关性为 0.478，也是呈正向强相关。他们之间的 p 值均小于 0.001，所以可以说明品牌本土象征性对消费者品牌感知质量、品牌感知声望、感知品牌创新性和感知品牌自我关联性有正向显著影响。

4.3.4 线性回归分析和调节效应检验

（1）品牌属性与品牌态度的线性回归分析

表格 6. 回归系数表

<table>
<thead>
<tr>
<th>模型</th>
<th>非标准化系数</th>
<th>标准化系数</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>标准误差</td>
<td>试用版</td>
<td></td>
</tr>
<tr>
<td>1（常量）</td>
<td>6.923</td>
<td>.722</td>
<td>—</td>
<td>9.589</td>
</tr>
<tr>
<td>品牌感知质量</td>
<td>1.706</td>
<td>.164</td>
<td>.634</td>
<td>10.411</td>
</tr>
</tbody>
</table>
### (1) 变量对品牌态度的影响分析

由表格 6 可知，品牌感知质量与品牌态度的回归系数为 0.634，呈正向极强相关；品牌感知声望与品牌态度的回归系数为 0.642，呈正向极强相关；品牌创新性与品牌态度的回归系数为 0.708，呈正向极强相关；品牌自我关联性与品牌态度的回归系数为 0.788，呈正向极强相关。这说明消费者的品牌感知质量、品牌感知声望、感知品牌创新性以及感知品牌自我关联性对其品牌态度有正向显著影响。

### (2) 品牌态度与品牌购买意愿的线性回归分析

#### 表格 7. 结果统计表

<table>
<thead>
<tr>
<th>模型</th>
<th>非标准化系数</th>
<th>标准系数</th>
<th>t 值</th>
<th>显著性</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2.733</td>
<td>.639</td>
<td>4.276</td>
<td>.000</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 因变量：购买意愿

由表格 7 可知，品牌态度与品牌购买意愿的回归系数为 0.582，p 值小于 0.001，所以他们之间呈正向强相关，说明消费者品牌态度对其购买意愿有正向显著影响。

### (3) 本土认同的调节作用分析

#### 表格 8. 模型摘要表

<table>
<thead>
<tr>
<th>模型</th>
<th>R</th>
<th>R 平方</th>
<th>调整后 R 平方</th>
<th>标准 估计错误</th>
<th>更改统计量</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.582a</td>
<td>.339</td>
<td>.335</td>
<td>2.10044</td>
<td>.339</td>
</tr>
<tr>
<td>2</td>
<td>.592b</td>
<td>.350</td>
<td>.342</td>
<td>2.09002</td>
<td>.011</td>
</tr>
<tr>
<td>3</td>
<td>.607c</td>
<td>.369</td>
<td>.357</td>
<td>2.06623</td>
<td>.019</td>
</tr>
</tbody>
</table>

a. 预测变量：(常量)，品牌态度中心化
b. 预测变量：(常量)，品牌态度中心化，本土认同中心化
c. 预测变量：(常量)，品牌态度中心化，本土认同中心化，交互项

#### 表格 9. 结果统计表

<table>
<thead>
<tr>
<th>模型</th>
<th>非标准化系数</th>
<th>标准系数</th>
<th>t 值</th>
<th>显著性</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 因变量：品牌态度
<table>
<thead>
<tr>
<th></th>
<th>(常量)</th>
<th>-1.263E-005</th>
<th>.165</th>
<th>—</th>
<th>.000</th>
<th>1.000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>品牌态度中心化</td>
<td>.400</td>
<td>.044</td>
<td>.582</td>
<td>9.093</td>
<td>.000</td>
</tr>
<tr>
<td>2</td>
<td>(常量)</td>
<td>-1.207E-005</td>
<td>.164</td>
<td>—</td>
<td>.000</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>品牌态度中心化</td>
<td>.430</td>
<td>.048</td>
<td>.627</td>
<td>9.028</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>本土认同中心化</td>
<td>-.103</td>
<td>.064</td>
<td>-.112</td>
<td>-1.615</td>
<td>.108</td>
</tr>
<tr>
<td>3</td>
<td>(常量)</td>
<td>.128</td>
<td>.172</td>
<td>—</td>
<td>.745</td>
<td>.457</td>
</tr>
<tr>
<td></td>
<td>品牌态度中心化</td>
<td>.433</td>
<td>.047</td>
<td>.631</td>
<td>9.183</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>本土认同中心化</td>
<td>-.107</td>
<td>.063</td>
<td>-.117</td>
<td>-1.699</td>
<td>.091</td>
</tr>
<tr>
<td></td>
<td>交互项</td>
<td>-.031</td>
<td>.014</td>
<td>-.137</td>
<td>-2.169</td>
<td>.032</td>
</tr>
</tbody>
</table>

a. 因变量：购买意愿中心化

表格 8 报告了层次回归的 R²值变化情况及显著性，从该表可知，当我们在方程中引入交互项之后，ΔR²=0.019，F=4.706（P=0.032），这表明交互项对方程的解释力是非常显著的。从表 9 的系数及其显著性可得出，品牌态度和本土认同的交互项的系数为-0.031（P=0.032），这说明本土认同在品牌态度对产品购买意同起到了负向显著调节的作用。

5 研究结论与启示

5.1 检验结果

本文研究模型的检验结果如下表格 10 所示：

<table>
<thead>
<tr>
<th>假设</th>
<th>结果</th>
<th>结论</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1a、H1b、H1c、H1d</td>
<td>成立</td>
<td>品牌本土象征性对消费者品牌感知质量/品牌感知声望/感知品牌创新性/感知品牌自我关联性有正向显著影响</td>
</tr>
<tr>
<td>H2a、H2b、H2c、H2d</td>
<td>成立</td>
<td>消费者品牌感知质量/品牌感知声望/感知品牌创新性/感知品牌自我关联性对品牌态度有正向显著影响</td>
</tr>
<tr>
<td>H3</td>
<td>成立</td>
<td>消费者的品牌态度对品牌购买意愿有正向显著影响</td>
</tr>
<tr>
<td>H4</td>
<td>不成立</td>
<td>消费者本土认同会正向调节消费者品牌态度对购买意愿的作用</td>
</tr>
</tbody>
</table>

5.2 研究结论和管理建议

5.2.1 研究结论

（1）品牌本土象征性对品牌属性、品牌态度和购买意愿影响显著

品牌本土象征性能够激起消费者对品牌感知质量、品牌感知声望的积极感知，对于消费者感知品牌创新性以及感知品牌自我关联性也有正向显著影响。而消费者品牌感知质量、品牌感知声望、感知品牌创新性以及品牌自我关联性对于消费者品牌态度均有正向显著影响。消费者的品牌态度对其购买意愿也存在积极影响。
（2）本土认同起到了负向调节的作用

消费者在形成某种品牌态度之后，其内心的本土认同感越强，越是不会产生品牌购买意愿，这说明在中国本土消费者看来，全球品牌中中国元素的运用有时与自己内心的期望存在着偏差，对于那些本土认同感较高的消费者来说，有的时候他们内心的本土认同感会在他们选择购买融入中国元素的全球品牌产品中起到负向作用。

5.2.2 管理建议

在信息科技不断快速更新以及消费者多元化选择越来越普遍的今天，全球品牌虽然越来越国际化，但是若是想要利用本土文化元素在中国占领市场，获得更多的中国消费者的认可，应该更加深刻地去了解中国元素的本质含义以及本土消费者内心期望能够感受到的中国元素。

中国元素并不仅仅只是一种符号或者形象，它更多的是一个民族历史文化不断沉淀和发展的象征，象征着一种文化使命、一种民族精神，全球品牌应该严格地把握本土文化元素的内涵，推出更多的中国消费者喜爱的且被广泛接受的全球品牌产品，让中国消费者能够强烈感受到品牌本土象征性价值，能够激发出一种民族文化认同感。

企业在进行产品开发设计时，在保障其品牌产品品质的同时，应该尽可能多地去开展能够提高消费者品牌感知利益的营销活动，这样不仅能够提升消费者品牌感知质量，也能赢得消费者心中对其品牌的感知声望，让更多的中国消费者感受到品牌的创新以及自身与品牌的关联度，使得消费者对品牌形成正面的品牌态度以及表现出较强的购买意愿，进而推动全球经济的发展和民族文化的交融。

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Research on Mechanism of Advertising Appeals Based on Grounded Theory

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Abstract

Based on grounded theory, this thesis explores how the cross-functional influence between product category, involvement, creative advertising and some factors related to brand impact the effectiveness of advertising appeals from the perspective of the audience. Each respondent was shown several selected advertisements, from a gallery composed of 10 commercial advertisements, then a semi-structured interview was carried out. We collected 112 complete interview records form 41 respondents and the data was treated by a series of processes involving open coding, axial coding, and selecting coding. According to the analysis of the collected data, this study suggests that the mechanism of advertising appeal is influenced by product category, brand image and some other relevant factors. And then discussed some important points from the results. This research explains the mechanism of advertising appeals under the integrated influence of different factors, and provides implications to practitioners.

Keywords: Advertising appeals; Product category; Involvement; Brand image; Advertising effectiveness
基于扎根理论的广告诉求作用机制研究

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摘要

本论文从广告受众的角度出发，采用扎根理论，主要研究产品类型、购买卷入程度、广告创意，以及与品牌相关的因素是如何交叉影响广告诉求的有效性。本研究建立了由 10 条商业广告组成的广告库，通过对每位被访者有针对性地选择部分广告播放，并对其进行半结构化的访谈，共收集了来自 41 位被访对象的 112 条完整访谈记录，最后对访谈记录进行了包括开放式编码、主轴编码、选择性编码等一系列处理。通过对这些访谈记录的分析，本研究发现了产品类型、购买卷入程度、品牌形象等相关因素在广告诉求的作用过程中产生的影响，并对结论中的要点展开了一定的讨论。本研究解释了在不同因素综合影响下广告诉求的作用机制，能够为企业展开广告活动提供指导。

关键词：广告诉求；产品类型；购买卷入程度；品牌形象；广告效果

1. 引言

广告在消费者的日常生活中无处不在，这些广告对消费者的生活、购物的选择都产生着巨大的影响。然而，广告主如何才能使广告对消费者发生正面影响，使消费者对本产品或品牌产生积极态度或者行为，从而获取利润呢？Ducoffe 认为广告只有在正确传递广告信息，并符合消费者心中的期待时，才能发挥其应有的作用（Ducoffe，1996）。同时在 Holbrook 和 Batra 的研究中提到，广告诉求是广告信息中的核心内容，同时决定广告说服效果的关键因素（Holbrook，Batra，1987）。因此，广告能否正面影响消费者，主要看广告诉求如何表达。

也正是因为广告诉求方式的重要影响，近年来也出现了大量关于影响广告诉求有效性的研究，但是这其中的大部分研究都只关注一个因素或者是其中几个因素的交互作用对广告诉求的影响。比如已有研究发现，不同的广告诉求方式对消费者购买意愿的强弱有着显著的影响，通常理性广告诉求比感性广告诉求的作用效果更佳（郭国庆，周健明，邓诗鉴，2015）。在不同的广告诉求方式下，对于偏好品牌，消费者的前后购买意愿改变并不明显，而对于非偏好品牌，消费者前后购买意愿改变显著（黎光明，王幸君，蒋欢，梁正妍，2015）。从现阶段已有的研究来看，目前的研究一般都使用量化的方法，集中研究单一或少数几个因素对广告诉求产生的影响，但是对于的这些重要的因素是如何组合在一起对广告诉求产生影响的研究目前还尚没有较为成熟的研究。

文献梳理表明，除了产品类型、产品卷入程度这两个最明显的影响因素以外，广告本身是否有创意，以及许多品牌相关的因素也会影响广告诉求对消费者发生作用，而这些因素之间往往又互相影响。因此，量化研究远远无法清楚探讨这些
影响关系如何发生以及怎样发生。因此，本文试图使用质化方法探索多因素影响下的广告诉求作用机制。

本文首先向被访者展示当下较为热门以及传播度较广的商业广告，随后对被访者进行一对一深度访谈，接着运用扎根理论对所收集的数据、信息进行整理和分析，最后得出结论。本文试图回答以下问题：产品类型、购买卷入程度、广告是否有创意，以及与品牌相关的因素是如何交叉影响广告诉求的有效性。本文丰富了广告诉求作用机制的研究成果，研究结论能够为广告主的广告实践活动提供借鉴与参考。

2. 文献综述

2.1 广告效果

广告效果主要是指广告对受众心理和行为的影响，是广告传播效果、销售效果和社会效果的整合效应（仇兴蕾，2008；潮道馨，2011）。汪涛将广告效果定义为广告作品通过广告媒体传播之后所产生的作用（汪涛，2004）。那么广告效果是如何被衡量的呢？Lacidge和Steiner认为广告效果主要包括沟通效果以及销售效果这两方面（Lacidge，Steiner，2002）。这里的沟通效果主要是指消费者接收到广告信息，并且理解广告信息之后，其态度和行为上发生的变化的程度。销售效果是指在广告投放之后，销售量增加的幅度，但是这里的销售量的变化除了广告宣传外，还会受到产品本身质量、包装、价格等各种因素的影响。由于广告投放前后销售量的变化无法判断，因此在本研究中主要以广告所达到的沟通效果作为广告效果的主要评判依据。

2.2广告诉求

黎建新等认为广告诉求是指广告信息传播者为了改变消费者的观念或影响其对于某种产品或服务的态度在传播信息中应用某些心理动力来引发消费者的兴趣激发消费者的购买欲望以求达到所期望的反应（黎建新，2014）。柴俊武等认为广告利益诉求是指用什么样的方式和信息内容来阐述广告信息的主旨利益（柴俊武，2012）。简而言之，广告诉求就是广告中明确阐述的产品能够为消费者提供何种利益，具有何种价值。广告诉求是会对其他所有的衡量广告有效性的要素产生影响的一个广告元素（Rizwan et al., 2013）。因此，选择正确的广告诉求方式就成为了成功的广告活动至关重要的一个环节。De Pelsmacker将广告诉求分为感性诉求和理性诉求两种（De Pelsmacker，2007）。Keshari和Jain认为感性诉求是通过广告唤起积极或者是消极的情感从而刺激消费者购买行为，而如果一个广告中包含了产品价格、质量、功能、材质等产品信息中的其中之一的话，则认为其是采用了理性诉求（Keshari，Jain，2014）。

研究表明能够反映消费者情感诉求的广告对于那些与竞争品牌没有太大差异的品牌来说是更有效的（Belch, Belch, 2014; Blakeman, 2015）。也就是说，感性诉求方式更适用于与竞争对手差异不大的品牌，反之，理性诉求则更常被用于那些与竞争对手差异较大的品牌。但是在日常的生活中所接触到的广告中不难发现，很多广告并不只是单一地使用感性诉求或者理性诉求，而是一个广告中同时采用了两种广告诉求，不过在该广告中通常还是会侧重于感性诉求或
理性诉求中的一个方面。出现这种情况的可能原因在 Belch 的研究结论中似乎可以找到一些依据，根据 Belch 的研究显示，消费者的购买决定通常也是在情感动力和理性动力的共同基础上做出的，消费者会同时基于广告的感性诉求以及理性诉求从而做出最终的购买决策（Belch，Belch，2014）。


但不可否认的是，消费者对于广告的反应并不会是总是保持理性或者感性的，它更倾向于是在对该广告的感性情感上的一种理性判断。因此这也就是说，不论是感性诉求广告还是理性诉求广告都能对消费者产生影响，只是通过不同的方式（Viktorija，2016）。

所以，单纯地考虑哪一种广告诉求更有效果是没有意义的，广告诉求方式的选择必须要首先考虑与产品或品牌相关的重要因素。

2.3 产品类型与广告诉求

不同类型的广告诉求对广告效果的作用是如何别不同的产品类别所影响的呢？首先，先明确对于产品的定义，Kotler 等人认为，产品指的是所有可以引起消费者的注意、购买、使用，满足消费者欲望或者需求的所有有形的产品以及无形的服务（Kotler，2013）。因其定义范围之广泛，对于产品类型的划分，不同的学者也各执一词，从不同的角度对产品做出了不同的分类。

在本研究中，我们对产品类型的划分主要基于郭崇廷对产品作出的分类。鉴于产品消费主要分为理性消费和感性消费两大类，因此把产品划分为功能型产品和享乐型产品两大类（郭崇廷，2012）。对于功能型产品，消费者主要看重的是该产品的功能，即该产品能够带来的解决消费者实际问题的能力，而对于享乐型产品，消费者更注重的是它能带给自己的情感上的一些感受和体会。

在之前的研究中，很多学者对于产品类型对于广告诉求与购买意愿的研究也给出了一些结论。对于实用型产品，广告理性诉求相较感性诉求更能够促使消费者购买意愿的产生，而当消费者需要选择的是享乐型产品时，广告感性诉求和理性诉求对于促使消费者购买意愿产生的作用区别不大（郭国庆，周健明，邓诗鉴，2015）。

2.4 产品卷入程度与广告诉求

除了因为产品类别不同而带来的在广告诉求选择时所产生的不同考量，消费者的产品卷入度也是对诉求点的选择以及广告诉求的作用有着很大影响的一个要素。

Traylor 认为，产品卷入程度指的是消费者对认知一种产品所需要耗费的精力的程度（Traylor，1981）。Hsu 和 Lee 的观点认为，卷入是消费者在他们的
购买过程中所投入的时间和付出的努力程度（Hsu, Lee, 2003）。例如，当消费者需要购买一辆汽车的时候，他们在整个的购买过程中花费大量的时间进行与汽车有关的收集，对品牌做出比较等。类似这样的产品对于大多数消费者来说属于高卷入程度的产品，相反地，对于那些能够轻易做出决策的产品，比如一支笔等，对于该消费者来说则属于低卷入度的产品。

根据Sadeghi等人的研究表明，当产品类型属于高卷入度的产品类型的时候，广告理性诉求会产生更有效的广告效果，因为这种类型的产品通常和高风险联系在一起，消费者需要比较强有力地说服（Sadeghi, 2015）。Dubé等人在他的研究中也指出，对需要进行更多的思考的产品使用理性诉求广告，对需要倾注更多情感的产品建议使用广告情感诉求（Dubé, 1996）。而且，当产品卷入程度高时，广告理性诉求比感性诉求更能激发消费者的购买意愿，相反地，当产品卷入程度低时，广告感性诉求相比于广告理性诉求更能激发消费者的购买意愿，能够帮助达到更好的广告效果（郭国庆, 周健明, 邓诗鉴, 2015）。

### 2.5 产品卷入程度与产品类型的交互作用

为了进一步认清如何能够促使广告取得更好的效果，对于不同类型产品，不同购买卷入程度产品在不同广告诉求的帮助下对广告效果的影响，在不同学者的研究中已经有了比较成熟的结论。郭国庆等人对于产品卷入对广告诉求与购买意愿关系中的交互作用的研究中表明，当对产品卷入程度高且需要购买的产品为功能型产品时，广告理性诉求能进一步加强消费者的购买意愿；但是当产品卷入程度较低，且购买的产品为享乐型产品时，广告感性诉求对消费者购买意愿的强化能起到更有效的作用，促成更好的广告效果的实现（郭国庆, 周健明, 邓诗鉴, 2015）。

### 2.6 广告创意水平与广告效果

创意对广告效果有有着重要的影响。朱月昌认为，广告创意是“针对目标对象，把握商品（品牌）个性，追求最佳传播效果的创造性主意”（朱月昌, 2007）。张舫认为，电视广告创意是用非常简洁生动的语言，把一些人们熟悉的简单元素用崭新的方式进行组合，从而创造出特定的意境，让广告受众形成对广告内涵的认知与共鸣，从而在广告受众心中留下比较深的印象。同时他还指出在当下这个竞争激烈的市场环境中，广告创新变得至关重要，极富创意的广告能够帮助品牌一鸣惊人或东山再起，进而刺激消费者的购买意愿（张舫, 2007）。

此外，宋玉蓉在他的研究中也发现，创意好的广告能够将受众真正感兴趣的产品或品牌信息，通过广告受众喜欢的方式传递给他们，让广告受众觉得接收到的重要信息充分而且可信，从而记住了品牌，也产生了较强的购买意愿（宋玉蓉, 2014）。由此可见，能够吸引消费者的有创意的广告可以帮助广告达成更好的广告效果。

### 2.7 品牌与广告效果

在关于理性诉求和感性诉求哪一个更能引发积极的购买行为，以及不同产品类型和产品卷入程度在以上关系中所起的交互作用的研究中，国内外不少学者就这些问题进行了较为全面的讨论，也得到了较为一致的结论。但是关于品牌与广告诉求的作用机制之间关系的研究，在以往的文献中却尚未得到很好的验证。
比如说品牌发展阶段、品牌形象等在广告诉求的作用机制中所担任的角色，起到的作用，国内外的学者都还没有对其进行更多的讨论。大部分关于这一领域的现有研究主要都集中于品牌相关的各因素对广告效果的影响，与之相关的研究较少涉及广告诉求点领域，因此这也成为本研究关注的重点。

在探讨国内外学者们对这一方面的研究之前，首先要解决的一个问题是关于品牌的定义，即品牌是什么？美国营销协会（AMA）对品牌的定义，品牌是用于分辨出一个销售者或者一个销售集团的产品或服务，以及将他们自己的产品或服务同其他竞争对手区分开来的一个名字、术语、符号、标志或者设计，或它们的一种组合。

2.7.1 品牌熟悉度

对品牌熟悉度的定义，Alba 和 Hutchinson 认为品牌熟悉度是在消费者与该品牌接触过程中，对该品牌的了解与认知的记忆的累积（Alba，Hutchinson，1987）。之后，Hoch 和 Deighton 在他们的研究中也提出，品牌熟悉性是消费者对于与该品牌相关的体验的持续累积（Hoch，Deighton，1989）。


品牌熟悉度与广告效果之间又有什么样的联系呢？在张培育以大学生为研究对象对品牌熟悉度对广告心理效果的影响研究中发现，首先，虽然大学生消费者对于陌生品牌的广告有更高的兴趣，但是相对于陌生品牌，他们对于熟悉品牌的广告态度以及品牌态度会更加积极（张培育，2012）。

对于广告诉求与品牌熟悉度之间的匹配关系，黎光明等人的研究中显示，对于不熟悉的品牌，男女消费者在理性和感性诉求方式下对该品牌产品的购买意愿的改变并不显著；对于熟悉品牌，女性前后购买意愿在理性和感性诉求下都改变显著，男性购买意愿在理性诉求方式下没有太大改变，在感性诉求方式下男性购买意愿的改变也只呈现出了边缘显著状态（黎光明，甄锋泉等，2016）。

2.7.2 质量感知

Zeithaml 的观点认为，消费者是通过对价格、质量、价值等主观感受对产品进行评价，产品本身的客观属性（如耐用性等）对这个判断所产生的影响消费者主观做出的判断要小的多。他总结了质量感知的几个特点：首先，感知质量是消费者对产品的一种主观评价；第二，感知质量属于产品的抽象概念，并不代表产品实际的质量；第三感知质量与态度类似；第四，感知质量通常是消费者一种主观判断（Zeithaml，1988）。Chapman 对感知质量的定义是消费者对于所购买的产品整体良好程度的一个判断，感受（Chapman et al.，1999）。

而关于影响消费者质量感知的因素，本文从国内外学者的研究中注意到，品牌的来源国也会在一定程度上影响消费者对质量的感知。首先，外国学者
Maheswaran 以及国内学者汪涛等的研究都表明，消费者通过自身的购买体验，观察式学习，以及媒体接触等途径会逐渐形成对于来自某个国家的某类型产品的刻板印象（Maheswaran，1994；汪涛，周玲，周楠等，2012）。并且，消费者对其形成的刻板印象也会直接影响消费者对产品的评价（Han，1989）。

那么，消费者对品牌产品的感知质量会对他们的购买意愿产生影响吗？

首先，感知质量正向影响顾客满意这一观点从国内外众多学者的研究中都得到了验证。国外学者 Taylor 和 Baker 通过对航空业等行业进行研究时发现服务质量会影响顾客满意度（Taylor，Baker，1996）。国内学者杨魁等在他们的研究中也发现了感知质量对顾客满意的正向影响（杨魁，曹爱稳，2010）。

其次，在鱼文英对顾客满意与重复购买行为的研究中发现，顾客满意度对重复购买意愿有显著的正向影响。因此，感知质量在一定程度上是对消费者的购买意愿是有存在影响的（鱼文英，2012）。

2.7.3 形象感知

品牌含义中的一个主要类型是品牌形象，根据 Keller 对品牌形象的定义，品牌形象指的是品牌的无形元素，顾客可以从过往的经历中形成对品牌形象的联想，也可能通过广告等其他渠道间接形成品牌形象联想（Keller，2014）。

一个品牌会有多重的无形资产主要包括品牌的消费者形象，购买和用途形象，品牌个性和价值以及品牌历史、品牌传承、品牌体验这四个方面。Keller 在战略品牌管理一书中也提到“品牌的任何一个方面都是可以被消费者用来推测品牌个性的”（Keller，2014）。

Johar 等人在研究更新品牌的自我形象时表明广告中的代言人，广告风格以及由广告所激发出的感情等都会影响到消费者心目中品牌个性的形成，并且一旦该个性形成，消费者就很难再接受与该品牌个性不符的信息了（Johar，2005）。

那么品牌形象与消费者的购买意愿之间是否存在联系呢？Dodds 的研究表明，品牌形象越好，其可以降低消费者感知风险的能力就越强（Dodds et al.，1991）。也就是说，当消费者对品牌形象评价较高时，可以降低消费者对该品牌产品的感知风险，对该品牌表现出更多的青睐，进而对该品牌产生重复购买行为。

品牌形象较佳的产品可以减弱消费者对于产品的疑惑，使得消费者对品牌产品的感知风险下降，增加消费者对其的信赖感从而产生较高的购买意愿。

3. 研究设计

3.1 研究方法

研究将根据这些步骤建立广告库，通过对被访者对这些广告的反应进行分析，找出在各因素综合作用下广告诉求的作用机制，在这里本研究将重点关注的是与品牌相关的一些因素。

3.2 建立广告库

在每天的生活中广告可以说是随处可见，广告的形式多种多样。但是，在费显政等人的研究中表明在各类广告中，视频广告是受到最多的关注的，同时广告效果也相对较好（费显政，杨辉，游艳芬，2013），因此在本研究中将会采用影响力最大的视频广告对受众进行访谈。鉴于本研究的目的，本研究中将只考虑商业广告中广告诉求的作用机制，因此在广告库不收录公益广告。同时，考虑到受众对广告的认知程度，本研究通过对爱奇艺、腾讯、优酷、芒果 TV 这 4 个当下热门的视频网站的观察，从中选出了 10 个品牌知名度相对较高，并且目前较为热门的广告建立了广告库。这 10 个广告涵盖了食品、护肤品、日化用品等多个行业。详见表 1。

在正式的访谈中，对于每一位被访者，本研究将选择 2~3 则以该被访者作为目标消费者的品牌产品广告作为对该被访者的访谈材料，在视频开始前对被访者进行相关问题的前测，随后播放一则广告给被访者观看，再对消费者展开正式访谈。
### 表 1. 广告列表

<table>
<thead>
<tr>
<th>广告业主</th>
<th>行业类别</th>
<th>诉求类型</th>
<th>诉求点</th>
<th>产品类别</th>
<th>卷入程度</th>
<th>幽默与否</th>
<th>播放频次</th>
<th>广告编号</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iphone X</td>
<td>数码产品</td>
<td>理性诉求</td>
<td>人脸识别智能开锁</td>
<td>功能型</td>
<td>高</td>
<td>是</td>
<td>11 01</td>
<td></td>
</tr>
<tr>
<td>雅诗兰黛粉底液</td>
<td>化妆品</td>
<td>理性诉求</td>
<td>遮瑕持妆</td>
<td>功能型</td>
<td>高</td>
<td>否</td>
<td>12 02</td>
<td></td>
</tr>
<tr>
<td>黑人超白牙膏</td>
<td>日化用品</td>
<td>理性诉求</td>
<td>牙齿亮白</td>
<td>功能型</td>
<td>低</td>
<td>否</td>
<td>12 03</td>
<td></td>
</tr>
<tr>
<td>士力架</td>
<td>食品</td>
<td>理性诉求</td>
<td>饱腹</td>
<td>享乐型</td>
<td>低</td>
<td>是</td>
<td>10 04</td>
<td></td>
</tr>
<tr>
<td>自然堂</td>
<td>护肤品</td>
<td>感性诉求</td>
<td>你本来就美</td>
<td>功能型</td>
<td>高</td>
<td>否</td>
<td>11 05</td>
<td></td>
</tr>
<tr>
<td>I Do 香水</td>
<td>奢侈品</td>
<td>感性诉求</td>
<td>恋爱的甜蜜</td>
<td>享乐型</td>
<td>高</td>
<td>否</td>
<td>13 06</td>
<td></td>
</tr>
<tr>
<td>飘柔微米卸妆级洗发水</td>
<td>日化用品</td>
<td>感性诉求</td>
<td>清爽自信</td>
<td>功能型</td>
<td>低</td>
<td>是</td>
<td>10 07</td>
<td></td>
</tr>
<tr>
<td>绿箭口香糖</td>
<td>食品</td>
<td>感性诉求</td>
<td>清新，勇敢交朋友</td>
<td>享乐型</td>
<td>低</td>
<td>是</td>
<td>11 08</td>
<td></td>
</tr>
<tr>
<td>梦龙冰淇淋</td>
<td>食品</td>
<td>理性诉求</td>
<td>比利时进口巧克力</td>
<td>享乐型</td>
<td>低</td>
<td>否</td>
<td>11 09</td>
<td></td>
</tr>
<tr>
<td>鬼冢虎</td>
<td>服装</td>
<td>感性诉求</td>
<td>涅槃新生</td>
<td>享乐型</td>
<td>高</td>
<td>否</td>
<td>11 10</td>
<td></td>
</tr>
</tbody>
</table>

3.3 访谈设计

本研究中将采用一对一深度访谈法进行信息数据的收集，为了保证被访者对广告做出的反应更具有真实性，本研究中在选择播放给被访者观看的广告时会选择以该被访者为目标受众的广告进行播放。

为了避免在访谈中形成对被访者的引导以及忽视重要的关键问题，在数据收集之前制定了统一的访谈提纲。在正式的访谈过程中，为了避免深入了解被访者的想法，观点，研究者也会依据被访者的不同回答进行不同的追问，从而为研究提供进一步的帮助。

在确定了需要播放给该被访者的广告之后，需要先对被访者对该广告即将出现的品牌的相关问题根据访问提纲对受访者进行了解（前测），随后在播放广告，在广告放映结束之后，根据访谈提纲，开始对被访者的访谈。同时为了保证被访者访谈内容有效性，在前测中，被访者若对该广告本身具有极端正面、负面的情绪，或是对该广告中出现的代言人有强烈的个人情感，则将不再对该被访者播放。
该则广告，而将重新选择另一则广告对被访者展开访谈。在广告播放结束后，若被访者表明对广告内容产生困惑或者没有看懂广告的情况下，访谈者会选择终止访谈，并挑选另一则广告重新开始对其进行访问。同时，若是被访者在访谈过程中出现敷衍的态度，本研究也会终止访谈以保证访谈的质量。

3.4 样本选取及数据采集

在确定了广告库以及访谈提纲和访谈方式之后，下一步则是对访谈对象的确定。

本研究在选择受访对象的过程中，为了所收集到的数据更具有普遍性，主要遵循了以下几个原则：第一，尽量保证被访对象中男女比例的均衡。同时，尽可能扩大被访对象的年龄层次，第二，尽可能地挑选有不同专业背景的人进行访问，也就是说，被访对象的来源并不局限于某个或某几个专业。

为了收集到更为真实的全面的被访者对广告的反应，根据广告中所展示的不同产品类别，由本研究确定该广告的目标被访者。比如针对年轻的女性被访者，本研究可选择的广告编号为02（高卷入度、属于功能型类别的女性护肤品），因为对于这类被访者们的这类产品会有相对较高的需求，这样可能更能够收到被访者对于广告真实的反应。

为了便于对所收集的信息的整理，本研究将对每一位被访者的回答进行编码。最前面的一个大写字母与一位数字的组合代表的是该条回答所属的范畴以及具体的概念分类，比如B1则表示该条记录是属于范畴“诉求点理解”下的第一个概念“感性诉求”；随后的两个数字代表的是被访者的编号，比如01表示的就是第一位被访者；最后的两位数字代表的是该被访者所观看的广告的编号，比如06就表示广告库中的第6个广告I Do香水。因此，例如编号为B10106指的是第一个受访者对于06号广告的回答中关于广告诉求点的理解为感性诉求。

在数据收集过程结束后，本研究一共收集到了41个被访者对于不同广告共112条完整的访谈记录，其中有82条记录将被用于理论模型的构建，另外的30条记录则用于理论饱和度检验。

4. 研究结果

本研究在对收集到的访谈记录进行整理，剔除与研究不相关的内容得到了用于构建模型的访谈记录并根据扎根理论的编码步骤对其进行整理以及分析。

4.1 访谈记录的初步整理

在收集了被访者的访谈记录之后，对于用于构建模型的82条完整记录按照以下标准进行初步筛选：第一，排除与本研究目的不相关的内容，比如被访者在访谈过程中表达的与该品牌、该广告无关的信息，对访谈目的猜测、提问等；第二，排除在访谈过程中出现的因他人引导而发表的言论；第三，排除显示出严重的前言不搭后语逻辑不通的访谈记录；第四，排除只针对访谈问题进行简单回答而完全没有对所做回答的解释的言论，如只简单回答了“会”或“不会”，但是却表达不出为什么做出这样的回答的原因。之后，按照一定的逻辑关系将其进行整理，最后总共得到了75条有效访谈记录。

4.2 开放式编码
开放性编码是将所得到的资料进行整理，将其逐步概念化、范畴化的一个过程。开放性编码的目的在于指认现象、界定概念、发现范畴。开放式编码的程序为：概念化—挖掘范畴—对范畴进行命名—确定范畴性质。通过对访谈记录的反复整理与分析，本研究得到了 11 个范畴和 27 个概念。详细的编码过程以及范畴定义如表 4.1 所示。鉴于表 2 中所展示的开放性编码作用仅限于展示编码的过程，本研究在每一概念中选取了前几位被访者的部分访谈记录用于举例。
<table>
<thead>
<tr>
<th>定义</th>
<th>范畴</th>
<th>概念</th>
<th>访谈记录举例</th>
<th>编号</th>
</tr>
</thead>
<tbody>
<tr>
<td>观看广告之后对广告中得到的信息的简单描述</td>
<td>感知</td>
<td>信息</td>
<td>里面的人很年轻很帅，比较吸引女孩子，表达的内容也是恋爱风的......还是不错的，布景和产品颜色还蛮搭配的。</td>
<td>A00106</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>把控油那些功能都说了到</td>
<td>A00302</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>前面还挺好的，但是后面他们都哭了，有点滥情</td>
<td>A00405</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>在牙膏广告中还不错......超白具体表现在......</td>
<td>A00503</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>制作得还挺精致的，讲了一个故事</td>
<td>A00604</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>看到它很甜，这个香水应该是个很甜的感觉，就是恋爱的感觉，甜蜜，小可爱的那种</td>
<td>A00906</td>
</tr>
<tr>
<td>对广告中传递出的关于诉求点的解读</td>
<td>感性诉求</td>
<td>描述的是恋爱的感觉。</td>
<td>B10106</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>有清新的口气之后更自信，更愿意交朋友</td>
<td>B10208</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>亲情</td>
<td>B10405</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>恋爱，初恋，少女粉</td>
<td>B10906</td>
</tr>
<tr>
<td></td>
<td>理性诉求</td>
<td>比较多的是它的特点，控油，持妆</td>
<td>B20302</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>新的主打的一个超白的品类吧，能预防牙渍</td>
<td>B20503</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>能补充能量</td>
<td>B20604</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>功效吧，觉得头发油腻的时候用它就会变得清爽一点</td>
<td>B20707</td>
</tr>
<tr>
<td></td>
<td>混合性诉求</td>
<td>首先就是美白牙齿，然后就是我的笑容力量，应该就是一种健康生活的理念</td>
<td>B31203</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>既表现了它的产品，又有表现品牌的</td>
<td>B31909</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>一种快乐，欢愉，简洁又明了的感觉</td>
<td></td>
</tr>
<tr>
<td>消费者对产品功能与作用的理解。</td>
<td>产品类型</td>
<td>功能</td>
<td>口气清新，主要是怕嘴巴里有异味。</td>
<td>C10208</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>我比较关注它那个控油的功能</td>
<td>C10302</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>护肤的</td>
<td>C10405</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>就是每天都用的，刷牙呀</td>
<td>C10503</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>主要还是能饱</td>
<td>C30603</td>
</tr>
<tr>
<td></td>
<td>享乐型产品</td>
<td>享受</td>
<td>外出逛街约会的时候使用，取悦自己和他人。</td>
<td>C20106</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>除了基础的通信这些功能之外，用来上网比较多，聊天，拍照</td>
<td>C20801</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>就是上班的时候喷一下，心情愉悦</td>
<td>C20906</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>用的比较多的都是社交软件吧，聊天，然后刷一些东西</td>
<td>C21701</td>
</tr>
<tr>
<td>定义</td>
<td>范畴</td>
<td>概念</td>
<td>访谈记录举例</td>
<td>编号</td>
</tr>
<tr>
<td>------</td>
<td>------</td>
<td>------</td>
<td>--------------</td>
<td>------</td>
</tr>
<tr>
<td>消费者自身在决策过程中所耗费的时间与精力的程度的判断。</td>
<td>卷入程度</td>
<td>高卷入度</td>
<td>会对比，会用一两个礼拜……因为它系列又很多，品牌也很多，而且这种香水需要买一喜欢的话需要闻味道……</td>
<td>D10106</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>会考虑别人的建议，比较耗费精力</td>
<td>D10302</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>会花比较多时间去考虑</td>
<td>D10405</td>
</tr>
<tr>
<td></td>
<td>低卷入度</td>
<td></td>
<td>不会想很久。</td>
<td>D20208</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>不会考虑很久，就是超市里看到喜欢就买了</td>
<td>D20503</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>我觉得应该不会考虑很久</td>
<td>D21203</td>
</tr>
<tr>
<td>被访者对品牌的熟悉程度的判断</td>
<td>品牌熟悉度</td>
<td>很熟悉</td>
<td>小学开始就知道了吧</td>
<td>E10208</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>我看过很多广告啊，我妈妈也在用。</td>
<td>E10405</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>就国产品牌嘛，然后价格也比较亲民</td>
<td>E11105</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>熟悉的品牌，它主打的就是美白牙齿吧……</td>
<td>E11203</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>我对它的产品很熟悉</td>
<td>E11308</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>还行吧……知道它有口红粉底之类的，小棕瓶。</td>
<td>E10302</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>还算熟悉，因为现在正在用的就是黑人</td>
<td>E10503</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>还可以，广告真的很很有意思，而且真的很管饱</td>
<td>E10604</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>它以前的广告有给我留下比较多的印象。</td>
<td>E10707</td>
</tr>
<tr>
<td></td>
<td>完全不熟悉</td>
<td></td>
<td>完全没有听过。</td>
<td>E20106</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>似乎完全没有听过</td>
<td>E20906</td>
</tr>
<tr>
<td></td>
<td>质量感知</td>
<td>正面质量感知</td>
<td>牌子比较大，应该还不错</td>
<td>F10208</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>问了别人觉得还行，质量应该还是不错的，毕竟那么贵嘛……评价也还不错，自己也刚买了用过</td>
<td>F10302</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>好像也还可以，因为我妈妈说用了感觉皮肤挺好的</td>
<td>F10405</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>质量挺好的，因为它没有负面新闻，而且它的代言人是流量比较高的明星。</td>
<td>F10604</td>
</tr>
<tr>
<td></td>
<td></td>
<td>负面质量感知</td>
<td>质量一般吧</td>
<td>F20707</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>一般，以前洗过就是觉得头皮有点痒</td>
<td>F21407</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>应该还好吧，因为舍友有使用，使用感还不错</td>
<td>F21802</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>还可以啊，因为相对于益达、炫迈来</td>
<td>F22008</td>
</tr>
</tbody>
</table>
被访者基于自身以往的经验以及已知的信息对品牌形象做出的判断。

<table>
<thead>
<tr>
<th>形象感知</th>
<th>正面形象</th>
<th>走青春路线的，年轻人的品牌。</th>
<th>G10106</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>年轻，蛮有活力。比较专业，在那一块比较出名</td>
<td>G10208</td>
<td></td>
</tr>
<tr>
<td></td>
<td>挺绿色的，就是好像比较健康的感觉</td>
<td>G10405</td>
<td></td>
</tr>
<tr>
<td></td>
<td>国际大品牌，有一定知名度……比较年轻，注重性价比的人，开朗，因为黑人牙膏，想要露出牙齿的话就是必须要笑啊</td>
<td>G10503</td>
<td></td>
</tr>
<tr>
<td>负面形象</td>
<td>去屑那块真的特别差，以前用得就是头发很痒</td>
<td>G20707</td>
<td></td>
</tr>
<tr>
<td></td>
<td>感觉是低端市场一种产品，以前的包装真的很低端</td>
<td>G21407</td>
<td></td>
</tr>
<tr>
<td></td>
<td>但是品牌形象有点土吧，最近几年也没有看到什么它的新广告的感觉，包装也比较土，没有像其他品牌那样</td>
<td>G22008</td>
<td></td>
</tr>
</tbody>
</table>

续表二

<table>
<thead>
<tr>
<th>定义</th>
<th>范畴</th>
<th>概念</th>
<th>访谈记录举例</th>
<th>编号</th>
</tr>
</thead>
<tbody>
<tr>
<td>对广告的幽默程度的感知</td>
<td>有趣</td>
<td>有趣，就广告创意来说还是蛮有趣的</td>
<td>H10801</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>恩，还不错，蛮有意趣的</td>
<td>H11701</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>算有趣吧，就是比较简洁和明快的感觉</td>
<td>H11909</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>还算有趣吧，他们也还蛮帅的</td>
<td>H12206</td>
<td></td>
</tr>
<tr>
<td></td>
<td>没什么意思</td>
<td>就一般吧……如果在电脑上视频一般就不会看完</td>
<td>H20707</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>没有很有趣吧，我觉得他们的这个广告就是都是这样，就是快，就是这样的</td>
<td>H21002</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>还好吧，因为就打感情牌嘛，但是也没有泰国那些品牌做得好</td>
<td>H21105</td>
<td></td>
</tr>
<tr>
<td>被访者在观看广告之后对广告本身表达方式、广告中呈现的内容以及对广告内容及形象的关注</td>
<td>接受广告内容</td>
<td>一看就是给小姑娘用的，很甜的感觉，把它的主题突出得蛮好的……已经做得还不错了</td>
<td>I10106</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>只是接受，但是没有很心动的感觉</td>
<td>I10302</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>可以接受，因为没有夸大，它就是一个比较正常的广告</td>
<td>I10503</td>
<td></td>
</tr>
<tr>
<td></td>
<td>不接受广告内容</td>
<td>关联性不强，只是为了创意而做的……没有说出使用产品的目的，代入性不强。</td>
<td>I20208</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>打感情牌更能引起共鸣，但是后面都哭了这就有点太过了有点过犹不及吧</td>
<td>I20405</td>
<td></td>
</tr>
<tr>
<td>期望行为</td>
<td>品牌好感度增加</td>
<td>有多一点吧，首先这个广告来说就和以前很不一样啊，然后有新的功效啊……然后也多了一点生活点的气息吧……</td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>---------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>还行，因为就是感觉它至少用的代言人还是国内比较火的团体，就感觉这个品牌还是有点钱的吧</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>这个广告表达的满足了我的需求</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>会有那么一点吧，就是你能够更能去认同它的那个感觉了</td>
<td></td>
<td></td>
</tr>
<tr>
<td>考虑购买</td>
<td>包含</td>
<td>他们代言得还不错，感觉也是有的，会去试一下。</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>包含</td>
<td>和广告无关，还是会因为品牌而去购买</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>包含</td>
<td>可能会考虑吧</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>包含</td>
<td>因为我已经看到这个香水的广告了，所以在我之后要买香水的话我可能还是会考虑一下</td>
<td></td>
<td></td>
</tr>
<tr>
<td>推荐购买</td>
<td>包含</td>
<td>会对别人推荐这个品牌，但是对广告没有太大的感觉，对品牌的好感并不来源于广告</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>包含</td>
<td>会推荐吧，因为就是家人啊就是对这个品牌比较不了解…</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>包含</td>
<td>会啊，如果有人觉得他需要美白牙齿的话我会向他们推荐这个吧</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

被访者在看完广告之后，因为广告的原因对品牌的偏好或者是因为广告的刺激产生了购买意愿以及推荐购买的行为。

<table>
<thead>
<tr>
<th>期望行为</th>
<th>希望增加理性诉求点</th>
<th>更希望知道产品的功效</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>实际上的宣传和营销需要更多表现产品的品质，从产品本身出发吧。</td>
</tr>
<tr>
<td></td>
<td></td>
<td>增加一下更多的产品的功效方面的信息吧</td>
</tr>
<tr>
<td></td>
<td></td>
<td>可以增加一些情境，就是展现出她用了这个东西跟别的女生不一样的</td>
</tr>
<tr>
<td></td>
<td></td>
<td>加上一些时尚的因素，可能把它放在一个场景里面，就是使用的场景啊什么的</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>期望行为</th>
<th>希望增加感性诉求点</th>
<th>可增加感性诉求点在产品功效方面的信息吧</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>可以增加一些情境，就是展现出她用了这个东西跟别的女生不一样的</td>
</tr>
<tr>
<td></td>
<td></td>
<td>加上一些时尚的因素，可能把它放在一个场景里面，就是使用的场景啊什么的</td>
</tr>
</tbody>
</table>

式的期望。
### 定义
在广告观看结束之后，没有因为广告增加对品牌的好感，或者因为广告做出负面的言论，以及购买决策以及推荐购买行为与广告无关。

### 范畴
非期望行为

### 概念
没有增加品牌好感度

### 访谈记录举例
- **编号**

<table>
<thead>
<tr>
<th>访谈内容</th>
<th>编号</th>
</tr>
</thead>
<tbody>
<tr>
<td>没有，因为我想象中的不太搭，是偏功能的产品展现出交朋友那样的诉求和我想要的不一样...希望展现它清新口气更自信的那一块。</td>
<td>K10208</td>
</tr>
<tr>
<td>没有，因为好感度就摆在那里了，很难再提升了。</td>
<td>K10604</td>
</tr>
<tr>
<td>这个广告一般都是用到他们本土的元素多一些，希望他们出现在中国的广告可以出现一些我们本土的元素这样可能会增加一点好感度。</td>
<td>K10801</td>
</tr>
<tr>
<td>没有吧，还是本身固有的观念会强一点，就是本身对它也没有什么不好的观点。</td>
<td>K11105</td>
</tr>
<tr>
<td>应该暂时不会考虑吧...对比国产品牌像华为啊之类的就感觉还是比较喜欢国产品牌多一点...</td>
<td>K20801</td>
</tr>
<tr>
<td>不会因为广告而去买它</td>
<td>K21509</td>
</tr>
<tr>
<td>比较不会考虑，更多可能会考虑**，因为**的包装比较精巧一点</td>
<td>K22008</td>
</tr>
<tr>
<td>感觉前面还很好，但是后面煽情用得太多了</td>
<td>K30405</td>
</tr>
<tr>
<td>没有使用过，会选择其他的更熟悉的产品进行推荐。</td>
<td>K40106</td>
</tr>
<tr>
<td>比较会推荐**，因为现在炫迈接收到的信息会比较多一点</td>
<td>K42008</td>
</tr>
</tbody>
</table>

### 4.3 主轴编码
上述概念以及范畴之间基本都是相互独立的，而且通过开放性编码无法表现出他们之间的关系。因此，下一步本研究对上述概念以及范畴进行了主轴编码。主轴编码的目的在于将开放性编码中的内容进行进一步地整理，确定上述范畴之间的逻辑关联。主轴编码的部分举例详见表 4.2。
通过整理和分析，本研究发现开放式编码中的出现的范畴之间存在一定的关系。在将其中规律性的内容进行分析之后，本研究发现其中主要的范畴有“广告诉求的作用机制”这一大类。

表 3. 主轴编码举例

<table>
<thead>
<tr>
<th>访谈记录</th>
<th>有清新的口气之后更自信，更愿意交朋友（B10208）</th>
<th>有清新的口气之后更自信，更愿意交朋友（B10208）</th>
</tr>
</thead>
<tbody>
<tr>
<td>访谈记录</td>
<td>口气清新，主要是怕嘴巴里有异味。（C10208）</td>
<td>口气清新，主要是怕嘴巴里有异味。（C10208）</td>
</tr>
<tr>
<td>访谈记录</td>
<td>不会想很久。（D20208）</td>
<td>不会想很久。（D20208）</td>
</tr>
<tr>
<td>访谈记录</td>
<td>熟悉，小学时候开始就知道了吧（E10208）</td>
<td>熟悉，小学时候开始就知道了吧（E10208）</td>
</tr>
<tr>
<td>访谈记录</td>
<td>牌子比较大，应该还不错（F10208）</td>
<td>牌子比较大，应该还不错（F10208）</td>
</tr>
<tr>
<td>访谈记录</td>
<td>年轻，蛮有活力。比较专业，在那一块比较出名（G10208）</td>
<td>年轻，蛮有活力。比较专业，在那一块比较出名（G10208）</td>
</tr>
<tr>
<td>访谈记录</td>
<td>没有吧，感觉有点无厘头，而且为什么跟绿箭有什么关系呢（H20208）</td>
<td>关联性不强，只是为了创意而做的……没有说出使用产品的目的，代入性不强。（I2—更希望知道产品的功效I3）</td>
</tr>
<tr>
<td>访谈记录</td>
<td>没有增加品牌好感，跟我想象中的不太搭，是偏功能的产品展现出交朋友那样的诉求和我想要的不一样…希望展现它清新口气更自信的那一块（K10208）</td>
<td>没有增加品牌好感，跟我想象中的不太搭，是偏功能的产品展现出交朋友那样的诉求和我想要的不一样…希望展现它清新口气更自信的那一块（K10208）</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>主轴编码</th>
<th>感性诉求—功能型—低卷入度—熟悉—正面质量感知+正面形象感知—广告无趣—负面的广告反应/增加理性诉求—期望行为/非期望行为</th>
</tr>
</thead>
<tbody>
<tr>
<td>访谈记录</td>
<td>比较多的是它的特点，控油、持妆（B20302）</td>
</tr>
<tr>
<td>访谈记录</td>
<td>我比较关注它那个控油的功能（C10302）</td>
</tr>
<tr>
<td>访谈记录</td>
<td>会考虑别人的意见，比较耗费精力（D10302）</td>
</tr>
<tr>
<td>访谈记录</td>
<td>还行吧…知道它有口红粉底之类的，小棕瓶。（E10302）</td>
</tr>
<tr>
<td>访谈记录</td>
<td>问了别人觉得还行，质量应该还是不错的，毕竟那么贵嘛…评价也还不错，自己也刚买了用过（F10302）</td>
</tr>
<tr>
<td>访谈记录</td>
<td>各方面都挺好的，但是不是很突出，不是特别个性化的品牌（G10302）</td>
</tr>
<tr>
<td>访谈记录</td>
<td>没有趣啊，它就只是把它的功能都念了一遍而已（H20302）</td>
</tr>
<tr>
<td>访谈记录</td>
<td>只是接受，没有什么做得不好的地方，但是也没有什么特别抓住你的地方…印象不深（I10302）</td>
</tr>
<tr>
<td>访谈记录</td>
<td>会对别人推荐这个品牌，但是对广告没有太大的感觉，对品牌的好感并不来源于广告（J10302）</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>主轴编码</th>
<th>理性诉求—功能型—高卷入度—熟悉—正面质量感知+正面形象感知—广告无趣—正面广告反应—期望行为/非期望行为</th>
</tr>
</thead>
<tbody>
<tr>
<td>访谈记录</td>
<td>就是打情感牌嘛，你本来就很美（B11105）</td>
</tr>
<tr>
<td>访谈记录</td>
<td>就是护肤，护肤品（C11105）</td>
</tr>
<tr>
<td>访谈记录</td>
<td>最开始的时候会，因为需要把它和不同的牌子做比较嘛（D11105）</td>
</tr>
<tr>
<td>访谈记录</td>
<td>就国产品牌嘛，然后价格也比较亲民（E11105）</td>
</tr>
<tr>
<td>访谈记录</td>
<td>质量其实我觉得，也不是说效果特别明显，但是至少说基本功能有保障（F11105）</td>
</tr>
<tr>
<td>访谈记录</td>
<td>国产，靠谱，之前的形象就是，用一个人的性格来说就是老实人的感觉，现在因为他们找TFboys代言了嘛，就是年轻的老实人的感觉。（G11105）</td>
</tr>
</tbody>
</table>
还好吧，因为就打情感牌嘛，但是也没有泰国那些品牌做得好
(H21105)
能啊，就自然美，就打情感牌吧，品牌理念突出得蛮好(I11105)——
产品吧，我觉得对产品广告还是会看得更多一点，就是像泰国广告那
样最后把产品放出来(I31105)
会，还是会购买(J21105)
没有吧，还是本身固有的观念会强一点，就是本身对它也没有什么不
好的观点(K11105)

<table>
<thead>
<tr>
<th>主轴</th>
<th>编码</th>
</tr>
</thead>
<tbody>
<tr>
<td>感性诉求—功能型—高卷入度—熟悉—正面质量感知+正面形象感知 —广告无趣—负面广告反应/增加理性诉求—期望行为/非期望行为</td>
<td></td>
</tr>
</tbody>
</table>

### 4.3.1 高卷入度的功能型产品类别下诉求的作用规律

在对高卷入度功能型产品类别下广告诉求的作用规律进行了分析的过程中，本研究主要得到了以下四个结论：

（1）对于此类产品，在消费者对品牌熟悉且有正面的质量和形象感知的情
况下，即理性诉求方式更符合消费者对此类品牌产品广告的期待；（2）对于此类产品，
在消费者对品牌熟悉且有正面的质量和形象感知的情
况下，不同诉求方式广告中，虽然创意的加入并不会直接
影响消费者的购买决定，但是消费者对有
趣的广告表现出了更积极的反应；（3）对于此类产品，在消费者对品牌熟悉且
有正面的质量和形象感知的情
况下，不同广告诉求方式的
选择对于消费者的购买
决定没有太大的影；（4）对于此类产品，在消费者对品牌不熟悉的情
况下，将
感性诉求方式与理性诉求方式相结合可以产生更好的广告效果。

根据 Mano 和 Oliver 的研究，消费者对功能型产品进行选购时，通常更重视
产品本身的使用功能（Mano, Oliver, 1993）。而对于高卷入度的功能型产品，
采用理性诉求方式的广告能够达到更好的广告效果（郭国庆, 周健明, 邓诗鉴, 2015）。

当本研究在对这一问题进行探讨的时候，加入了与品牌相关的因素对其进行
分析。本研究发现，被访者在观看了使用感性诉求方式广告的高卷入度功能型产
品后，大部分被访者在访谈过程中表达了希望在广告中看到更多的理性诉求的观
点。如“产品吧，我觉得对产品广告还是会看得更多一点，就是像泰国广告那
样最后把产品放出来……”（1105）。

这说明针对高卷入度功能型的产品，消费者更希望从广告中获取与产品本身
功能等相关的信息，这也是在一定程度上表明针对高卷入度功能型的产品，消
费者更注重产品本身能给他们带来的实际利益。这也再一次验证了 Mano 和
Oliver 的观点。

除此之外，本研究对这类型产品广告中的创意因素也进行了相应的探讨。结
果显示，对于高卷入度的功能型产品，在消费者已经对该品牌熟悉并且有正面质
量和形象感知的情况下，消费者对于两种诉求方式广告中有趣程度的感知对被访
对象最后的购买意愿影响不大，但是有创意的广告本身还是能够让消费者对广告
产生更积极的反应的。

从该被访者的言论中可以看出，虽然他赞同该广告是有趣的，但是他最后表
现出来的期望行为与该广告似乎并无关联。如：“感觉还是挺有创意的……还不错，这个广告的感觉和以前的广告感觉还是挺不一样的，就是这个场景感觉挺能让人记住的吧……”（3207）。

因此，对于熟悉且形象感知及质量感知正面的品牌，有创意的广告确实能够让消费者对广告中所展示的品牌留下较深的印象。

但是，本研究随后发现，针对于高卷入度的功能型产品，大部分消费者在观看了理性诉求广告以及感性诉求广告之后都表现出了期望行为，这似乎不符合功能型产品使用理性诉求广告可以达到更好的广告效果这一结论。那么产生这样的差异的原因是什么呢?

通过进一步的分析，本研究发现：

首先这类被访者在观看广告后产生的期望行为大多数属于与广告不直接相关的购买意愿；广告中所展现的品牌有正面的品牌形象感知。即使广告并没有向被访者传达他们期望看到的信息，没有达到被访者的期待，或者被访者不为之所动，他们事前已经形成的对品牌质量以及形象的认知，并不会受到太多来自广告的影响；如在被访对象已经表现出产品无趣且给出了负面的广告反应的情况下，依然表达出了继续购买该品牌产品的意愿。“会，还是会购买……没有吧，还是本身固有的观念会强一点，就是本身对它也没有什么不好的观点……”（1105）。

也就是说，针对高卷入度的功能型产品而言，消费者更多关注的是产品的相关功效等信息，但是如果消费者在观看广告之前，通过自身的经历、来自各种渠道的信息等，已经对该品牌比较熟悉且形成了一定的品牌形象感知和质量感知，不论是选择感性诉求方式，还是理性诉求方式，对于消费者前期形成的对品牌各方面的感知，还有已经形成的购买倾向等，影响都不大。

在前面本研究已经探讨了当对品牌熟悉且有正面的质量和形象感知时，对于高卷入度的功能型产品，广告诉求的作用规律。接下来本研究将分析被访者在观看广告之前不熟悉品牌的情况下，广告诉求的作用机制。

从访谈记录中本研究发现，对于高卷入度功能型的产品，产品的实际功能依然是被访对象较为关心的一个点，并且广告理性诉求方式在这种情况下能够引起较好的期望行为，如“创意一般，但是对功能的介绍很全面……很想买，因为广告里提到的每个功能我都需要啊……”（4002）。

由此可见，对于功能型的产品，在消费者不熟悉品牌产品的情况下，在广告中采用理性诉求方式对产品功能等相关信息进行有效展示是可以起到刺激消费者购买欲望的作用的。

但是与此同时，本研究也注意到，虽然被访对象表现出了期望行为，在接受与广告内容相关问题的提问时还是表达了希望可以看到一些感性诉求信息，如“如果可以也表现一下在用完这个之后很美啊，一走出去迷倒很多人……也很好”（4002）。

所以，对于消费者不熟悉的品牌，如果是高卷入度的功能型产品，利用理性诉求方式在广告中展现出与产品功能等相关的信息可以在一定程度上消除消费者对于产品的疑虑与困惑。从而增加消费者对于不熟悉产品的认识。但是如果能
够辅之以感性诉求广告，则能够更好地帮助消费者建立对于该品牌产品更全面的
认知。

这也是又一次印证了缪文海的观点，在他对广告诉求策略的研究中表明，感
性诉求和理性诉求广告都具有片面性，如果将两种广告的优势结合起来，用感性
诉求提供给消费者有关生活方式，生活态度的讯息的同时，用理性诉求告诉消费
者产品能给他们带来的实际的利益，这样的广告才能更好地将广告效果最大化
（缪文海，2005）。

因此，对于高卷入度的功能型产品，在消费者对品牌不熟悉的情况下，在广
告中将感性诉求方式与理性诉求方式相结合可以产生更好的广告效果。

除了上述总结出的规律之外，在对访谈记录进行反复整理以及分析的过程中
发现，受访者在访谈过程中多次提到了关于品牌来源国对于他们对品牌的质量感
知的影响。比如化妆品香水这类产品，不少消费者认为来自欧美地区国家品牌产
品的质量优于国产品牌所生产的同类型产品。如：“我觉得大家其实对国货应该
都有点点不放心……所以我觉得这个，应该先从产品这方面下功夫吧……先把产
品值得信赖这一点打出去……”（3205）。因此当他们在观看广告时也表示希望
国产护肤品品牌能更多将重心放在提升产品本身品质这个关键问题上。同时，希
望这些品牌可以向消费者告知国产护肤品在品质方面做出的努力等，从而提升
消费者对产品的信心。

被访对象的这些观点在国内外学者关于品牌来源国的研究中也得到了一定
的解释。首先，研究表明，消费者通过自身的购买体验，观察式学习，以及媒体
接触等途径会逐渐形成对于来自某个国家的某类型产品的刻板印象
（Maheswaran，1994；汪涛，周玲，周楠等，2012）。并且，消费者对其形成的
刻板印象也会直接影响消费者对产品的评价（Han，1989）。

由此又一次地表明，品牌来源国对于消费者对品牌质量的感知确实存在着
一定的影响。

4.3.2 低卷入度的功能型产品类别下诉求的作用规律

对于低卷入度的功能型产品，结合上述研究结论，本研究中在加入品牌相关
因素对诉求的作用规律进行分析之后主要得出了以下四个结论。

（1）在对熟悉品牌有着正面的质量感知和形象感知的前提下，对于功能型
产品，选择感性与理性广告诉求对于广告效果的影响并不明显；（2）在对品牌
熟悉且有正面的质量感知和形象感知的前提下，在不同广告诉求的作用过程中，
创意的加入并不会直接影响消费者对品牌原有的质量和形象感；（3）对于这类型
产品，在对品牌熟悉但是对品牌有负面的质量感知和形象感知的情况下，理性
诉求方式能够更好地帮助消费者更新对品牌产品的认知；（4）对于这类型产品，
在对品牌不熟悉的情况下，将感性诉求方式与理性诉求方式相结合更有利于达到
期望的广告效果。

对于低卷入度的功能型产品，不同的广告诉求又是如何作用的呢？本研究在
接下来的研究过程中针对低卷入度功能型产品的相关访谈记录进行了进一步的
整理分析。
在前面的研究过程中，本研究已经发现针对高卷入度的功能型产品而言，如果消费者事前已经对品牌形成了好感，广告诉求点的选择对广告效果不会产生太大的直接影响。

而对于低卷入度的功能型产品，在已经形成了对该熟悉品牌正面的质量和形象感知之后，被访者在观看广告后也都表现出了期望行为。值得关注的是，在这里被访者所表现出来的期望行为，也都集中在与广告无直接关联的购买行为与推荐行为。

如果被访者对于广告本身的反应并没有特别积极“没什么意思吧，就很正常的广告啊”（0503），但是当问到其购买意愿时，该被访者表示“还是会买，现在正在用的就是这个……和广告还是没有很大的关联吧……”（0503）。也就是说广告本身并没有直接影响到他今后的购买行为的选择。

综合这两个发现表明，在消费者事前已经对该熟悉品牌形成正面的质量和形象感知的情况下，对于不同卷入程度下的功能型产品，不同广告诉求形式对于消费者对该品牌已经形成的感觉，以及对该品牌产品的购买倾向并没有太大的影响。

也就是说，在对熟悉品牌有着正面的品牌感知的前提下，对于功能型产品，选择感性与理性广告诉求对于广告效果的影响并不明显。

那么，广告创意程度在这之中又起到了什么样的作用呢？

通过所收集的访谈记录中对于低卷入度功能型产品广告中广告创意这一因素的研究结果表明，在消费者已经对该品牌熟悉，同时对品牌有正面的质量感知和形象感知的前提下，对于这类型产品的广告，广告创意在不同诉求点广告中的表现与消费者对品牌产品的认知变化并没有什么直接的联系。

简单来说，当被访者对广告中所展示的产品的感知是卷入度低的功能型产品时，被访者在观看了有创意的感性诉求广告、没有创意的感性诉求广告、有创意的理性诉求广告以及没有创意的理性诉求广告之后，他们最终表现出来的行为之间暂时没有发现什么明显的联系。

由此本研究认为，对于不同卷入程度下的功能型产品，若消费者该品牌熟悉抱有正面形象感知，在不同广告诉求方式下，广告创意程度在其中所能发挥的作用相对而言是比较小的。

但不可否认的是，虽然广告有趣与否在这类型品牌产品广告中发挥的作用似乎不是很大，但是如果广告对消费者而言有创意的话，消费者还是会对广告产生比较好的印象。

并且，如果该广告中呈现出的创意与该品牌以往的形象是相符合的，则能够更好地起到提醒注意的效果，同时又一次强化消费者对品牌形象的感知。

例如被访者在观看某广告后给出的对于广告的观点“对我来说，挺好玩的。它一贯来说就是比较有趣的，它只要把这个有趣贯穿下去就够了……”（0604）。

然而，根据对访谈记录的分析，针对这类低卷入度的功能型产品，如果被访者在接受广告刺激之前已经对广告产生了负面印象，通过理性诉求方式是可以在
一定程度上改变消费者对该品牌产品的成见，在增加消费者对品牌好感的同时刺激消费者产生相对积极的购买行为。

如在对某访谈记录中显示，消费者在前测中表达的对于品牌形象的言论如下，“一般，以前洗过就是觉得头皮有点痒……感觉是低端市场一种产品，以前的包装真的太低端”（1407）。从被访者的表达中可以看出该被访者表现出了对该品牌有明显的负面质量和形象感知。

然而，在广告观看结束之后，被访者却表达出了期望行为“有一点，就是它出的新产品，新包装确实还是可以，相对于原来的包装来说确实还是上升了一个层次了……”（1407）。

产生这样的结果的原因我们在被访者的广告反应中找到了解释。被访者在广告结束之后提及对广告本身的态度时表示“感觉后面新的包装还是挺能吸引我的注意的……就通过场景的植入……对新产品对于旧产品来说新的一点功能是什么会比较好奇……”（1407）。

从这里可以发现被访者虽然在事前对该品牌已经形成了较为负面的质量和形象感知，但是广告中所展现出来的与以往品牌形象不同的理性诉求点，增加了被访者对该品牌产品的兴趣。

同时在被访者的言论中也表达出了更多对于功能方面信息的期待。这在一定程度上又一次验证了Albers-Miller的给出的结论，理性诉求广告有利于消除消费者对于产品的疑惑以及不确定性（Albers-Miller, 1999）。

也就是说，对于这类低卷入度的功能型产品，尤其是形象在消费者心中较为负面的品牌，采用理性诉求广告向消费者展现出现有产品与原来的产品不一样的形象，能够更好地帮助消费者更新对品牌形象的认知，从而达到更好的广告效果。

对于低卷入度的功能型产品，在被访者不熟悉品牌的情况下，广告的理性诉求能够更快地帮助消费者认识到产品，对品牌产生印象，最终产生期望行为。比如在某被访者在对某不熟悉品牌广告的访谈记录中显示“这个里面只讲了它的理念啊感觉，你本来就不太清楚它的东西到底怎么样啊……可能我还是想要知道一下吧，比如用的什么原料啊，功效之类的”（3304）。

由此可见，对于低卷入度的功能型产品，如果消费者对该品牌是相对陌生的，在这种情况下，单纯的感性诉求方式虽然可以起到帮助消费者了解品牌形象的作用，但是对于功能型产品，消费者同时也更关注产品本身能够给他们带来的实际利益。因此，对于此类产品，当消费者对品牌不熟悉的情况下，将感性诉求与理性诉求相结合能够更好地激发消费者对该品牌产品的兴趣，从而达到更好的广告效果。

4.3.3 高卷入度的享乐型产品类别下诉求的作用规律

通过对被归类为高卷入度享乐型产品相关的访谈记录进行分析，本研究主要得到了以下五点结论：

（1）对于高卷入度享乐型产品，在消费者对品牌熟悉且有正面的质量和形象感知的情况下，广告的诉求方式对消费者对于品牌质量和形象的认知影响不
大；（2）对于高卷入度享乐型产品，在消费者对品牌熟悉且有正面的质量和形象感知的情况下，感性诉求方式下广告代言人的正确选择有助于广告产生更好的广告效果；（3）对于高卷入度享乐型产品，在消费者对品牌熟悉且有正面的质量和形象感知的情况下，广告中的创意元素对消费者最终的购买行为产生的影响不；（4）对于高卷入度的享乐型产品，在消费者对不熟悉的情况下，将理性诉求方式与感性诉求方式相结合，能够达到更好的广告效果；（5）对于高卷入度的享乐型产品，在消费者对不熟悉的情况下，如果在广告中加入合适的广告创意，也能够帮助达成更好的广告效果。

在郭国庆之前的研究中发现，对于高卷入度享乐型的产品，广告感性广告诉求比理性诉求更能激发消费者的购买意愿（郭国庆, 周健明, 邓诗鉴, 2015）。本研究中，加入了对品牌相关因素在其中产生的影响的考虑，也对相同的问题进行了探讨。

对于高卷入度的享乐型产品，结合收集到的访谈记录，本研究发现了与功能性产品分类下的广告诉求作用规律相似的结论。出现这样的结果的原因是什么呢？本研究对这部分访谈记录进行了进一步的分析。

本研究发现，对于高卷入度的享乐型产品，如果消费者在事前对该熟悉品牌以及产品形成了正面的形象感知，使用不同的诉求方式所得到的广告效果并没有明显的差异。

被访者普遍表现出了期望行为，同时该期望行为也主要集中于会因为原有对品牌的好感而去继续考虑购买该产品。

也就是说，如果消费者在观看该广告之前已经对该品牌产品形成了较为清晰的认知，他们也清楚地知道自己对该品牌产品的需求情况，比如某消费者在接受访谈时提到的“如果在我不知道这个品牌的时候看广告可能会有增加，但是因为已经知道这个了，就清楚自己会不会想买它，广告的作用也不大……”（2101）。从最终的消费者行为来看，在不同广告诉求方式下，消费者原有购买意愿的影响是没有太大的差别的。对于此类消费者来说，对购买决策起着关键作用的还是消费者在广告观看之前对品牌形成的质量以及形象感知。

但是在这里，值得注意的是，针对高卷入度的享乐型产品，在感性诉求广告中为被访者熟悉的代言人的出现获得了一大部分被访者的关注。在 Johar 等人的研究中提到，广告中的代言人，广告的风格，以及广告所引发的情感、感觉等都会影响品牌个性（Johar et al., 2005）。本研究发现，在高卷入度享乐型产品广告中使用了感性诉求方式，并且在广告中出现了知名度较高的代言人的时候，被访者基本都提到了广告中代言人的存在。

在追问后，被访者表示，因为代言人个性与该品牌个性是相符的，所以对广告表现出更愿意接受的态度。如“会有增加一些吧，它们选的代言人也比较火啊，就是这个产品本来也是他们推的新产品，然后这个组合也是刚出道，小鲜肉吧，年轻，很符合啊……”（2206）。并且在随后的访谈中也表现出了积极的购买意愿。
通过这些访谈记录也进一步看出了广告代言人在品牌形象塑造过程中的重要性。

代言人在平时出席的各类活动中的表现，容易给消费者留下关于对于该代言人的多方面性格、特点的感知。利用广告中的感性诉求点将代言人与品牌相符的那部分内容人物性格放大，可以让消费者更全面地感受到品牌的多方面，产生品牌一自我概念一致，增强消费者对品牌个性、品牌形象的认同感，引发消费者的共鸣，最终产生购买行为。

也就是说，尤其针对高卷入度享乐型产品，如果消费者在广告观看之前已经对其形成正面联想，感性诉求广告中代言人的正确选择能够帮助广告达成更好的广告效果。

随后，本研究对此类型产品被访者对广告中创意程度的感知进行了分析。结果显示，当被访者对该品牌表示熟悉且有有正面的质量感知和形象感知时，广告中创意的程度对消费者的态度和行为并没有太大的影响。

与此同时本研究也发现，相对于被访者表示无趣，没有创意的广告，当被访者认为该广告有趣且具有创意时，其对广告本身的评价是较高的。

而对于那些消费者原来不熟悉的高卷入度享乐型产品。广告的感性诉求能够很好地帮助品牌塑造在消费者心目中的形象的作用。

对于不熟悉的品牌，消费者在接触广告之前对该品牌以及产品的相关信息不了解，对该品牌也尚未形成较为清晰的认知，在这种情况下用广告对被访者进行刺激相对而言能够更容易对被访者产生影响。

比如同样是针对 06 号广告，对该品牌不熟悉的被访者在看完广告后，形成了对该品牌形象较为一致的看法，“这个广告一看就是给小姑娘用的，很甜的感觉，把他的主题突出得蛮好……”（0106），“初恋，少女粉，年轻……情景的那个联想……”（0906）。通过广告中感性诉求所表达出来的感觉帮助被访者建立对不熟悉品牌的认知。

但是同时本研究也发现，被访者在观看了感性诉求广告之后，表达了产品原材料等信息的好奇，如“可能对它的原料，就是花的原料，就是多珍贵得提取出来的，还有就是适当增加包装的镜头，因为它只给了一个包装的样子，希望更多体现产品本身的属性……”（0906）。

因此，对于高卷入度的享乐型产品，在消费者对品牌不熟悉的情况下，单纯地使用感性广告来对消费者进行刺激还是不够的，要达到更好的广告效果还是需要结合理性诉求广告的帮助。比如在广告中对产品原料、包装、工艺、功能等理性诉求点进行展示。

所以，对于消费者不熟悉的高卷入度享乐型产品品牌，感性诉求广告有利于帮助消费者构建对于品牌形象的认知，同时理性诉求广告能够更好地减少消费者对产品的疑惑，了解产品本身，进而形成一定的对产品质量的认知。

由此可见，对于不熟悉的品牌，通过感性与理性诉求的结合能够更好地帮助消费者形成对品牌的形象与质量的认知，更好地刺激消费者形成对品牌的好感，产生购买意愿。
另外，本研究通过对该品类下被访者访谈记录的研究中发现，在被访者对该品牌产品不熟悉的情况下，若被访者认为该广告内容是有趣的，在随后的访谈中被访者也更容易表现出期望行为，比如增加品牌好感，产生购买意愿等。如“还是挺创意的啊，把它的味道描述成恋爱的味道……应该会考虑，因为感觉还是挺不错的”（3506）。因此，对于高卷入度的享乐型产品，广告的创意因素对于消费者不熟悉品牌是存在影响的。

4.3.4 低卷入度的享乐型产品类别下诉求的作用规律

通过对涉及低卷入度享乐型产品的相关广告的访谈记录的整理分析，本研究在这一部分主要得到了以下四个结论：

（1）对于低卷入度享乐型产品，在消费者对品牌熟悉且有正面的质量和形象感知的情况下，广告的诉求方式对消费者对于品牌质量和形象的感知影响不大；（2）对于低卷入度享乐型产品，在消费者对品牌熟悉且有正面的质量和形象感知的情况下，感性诉求方式下广告代言人的正确选择有助于广告产生更好的广告效果；（3）对于低卷入度的享乐型产品，在消费者对品牌熟悉且有正面的质量和形象感知的情况下，如果在广告中加入合适的广告创意，也能够帮助达成更好的广告效果；（4）对于低卷入度的享乐型产品，在消费者不熟悉的情况下，将理性诉求方式与感性诉求方式相结合，能够达到更好的广告效果。

在郭国庆之前关于产品类型，产品卷入程度对广告的交互作用的研究中提到，相对于广告理性诉求，对低卷入度享乐型产品而言，广告感性诉求的广告效果更好（郭国庆，周健明，邓诗鉴，2015）。

但是加入了对品牌因素在其中起的作用对同一问题进行探讨之后，本研究发现所得到的结论与此观点似乎有所差异。出现这样的差异的原因是什么呢？本研究对访谈记录进行了进一步地分析。

针对那些消费者事前就已经熟悉，且产生了正面的质量和形象感知的品牌相关的访谈记录进行整理之后，本研究发现在功能型产品广告以及高卷入度感性诉求产品中的广告诉求的作用规律在这里依然成立。

例如，在被访者对该低卷入度享乐型产品表达了正面的质量和形象感知之后，在广告观看结束之后给出了这样的观点“会考虑购买，但是这可能是综合很多因素的考虑，就是你前面问到的那些都有可能……”（1701）。从被访者的回答中可以看出被访者最终表现出了期望行为，但是该期望行为产生的原因更多是因为先前搜集到的信息，以及受访者对该品牌产品原有的认知等，这其中受到的来自于广告本身的影响其实不太大。

因此这也表明，对于不同卷入程度下的功能型产品以及享乐型产品，如果在观看广告之前，消费者就已经通过来自各种渠道的信息对品牌感到熟悉，并形成了正面的质量和形象感知之后，广告诉求方式的不同对于消费者的影响其实并不明显。

换句话说，对于这类的消费者而言，一次的广告并不足以撼动消费者在一段较长时间内积累而成的对于品牌以及产品的认知，自然也难以对他们的购买意愿产生太大的直接影响。
但是需要注意的是，对于这类品牌产品，广告诉求方式的选择虽然对消费者最终的购买倾向没有很大的影响，但是，广告所表达出来的形象与理念应该是与品牌原有的正面形象保持一致的。这样才能更好地发挥广告提醒注意，强化品牌在消费者心中正面形象的效果。

在前面的研究中提到代言人在高卷入度享乐型产品中的影响，针对低卷入度享乐型产品的广告本研究进行了同样的分析。

结果表明在使用感性诉求的低卷入度享乐型产品中，该结论依旧是可行的。如“可以啊，有***（该广告中出现的代言人）就赢了，就***（该广告中出现的代言人）就很好，和它的形象还是比较符合的”（2710），这是针对低卷入度享乐型产品的广告，消费者给出的广告反应。

首先对于该被访者而言，该产品属于低卷入度的享乐型产品，同时他对该品牌的形象认知就是潮、有个性。在观看广告之后，该被访者也给出了相同的正面广告反应，认为广告代言人的特征与该品牌是相符的。

由此可见，针对于不同卷入程度的享乐型产品，在感性诉求广告中选择合适的符合品牌形象的代言人有助于品牌进一步加深消费者对于该品牌形象的感知。从而达到更好的广告效果。

最后对于该类型产品广告中的创意部分本研究发现创意的因素在这部分类型产品的广告中所发生的作用依旧没有特别明显。

但是这其中的一个被多次提及的观点也引起来注意，那就是广告时长对消费者对广告表现出来的情感的影响。本研究发现，消费者对时长过长或是信息大量重复的广告都普遍表现出了厌烦的心理。比如被访者在访谈过程中表示“感觉前面看得不知所云，广告又太长了，看得有点累”（2307），“还是挺有创意的，但是就一直重复地开锁开锁，我都已经知道了要表达的意思了，还在讲，感觉有点太累赘了”（3201）。


也就是说，如果广告时长较长且内容较为重复，消费者对其容易产生厌烦的心理。同时，如果广告时长过长但内容乏味也容易让消费者产生抗拒的心理。

此外，在被访者对品牌熟悉且有正面感知的情况下，即使该广告被被访者认为是无趣的，被访者对广告的接受程度也还是相对较高，并且随后表现出来的期望行为也更多受到被访者本身对于该品牌产品的情感的影响。

虽然缺乏创意的广告对被访者最后的行为没有产生很大的影响。但是很明显，有创意的广告更容易被消费者记住。如“没有意思啊，就是***的个人独白，没有什么起伏……”（3610），对于这类没有创意的广告，虽然被访者最后表现出了期望行为，但是广告本身对被访者而言是无趣的。但是另一被访者的访谈例
子中可以发现广告创意对被访者的影响“还是挺有趣的啊，感觉以后看到这个产品都会想起来这个广告……”（3508）。

因此，对于低卷入度的享乐型产品，在消费者本身已经对品牌产品熟悉，且表示出了相对正面的质量和形象感知时，广告中的创意成分对消费者的最终购买意愿的影响并不太明显。但是，不可否认的是，有创意的广告更容易吸引消费者的注意。

而在消费者对品牌不熟悉的前提下，将广告的感性诉求与理性诉求相结合能够更好地刺激消费者的购买意愿。比如“这个挺好的，就是知道了它原料用得很高级……但是如果可以再表现一些开心的氛围啊什么的也很好”（4109）。

由此可见，对于不熟悉的品牌，虽然广告中的理性诉求也在一定程度上刺激了消费者的购买意愿，但是消费者同时期望从广告中接收到感性诉求信息。因此，对于低卷入度的享乐型产品，如果消费者对品牌不熟悉，使用理性诉求广告与感性诉求广告相结合的方式能够将广告效果最大化。

4.3.5 广告诉求作用机制基本框架

根据前述主轴编码，汇总得到的广告诉求的作用机制如图1所示

图1. 广告诉求的作用机制

4.4 选择性编码

选择性编码就是要从主范畴的基础上找出核心范畴，发掘核心范畴与其他范畴之间的联系，并且用故事显得形式描述整体现象。

结合原始的访谈记对未来各个范畴以及主范畴进行不断地对比分析和整理，
本研究发现可以用“广告诉求方式的作用机制”这一核心范畴来对所有的主范畴进行综合。围绕这一核心范畴的故事线为：广告诉求方式的选择会影响消费者对广告的态度，影响消费者对广告中所展示的品牌形象的感知，从而最终影响消费者的选择行为。广告中所展示产品的品类、卷入程度，消费者对该品牌的熟悉程度以及消费者通过事前与品牌相关的体验、广告、朋友推荐等渠道形成的对品牌正面或是负面的品牌形象感知，在广告诉求作用的过程中对广告最终的效果产生影响。在这些因素的综合影响下，消费者形成了对广告的态度，并最终决定自己的对品牌的态度。

4.5 理论饱和度检验

为了验证本研究中所发现的概念以及范畴之间的关系的充分性，本研究将预留出的30条完整访谈记录展开分析。通过编码和分析，本研究发现余下的这些访谈记录中仍然发现“广告诉求方式的作用机制”这个核心范畴。对并没有出现新的范畴和关系，因此可以认为本文的核心范畴是比较全面的（费小东，2008）。

5. 结论与讨论

5.1 结论

本文用扎根理论这一质化研究方法对广告诉求的作用机制展开了研究。研究结果表明，广告诉求方式的作用过程是复杂的，其中受到来自产品类型、购买卷入程度，广告创意程度以及品牌相关因素的交叉影响。

首先，对于不同卷入程度功能型和享乐型产品，本文主要得到了以下3点结论：

（1）在消费者对品牌熟悉且持有正面质量和形象感知的情况下，不同的广告诉求方式对于消费者对品牌的感知影响不大，对消费者最终的购买意愿影响也不是很大。

但是需要特别提到的一点是，对于高卷入度的功能型产品，在消费者在接受广告刺激时，理性诉求方式相较于感性诉求方式对消费者更具有吸引力。同时值得注意的是接受广告的表达方式，并不代表广告受众会受到广告的影响而产生期望行为。也就是说即使广告受众对广告中所表达的内容表现出接受状态，但并不意味着通过该广告能让受众增加对产品中出现的品牌的好感，或因此而产生购买冲动或购买意愿。与此同时，对广告本身表达方式的负面印象也不一定会导致非期望行为的发生。

（2）如果是消费者不熟悉的品牌，将感性诉求与理性诉求相结合更容易帮助消费者对品牌形成好感，刺激消费者的购买意愿。

单纯的感性诉求广告或者理性诉求广告在对广告受众产生影响的过程中都存在一定的片面性。观看了理性广告的受众在访谈中表示希望能在广告中增加一些感性诉求相关的内容从而让受众对产品使用情境、目标受众等产生更明确的认识。但是观看了感性诉求广告的受众在访谈中却表示希望可以稍微增加一些与产品相关的信息，帮助他们更全面地了解产品的品质以及功效等信息，从而帮助他们发现自己的需求或者可以通过此更加了解产品能够给他们带来的实际利益。因此对于不同的品牌不同的产品，如果可以找到感性与理性诉求的
一个融合点，将二者相结合在广告中进行展示，能够更好地达到理想的广告效果，甚至将广告效果最大化。

（3）在使用不同的广告诉求方式时，消费者对于广告创意程度的感知对他们最终的购买行为不会产生很大的影响，但是当广告对消费者而言富有创意时，消费者会表现出更为积极的态度，同时有助于增加消费者对品牌的好感。因此，广告创意仍然是广告作用过程中很重要的一个影响因素。

第二，对于不同卷入程度的享乐型产品，对那些已经对品牌熟悉并且产生了正面的质量和形象感知的消费者而言，在感性诉求广告中选择与品牌个性相符的广告代言人有利于达到更好的广告效果。

与品牌形象相符的广告代言人有助于广告受众进一步明确对品牌形象的认知。尤其在广告感性诉求广告中使用有着与品牌形象相符的个性的代言人时，因为代言人本身的个性与广告诉求点中所展现的个性是相符的，广告受众在注意到广告中的代言人之后会自动将对代言人的形象的认知附加到品牌形象上，从而对品牌形象产生更强烈的认同感，最终引发期望行为。

第三，对于购买卷入程度低的功能型产品，如果消费者对该品牌形成了负面的质量感知和形象感知，采用理性诉求能够更好地帮助消费者更新对品牌形象以及形象的感知。通过对与以往形象不同的产品包装、工艺等信息的展示重新吸引消费者，从而再次引起消费者的兴趣。

总而言之，在广告诉求方式的作用过程中，品牌相关的因素对于最终的广告效果有着难以忽视的巨大影响。同时，广告的创意程度对于消费者最终的态度也是有一定的影响的，虽然它所带来的影响相对有限，但是不能否认它对于广告受众的吸引力。

5.2 讨论

（1）针对不同的产品类型以及购买卷入程度，消费者在信息的收集过程中也会有其倾向性。针对功能型的产品，消费者更关注的是产品能够给他们带来的实际利益，因此，在对该品牌信息的收集过程中，相对而言，消费者会更重视品牌原材料、工艺、功能等产品的内在属性；相反，对于享乐型的产品，消费者使用的目的更多的是获得情感上的满足，因此他们在收集信息的过程中更多关注的是产品的包装、设计等能够直观感受到的外在属性。而对于不同卷入程度的产品而言，相较于低卷入度的产品，购买卷入程度高的产品，通常和高风险联系在一起，消费者需要比较强有力的说服，因此采用理性诉求方式向消费者展示与产品功能直接相关的信息更有利于为消费者提供更强有力的说服（Sadeghi, 2015），从而刺激消费者的购买意愿；而对于购买卷入程度低的产品，消费者所需要承担的风险是比较低的，因此即使消费者做出了错误的购买决策所产生的损失也不会太大。

（2）在加入了与品牌相关的因素对广告诉求方式的作用机制进行讨论之后，发现广告诉求方式的选择对消费者最终的态度以及行为的影响不大。品牌是如何影响消费者的呢？首先从品牌形象的定义来看，目前一般认为品牌是品牌长期与消费者接触而产生的“消费者对品牌的总体感知和看法”，它影响消费者对品牌的购买行为（范秀成、陈洁，2002）。由此可见，消费者对品牌形象的感知是在
一个较长的时间内逐渐积累形成的。因此，通过单次的广告刺激，是很难撼动消费者对于该品牌已经形成的既有认知的。在长期的接触过程中，消费者形成了自己对该品牌的形象和质量的判断。由此而产生的态度和行为也难以通过一次的广告刺激而发生改变。

同时，当消费者对该品牌形成了正面的形象感知或者质量感知之后，在晕轮效应的作用下，消费者对于该品牌的广告也有着更高的包容性，即使该品牌的某一条广告并不完全符合他们的期待，也不容易产生对其的抵触心理从而影响他们对品牌的认知。

因此如果能够在消费者心中形成较为正面的形象感知和质量感知，广告诉求方式的不同对于广告受众最终的态度和行为影响是相对较小的。因此如何让消费者对品牌形成正面的认知应该是企业需要特别关注的一个方面。

（3）总的来说，相对于没有创意的广告，有创意的广告对于消费者来说更具有吸引力，同时也更能够在消费者心中留下较为深刻的印象，让消费者记住品牌。因此，应该说在消费者对于品牌还不熟悉并且尚未形成认知的时候，使用富有创意的广告是能够帮助广告取得更好的广告效果的。但是，在消费者已经对品牌形成了一定的较为清晰的认知之后，广告中的创意元素的使用对于消费者最终的购买行为的影响也就相对较小了。因为一次的有创意的广告也难以改变消费者通过长时间的积累形成的对品牌的态度和行为。如果希望提升消费者对于品牌的的好感，广告主也应当制定长期的战略，通过不断的刺激，让消费者对品牌产生认同感。

6. 启示与局限

6.1 理论贡献与管理启示

本研究的贡献在于开始尝试利用扎根理论这种质化研究的方法试图去解释在各种因素综合作用之下广告诉求的作用机制，填补了现有研究中的空缺。以往的研究多研究少数几个因素在广告诉求作用过程中产生的影响，较少将所有的因素综合起来讨论，本研究为以后的相关方面的研究提供了新的思路。其次，本研究发现了在广告诉求作用过程中各因素对其产生功能的交互作用，为以后企业制定广告策略起到了一定的参考作用。

对企业而言，本文的结论也对广告主开展相关工作的时候提供一点帮助。

首先，企业在日常的营销活动中应该要将关注点放在正面品牌形象的塑造上，消费者对于有着正面的品牌形象品牌通常具有更高的包容度以及接受度，对于这类企业，在广告所表达的与品牌形象相符的情况下，即使广告受众没有被广告打动，他们也还是会对品牌保持原有的正面态度并且保持原有的购买倾向。

第二，企业在日常的经营管理活动中应当注重于消费者的沟通，关注消费者与品牌相关的心理变化，从而帮助企业针对消费者心理活动的变化更好地制定营销方案，包括广告的相关活动等，这样才能在长久的经营中更好地保持优势。

第三，对于知名度较高且已经拥有比较正面的形象的享乐型产品品牌，广告主更适合选用感性诉求广告进一步强化消费者心中的品牌个性。但是对于这类型产品的广告，广告主要注意的是在进行广告创作时代言人的人选。广告主所选的
代言人应该有比较明显的与品牌个性相符的性格特征，这样可以帮助广告达到更好的广告效果。相反，当选择的广告代言人个性与该品牌形象冲突时，可能会引起消费者的负面的广告反应。

第四，如果品牌在消费者心中已经形成了较为负面的形象，或者消费者对该品牌还不熟悉的情况下，广告主可以通过理性诉求直接向消费者传递产品相关的信息，帮助消费者建立对于品牌产品的质量的感知，这样更有利于改善消费者对品牌的负面印象，或者消除消费者对于不熟悉产品的疑虑，从而引导消费者产生期望的行为。但是，需要提到的一点是，对于消费者不熟悉的品牌，广告主应注意在使用理性诉求广告的同时辅之感性诉求广告，帮助消费者更加全面地认识品牌，形成对品牌质量以及形象的感知。

第五，对于不同品类，不同卷入程度的产品，营销主在进行广告投放的时候应注重感性诉求广告以及理性诉求广告的结合使用。利用感性诉求广告能够更好地帮助消费者建立对品牌形象的认知，理性诉求广告可以更好地传递与产品相关的信息，为消费者提供相对更为直观的关于产品质量以及功效的感知，从而更直接地帮助消费者发现自己的需求，打破消费者的疑虑对产品产生信任。

第六，在广告主进行广告设计的时候可以适当的加入创意的元素，使用消费者喜爱的方式将信息传递给消费者，这样可以让消费者对广告留下更深的印象，记住品牌，刺激消费者的购买意愿。但是在广告信息大量重复的情况下需要适当注意广告的时长，以免被消费者认为是乏味的，啰嗦的，这样反而会容易出现反效果。

6.2 局限与展望

本研究采用质化研究的方法，主要从品牌与产品各因素在广告诉求点的作用过程中产生的影响进行了研究得出了一定的结论，对理论以及实践都产生了一定的价值，但是这其中也存在着一些不足。首先由于研究时间的限制，研究的被访对象主要集中在大学生群体，在广告库的建立过程中所涉及的行业领域不够丰富，研究样本比较不成熟。其次，由于本研究本身水平的局限性对所收集的数据分析不够全面，因此难免有些瑕疵，但是本研究严格按照扎根理论的方法步骤进行操作，尽可能在研究的每个环节都做到有理有据。未来的研究中可以在样本的分析过程中加入人口统计学因素进行分析。

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A study on Acceptance Intention of Catering Service System

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Abstract

With the rapid development of technology networks and the rapid spread of mobile devices, more and more services are through electronic equipment. The catering service system is one of them. The catering service system are useful in our daily life. Generalize the catering service system also can lower the cost of restaurant. So, it’s necessary to research what is the important to make people accept this system. Technology acceptance was theorized in 1986 and has been in use since then. The Technology Acceptance Model and the Theory of Planned Behavior were compared to assess which model best helps to understand usage of information technology. In this research, based on Technology Acceptance Model and do some extend. Add in Perceived system reliability, system Innovation as another dimension to do the dining service system accept research. In this study, we use Amos 24 to analyze the hypothesis structure by SEM analysis. According to the research results, we draw the following conclusions: The perceived ease of use, perceived useful and perceived system reliability on the behavior intention of using catering service system has a positive impact. The system Innovation on perceived ease of use, perceived useful and perceived system reliability has a positive impact.

Keywords: Technology Acceptance Model; Catering service system; Perceived System Reliability; System Innovation; Behavior Intention
餐饮服务系统之使用意图研究

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摘要
随着当今科技的进步，科技系统的日新月异，为人们每天生活服务的各种系统应运而生，并且在日常生活中越来越普及，已经成为了大家不可或缺的使生活更加便利的一部分。餐饮服务系统也是其中之一。研究人们对餐饮服务系统的接受度就十分重要了。

研究基于 1986 年 Davis 提出的科技接受模型。主要研究人们对信息科技的接受程度。在此基础上，为了使研究切合餐饮服务接受系统这一主题，更好的衡量人们对餐饮服务系统的接受度，加入了知觉可靠性和系统创新性作为构面，对餐饮服务系统用户接受度这一特定的研究主题做出分析。在餐饮服务系统接受度这一问题，通过调查发现使用者对系统的可靠有一定的需求，保证在使用时不出现程序上的问题很重要；系统的创新要跟随信息科技进步的速度，满足使用者日益增加的对系统的要求。本次研究增加两个新的变量，衡量餐饮系统的用户接受度。

研究通过对研究构面设置问卷来获得研究数据，问卷来源于已有的文献研究，通过网络派发问卷填写，对餐饮服务系统有经验的受访者进行调查，从而收集到研究数据。有效问卷回收 279 份，对收集到的问卷数据使用 Amos24 和 SPSS24 作为分析工具，采用 SEM，描述统计，信度分析，效度分析和相关性分析，得到以下结论：

系统创新性对餐饮服务系统的知觉易用性，知觉有用性和知觉可靠性有正向影响。

知觉易用性，知觉有用性和知觉可靠性对餐饮服务系统的使用意向有正向影响。

关键字：科技接受模式；知觉可靠性；系统创新性；餐饮服务系统；使用意向
1. 引言

当科技进步的同时，人们对信息科技的接受程度就成了一个值得研究的问题。一些行之有效的调查人们对信息科技接受创新科技因素的研究应运而生。Davis、Bagozzi and Warshwa (1989) 指出可以用社会心理学领域的使用意图模式 (Behavioral Intention Models) 作为研究影响个人对信息科技的使用行为因素的理论依据 (Christie, 1981; Swanson, 1982)。Davis (1986) 根据 Fishbein 与 Ajzen (1975) 的理性行为理论提出了科技接受模型。科技接受度模型是对于信息科技和信息系统推广方面应用较广泛的一种研究方法。从这篇文章发表以来，一直受到广泛的关注和并得到实证支持 (see Lee et al. 2003)。TAM 模型假设使用新科技的意愿，将受到使用者对于该科技产品的知觉易用性 (Perceived Ease of Use) 和知觉有用性 (Perceived Usefulness) 的程度的影响。

![科技接受度模型](image)

资料来源：Davis, F.D., R.P. Bagozzi and P.R. Warshaw (1989)

研究不断的在跟随科技发展，时代向前，而更加的精益求精。力求更准确的解释和预测人们对新科技的接受，于是便有了对科技接受模式的不断延伸。根据 Lindgaard (1994) 对科技接受模式中，系统特征的分析，系统创新性是科技系统的很重要的一部分。科技系统方面的技术越来越成熟，用户对科技系统的稳定可靠也有了要求。系统提供稳定的服务，将会显著到影响用户对系统使用。 (Chung et al. 2008; Wixon & Todd 2005)。

根据 2015 年 6 月 11 日 Google 发布消费者行为报告，在报告中指出，中国香港和中国大陆地区智能手机使用率分别到达 79% 和 74%。由此可见，智能手机已成主流，智能手机应用平台也会有迅速的发展。近年来，中国餐饮业发展迅速，竞争也日益激烈。根据中国烹饪协会发布的《2013 年中国餐饮产业信息化调查报告》，当前全国餐饮业信息化应用还处于初级阶段。 (王清清，2016) 对于餐饮业来说员工提供优质服务服务更是其主要竞争优势。 (Prince & Simon, 2009) 中国已经进入由过去的低端低效服务业转向了高效高质量服务业的过程，人们对于餐饮服务业，对餐厅的服务效率，服务质量的要求已经有所提高但很多餐厅服务升级并没有赶上消费者需求的增长速度，造成餐厅竞争力下降。《2016 年度餐饮大数据报告》调查得出 2016 年全国餐饮收入超过 3.5 万亿元，占到了社会消费品零售总额收入的 10.80%。在线订餐用户已经由 2011 年的 0.63 亿人增长至 2016 年的 2.56 亿人。
本文为了更好的预测和分析人们对于餐饮服务系统的使用意向，做出以下研究：

1. 研究科技接受模式中前置变量对使用者接受餐饮服务系统的使用意向的影响。

2. 研究系统创新性对使用者使用餐厅服务系统的知觉有用性，知觉易用性和知觉可靠性的影响。

3. 用户知觉可靠性对餐饮服务系统的使用意向有影响。

根据 TAM 模型的研究实证发现，个体差异与 IT 的接受之间有很大的关联（Venkatesh，2000）。虽然科技接受模式是一个经过理论发展的意图模式，但该理论不是针对某一特定的行为进行解释和预测研究，所以有学者认为该理论对于需要机会、能力与资源等，无法掌握的因素并不能有足够的解释能力（Randall & Gibson，1990）。为了更好的解释使用者对餐饮服务系统接受度，对原有 TAM 模型进行延伸，以满足分析的需要。加入切合分析需要的新的变量，从而进行本次研究。
2.理论框架

影响餐饮服务系统的接受度的因素是由多个构面所组成的，不能只从单一构面来探讨。在研究不同领域的区别，添加不同的构面用作解释需要(Hu et al., 1999; Mathieson et al., 2001)。

根据 TAM 模型为基础，切合本研究餐饮服务系统接受度，对原有 TAM 进行延伸。除了科技接受模型原有知觉易用性，知觉有用性对使用意向有影响的基础上，加入了知觉可靠性对使用意向有影响。除了个人对系统的感知，系统的创新性对个人感知也会有影响，所以在模型中加入了系统创新性作为衡量标准。得出研究模型如下:

图片 2. 研究模型

2.1 知觉有用性对餐饮服务系统使用意向的影响

Davis et al. (1989) 指出 TAM 假设当使用者对系统产生有用感知时，会让使用者改善(提高)工作绩效，就是当潜在使用者感觉某一系统的有用程度越高时，对该系统越会产生使用倾向。Pavlou (2003) 提出知觉有用和行为意向存有正向关系。

当人们觉得使用餐饮服务系统会给他们就餐时候带来便利和快捷的服务，他们就会觉得餐饮服务系统对于他们来说是有用的。餐饮服务系统代替了传统的餐饮服务，使得使用者在就餐时候的需要能够得到及时的满足。在就餐时候有了更多的自主权。餐饮服务系统能在就餐时为消费者节约时间。采用服务较为稳定的餐厅服务系统，会让服务质量得到保证，从而对餐厅的经营也是一种促进。当餐饮业主和就餐者都能从餐饮服务系统中得到益处的时候，他们就会更愿意去使用该系统。所以得到以下假设:

假设 1：知觉有用性对餐厅服务系统的使用意向有正向影响。
2.2 知觉易用性对餐饮服务系统使用意向的影响


使用者的受教育程度参差不齐，年龄段也有差别，所以让每一个使用者感到系统是他们可以熟练使用的就变得十分重要了。餐饮服务系统主要是为人们提供便利，而不是在一个地方节省时间，又让使用者再另一方面增加困惑。所以系统的操作简单，让人一看就明白，才会让服务系统更好的发挥它应有的作用。当系统简单易用，人们才会在就餐时选择该系统为他们服务，提供便利。本次研究做出如下假设：

假设 2：知觉易用性餐厅服务系统的使用意向有正向影响。

2.3 知觉可靠性对餐饮服务系统使用意向的影响

我们将系统感知可靠性定义为，在用户使用的时候，系统提供可靠的技术服务，让用户感觉使用系统能够达到预期的效果。（Lu & Yu & Liu 2005；Zahedi 1989）利用无线网络传递信息，使用者有系统是稳定认知，才会增加其去使用的想法。（Frolick & Chen, 2004；Fang et al., 2006）在人们对信息科技系统的接受度研究方面指出，心理无形性感知越明显，使用者对科技系统的知觉可靠性会降低，从而使使用者对系统的使用意向也会有所下降。（林南宏&蔡佳颖，2009）保证使用的时候系统不会出现故障，不会出现错误，才能让用户更加放心的去使用。如果故障率太高，用户可能会对系统失去信心，从而降低使用率，或者不再使用。

使用者在用餐饮服务系统进行操作时，系统值得他们相信，保证他们在使用这些服务的时候信息安全，才会原因去使用。所以本研究做出如下假设：

假设 3：知觉可靠性对餐厅服务系统的使用意向有正向影响。

2.4 系统创新性

Damanpour（1998）认为创新可以是没出现过的的产品也可以是现有产品的更新或者升级，同样可以是一种对接受者而言相对是新出现的流程以及政策等。当系统跟随科技时代的进步，满足人们更新的需求的时候，人们对系统的感知也会随之提升。Drucker（1985）认为创新是赋予既有资源创造财富的新能力。只有不断更新的系统，才能更好的吸引到用户的使用，并且持续的使用。

新的系统能为消费者提供优于以前系统能够带来的服务。具有创新的系统能够与时俱进，了解当下的用户需求，紧跟需求的系统才能对用户是有用的。在餐饮行业里，随着市场发展而进行更新换代的餐厅，才更容易占有市场份额，才能...
更好的进行经营。所以跟随着餐饮行业的餐厅服务系统也需要进行更新才能更好的服务与用户。

随着科技的不断发展，操作也应该是越来越简便就可以达到使用的目的和要求。不断的进行更新，操作越来越简单，才能对用户而言是简单易用的。

系统还需要不断完善，保证系统的稳定，不出现可能使系统出错的漏洞。更新的系统使用新的技术，新的技术手段可以保证系统安全性更高和稳定性更好。不断更新的系统是来源于前人积累的经验而得到，经验的积累，会让使用者觉得该系统更加的可靠。

假设 4：餐厅服务系统的创新性对餐厅服务系统的知觉有用有正相关影响。
假设 5：餐厅服务系统的创新性对餐厅服务系统的知觉易用有正相关影响。
假设 6：餐厅服务系统的创新性对餐厅服务系统的知觉可靠性有正相关影响。

3.研究方法

3.1 变量定义及衡量

本研究主要采用文献探讨及问卷调查进行研究分析，主要是想了解到潜在用户对餐厅服务系统的使用意愿与了解用户需求。问卷总共涉及六个变量。感知有用涉及问题五个，问卷来源参考 Davis (1989); Venkatesh et al. (2003); Lee (2010); Wu et al. (2011)等文献。感知易用涉及问题七个，来源 Davis (1989); Venkatesh et al. (2003); Lee (2010); Wu et al. (2011)等文献。感知可靠涉及问题三个，文献主要来源 Henri (2001)。产品创新性设置问题四个，问题主要来源，LaBahn and Krappel and Ali (1995)使用意向设置问题六个，文献来源参考 Fishbein and Ajzen (1975); Davis (1989); Lee (2010); Wu et al. (2011)。将知觉有用性定义为，认为使用餐饮服务系统可以满足用餐服务需求的程度；知觉易用性定义为认为餐饮服务系统易于学习使用与了解的程度；知觉可靠性定义为认为餐饮服务系统安全稳定可以放心使用的程度；系统创新性定义为系统跟随科技发展能满足使用需求；使用意向定义为使用者未来会想要使用餐饮服务系统的主观意愿。

3.2 抽样设计

本研究针对我国中东部地区二级以上城市人口为研究母体，以中东部地区使用过餐厅服务系统的人口为研究对象。由于使用餐饮服务系统需要对手机或者计算机的使用有一定的了解，且由于时间地点的限制，问卷采用网络发放，对象为能上网的人群。总共发放 300 份，回收问卷 283 份，其中无效问卷 4 份，实际有效问卷为 279 份。

本次调查采取立意抽样方式抽取样本，先询问是否愿意配合网上填写，并针对曾使用餐厅服务系统的人员进行问卷调查。主要通过在餐厅群组以及对餐厅服务系统有一定了解的人群中进行发放，采取自愿接受调查的方式，请受访者填写问卷。
4. 数据分析

4.1 描述性统计

本次派发问卷 300 份，实际填写人数 284，其中有效填写 279，问卷有效率为 98.23%。经过调查，使用过餐厅服务系统的为 279 人，未使用过为 5 人。

其中男性受访者为 132 名，占受访者的 47.31%；女性受访者为 147 名，占受访者的 52.69%。根据数据显示，参与调查的男女比例平均。

在受访者中，年龄大多为 31-40 岁，参与调查人数，158 人，占总人数的 56.63%；其次为 20-30 岁，参与调查人数为 68 人次，占总人数的 24.37%；然后是 41-50 岁，50 岁以上，20 岁以下，分别占调查人数的 12.19%，5.73%，1.08%。本次调查参与填写的以青年人为主。产生这样的资料原因分析是因为现在外出就餐以青年人群较多。青少年多以学校就餐为主。

接受教育的程度的差异也可能会对研究产生影响，所以调查受访者的教育程度。教育程度为本科的人数最多，为 161 人占总接受调查人数的 57.71%；其次是大专学历参与调查人数为 63 人次，占调查人数的 22.58%；接下来是研究生及以上，高中，初中分别为 34 人，20 人，1 人。接受教育的程度可以的高低，可以认为对系统的使用的学习速度和理解能力会产生差别。所以调查学习的程度，可以判断填写出问卷的大致人群的程度，反映出对系统接受能力的是那部分人比较高。
4.2 效度分析

信度也称为可靠性，是指测量结果的稳定性程度或一致性程度。本研究采用 DeVellis (1991) Cronbach’s α 系数提出：0.7 > α > 0.6，属中信度；0.8 > α > 0.7，
则具高信度；若 α > 0.8 时，信度最佳。

本研究中，知觉有用性信度为 0.930；知觉易用性信度为 0.930；知觉可靠性
为 0.936；系统创新性为 0.891；个人科技创新性为 0.916；使用意向为 0.932。根
据 Nunnally(1978)提出的概念，Cronbach’s 系数在 0.6 以上就为可信的。所以本研
究的构面可以认为有足够的信度。

表格 1. 研究构面信度

<table>
<thead>
<tr>
<th>研究构面</th>
<th>Crobach’s</th>
</tr>
</thead>
<tbody>
<tr>
<td>知觉有用性</td>
<td>0.930</td>
</tr>
<tr>
<td>知觉易用性</td>
<td>0.930</td>
</tr>
<tr>
<td>知觉可靠性</td>
<td>0.936</td>
</tr>
<tr>
<td>系统创新性</td>
<td>0.891</td>
</tr>
<tr>
<td>使用意向</td>
<td>0.932</td>
</tr>
</tbody>
</table>

4.3 效度分析

关于本次研究的问卷的题项衡量的效度方面，各个题项皆由 Davis (1989); Venkatesh et al. (2003); Lee (2010); Wu et al. (2011); Henri (2001); LaBahn; Krapfel; Ali (1995); Rogers (2005); Taylor (2007); Fishbein & Ajzen (1975) 等先前
研究过之问卷而来，故本次研究采用的衡量题项，内容效度良好。
4.4 相关性分析

分析采用 Pearson 积差相关分析，分别就知觉有用性，知觉易用性，知觉可靠性，产品创新性以及行为意向个构面的相关性进行分析。相关系数的大小与相对应的意义为：0.10 以下为微弱或无相关；0.10 至 0.39 之间为低度相关；0.40 至 0.69 之间为中度相关；0.70 至 0.99 之间为高度相关；1.00 为完全相关（邱皓政，2000）。

表格 2. 构面相关性

<table>
<thead>
<tr>
<th>构面相关性</th>
<th>平均值</th>
<th>标准差</th>
<th>知 觉 有 用 性</th>
<th>知 觉 易 用 性</th>
<th>知 觉 可 靠 性</th>
<th>系 统 创 新 性</th>
<th>使用意向</th>
</tr>
</thead>
<tbody>
<tr>
<td>知 觉 有 用 性</td>
<td>3.80</td>
<td>0.867</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>知 觉 易 用 性</td>
<td>3.646</td>
<td>1.027</td>
<td>0.529**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>知 觉 可 靠 性</td>
<td>3.704</td>
<td>1.062</td>
<td>0.515**</td>
<td>0.512**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>系 统 创 新 性</td>
<td>3.755</td>
<td>0.979</td>
<td>0.540**</td>
<td>0.512**</td>
<td>0.485**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>使用意向</td>
<td>3.624</td>
<td>1.002</td>
<td>0.396**</td>
<td>0.350**</td>
<td>0.363**</td>
<td>0.325**</td>
<td>1</td>
</tr>
</tbody>
</table>

4.5 结构方程分析

分析采用 Amos 24，对知觉易用性，知觉有用性，知觉可靠性，产品创新性以及使用意向建立结构方程。

该模型主要外生非观测变量为知觉可靠性，系统创新性，知觉有用性，知觉易用性；内生非观测变量为使用意向。变量总数为 59 个，其中观测变量 25 个，非观测变量 34 个，外生变量 30 个，内生变量 29 个。

模型卡方值为 413.266 自由度为 269，卡方与自由度比值为 1.536。根据评估标准，此项比值合理。

根据 Amos 24 结果中 modification indices 对知觉有用性的残差值和系统创新性残差值进行修正，根据 Amos 报告整理本结构方程结果得到以下表格：
表格 3. 模型适配指标分析

<table>
<thead>
<tr>
<th>配适指标</th>
<th>整体模式适配度</th>
<th>评估准则</th>
<th>是否符合评鉴标准</th>
</tr>
</thead>
<tbody>
<tr>
<td>绝对适配度指标</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GFI</td>
<td>0.901</td>
<td>&gt;0.9</td>
<td>是</td>
</tr>
<tr>
<td>RMSEA</td>
<td>0.041</td>
<td>&lt;0.08</td>
<td>是</td>
</tr>
<tr>
<td>增值适配度指标</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AGFI</td>
<td>0.881</td>
<td>&gt;0.9</td>
<td>否</td>
</tr>
<tr>
<td>NFI</td>
<td>0.912</td>
<td>&gt;0.9</td>
<td>是</td>
</tr>
<tr>
<td>CFI</td>
<td>0.970</td>
<td>&gt;0.9</td>
<td>是</td>
</tr>
<tr>
<td>简效适配度</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PNFI</td>
<td>0.815</td>
<td>&gt;0.50</td>
<td>是</td>
</tr>
<tr>
<td>PCFI</td>
<td>0.867</td>
<td>&gt;0.50</td>
<td>是</td>
</tr>
<tr>
<td>PGFI</td>
<td>0.743</td>
<td>&gt;0.50</td>
<td>是</td>
</tr>
</tbody>
</table>

GFI 是拟合优度指数，范围在 0 到 1 之间，理论上可以出现没有意义的负数，如果模型可以接受，GFI 值应该大于 0.9。按照这样的要求，本研究的 GFI=0.901 值是合格的。

AGFI 是调整拟合优度，利用自由度和变量个数的比例来调整 GFI，变化范围也应该在 0 到 1 之间，AGFI 的值也应该是大于 0.9 为佳。但是本研究值略小于 0.9 这一建议值。为 0.881。Hair et al. (2009) 认为 AGFI 其值愈接近 1 愈好，但并无一绝对标准值判定观察资与模式间的配适，例如 Baumgartner and Homburg(1996)研究 1977-1994 年间营销与消费者领域以 SEM 进行分析的文献中有 48%的分析 AGFI 低于 0.9，文章中认为是可接受的范围。在本研究中，仅 AGFI 值略低于 0.9 这一判断标准，表示模式适合度尚可。

PGFI 是简效拟合优度，是由独立模式的自由度与内定模式的自由度的比率乘以 GFI。本研究中 PGFI=0.743 符合建议指标。

PNFI 是简效规范拟合指数，是独立模式的自由度与内定模式的自由度的比率乘以 NFI。本研究中 PNFI=0.815 符合建议指标。

PCFI 是简效比较拟合指数，是独立模式的自由度与内定模式的自由度的比率乘以 CFI。本研究中 PCFI=0.867 符合建议指标。

NFI 是规范拟合指数，范围在 0 到 1 之间，1 是完全拟合。建议值是需要大于 0.9。本研 NFI=0.912 全符合标准。

CFI 表示比较拟合指数，范围值在 0 到 1 之间，CFI 值越接近 1 表示拟合越
好。要求的值需要大于 0.9。本研究 CFI=0.970 符合要求。

如果 RMSEA 小于或等于 0.05，表示模型拟合较好；当 RMSEA 大于 0.05 且小于 0.08 则模式有适当拟合。所以按照判断标准，本研究 RMSEA 值为 0.041，为模型有较好拟合。

### 4.6 假设检验

根据 Amos 24 对假设进行分析，结果如下：

<table>
<thead>
<tr>
<th>假设</th>
<th>内容</th>
<th>估计值</th>
<th>t 值</th>
<th>P 值</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>知觉有用性对餐厅服务系统的使用意向有正向影响。</td>
<td>0.245</td>
<td>3.226</td>
<td>0.001</td>
</tr>
<tr>
<td>H2</td>
<td>知觉易用性对餐厅服务系统的使用意向有正向影响。</td>
<td>0.129</td>
<td>1.829</td>
<td>0.067</td>
</tr>
<tr>
<td>H3</td>
<td>知觉可靠性对餐厅服务系统的使用意向有正向影响。</td>
<td>0.189</td>
<td>2.629</td>
<td>0.009</td>
</tr>
<tr>
<td>H4</td>
<td>餐厅服务系统的创新性对餐厅服务系统的知觉有用性有正相关影响。</td>
<td>0.868</td>
<td>9.925</td>
<td>***</td>
</tr>
<tr>
<td>H5</td>
<td>餐厅服务系统的创新性对餐厅服务系统的知觉易用性有正相关影响。</td>
<td>0.753</td>
<td>8.620</td>
<td>***</td>
</tr>
<tr>
<td>H6</td>
<td>餐厅服务系统的创新性对餐厅服务系统的知觉可靠性有正相关影响。</td>
<td>0.788</td>
<td>8.522</td>
<td>***</td>
</tr>
</tbody>
</table>

本研究根据 t 值来判断假设，在 0.05 的显著性水平上，t 绝对值大于 1.96 为显著。

假设 1：知觉有用性对餐厅服务系统的使用意向有正向影响。
得到的估计值是 0.245，t 值 3.226，大于 1.96。不拒绝原假设。
假设 2：知觉易用性对餐厅服务系统的使用意向有正向影响。

得到的估计值是 0.129，t 值 1.829，略小于 1.96。根据 Amos 分析之数据结论，应当拒绝原假设。但是已有大量文献证明，知觉易用性与使用意向之间是有直接的正相关影响。例如移动通信 (Hong & Tam, 2006; Park & Chen, 2007; Kim, 2008; Lopez-Nicolas et al., 2008)、银行系统 (Suh & Han, 2002)；实时通讯系统 (Chung & Nam, 2007)、以及移动游戏设备接受度 (Okazaki, Skapa, & Grande, 2008) 等都已证明知觉易用性和使用意向之间有直接关系。本研究数据显示显著性不好，总结原因在于填写问卷样本不够多，且多以熟练使用系统的被调查者为主，所以导致本次收集到数据分析之后结果不理想。但是仍然无法否定知觉易用性和使用意向之间的正相关关系。

假设 3：知觉可靠性对餐厅服务系统的使用意向有正向影响。

假设 4：餐厅服务系统的创新性对餐厅服务系统的知觉有用性有正相关影响。

假设 5：餐厅服务系统的创新性对餐厅服务系统的知觉可靠性有正相关影响。

假设 6：餐厅服务系统的创新性对餐厅服务系统的知觉可靠性有正相关影响。

根据 Amos 得到数据判断，各项假设之间的 t 值，除知觉易用性与使用意向之间的关系外，都大于 1.96。关于知觉易用性与使用意向之间，t 值略小于 1.96 也有较为合理的推断。P 值给出检验原假设总体参数是 0 的近似双尾概值。所以本研究所设原假设都成立。

5. 结论及展望

5.1 结论及理论贡献

在科技接受模式的研究中，随着科技的发展，信息科学技术也越来越智慧化，越来越生活化。为了更加准确的预测和解释人们对于科技系统的接受度，所以我们根据不同的情况对模型进行延伸。随着模式稳定的发展，其应用范围已扩展至其他领域，被许多学者广泛使用在预测和解释使用者采用信息科技的行为上 (Hong & Tam, 2006; Park & Chen, 2007; Kim, 2008; Lopez-Nicolas et al., 2008)。

本研究对餐饮服务系统的接受度研究中，加入知觉可靠性和系统创新性作为新的研究变量，并得出了系统创新性对知觉有用性，知觉有用性，知觉可靠性之间存在正向影响。知觉可靠性对使用意向之间存在正向影响。在本次研究中发现，系统创新性对知觉有用性之间正向相关关系最明显，可以认为当创新跟随科技发展而更新升级的时候，使用者会越觉得该系统对他们而言是有效的。系统创新性对使用者的知觉有用性和知觉可靠性正相关关系也是十分明显的。
越具有创新性使用者越会觉得系统简单易用，可靠。在使用者知觉可靠性方面，知觉可靠性对使用者的使用意向上面也是有正向影响。餐饮服务系统需要保证其系统稳定和安全才能让使用者更愿意其使用该系统。

由此得到本次研究中加入的系统创新性，知觉可靠性都会与餐饮服务系统的用户接受度有正向的关系。

5.2 研究现在及未来建议

研究由于时间限制，派发问卷工作仅在网上进行，没有实地的详细向受访者说明餐饮服务系统的情况，只是向受访者以现有流行的餐饮服务系统为例，可能会导致少数受访者对系统的了解产生偏差。其次是问卷填写人数不够多。本次问卷填写人数为281人。在以后的调查中希望能够搜集到更多的样本，从而让研究更加准确。再次是希望扩大调查的范围，不仅仅是中青年为主的调查对象，能够扩大到各个年龄层，了解到不同样本群体的使用需求。

在本次的研究中，选择知觉可靠性，系统创新性，知觉有用性，知觉易用性作为构面，但是并不够全面的衡量餐饮服务系统接受度。餐饮服务系统接受度有不同于其他科技系统的地方，在以后研究里可以加入更具有衡量餐饮服务系统特点的构面做更详细的研究和考虑。

致谢

感谢石贵成对本论文的悉心指导，对我学业上的关心。感谢为管理学做出贡献的学者和前辈。
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### 附录

<table>
<thead>
<tr>
<th>知觉易用性</th>
<th>Davis (1989); Venkatesh et al. (2003); Lee (2010); Wu et al. (2011)等</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 当我使用餐饮服务系统时，经常感到困惑。</td>
<td></td>
</tr>
<tr>
<td>2. 我在使用该系统的时候经常出现错误。</td>
<td></td>
</tr>
<tr>
<td>3. 我发现使用该系统非常容易完成我想要做的事情。</td>
<td></td>
</tr>
<tr>
<td>4. 我觉得该系统能根据我的需要和习惯灵活改变其设定。</td>
<td></td>
</tr>
<tr>
<td>5. 我很容易理解该系统的交互系统。（交互系统：人与计算机之间通过相互理解的交流与通信，在最大程度上为人们完成信息管理、服务和处理等功能）</td>
<td></td>
</tr>
<tr>
<td>6. 该系统的引导功能对我有帮助。</td>
<td></td>
</tr>
<tr>
<td>7. 总而言之，餐厅服务系统简单易用。</td>
<td></td>
</tr>
</tbody>
</table>
# 知觉可靠性

1. 餐饮服务系统能够及时且保证支付信息安全的执行我的要求。  

2. 该系统的运行是高效的。

3. 总而言之，该系统是可靠的。(系统稳定,运行时基本不出现错误。)

# 知觉有用性

1. 使用餐饮服务系统比使用传统餐厅服务更加有效率。  
   Davis (1989); Venkatesh et al. (2003); Lee (2010); Wu et al. (2011)等

2. 该系统使我能够更快地得到就餐所需服务。

3. 使用该系统能让服务多元化。

4. 使用该系统能节省我在就餐时在其他方面花费的时间。(例如等待服务员的服务,排队等位)

5. 该系统让我的就餐更加便捷。

6. 总而言之,我觉得该系统对我的就餐而言是有用的。
### 系统创新性

1. 我认为使用餐饮服务系统能提供给我更好的生活质量。  
   LaBahn; Krapfel; Ali（1995）

2. 我认为该系统有较好的系统性能。

3. 我会使用该系统是因为其独特性。

4. 我对于该系统是熟悉和了解的。

### 使用意向

1. 我会再使用餐饮服务系统的几率很高。  
   Fishbein and Ajzen (1975); Davis (1989); Lee (2010); Wu et al. (2011)

2. 我觉得该系统是值得使用的。

3. 我会建议亲戚朋友们使用该系统。

4. 如果我有机会接触到该系统, 我是会使用该系统的。

5. 预计未来我会使用该系统。
Situational Consumer Vulnerability: Scale Development and Validation

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Abstract

This paper reports on studies whose purpose was to develop and validate a scale of situational consumer vulnerability. After reviewing the research literature related to consumer vulnerability, the definition of situational consumer vulnerability was developed, followed by the process of scale development. To develop the scale, these studies used multi-research methods, including qualitative research methods, such as a focus group, and quantitative research methods, such as a survey. Study 1 and study 2 employed qualitative research; their purpose was to define the boundary and dimensions of consumer vulnerability in order to create the items of the scale. After these two qualitative studies, situational consumer vulnerability was determined to be a three-dimension construct, including affective, conative and cognitive dimensions. After expert review, 25 items that belong to three dimensions were kept. Study 3, study 4, and study 5 entailed quantitative research; their purpose was to explore, reduce, and validate items and scales of situational consumer vulnerability. Following these three studies, the scale of the situational consumer vulnerability was created. The affective dimension has 5 items, and the conative
dimension and cognitive dimension each have 4 items. Data analyses from these studies also
indicate that the final version of the scale has good reliability and validity. Finally, this paper gives
a brief conclusion and suggests directions for future research.

Keywords: consumer vulnerability; affective; cognitive; conative; self-efficacy

情境消费者脆弱性：量表开发与验证

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摘要

本研究的目的是进行情境消费者脆弱性量表开发与验证。正文在系统地回顾有关消费者脆弱性相关文献基础上，形成情境消费者脆弱性构念的界定，进而进行量表开发。为进行量表开发，采用多种研究方法，包括焦点小组讨论等的定性研究，及包括问卷调查等的定量研究。研究一与研究二为定性研究，目的是确定消费者脆弱性的范围及识别构念维度，并在此基础上生成情境消费者脆弱性的测量项目。两个定性研究表明，情境消费者脆弱性为一个三维度的构念，包括情感、意动与认知三个维度。经过专家评审后，共保留属于这三个维度的25个项目。研究三、研究四与研究五为定量的调查研究，目的是进行情境消费者脆弱性量表开发的探索、精简与验证。通过三个定量研究，最终生成了情境消费者脆弱性量表。情感维度共有五个测量项目，意动和认知维度各有四个测量项目。定量研究的
数据分析结果也表明，所开发的量表具有良好的信度和效度。本文最后进行简要总结，并提出未来研究方向。

关键词：消费者脆弱性；情感维度；意动维度；认知维度；自我效能

1. 引言

消费者脆弱性是一个广泛使用的概念，研究者、政策制定者及时事评论者均在使用它。现存的对于消费者脆弱性研究的营销文献在宽泛背景下探索脆弱性（Pavia & Mason，2014）：遭遇自然灾害社区中的人们；认知正常但是低文化水平的成年人；新生儿的母亲；在多元文化市场中的消费者；失去爱人处于悲痛中的人们；贫穷的第三世界国家的难民、孤儿、老年人和市民。对于政策制定者及营销者等，拥有一个合乎逻辑的构架来理解导致消费者脆弱性的情境，可以更好地理解政策和程序如何影响市场中脆弱的消费者（Pavia & Mason，2014）。

在营销情境下，对于不同的群体，消费者脆弱性概念为聚焦于消费社会后果的各种研究提供了一个统一标签。作为概念的固有属性，研究者等在不同的含义上使用这一术语。Ringold（1995）指出，消费者脆弱性概念在某种程度上是令人困惑的。Smith & Cooper-Martin（1997）感慨消费者脆弱性没有被广泛地研究，并且没有被充分地理解。因此，尽管这统一性质，对于消费者脆弱性普遍接受的界定及含义缺乏一致性（Baker，Gentry & Rittenburg, 2005）。

2. 消费者脆弱性概念演化

形成广为研究者接受的消费者脆弱性概念被证实为极端难以实现且极其复杂(Garrett & Toumanoff, 2010)。什么是脆弱的消费者在营销法律环境中不断演化，并且伴随着不确定的地位（Morgan, Schuler & Stoltman, 1995）。在过去的30年，研究者、时事评论者和政策制定者提出了各种各样的脆弱的消费者意味着什么定义(Sourdin, Williams, Burstynner, Gill & Brennan, 2017)。尽管这种关注，什么构成消费者脆弱性没有确定的共识（Sourdin, Williams, Burstynner, Gill & Brennan, 2017）。

2.1 消费者脆弱性早期的特质（身份）论


后来法庭接受异常敏感性应该推及并包括更大群体的观点，或者应该包括在购买时不能做出知情决策的人们。并且两部联邦法律（《美国残疾人法案（ADA）（1990）》、《公平债务收集实践法案（FDCPA）（1968）》）通过提出另外三个脆弱性分类（身体能力、心理能力、和复杂性水平）来阐明这个拓展的视角（Baker, Gentry & Rittenburg, 2005）。

身体能力包括残疾及与年老相伴的身体能力衰退（视觉、听觉与活动能力）。心理能力包括认知处理异常，比如诵读困难或注意力缺陷障碍；也包括不能充分理解书面警示，比如文盲及拥有不佳英文技能的个人。消费者复杂水平包括低社会经济地位、低教育水平等的消费者。当遇到虚假或有问题的产品或服务宣传时，这些消费者可能轻易相信。复杂水平概念也适用于对于产品高度情绪化的或介入的响应，它们可能导致对于一特定产品类别所作宣传的选择性脆弱性。比如，注意健康和关注环境的人们在责任消费方面可能会寻求与他们的态度和观点相一致的产品。这样的消费者如果没有充分地知情，容易被有吸引力产品的宣传所说服（Morgan, Schuler & Stoltman, 1995）。

另一个与脆弱性密切相关的术语是“弱势的”（disadvantaged）。术语“弱势的”通常用在早期的研究中以描述在市场中潜在地处于最危险境地的消费者群体。Andreasen（1975）将弱势的消费者描述为在市场中相对于支出对获得充分价值特别有障碍的人：因为他们极其有限的收入、他们的少数族裔地位、老龄和/或他们语言的障碍。Andreasen (1975)在他的深有影响的著作《弱势消费者》（The Disadvantaged Consumer）中提出，弱势消费者假设为弱势消费者问题主要归咎于他们的个人特征，及其是什么样的人。由于年老、贫穷、未受教育、涉世不深或种族原因，弱势的消费者不能在城市的市场中成为有能力驾驭市场的消费者。这个谁是弱势消费者的定义将弱势归因于个人特质，没有认识到个体能动
遵循这种分类方法，很多研究聚焦于四类人口统计变量作为最明确的在市场中消费者潜在脆弱性的标志（Garrett & Toumanoff, 2010）。1、收入：与高收入者相比，贫穷者被认为是脆弱的；2、年龄：与年轻人驾驭市场能力相比，老年人被认为是脆弱的；3、教育：接受更少正式教育的个体被认为是更脆弱的消费者；4 种族和民族：少数族裔包括非裔和西班牙裔消费者面临更多挑战，被认为是弱势的消费者。拥有不佳语言技能的少数族裔也被包括在脆弱的消费者群体中。

Smith & Cooper-Martin（1997）在前期的研究基础上提出谁是脆弱的消费者定义：因为限制能够最大化他们效用和福利的个体特征，在经济交易中或作为经济交易的结果，对于经济、身体或心理伤害更为敏感的那些人。

在脆弱性消费者界定及分类相关方面，早期的方法倾向于关注个体个人特征和特定群体消费者的情境，并且在美国、欧洲和澳大利亚相关文献中存在高度的一致性，它们均认为下列群体是脆弱的消费者：年老者、低收入者、无工作者、长期残疾者、低教育水平者、居住乡村者及少数族裔（Sourdin, Williams, Burstyn, Gill & Brennan, 2017）。

2.2 消费者脆弱性的状态论

基于成员身份将在特定人口类别中的个体界定为脆弱的消费者受到了一些研究者的尖锐批评。他们提出这并不确切，它暗示一些消费者总是脆弱的，只是因为他们具备特定群体成员身份的特征。他们提出相反的观点，认为消费者脆弱性是一种暂时的状态，而不是持久的个体特征。

Morgan, Schuler & Stoltman（1995）利用跨越一百多年的美国产品责任案例，提出了脆弱消费者的消费者—情境分类，包括四种消费者群体（身体敏感性、身体能力、心理能力和复杂性水平）和五种情境（物质环境、决策者、消费间隔、用途界定和暂时条件）。他们认为，单纯的特定类型消费者群体并不必然暗示消费者脆弱性，只有在特定的情境下，与特定的情境互动才可能导致脆弱性的形成。他们具体说明了五种情境分类。第一、物质环境：产品的存在和使用行为导致了产品相关的问题，特定类型的产品与其它产品相比更加危险，或者拥有更大的潜在性造成对所有消费者的伤害。第二、决策者：在特定情境下，消费者可能依赖外部相关方面做出产品选择。第三、消费间隔：涉及时机问题，包括购买间隔、多次接触效率、时间压力下购买和使用情境。第四、用途界定：关到对于消费者履行目前任务所需要的适合的信息沟通。第五、暂时情境：比如当消费者没有认识到有效期的重要性，或没有实体迹象表明产品可能变质。这个分类表明消费者脆弱性产生于个人状态、个体特征与消费者情境的互动，单纯的个体特征并不必然导致脆弱性（Morgan, Schuler & Stoltman, 1995）。

近年来，大多数研究者同意，尽管没有人选择被归类为脆弱的，所有的消费者可以期望在他们生命中的某一时刻他们是脆弱的。研究者区分了真实脆弱性和感知脆弱性（Hogg, Howells & Milman, 2007）。当消费者事实上经历并且只能通过倾听和观察消费者的体验来理解，真实的脆弱性发生了。当他人相信个体是脆弱的，但他或她可能同意或可能不同意，感知脆弱性发生了（Hogg, Howells & Milman, 2007）。
Baker, Gentry & Rittenburg (2005)提出了消费者驱动的消费者脆弱性模型。他们提出，消费者个人内部和外部因素都可能促成消费者脆弱性。导致脆弱性的内部因素可以进一步分为个体特征（如自我概念）和个人状态（如动机）。很多在消费者控制之外的外部因素可能影响消费者日常生活，它们包括污名化和压制、资源分配、实体要素、物流要素，以及其它环境条件比如经济的、社会的、政治的动荡或暴力。这些外部因素造成了不利于消费者交易关系中权力的失衡。

他们提出，消费者驱动的脆弱性界定核心是控制问题，更少的控制（对于市场互动、消费结果）与更高的脆弱性相关联。简言之，他们将脆弱性界定为一种无力的状态，产生于市场互动中的一个失衡，衍生于个人状态、个体特征和外部条件的互动（强调本源）。真正的脆弱性产生于个体状态、个体特征和外部条件的互动。在特定情境中，消费目标可能被阻碍，并且经历影响个人的和自我的知觉。消费情境中，当消费者不能够完成他的或她的目标，因为无能为力、失去控制等，消费者脆弱性可能会发生（Baker, Gentry & Rittenburg, 2005）。在这个定义中，虽然表明每一个人都有潜在脆弱性的可能，但脆弱性不是个体状态、个体特征或外部条件的自动副产品，它必须包括消费者无力实现市场目标的一个经历要素。

经历脆弱性的消费者不只是被动地、任由自然地接受负面现实。相反，他们使用各种各样的应对策略来处置他们的脆弱性，包括认知、情绪及行为应对策略。认知和情绪策略可能包括超脱、疏远、幻想及其它一般的努力以控制情绪。消费者也从事各种各样行为应对策略，比如控制潜在的有害行为，摆个人自我经历的提醒，寻求社会支持，或者甚至应用欺骗。然而当环境变得极其不利，消费者不能采取任何应对策略，他们则可能形成习得性无助（learned helplessness）。对于主张特质论（身份论）研究者所标记的脆弱性群体，他们断言，尽管某类人更可能经历脆弱性，那并不意味着那些类别中的人总是脆弱的，给予恰当的支持和市场系统，他们可以摆脱脆弱性（Pavia & Mason，2014）。

Shultz & Holbrook（2009）界定了与脆弱性关联的两个关键消费者特征：有用手段—目的关系的知识（类似于文化资本）和有用手段的获得（类似于经济资本）。首先，有用手段—目的关系的知识假定包括是否经历正式学校教育、自我教育或日常体验，特定的人拥有更高或更低的需要实现他们自己目标及完成被社会认可的那些目标的手段知识，并且他们拥有不同程度的执行这些方式需要的技术以实现对于自己或他人合意结果。第二，有用手段的获得表明这样的禀赋具有经济价值，人们控制特定产品的消费，或从事特定的消费经历，努力朝向实现某组个人目标从而创造自我导向的外在价值。运用这两个特征进行分类，可以形成表1的消费者脆弱性的分类（Shultz & Holbrook，2009）。

<table>
<thead>
<tr>
<th>有用手段—目的关系的知识</th>
<th>有用手段的获得</th>
</tr>
</thead>
<tbody>
<tr>
<td>无</td>
<td>无</td>
</tr>
<tr>
<td>双重脆弱</td>
<td>文化脆弱</td>
</tr>
</tbody>
</table>

表1 消费者脆弱性分类
如果消费者不知道什么是对他们有益的，并且不拥有获取它的资源，他们是双重脆弱的。如果消费者知道什么对他们是有益的，但是不拥有能力、技术、资金或需要拥有的其它资源，他们是经济脆弱的。如果消费者拥有大量的资源以获取他们的所需，但只是不知道什么是对他们有益的，他们是文化脆弱的。如果消费者知道实现有益结果的相关手段，并且拥有大量的资源，他们是非脆弱的。这四种类型的（非）脆弱性可以视为是情境的、条件的和/或暂时的，意味着任何一种类型的消费者可以在任何时候改变：由于资源的改变、能力的变换或任何其它可能影响个人有用的手段—结果关系知识和或有用手段获得的环境。疾病、死亡、经济的不幸、犯罪、风暴、洪水的受害者，或相反，财务的意外收入、工作晋升、股市中的获利、来自陌生人的帮助等等，这仅是一些可能发生的运气逆转的多种方式（Shultz & Holbrook，2009）。

强调基于状态的消费者脆弱性对于概念界定和实际应用方面都做出了重要贡献。这意味着不是将整个一类消费者归咎为脆弱的，而是把脆弱性表达为当消费者经历时候（Baker, Gentry & Rittenburg，2005）。

2.3 消费者脆弱性身份论与状态论的权衡


Mansfield & Pinto (2008) 从一个时间视角，提出了消费者脆弱性的连续统一体理论。在统一体两端，脆弱性或者是暂时的（情境性的），或者是永久的（持久的）的状况。情境地脆弱的消费者在有限时期内是脆弱的，当那个时期结束，他们则被认为在市场中是有能力的行为者。在频谱的另一端，是持久脆弱性或更永恒脆弱性的个体。

通过消费者脆弱性概念演化的文献回顾，可以明确地认识到，研究者更加认同消费者脆弱性是情境性的，是一种状态。同时，一些人口统计特征和心理统计特征因素可能会调节情境性消费者脆弱性，从这种意义上，可以认为一些消费者群体更可能经历脆弱性，因此，认为消费者脆弱性是一种状态的观点并不影响对于宏观政策制定者的指导意义。本文通过相关文献回顾将消费者脆弱性界定为：消费情境下，在营销与社会文化等因素的影响及消费者人口及心理统计特征的作用下，导致消费者失去自我控制，不能完成合意的消费者行为的结果。消费者脆弱性的可能后果是消费者不能实现效用最大化，从而造成身体、心理或经济方面的伤害，并且导致市场失灵。

2.4 消费者脆弱性与感知自我效能

对于践行人类能动性在自我过程中有复苏的兴趣。若干原因解释了为什么自我参考现象已经渗透到心理学的不同领域。自我影响环境的选择和构建，对于人类动机、情感和行为大部分环境作用的影响在很大程度上受到自我过程的中介。它们给予外部事件意义和效价，从而自我影响在因果过程核心方面作为一个重要的接近前提（Bandura A, 1993）。通过个人能动性机制，人们对于他们机能发挥作出了因果贡献。在能动力性机制中，没有什么比个人对于践行控制他们自己机能发挥水平和影响他们生活事件更为核心和普遍。效能信念影响人们如何感受、思考和激励他们自己和行为（Bandura A, 1994）。

Baker, Gentry, & Rittenburg (2005) 提出的消费者脆弱性概念强调消费者失去控制，从而导致一种无能为力、依赖于外部代理（如营销者）来创造市场公平的状态。消费者在受限的消费者情境下，不能按自身意愿进行自由选择，而经历失去控制、无能为力感受的状态。当消费者不能确定消费者后果时，也可能经历这种状态。

基于上述，可以合理地假定感知自我效能与消费者脆弱性水平负相关，并且自我效能可能是消费者脆弱性的一个决定变量。因此提出如下假设：

H1：在消费情境下，感知自我效能负向地影响消费者脆弱性。即：更高水平的感知自我效能导致更低水平的消费者脆弱性，否则反之。

3. 消费者脆弱性量表开发与验证过程

为了开发消费者脆弱性测量量表，我们以回顾相关文献开始，随后运用深度访谈方法来深入洞察消费者脆弱性，然后进行不断进行修订的量表开发过程。量表开发过程包括
两个定性数据收集、项目产生、专家评论、一个探索性研究及两个验证性研究。在接下来的部分，我们提供整个过程的细节及在开发过程每一阶段使用的标准。

3.1 消费者脆弱性维度的识别

尽管对于消费者脆弱性有数十年的研究，但是研究者、政策制定者等在不同的意义上使用它。因此，为开发消费者脆弱性量表，我们通过深度访谈方法来探索脆弱性的范围。接下来，进行两个定性研究（包括焦点群体和开放的定性调查）来开始这个过程，以理解消费者脆弱性产生，识别消费者脆弱性的维度。

3.1.1 研究 1：焦点群体

焦点群体的被试均为在校本科生，并且均自愿参加，共有 17 名学生。在向他们描述有关情境消费者脆弱性的含义以及脆弱性可能产生的情形后，11 名学生（6 名男性 5 名女性，平均年龄 21 岁）描述有过类似的消费者脆弱性经历，从而他们正式成为焦点群体成员。为保证焦点群体讨论的针对性，为焦点群体开发了结构化问题及讨论指导，按照预先确定的提问是线路进行讨论。焦点群体研究结束后，对于讨论的内容进行回顾，并且形成初步的消费者脆弱性维度及相关的主题。为了精炼初始的消费者脆弱性维度，进行了作为补充的开放定性调查。

3.1.2 研究 2：开放调查

在本研究中，开发出开放问题的问卷，然后利用可以接触到的朋友作为调查对象，然后利用他们推荐的方法来选择成年人被试进行调，回收 20 个完成的调查问卷。有 4 份被筛选掉，主要因为对于问题的理解偏差及回答问题过于简单。对余下的 16 份问卷进行分析，包括 7 名男性和 9 名女性，年龄中位数是 37 岁。根据对于回收的有效问卷进行评价的结果，并结合对于焦点群体讨论的解释，提炼并形成消费者脆弱性最初的 3 个维度，同时为每一个维度形成了试探性的概念界定。（表 1 提供了三个消费者脆弱性维度的名称和操作化界定）

<table>
<thead>
<tr>
<th>维度</th>
<th>定义</th>
</tr>
</thead>
<tbody>
<tr>
<td>情感</td>
<td>经历脆弱性的消费者的感受和情绪</td>
</tr>
<tr>
<td>意动</td>
<td>经历脆弱性的消费者采取具体行为或行动的倾向</td>
</tr>
<tr>
<td>认知</td>
<td>经历脆弱性的消费者对于经历的认识和知觉</td>
</tr>
</tbody>
</table>

3.2 初始项目生成和精减

3.2.1 项目生成

形成情境消费者脆弱性三个维度后，在另一名志愿研究者的协助下，进行生成这三个维度项目的调查。以学生和成年人为调查对象，通过向他们描述情境消费者脆弱性的含义，并且了解他们脆弱性的经历，由这些被调查者提供项目，共计收集 89 个项目。 这些项目分别用来测量情境消费者脆弱性的三个维度。
3.2.2 项目精简和专家评审

在收集并整理研究项目后，与有关学者进行讨论以精简消费者脆弱性的项目。剔除冗余项目后，选择具有良好表面效度的 36 个项目供相关领域专家评审。项目评审专家熟悉消费者行为相关文献，但是不知晓研究计划的具体问题。对于每一个项目，要求评审专家将项目匹配给最有代表性的维度。如果专家正确地将项目匹配到意欲的维度，那么项目被保留以供进一步检验。基于专家评审以及讨论，总共 25 个项目被保留。（详情见表 3）

表 3 最初的量表维度及测量项目

<table>
<thead>
<tr>
<th>情境消费者脆弱性维度</th>
<th>项目编号</th>
<th>项目内容</th>
</tr>
</thead>
<tbody>
<tr>
<td>情感维度</td>
<td>a1</td>
<td>对于决定购买 xx 产品，我处于一种无能为力的状态</td>
</tr>
<tr>
<td></td>
<td>a2</td>
<td>对于决定购买 xx 产品，我处于一种无助的状态</td>
</tr>
<tr>
<td></td>
<td>a3</td>
<td>对于决定购买 xx 产品，我处于一种失去控制的状态</td>
</tr>
<tr>
<td></td>
<td>a4</td>
<td>对于决定购买 xx 产品，我处于一种别无选择的状态</td>
</tr>
<tr>
<td></td>
<td>a5</td>
<td>对于决定购买 xx 产品，我感到自已失去控制能力</td>
</tr>
<tr>
<td></td>
<td>a6</td>
<td>对于决定购买 xx 产品，我感到无能为力</td>
</tr>
<tr>
<td></td>
<td>a7</td>
<td>对于决定购买 xx 产品，我感到无可奈何</td>
</tr>
<tr>
<td></td>
<td>a8</td>
<td>对于决定购买 xx 产品，我感到别无选择</td>
</tr>
<tr>
<td></td>
<td>a9</td>
<td>对于决定购买 xx 产品，我感到非常无助</td>
</tr>
<tr>
<td>意动维度</td>
<td>b1</td>
<td>对于决定购买 xx 产品，并不是出于我的自愿</td>
</tr>
<tr>
<td></td>
<td>b2</td>
<td>对于决定购买 xx 产品，并不是由于我的心甘情愿</td>
</tr>
<tr>
<td></td>
<td>b3</td>
<td>对于决定购买 xx 产品，违背了我的意愿</td>
</tr>
<tr>
<td></td>
<td>b4</td>
<td>对于决定购买 xx 产品，并不反映我真实的意愿</td>
</tr>
<tr>
<td></td>
<td>b5</td>
<td>对于决定购买 xx 产品，并不是我的本意</td>
</tr>
<tr>
<td></td>
<td>b6</td>
<td>对于决定购买 xx 产品，是我无耐的选择</td>
</tr>
<tr>
<td></td>
<td>b7</td>
<td>对于决定购买 xx 产品，是环境所迫</td>
</tr>
<tr>
<td></td>
<td>b8</td>
<td>对于决定购买 xx 产品，是迫不得已</td>
</tr>
<tr>
<td>认知维度</td>
<td>c1</td>
<td>对于决定购买 xx 产品，我认识到我处于一种困境</td>
</tr>
<tr>
<td></td>
<td>c2</td>
<td>对于决定购买 xx 产品，我认识到我的选择受到限制</td>
</tr>
<tr>
<td></td>
<td>c3</td>
<td>对于决定购买 xx 产品，我认识到我不能掌控环境</td>
</tr>
<tr>
<td></td>
<td>c4</td>
<td>对于决定购买 xx 产品，我认识到我别无选择</td>
</tr>
<tr>
<td></td>
<td>c5</td>
<td>对于决定购买 xx 产品，我认识到是我目前唯一的选择</td>
</tr>
<tr>
<td></td>
<td>c6</td>
<td>对于决定购买 xx 产品，我认识到我处于受限的境地</td>
</tr>
<tr>
<td></td>
<td>c7</td>
<td>对于决定购买 xx 产品，我认识到不是我理想的选择</td>
</tr>
<tr>
<td></td>
<td>c8</td>
<td>对于决定购买 xx 产品，我认识到是我无奈情况的选择</td>
</tr>
</tbody>
</table>

3.3 初步的量表评定

3.3.1 研究 3：初步验证
研究采用问卷调查方法，在一所大学的本科生中调查消费者脆弱性经历。问卷说明情境消费者脆弱性的含义，被试回忆有关经历，然后回答由三个维度的 25 个项目形成的问题，问题选项采用 Likert 七点量表形式。共计回收 211 份完整问卷，86 份因为数据质量被剔除。125 份有效样本中，其中男性 61，女性 64。（被试详细情况见表 4）

表4 Gender

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>125</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>61</td>
<td>48.8</td>
<td>48.8</td>
<td>100.0</td>
</tr>
<tr>
<td>Female</td>
<td>64</td>
<td>51.2</td>
<td>51.2</td>
<td>100.0</td>
</tr>
</tbody>
</table>

为进行初步探索性的研究，利用 SPSS 22 对收集到的数据进行因子分析。因子分析前，首先对数据进行 KMO 和 Bartlett 检验。KMO 和 Bartlett 检验结果表明（见表 5），KMO 值为 0.915，说明原始变量适合进行因子分析；Bartlett 球形检验近似卡方(Approx. Chi-Square) 值为 2534.467，显著水平 p=0.000，说明变量间存在较强的相关性，从而适合做因子分析。

表5 KMO and Bartlett's Test

<table>
<thead>
<tr>
<th>Kaiser-Meyer-Olkin Measure of Sampling Adequacy</th>
<th>.915</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bartlett's Test of Sphericity</td>
<td></td>
</tr>
<tr>
<td>Approx. Chi-Square</td>
<td>2534.467</td>
</tr>
<tr>
<td>df</td>
<td>300</td>
</tr>
<tr>
<td>Sig.</td>
<td>.000</td>
</tr>
</tbody>
</table>

因子分析的结果表明，项目 a1、a2、a3、a4、a5、a6、a7 与 a8 与第一个因子更相关，项目 b1、b2、b3、b4、b6、与 b8 与第二个因子更相关；项目 c5、c6、c7 与 c8 与第三个因子相关。这表明，消费者脆弱性三个维度的测量项目总体上具有内部一致性，并且多数项目分别聚合在这三个维度上。（详细情况见表 6、表 7 与表 8）

表6 Total Variance Explained

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigenvalues</th>
<th>Extraction Sums of Squared Loadings</th>
<th>Rotation Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% of Variance</td>
<td>Cumulative %</td>
<td>Total % of Variance</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>12.59 4</td>
<td>12.59 4</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>50.376</td>
<td>50.376</td>
</tr>
<tr>
<td>2</td>
<td>2.400</td>
<td>9.600</td>
<td>59.976</td>
</tr>
<tr>
<td>3</td>
<td>1.365</td>
<td>5.459</td>
<td>65.435</td>
</tr>
<tr>
<td>4</td>
<td>.988</td>
<td>3.951</td>
<td>69.386</td>
</tr>
<tr>
<td>5</td>
<td>.889</td>
<td>3.556</td>
<td>72.942</td>
</tr>
</tbody>
</table>
Extraction Method: Principal Component Analysis.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>a1</td>
<td>.824</td>
<td>.020</td>
<td>.171</td>
</tr>
<tr>
<td>a2</td>
<td>.798</td>
<td>.008</td>
<td>.159</td>
</tr>
<tr>
<td>a3</td>
<td>.610</td>
<td>.147</td>
<td>.247</td>
</tr>
<tr>
<td>a4</td>
<td>.766</td>
<td>.020</td>
<td>.353</td>
</tr>
<tr>
<td>a5</td>
<td>.832</td>
<td>.058</td>
<td>.268</td>
</tr>
<tr>
<td>a6</td>
<td>.806</td>
<td>-.092</td>
<td>.257</td>
</tr>
<tr>
<td>a7</td>
<td>.728</td>
<td>-.109</td>
<td>.370</td>
</tr>
<tr>
<td>a8</td>
<td>.673</td>
<td>-.199</td>
<td>.301</td>
</tr>
<tr>
<td>a9</td>
<td>.718</td>
<td>-.044</td>
<td>.255</td>
</tr>
<tr>
<td>b1</td>
<td>.753</td>
<td>.173</td>
<td>.399</td>
</tr>
<tr>
<td>b2</td>
<td>.809</td>
<td>.188</td>
<td>.283</td>
</tr>
<tr>
<td>b3</td>
<td>.766</td>
<td>.163</td>
<td>.399</td>
</tr>
<tr>
<td>b4</td>
<td>.804</td>
<td>.118</td>
<td>.382</td>
</tr>
<tr>
<td>b5</td>
<td>.814</td>
<td>.117</td>
<td>.129</td>
</tr>
<tr>
<td>b6</td>
<td>.775</td>
<td>.047</td>
<td>.191</td>
</tr>
</tbody>
</table>
Extraction Method: Principal Component Analysis.

a. 3 components extracted.

<table>
<thead>
<tr>
<th>Component</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>a1</td>
<td>.706</td>
<td>.442</td>
<td>.125</td>
</tr>
<tr>
<td>a2</td>
<td>.679</td>
<td>.439</td>
<td>.095</td>
</tr>
<tr>
<td>a3</td>
<td>.606</td>
<td>.282</td>
<td>.086</td>
</tr>
<tr>
<td>a4</td>
<td>.793</td>
<td>.277</td>
<td>.084</td>
</tr>
<tr>
<td>a5</td>
<td>.780</td>
<td>.371</td>
<td>.146</td>
</tr>
<tr>
<td>a6</td>
<td>.754</td>
<td>.353</td>
<td>.177</td>
</tr>
<tr>
<td>a7</td>
<td>.778</td>
<td>.218</td>
<td>.162</td>
</tr>
<tr>
<td>a8</td>
<td>.691</td>
<td>.207</td>
<td>.251</td>
</tr>
<tr>
<td>a9</td>
<td>.330</td>
<td>.678</td>
<td>.118</td>
</tr>
<tr>
<td>b1</td>
<td>.253</td>
<td>.832</td>
<td>.022</td>
</tr>
<tr>
<td>b2</td>
<td>.375</td>
<td>.793</td>
<td>.003</td>
</tr>
<tr>
<td>b3</td>
<td>.262</td>
<td>.839</td>
<td>.034</td>
</tr>
<tr>
<td>b4</td>
<td>.302</td>
<td>.842</td>
<td>.081</td>
</tr>
<tr>
<td>b5</td>
<td>.668</td>
<td>.496</td>
<td>.003</td>
</tr>
<tr>
<td>b6</td>
<td>.416</td>
<td>.674</td>
<td>.113</td>
</tr>
<tr>
<td>b7</td>
<td>.638</td>
<td>.528</td>
<td>.060</td>
</tr>
<tr>
<td>b8</td>
<td>.478</td>
<td>.642</td>
<td>.042</td>
</tr>
<tr>
<td>c1</td>
<td>.410</td>
<td>.525</td>
<td>.284</td>
</tr>
<tr>
<td>c2</td>
<td>.527</td>
<td>.560</td>
<td>.203</td>
</tr>
<tr>
<td>c3</td>
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<td>.147</td>
</tr>
<tr>
<td>c4</td>
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<td>.526</td>
<td>.000</td>
</tr>
<tr>
<td>c5</td>
<td>.084</td>
<td>.003</td>
<td>.567</td>
</tr>
<tr>
<td>c6</td>
<td>.045</td>
<td>.068</td>
<td>.856</td>
</tr>
<tr>
<td>c7</td>
<td>.153</td>
<td>.076</td>
<td>.767</td>
</tr>
</tbody>
</table>
### 3.3.2 研究 3：性别调节效应检验

为检验性别是否对消费者脆弱性产生调节效应，分别对男性与女性被试的数据分别进行因子分析。对男性被试数据进行因子分析的结果表明（详细情况见表 9 与表 10），项目 a1、a2、a3、a4、a5、a6、a7 与 a8 与第一个因子更相关，项目 b1、b2、b3、b4、b6、与 b8 与第二个因子更相关，项目 c5、c6、c7 与 c8 与第三个因子相关。这表明，男性被试消费者脆弱性三个维度的测量项目总体上具有内部一致性，并且多数项目分别聚合在这三个维度上。对于女性被试数据进行因子分析的结果表明（详细情况见表 11 与表 12），项目 a1、a2、a3、a4、a5、a6、a7 与 a8 与第一个因子更相关，项目 b1、b2、b3、b4、b6、与 b8 与第二个因子更相关，项目 c5、c6、c7 与 c8 与第三个因子相关。这表明，女性被试消费者脆弱性三个维度的测量项目总体上具有内部一致性，并且多数项目分别聚合在这三个维度上。上述结果表明，男性与女性被试在消费者脆弱性三个维度方面表现出一致性。

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigenvalues</th>
<th>Extraction Sums of Squared Loadings</th>
<th>Rotation Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% of Variance (%)</td>
<td>Cumulative %</td>
<td>Total % of Variance (%)</td>
</tr>
<tr>
<td>1</td>
<td>12.74</td>
<td>50.996</td>
<td>50.996</td>
</tr>
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<td>2</td>
<td>2.409</td>
<td>9.637</td>
<td>60.633</td>
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<td>3</td>
<td>1.375</td>
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<td>66.134</td>
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<td>.974</td>
<td>3.897</td>
<td>70.031</td>
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<tr>
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<td>79.129</td>
</tr>
<tr>
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</tr>
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<td>90.796</td>
</tr>
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</tr>
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<td>2</td>
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</tr>
<tr>
<td>---</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>a1</td>
<td>.717</td>
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</tr>
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<td>a2</td>
<td>.694</td>
<td>.427</td>
<td>.086</td>
</tr>
<tr>
<td>a3</td>
<td>.632</td>
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<td>.687</td>
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<td>.035</td>
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<td>.837</td>
<td>.046</td>
</tr>
<tr>
<td>b4</td>
<td>.306</td>
<td>.838</td>
<td>.088</td>
</tr>
<tr>
<td>b5</td>
<td>.673</td>
<td>.494</td>
<td>.006</td>
</tr>
<tr>
<td>b6</td>
<td>.407</td>
<td>.685</td>
<td>.132</td>
</tr>
<tr>
<td>b7</td>
<td>.620</td>
<td>.552</td>
<td>.028</td>
</tr>
<tr>
<td>b8</td>
<td>.463</td>
<td>.663</td>
<td>.014</td>
</tr>
<tr>
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<td>c3</td>
<td>.527</td>
<td>.590</td>
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<tr>
<td>c6</td>
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<td>.855</td>
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</tbody>
</table>

Extraction Method: Principal Component Analysis.
Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigenvalues</th>
<th>Extraction Sums of Squared Loadings</th>
<th>Rotation Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% of Variance</td>
<td>Cumulative %</td>
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<td>69.653</td>
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<td>.803</td>
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<td>.464</td>
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<td>99.681</td>
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<td>100.000</td>
</tr>
</tbody>
</table>
Extraction Method: Principal Component Analysis.

Rotated Component Matrix

<table>
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<tr>
<th></th>
<th>1</th>
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</tr>
</thead>
<tbody>
<tr>
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<td>.716</td>
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<td>.113</td>
</tr>
<tr>
<td>a2</td>
<td>.692</td>
<td>.425</td>
<td>.083</td>
</tr>
<tr>
<td>a3</td>
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</tr>
<tr>
<td>a5</td>
<td>.777</td>
<td>.373</td>
<td>.144</td>
</tr>
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<td>a6</td>
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<td>.351</td>
<td>.173</td>
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<td>a7</td>
<td>.749</td>
<td>.250</td>
<td>.197</td>
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<td>a8</td>
<td>.662</td>
<td>.239</td>
<td>.286</td>
</tr>
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<td>a9</td>
<td>.319</td>
<td>.686</td>
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</tr>
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<td>b1</td>
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<td>.032</td>
</tr>
<tr>
<td>b2</td>
<td>.366</td>
<td>.800</td>
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<td>.492</td>
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<td>.685</td>
<td>.129</td>
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<td>.550</td>
<td>.033</td>
</tr>
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<td>b8</td>
<td>.459</td>
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</tr>
<tr>
<td>c1</td>
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<td>.530</td>
<td>.293</td>
</tr>
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<td>c2</td>
<td>.509</td>
<td>.575</td>
<td>.225</td>
</tr>
<tr>
<td>c3</td>
<td>.525</td>
<td>.590</td>
<td>.169</td>
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<tr>
<td>c4</td>
<td>.535</td>
<td>.553</td>
<td>.029</td>
</tr>
<tr>
<td>c5</td>
<td>.094</td>
<td>.002</td>
<td>.574</td>
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<tr>
<td>c6</td>
<td>.045</td>
<td>.074</td>
<td>.855</td>
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<tr>
<td>c7</td>
<td>.140</td>
<td>.095</td>
<td>.775</td>
</tr>
<tr>
<td>c8</td>
<td>.011</td>
<td>.074</td>
<td>.804</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 5 iterations.

3.3.1 研究 3：简短形式量表的形成

本研究的目的是形成简短形式量表充分地测量所有维度，并且未来研究者和管理者可以在实践中使用。基于研究 3 的结果，对于量表的测量项目再次进行精简，保留变量载荷在 0.7 以上的项目。结果，情感维度保留 5 个项目 (a1, a4, a5, a6 与 a7)，意动维度保留 4 个项目 (b1, b2, b3 与 b4)，认知维度保留 3 个项目 (c6, c7 与 c8)。为使精简后
各个维度保留的项目数量相对均衡，特别保留了认知维度的 C5 项目。最后，重新对保留后的项目进行编码。情感维度 5 个项目编码为：A1、A2、A3、A4 与 A5；意动维度的 4 个项目编码为：B1、B2、B3 与 B4；认知维度 4 个项目编码为：C1、C2、C3 与 C4。（详细情况见表 13）

表13 简短版本量表的维度和测量项目

<table>
<thead>
<tr>
<th>情境消费者脆弱性维度</th>
<th>项目编号</th>
<th>项目内容</th>
</tr>
</thead>
<tbody>
<tr>
<td>情感维度</td>
<td>A1</td>
<td>对于决定购买 xx 产品，我处于一种无能为力的状态</td>
</tr>
<tr>
<td></td>
<td>A2</td>
<td>对于决定购买 xx 产品，我处于一种别无选择的状态</td>
</tr>
<tr>
<td></td>
<td>A3</td>
<td>对于决定购买 xx 产品，我感觉自已失去控制能力</td>
</tr>
<tr>
<td></td>
<td>A4</td>
<td>对于决定购买 xx 产品，我感到无能为力</td>
</tr>
<tr>
<td></td>
<td>A5</td>
<td>对于决定购买 xx 产品，我感到无可奈何</td>
</tr>
<tr>
<td>意动维度</td>
<td>B1</td>
<td>对于决定购买 xx 产品，并不是出于我的自愿</td>
</tr>
<tr>
<td></td>
<td>B2</td>
<td>对于决定购买 xx 产品，不是由于我的心甘情愿</td>
</tr>
<tr>
<td></td>
<td>B3</td>
<td>对于决定购买 xx 产品，违背了我的意愿</td>
</tr>
<tr>
<td></td>
<td>B4</td>
<td>对于决定购买 xx 产品，并不反映我真实的心愿</td>
</tr>
<tr>
<td>认知维度</td>
<td>C1</td>
<td>对于决定购买 xx 产品，我认识到是我目前唯一的选择</td>
</tr>
<tr>
<td></td>
<td>C2</td>
<td>对于决定购买 xx 产品，我认识到我处于受限的境地</td>
</tr>
<tr>
<td></td>
<td>C3</td>
<td>对于决定购买 xx 产品，我认识到不是我理想的选择</td>
</tr>
<tr>
<td></td>
<td>C4</td>
<td>对于决定购买 xx 产品，我认识到是我无奈情况的选择</td>
</tr>
</tbody>
</table>

3.4 研究 4：简短形式量表验证与确立

3.4.1 研究 4：初步验证

研究 4 的目的是收集数据来再次验证并确立简短形式的量表。研究 4 的研究方法同研究 3，以在校本科生为被试，共收集有效问卷 192 份。因为数据质量等问题，51 份问卷被剔除。共计 141 名被试提供的数据适合分析，只中男性被试 60 人，女性被试 81 人。（被试详细情况见表 14）

表14 Gender

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>%</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
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</thead>
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<tr>
<td>Valid Female</td>
<td>60</td>
<td>42.6</td>
<td>42.6</td>
<td>42.6</td>
</tr>
<tr>
<td>Male</td>
<td>81</td>
<td>57.4</td>
<td>57.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>141</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

利用 SPSS 22 进行数据分析。KMO 和 Bartlett 检验结果表明（见表 5），KMO 值为 0.858，说明原始变量适合进行因子分析；Bartlett 球形检验似卡方(Approx. Chi-Square)值为 995.197，显著水平 p＝0.000，表明变量间存在较强的相关性，从而适合做因子分析。
因子分析的结果（详细情况见表 16、表 17 与表 18）表明，项目 A1、A2、A3、A4 与 A5 第一个因子更相关，项目 B1、B2、B3 与 B4 与第二个因子更相关，项目 C1、C2、C3 与 C4 与第三个因子更相关。这表明，消费者脆弱性三个维度的测量项目具有内部一致性，并且分别聚合在这三个维度上。

### 表15 KMO and Bartlett's Test

| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | .858 |
| Bartlett's Test of Sphericity | Approx. Chi-Square |
| df | 995.197 |
| Sig. | .000 |

### 表16 Total Variance Explained

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigenvalues</th>
<th>Extraction Sums of Squared Loadings</th>
<th>Rotation Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% of Variance</td>
<td>Cumulative</td>
<td>%</td>
</tr>
<tr>
<td>1</td>
<td>5.62</td>
<td>43.255</td>
<td>43.255</td>
</tr>
<tr>
<td>2</td>
<td>1.88</td>
<td>14.483</td>
<td>57.738</td>
</tr>
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<td>3</td>
<td>1.08</td>
<td>8.342</td>
<td>66.080</td>
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<tr>
<td>4</td>
<td>.933</td>
<td>7.174</td>
<td>73.255</td>
</tr>
<tr>
<td>5</td>
<td>.734</td>
<td>5.643</td>
<td>78.898</td>
</tr>
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<td>.574</td>
<td>4.417</td>
<td>83.315</td>
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<td>4.115</td>
<td>87.430</td>
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<td>8</td>
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<td>3.642</td>
<td>91.072</td>
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<td>2.412</td>
<td>93.484</td>
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<td>10</td>
<td>.292</td>
<td>2.246</td>
<td>95.730</td>
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<td>.237</td>
<td>1.824</td>
<td>97.554</td>
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<td>1.322</td>
<td>98.876</td>
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Extraction Method: Principal Component Analysis.

### 表17 Component Matrix

<table>
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<tr>
<th>Component</th>
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</tr>
</thead>
<tbody>
<tr>
<td>a1</td>
<td>.787</td>
<td>.147</td>
<td>.337</td>
</tr>
<tr>
<td>a2</td>
<td>.784</td>
<td>.214</td>
<td>.311</td>
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</table>
Extraction Method: Principal Component Analysis.

a. 3 components extracted.

<table>
<thead>
<tr>
<th></th>
<th>Component 1</th>
<th>Component 2</th>
<th>Component 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>a1</td>
<td>.822</td>
<td>.282</td>
<td>.027</td>
</tr>
<tr>
<td>a2</td>
<td>.819</td>
<td>.292</td>
<td>.045</td>
</tr>
<tr>
<td>a3</td>
<td>.786</td>
<td>.258</td>
<td>.036</td>
</tr>
<tr>
<td>a4</td>
<td>.755</td>
<td>.223</td>
<td>.001</td>
</tr>
<tr>
<td>a5</td>
<td>.587</td>
<td>.371</td>
<td>.138</td>
</tr>
<tr>
<td>b1</td>
<td>.390</td>
<td>.807</td>
<td>.030</td>
</tr>
<tr>
<td>b2</td>
<td>.362</td>
<td>.839</td>
<td>.035</td>
</tr>
<tr>
<td>b3</td>
<td>.324</td>
<td>.809</td>
<td>.112</td>
</tr>
<tr>
<td>b4</td>
<td>.423</td>
<td>.795</td>
<td>.109</td>
</tr>
<tr>
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<td>.184</td>
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</tr>
<tr>
<td>c2</td>
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<td>.025</td>
<td>.777</td>
</tr>
<tr>
<td>c3</td>
<td>.151</td>
<td>.205</td>
<td>.651</td>
</tr>
<tr>
<td>c4</td>
<td>.012</td>
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<td>.574</td>
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</tbody>
</table>

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 6 iterations.

3.4.2 研究 4：信度与效度检验

利用 AMOS 22 进行验证性因子分析来测试消费者脆弱性三个维度的信度和效度，包括复合信度、聚合效度与区分效度。
信度利用复合信度值来检验，每个构念项目的数量及它们相应的 Cronbach’s alpha 在表 19 中提供。聚合效度（convergent validity）测量利用被 Fornell & Larcker (1981) 所建议的两个准则来验证：1) 所有指标载荷应该显著，并且超过 0.7；2) 由于每一个构念的测量误差，每一个构念的平均方差析取（AVE）应该超过 0.5。对于当前的测量模型，所有指标的载荷均在 0.7 临界值之上，AVE 均大于 0.5 (详情见表 19 与表 20)。因此，对于聚合效度的两个条件都符合。

表 19 构念保留项目、Cronbach’s alpha 及 AVE

<table>
<thead>
<tr>
<th>构念</th>
<th>保留项目</th>
<th>Cronbach’s alpha</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>情感维度</td>
<td>5</td>
<td>0.868</td>
<td>0.756</td>
</tr>
<tr>
<td>意动维度</td>
<td>4</td>
<td>0.897</td>
<td>0.798</td>
</tr>
<tr>
<td>认知维度</td>
<td>4</td>
<td>0.922</td>
<td>0.821</td>
</tr>
</tbody>
</table>

区分效度（discriminant validity）的度量利用 Fornell & Larcker (1981) 所提出的准则来评价：一个构念的 AVE 平方根应当高于该构念与模型中其它构念间相关系数。表 20 列出了构念间的相关系数平方，AVE 在对角线上。所有的对角线上的值超过构念间的相关系数平方，从而，区分效度的检验被接受。 (详细情况见表 20)

表 20 AVE 和构念间相关系数的平方

<table>
<thead>
<tr>
<th>构念</th>
<th>情感维度</th>
<th>意动维度</th>
<th>认知维度</th>
</tr>
</thead>
<tbody>
<tr>
<td>情感维度</td>
<td>0.756</td>
<td></td>
<td></td>
</tr>
<tr>
<td>意动维度</td>
<td>0.589</td>
<td>0.798</td>
<td></td>
</tr>
<tr>
<td>认知维度</td>
<td>0.279</td>
<td>0.436</td>
<td>0.821</td>
</tr>
</tbody>
</table>

3.4.3 研究 4：性别调节效应检验

为检验性别是否对消费者脆弱性产生调节效应，对男性与女性被试的数据分别进行因子分析。对男性被试数据进行因子分析的结果（见表 21 与表 22）表明，项目 A1、A2、A3、A4 与 A5 第一个因子更相关，项目 B1、B2、B3 与 B4 与第二个因子更相关，项目 C1、C2、C3 与 C4 与第三个因子更相关。这表明，消费者脆弱性三个维度的测量项目具有内部一致性，并且分别聚合在这三个维度上。对于女性数据因子分析的结果（见表 23 与表 24）表明，项目 A1、A2、A3、A4 与 A5 第一个因子更相关，项目 B1、B2、B3 与 B4 与第二个因子更相关，项目 C1、C2、C3 与 C4 与第三个因子更相关。这表明，消费者脆弱性三个维度的测量项目具有内部一致性，并且分别聚合在这三个维度上。上述分析结果表明，男性与女性被试的在消费者脆弱性三个维度方面表现出一致性。
### Table 22 Rotated Component Matrix

<table>
<thead>
<tr>
<th></th>
<th>Component 1</th>
<th>Component 2</th>
<th>Component 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>a1</td>
<td>.220</td>
<td>.787</td>
<td>.056</td>
</tr>
<tr>
<td>a2</td>
<td>.220</td>
<td>.806</td>
<td>.036</td>
</tr>
<tr>
<td>a3</td>
<td>.187</td>
<td>.763</td>
<td>.036</td>
</tr>
<tr>
<td>a4</td>
<td>.096</td>
<td>.706</td>
<td>.041</td>
</tr>
<tr>
<td>a5</td>
<td>.299</td>
<td>.437</td>
<td>.226</td>
</tr>
<tr>
<td>b1</td>
<td>.835</td>
<td>.244</td>
<td>.032</td>
</tr>
<tr>
<td>b2</td>
<td>.859</td>
<td>.215</td>
<td>.036</td>
</tr>
<tr>
<td>b3</td>
<td>.807</td>
<td>.168</td>
<td>.146</td>
</tr>
<tr>
<td>b4</td>
<td>.815</td>
<td>.296</td>
<td>.133</td>
</tr>
<tr>
<td>c1</td>
<td>.088</td>
<td>.056</td>
<td>.687</td>
</tr>
<tr>
<td>c2</td>
<td>.018</td>
<td>.079</td>
<td>.776</td>
</tr>
<tr>
<td>c3</td>
<td>.171</td>
<td>.094</td>
<td>.649</td>
</tr>
<tr>
<td>c4</td>
<td>.334</td>
<td>.080</td>
<td>.539</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 5 iterations.
<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigenvalues</th>
<th>Extraction Sums of Squared Loadings</th>
<th>Rotation Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total % of Variance</td>
<td>Cumulative %</td>
<td>Total % of Variance</td>
</tr>
<tr>
<td>1</td>
<td>5.97</td>
<td>45.973</td>
<td>5.97</td>
</tr>
<tr>
<td></td>
<td>45.973</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>1.84</td>
<td>14.192</td>
<td>1.84</td>
</tr>
<tr>
<td></td>
<td>60.165</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>1.00</td>
<td>7.737</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>67.902</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>.911</td>
<td>7.008</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>.697</td>
<td>5.361</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>.554</td>
<td>4.258</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>.504</td>
<td>3.877</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>.439</td>
<td>3.375</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>.287</td>
<td>2.211</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>.267</td>
<td>2.053</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>.219</td>
<td>1.683</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>.159</td>
<td>1.225</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>.136</td>
<td>1.047</td>
<td></td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.

<table>
<thead>
<tr>
<th>Component</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>a1</td>
<td>.834</td>
<td>.274</td>
<td>.038</td>
</tr>
<tr>
<td>a2</td>
<td>.820</td>
<td>.298</td>
<td>.030</td>
</tr>
<tr>
<td>a3</td>
<td>.794</td>
<td>.281</td>
<td>.012</td>
</tr>
<tr>
<td>a4</td>
<td>.764</td>
<td>.236</td>
<td>.012</td>
</tr>
<tr>
<td>a5</td>
<td>.643</td>
<td>.361</td>
<td>.151</td>
</tr>
<tr>
<td>b1</td>
<td>.447</td>
<td>.777</td>
<td>.046</td>
</tr>
<tr>
<td>b2</td>
<td>.416</td>
<td>.817</td>
<td>.051</td>
</tr>
<tr>
<td>b3</td>
<td>.400</td>
<td>.782</td>
<td>.128</td>
</tr>
<tr>
<td>b4</td>
<td>.473</td>
<td>.768</td>
<td>.120</td>
</tr>
<tr>
<td>c1</td>
<td>.112</td>
<td>.262</td>
<td>.691</td>
</tr>
<tr>
<td>c2</td>
<td>.098</td>
<td>.011</td>
<td>.773</td>
</tr>
<tr>
<td>c3</td>
<td>.192</td>
<td>.259</td>
<td>.645</td>
</tr>
<tr>
<td>c4</td>
<td>.041</td>
<td>.308</td>
<td>.576</td>
</tr>
</tbody>
</table>
Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 6 iterations.

3.5 研究 5：简短形式量表的构念效度检验

3.5.1 研究 5：数据收集及信度与效度检验

本研究的目的是收集数据以最终验证简短形式版本量表，并且评价简短形式量表的构念效度。研究 5 的研究方法同研究 3 与研究 4，以在校本科生为调查对象。感知自我效能采纳 Kim & Kim (2005)，结合本研究的实际情况进行相应改编，共有四个测量项目：我有信心我能买到我恰好想要买的产品（或服务）；我能够自己应对问题；我有信心我能够买到值得信赖的产品（或服务）；我有信心我能获得产品（或服务）的相关信息。共收集问卷 171 份，有效问题 129 份。其中，男性被试 61 人，女性被试 68 人。（被试详细情况见表 25）

表 25 Gender

<table>
<thead>
<tr>
<th></th>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>Female</td>
<td>68</td>
<td>52.7</td>
<td>52.7</td>
<td>52.7</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>61</td>
<td>47.3</td>
<td>47.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>129</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

利用 AMOS 22 进行验证性因子分析来测试消费者脆弱性三个维度的信度和效度，包括复合信度、聚合效度与区分效度。

信度利用复合信度值来检验，每个构念项目数量及它们相应的 Cronbach’s alpha 在表 26 中提供。聚合效度（convergent validity）测量利用被 Fornell & Larcker (1981) 所建议的两个准则来验证：1) 所有指标载荷应该显著，并且超过 0.7；2) 由于每一个构念的测量误差，每一个构念的平均方差析取（AVE）应该超过 0.50。对于当前的测量模型，所有指标的载荷均在 0.7 临界值之上，AVE 均大于 0.5。因此，对于聚合效度的两个条件都符合。（详情见表 26 与表 27）

表 26 构念保留项目、Cronbach’s alpha 及 AVE

<table>
<thead>
<tr>
<th>构念</th>
<th>保留项目</th>
<th>Cronbach’s alpha</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>情感维度</td>
<td>5</td>
<td>.929</td>
<td>.851</td>
</tr>
<tr>
<td>意动维度</td>
<td>4</td>
<td>.828</td>
<td>.759</td>
</tr>
<tr>
<td>认知维度</td>
<td>4</td>
<td>.887</td>
<td>.814</td>
</tr>
<tr>
<td>感知自我效能</td>
<td>4</td>
<td>.901</td>
<td>.825</td>
</tr>
</tbody>
</table>

区分效度（discriminant validity）的度量利用 Fornell & Larcker (1981) 所提出的准则来评价：一个构念的 AVE 平方根应当高于该构念与模型中其它构念间相关系数。表 11 列出了构念间的相关系数平方，AVE 在对角线上。所有的对角线上的值超过构念间的相关系
数平方，从而，区分效度的检验被接受。 (详细情况见表 27)

<table>
<thead>
<tr>
<th>表 27 AVE 和构念间相关系数的平方</th>
<th>情感维度</th>
<th>意动维度</th>
<th>认知维度</th>
<th>感知自我效能</th>
</tr>
</thead>
<tbody>
<tr>
<td>情感维度</td>
<td>0.851</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>意动维度</td>
<td>0.551</td>
<td>0.759</td>
<td></td>
<td></td>
</tr>
<tr>
<td>认知维度</td>
<td>0.378</td>
<td>0.266</td>
<td>0.814</td>
<td></td>
</tr>
<tr>
<td>感知自我效能</td>
<td>0.419</td>
<td>0.515</td>
<td>0.611</td>
<td>0.825</td>
</tr>
</tbody>
</table>

3.5.2 研究 5：构念效度评价

检验研究 5 数据的信度和效度后，我们评价情境消费者脆弱性量表的构念效度。根据前文的假设，感知自我效能可能负向地影响情境消费者脆弱性。我们的研究表明消费者脆弱性由三个维度构成，因此，可以合理地认为感知自我效能可能负向地影响情境消费者脆弱性的这三个维度。为了进行验证，我们对于消费者感知自我效能回归情境消费者脆弱性的三个维度。做因变量感知维度对感知自我效能的线性回归。结果表明，回归方程相关系数平方为 0.121，预测变量的估计标准误为 0.87450。ANOVA 表中，F = 17.430，p = 0.000，表明预测变量与因变量间有明显的线性关系。感知自我效能的未标准化回归系数为-0.467，表明当感知自我效能增加 1 单位时，消费者脆弱性减少 0.467 个单位。标准化的回归系数为 -0.347，表明当感知自我效能增加 1 个标准差时，消费者脆弱性减少 0.347 个标准差。感知自我效能的回归系数显著性检验结果为：p = 0.000，统计检验显著。（详细情况见表 28、表 29 与表 30）

<table>
<thead>
<tr>
<th>表 28 Model Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>a. Predictors: (Constant), SelfEfficacy</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>表 29 ANOVAa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>a. Dependent Variable: Emotion</td>
</tr>
<tr>
<td>b. Predictors: (Constant), SelfEfficacy</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>表 30 Coefficientsa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

1170
做因变量意动维度对感知自我效能的线性回归。结果表明，回归方程复相关系数平方为 0.525，预测变量的估计标准误为 0.40286。ANOVA 表中，F = 140.091，p = 0.000，表明预测变量与因变量间有明显的线性关系。感知自我效能的未标准化回归系数为 0.609，表明感知自我效能增加 1 单位时，消费者脆弱性意向度减少 0.609 个单位。标准化的回归系数为 0.724，表明当感知自我效能增加 1 个标准差时，消费者脆弱性意向度减少 0.724 个标准差。感知自我效能的回归系数显著性检验结果为： p = 0.000，统计检验显著。（详细情况见表 31、表 32 与表 33）

表 31 Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.724a</td>
<td>.525</td>
<td>.521</td>
<td>.40286</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), SelfEfficacy

表 32 ANOVAa

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>22.736</td>
<td>1</td>
<td>22.736</td>
<td>140.091</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>20.611</td>
<td>127</td>
<td>.162</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>43.347</td>
<td>128</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Intention
b. Predictors: (Constant), SelfEfficacy

c. 表 33 Coefficientsa

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>.712</td>
<td>.110</td>
<td>6.489</td>
</tr>
<tr>
<td></td>
<td>SelfEfficacy</td>
<td>-.609</td>
<td>.051</td>
<td>-11.836</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Intention
表34 Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.780&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.608</td>
<td>.605</td>
<td>.39075</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Self-Efficacy

表35 ANOVA<sup>a</sup>

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>30.061</td>
<td>1</td>
<td>30.061</td>
<td>196.886</td>
<td>.000&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Residual</td>
<td>19.391</td>
<td>127</td>
<td>.153</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>49.452</td>
<td>128</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Cognition
b. Predictors: (Constant), Self-Efficacy

表36 Coefficients<sup>a</sup>

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>.607</td>
<td>.106</td>
<td>.780</td>
<td>-5.707</td>
</tr>
<tr>
<td>SelfEfficacy</td>
<td>-.701</td>
<td>.050</td>
<td>-.780</td>
<td>-14.032</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Cognition

研究5的回归分析结果表，感知自我效能负向消费者脆弱性三个维度负相关，即更高水平的感知自我效能导致更低水平的消费者脆弱性，否则反之。从而假设H1得到支持，进而表明本研究开发的简短情境消费者脆弱性量表具有良好的概念效度（construct validity）。

4. 结论与含义

4.1 结论

本文较为系统地回顾国外英文学术期刊有关消费者脆弱性概念的演化与界定，在此基础上提出情境消费者脆弱性概念界定，并且进行量表开发与验证。本文采用多种研究方法，进行了包括焦点小组等研究方法的两个主要定性研究，及包括问卷调查等研究方法的三个主要定量研究。研究一与研究二为定性研究，目的是确定消费者脆弱性的范围及识别概念维度，并在此基础上生成情境消费者脆弱性的测量项目。两个定性研究表明，情境消费者脆弱性为一个三维度的概念，包括情感、意动与认知三个维度。经过专家评审后，共保留属于这三个维度的25个项目。研究三、研究四与研究五为定量的调查研究，目的是进行情境消费者脆弱性量表开发的探索、精简与验证。通过三个定量研究，最终生成了情境消费者脆弱性量表。情绪维度共有五个测量项目，意动和认知维度各有四个测量项目。定量研究的数据分析结果也表明，所开发的量表具有良好的信度与效度。
4.2 管理含义

营销者所开展的一些营销活动中，可能有意或无意导致消费者脆弱性的形成，使消费者不能实现效用最大化。社会文化因素也对消费者脆弱性产生影响，诸如家庭、社会阶层等的参考群体。但是对于什么是消费者脆弱性并不存在共识性的概念化，研究者、实业家及政策制定者在不同含义上使用这一词语，因此极大降低了其作为构念的实用性价值。本研究通过文献回顾，提出其概念化界定，并且进行量表开发。由于本量表的开发，政策制定者和营销者可以直接测量营销活动对消费者脆弱性的影响，进而可以对营销活动进行干预或调整。

4.3 理论含义

本研究的理论贡献是提出了情境消费者脆弱性概念化界定，并开发出情境消费者脆弱性量表。根据本研究，情境消费者脆弱性具有三个维度，即情感、认知和意动维度。本研究给出了这三个维度的操作化界定，并且开发出每一个维度的测量项目。消费者脆弱性量表的开发使得未来研究可以直接实证检验这一构念，确定这一构念的关键变量和结果变量，及中介变量和调节变量，从而可以揭示情境消费者脆弱性的形成机制。

5. 局限性与未来研究方向

本量表开发在研究设计、样本选择等方面仍然存在局限性或有待完善。本研究定量研究部分均以在校本科生为调查对象，他们并不能代表消费者总体，并且总体上他们也不是经济独立的消费者。另外，本研究定量研究部分主要采用调查（survey）研究方法，因此收集到的数据容易受到其它因素的影响。因此，未来研究者可以在研究设计、样本选择方面进行完善，进一步完善情境消费者脆弱性量表。最后，本研究从三个维度上操作化界定消费者脆弱性，未来研究也应该探索其它角度的构念测量。

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参考文献


Research on Driving Factors of Customer Royalty in Business Management Software Market

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Abstract

With the rapid development of information technology, business management software is bringing much more opportunity to China software & information industry. This paper adopts empirical study method, and puts forward influential factors toward customer royalty in business management software market. Meanwhile, it introduces customer trust and switching cost variables, and builds customer royalty driving model. Then by means of questionnaire and SPSS22.0 analysis, it comes to following results. The product attributes, personal services, relationship quality, innovation ability, and company reputation are the main five influencing factors toward customer royalty in business management market, which all have significant positive influences on customer trust and customer royalty. The customer trust plays partial mediating effect, and the switching cost plays regulating effect in the process of customer trust impacting upon customer royalty. In the end, we can find that the product attributes and company reputation have been highly recognized, but the personal services, relationship quality and innovation ability are in urgent need of upgrade.

Keywords: Customer Royalty; Customer Trust; Business Management Software
企业管理软件市场顾客忠诚驱动因素研究

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摘要

随着信息技术快速发 展，企业管理软件正在给中国软件和信息技术服务业带来新的机遇。本文采用实证分析法，在组织市场顾客忠诚的研究基础上，提出企业管理软件市场顾客忠诚的影响因素，引入顾客信任与转换成本变量，构建企业管理软件市场顾客忠诚驱动模型。通过问卷调研、运用 spss22.0 进行数据分析，得出结论：产品属性、人员服务、关系质量、创新能力与企业声誉是企业管理软件市场顾客忠诚的五个主要影响因素，对顾客信任、顾客忠诚都有正向显著影响；顾客信任起到了部分中介作用；转换成本作为顾客信任影响顾客忠诚的调节变量，起着防止顾客产生不忠诚行为的控制作用。最后，通过用户评价分析得知在现阶段企业管理软件市场中，产品属性与企业声誉已经得到顾客的高度认可，而在人员服务、关系质量与创新能力三个维度上亟待管理软件企业进行改善。

关键词：顾客忠诚；顾客信任；企业管理软件

1. 研究背景

进入 21 世纪，信息技术已然成为了当下对社会和经济有着深远影响的技术。据 Gartner 的最新预测，2015 年全球企业管理软件市场规模，达 3100 亿美元。到 2016 年，企业管理软件市场已增长至 3260 亿美元，同比增长 5.3%。而企业管理软件也在中国的软件市场占据一定的份额，企业管理的系统化越来越得到各行业的广泛认可。据最新行业利润数据显示，2016 年全年，我国软件与技术服务业务已实现业务收入 4.5 万亿元，全行业实现利润总额 5000 亿元，整体利润率高达 12.2%，整体保持平稳增长，如图 1 所示。

图 1. 2016 年软件业利润走势

我国本土的企业管理软件市场总体保持上升趋势。据行业统计数据显示，
2013 年企业管理软件行业增速回升，市场规模达到 232 亿元。2014 年国内管理软件市场规模整体规模（含服务，仅限大陆地区）已达 582.5 亿元人民币。然而与全球市场份额相比，国内企业管理软件市场只占到全球市场份额的 3%，在企业管理软件市场下对顾客忠诚度的关注，是值得我们去深入探讨的一个研究课题。

我们发现关于顾客忠诚的研究已经取得部分成果，但是针对正在兴起的企业管理软件市场仍缺少相关研究。本文以企业管理软件市场为背景，以服务营销管理为理论视角，通过问卷调研、定量分析作为研究方法，尝试探讨企业管理软件市场顾客忠诚的驱动模型。试图回答以下问题：企业管理软件市场影响顾客忠诚的驱动因素有哪些、顾客信任可否作为对顾客忠诚产生影响的中介变量，转换成本是否在顾客信任影响顾客忠诚中起到调节作用。通过以上研究期望能对我国管理软件企业在全球市场竞争中取得优势提供理论参考。

2. 国内外文献综述

2.1 关于企业管理软件起源和发展的相关文献

企业管理软件发源于 20 世纪 50 年代的欧美国家，为了能够整体降低产品的成本，加快产品的流转，企业管理软件的概念首次被提出。到了 70 年代，企业的关注点发生转变，开始关注生产效率，在上一代企业管理软件的基础上加入了计划与反馈信息的功能，从而形成了新一代封闭式企业管理系统。到了 80 年代，为了追求产品品质、提高管理绩效，人们在系统中去掉了不必要的工作，第二代企业管理软件面世。随着市场环境的变化，企业越来越重视个性化需求，以此基础上提出了企业管理软件需要提高环境变应变能力，第一代 ERP 系统随之问世。ERP（企业资源计划）是 90 年代提出的一种基于“供应链管理”的企业管理理念[1]。

经过 40 多年的发展，企业管理软件已成为集高端信息技术、先进管理理念与一身的高新技术产业。与日常软件相比，企业管理软件不仅对于信息技术有着较高的要求，同时在系统设计过程中包含先进的管理理念，体现着计划、组织、指挥、控制、协调及控制等职能。因此，企业管理软件即包括为某一业务部门设计的专业系统，也包括跨多业务部门的合作管理系统。目前，企业应用最多的管理软件系统包括：办公自动化系统（OA）、人力资源系统（HR）、财务管理软件系统、客户关系管理系统（CRM）、企业资源计划系统（ERP）等[2]。

2.2 关于顾客忠诚理论的相关文献

（1）顾客忠诚的概念


一些学者的研究后，总结出顾客忠诚应被认为是一种行为和态度上的综合结果，忠诚不仅表现在行为上的忠诚，还包含对某产品或服务态度上的忠诚。

（2）顾客信任与顾客忠诚的关系

Singh 等学者首次提出了基于过程观点的顾客信任，将信任分事先信任（Pre-Trust）和事后信任（Post-Trust）。事先信任是顾客在进行消费活动前，通过其他各方面信息共同作用，产生的体验感。而事后信任是在购买产品或服务后[7]，产品或服务提供商通过传递给顾客满意感而对其产生信任感。

Schurr 和 Ozanne（1985）提出：高度的信任与低度信任相比更可以带来积极的效果。Robinson 和 Mattila 提出，对于公司而言，如果想要获得顾客忠诚，客户的信任是极为重要的一个方面，如果缺少顾客的信任顾客就很难对公司及其产品和服务保持忠诚[8][9]。学者易牧农（2011）认为事先信任影响后续信任及顾客满意，而后续信任又会影响顾客承诺和顾客忠诚。

（3）转换成本与顾客忠诚的关系


学者白长虹、刘炽提出[12]，除了具有不确定的顾客感知和市场结构外，竞争的强度忠诚计划也加入了感知的和实际的转换成本，认为在服务行业中，转换成本与顾客忠诚的关系是高度正相关的。本研究对于转换成本定义为，顾客从一个产品或服务提供商转向另一个提供商时，由于多种有形或无形因素需要付出金钱、物质和关系中断等损失。

2.3 文献综述总结

学者们对于顾客忠诚包含态度忠诚和行为忠诚两个方面上已形成高度统一。学术界关于“顾客满意”和“顾客忠诚”的研究较多。随着研究的深入，学者开始对其中可能存在的中介变量，如顾客信任开始进行深入研究。大量文献中发现，对于转换成本和顾客忠诚、顾客信任和顾客忠诚的研究较多，对于三个变量同时进行的研究较少。

学者们对于组织市场顾客忠诚的驱动因素都有各自的研究结论，且在企业管理软件市场和组织市场的研究相对较少。在研究过程中还发现，现有具体文献针对该市场提出驱动因素模型，是否可以直接借鉴传统组织市场的驱动模型也有待进一步研究。而单一的满意或信任驱动忠诚的研究在目前看来并不权威，是否有其他的影响因素仍缺乏理论研究。

3. 研究假设与模型构建

3.1 研究假设的提出

（1）企业声誉是形成顾客忠诚的前提因素

组织购买中心的研究显示，组织在进行首次购买时，购买决策更多是受到外
界信息的影响而做出的，而企业声誉正是决策者在信息收集时关注的因素之一。众多学者对于企业声誉对顾客忠诚的影响做了许多研究，如 Michael (2001) 认为，企业声誉直接作用于顾客忠诚，良好的企业声誉帮助企业简化购买决策，降低决策成本，提高顾客重复购买的几率。总的来说，企业声誉有助于顾客在进行购买行为时，降低购买成本与购买风险，激励顾客重复购买意愿，从而影响顾客忠诚。本文提出以下假设：

H1：企业声誉对顾客信任有正向显著影响；
H2：企业声誉对顾客忠诚有正向显著影响；

（2）易用性、安全性等产品属性是影响顾客忠诚的基础因素

与传统产品相比，企业管理软件在产品属性上有着较大的差别。对于规模较大的企业而言，企业内部运作的管理软件价格动辄千万甚至上亿，因此软件产品的质量属性，软件的安全性、易用性和稳定性是企业管理软件市场上更多强调的，能够保障数据安全且用户使用体验感较好的管理软件企业会更加受到市场的青睐。本文提出以下假设：

H3：产品属性对顾客信任有正向显著影响；
H4：产品属性对顾客忠诚有正向显著影响；

（3）人员服务是影响顾客忠诚的关键因素

与传统依托产品的服务（products supported by services）或纯服务（pure services）不同，在企业管理软件市场上，更多存在的是由服务依托的软件产品（services supported by products）。所有的管理软件企业都有一套标准化的产品，随着企业对于更加切合自身业务发展的管理软件的需求不断提升，定制化产品更加受到企业青睐。无论是在实施前的用户需求调研、业务解决方案汇报，实施中的人员培训、操作指引制作，实施后的日常问题处理都需要由软件实施人员来执行，因此，管理软件企业对于服务实施人员的素质要求不断提升。在众多文献中，也都将人员服务作为影响顾客忠诚的关键因素之一。本文提出以下假设：

H5：人员服务对顾客信任有正向显著影响；
H6：人员服务对顾客忠诚有正向显著影响；

（4）关系质量是维持顾客忠诚的必要因素

在管理软件市场顾客关系更为复杂，包括购买组织和购买决策者，供应组织和销售人员，关系结构可以描述为人与人、人与组织和组织与组织之间的关系。大多数情况下。企业管理软件涉及到的资金较为庞大，真正的购买决策者实则都企业管理高层。所以与最终决策者建立良好的关系质量，及时获取竞争情报和顾客信息，针对性的提供服务，帮助企业解决日常管理中出现的问题与痛点，保持良好的关系质量对于维持顾客忠诚起着越来越重要的作用。本文提出以下假设：

H7：关系质量对顾客信任有正向显著影响；
H8：关系质量对顾客忠诚有正向显著影响；
（5）创新能力是保持顾客忠诚的核心因素

对于购买组织而言，供应商的创新能力也决定着自身能够享受到长远的升级服务。与技术上的创新相比，企业管理者在现阶段更加重视管理理念的突破。因此对于管理软件企业而言，创新能力是保持顾客忠诚的核心因素。本文提出以下假设：

H9：创新能力对顾客信任有正向显著影响；
H10：创新能力对顾客忠诚有正向显著影响；

（6）顾客信任是顾客忠诚的驱动因素

美国学者 Singh 等人，通过随机抽样法，研究顾客信任与顾客忠诚之间的关系，利用回归分析发现，后续信任是顾客忠诚的直接驱动因素，而事先信任则通过后续信任影响顾客忠诚。本文提出以下假设：

H11：顾客信任对顾客忠诚有正向显著影响；
H12：顾客信任是产品属性、人员服务、关系质量、创新能力、企业声誉对于顾客忠诚的中介变量。

（7）转换成本是顾客忠诚的控制因素

正如在前文文献综述中所阐述的，转换成本不仅包括金钱上的损失，还包括物质和关系中断等造成的损失。与顾客信任相比，转换成本更多是防止顾客产生不忠诚行为的一个控制因素。本文提出以下假设：

H13：转换成本对顾客忠诚有正向显著影响；
H14：转换成本在顾客信任对顾客忠诚中起调节作用。

图 2. 本研究模型
3.2 模型构建

笔者认为，企业管理软件市场上的顾客忠诚主要由顾客信任与转换成本两个直接驱动因素影响，同时提出了产品属性、人员服务、关系质量、创新能力及企业声誉五个间接影响因素。根据学者廖公仆的“顾客价值-顾客满意-企业形象”模型中反映的顾客忠诚与九个影响因素的关系，按照该模型的构建逻辑，结合企业管理软件市场发展现状和市场特点，构建企业管理市场的顾客忠诚模型，如图2所示。

4. 问卷调查与数据分析

4.1 量表预测试

量表设计好后，为了验证 Likert 7 级量表的适用性，在深圳明源软件有限公司邀请了40多名同事通过问卷调查方式进行预测试，共回收有效问卷40份。在预测试中，对回收问卷数据进行三种方法的处理：第一，信度检验，检测量表是否具有可靠性。第二，KMO 样本测度和 Bartlett 球体检验来检测结构效度。第三，利用成分矩阵，检测每一个维度上各个题项的因子荷重，确定是否需要更改题项。结果如表1所示。

<table>
<thead>
<tr>
<th>Kaiser-Meyer-Olkin样本测度</th>
<th>0.920</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bartlett's 球体检验</td>
<td>Approx. Chi-Square</td>
</tr>
<tr>
<td>自由度df</td>
<td>36</td>
</tr>
<tr>
<td>显著性Sig.</td>
<td>0.000</td>
</tr>
</tbody>
</table>

从上表数据中，KMO 值为0.92远大于标准0.7，这说明该量表适合进行因子分析。同时在 Bartlett 球体检验结果中，显著性 sig 值为0.000小于0.01，符合因子分析标准。同时对每一维度中各个题项进行因子荷重的测试发现，所有因子的荷重都大于 0.7，说明各个题项都具有较好的表现性。根据预测试人员的反馈以及数据处理结果，我们对量表进行了二次修改，使问卷更具可靠性。通过预测试最终形成的问卷，除前三部分个人基本资料与公司资料外，共有35个题项。

4.2 正式调研的样本特征

从企业管理软件的适用性来看，与大公司相比，中小型企业大多处于初次使用企业管理软件阶段。为了使问卷的样本更具有参考性，本次调研选择的对象为我国中大型企业。填写问卷的对象特征为在日常办公活动中频繁使用公司管理软件的成员。本次问卷发放主要通过电子邮件、微信、实地发放等途径和方式，向长三角地区、珠三角地区以及内地部分区域的企业发放问卷。其中长三角，珠三角以及京津冀属于高新技术产业密集地区，符合调研对象群体较多。为了使问卷的可靠性有所保障，问卷填写过程中严禁同 IP 地址多次提交问卷，同时在最后提交后设置抽奖环节。本次问卷发放日期为2018年5月10日至5月20日，被调查人员要求是在日常工作中频繁使用企业管理软件的成员。本次共回收问卷180份，有效问卷150份。样本总体情况如下表2。
通过数据统计发现，此次取样具有较好的达标性，由以下几个方面反映。第一，行业应用结构分布均匀，取样公司大致涵盖常见行业。第二，样本人员职务合理，一半以上的取样对象为基层管理者与中层管理者，属于在日常工作中对于管理软件使用最为频繁的职务。

4.2 数据分析

本研究通过使用 SPSS22.0 对问卷的统计结果进行分析，主要有信度分析、效度分析、因子分析和回归分析。由分析结果检验量表的各个问项是否能较好的描述其对应变量，再进一步验证模型中各变量与顾客忠诚的关系，并检验假设是否成立。

4.2.1 信度与效度分析

本次取样共 150 份问卷，基本满足 Nunnally(1994) 所提出的，有效样本数量至少是量表题项的五倍要求（问卷题项共 35 个）。此节中我们采用与预测试相同的方法利用 Cronbach α 系数来检验量表信度和使用因子分析来检验量表效度，检验结果如下表 3:

表格3. KMO样本检测和Bartlett's测试

<table>
<thead>
<tr>
<th>Kaiser-Meyer-Olkin样本测度</th>
<th>0.877</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bartlett's 球体检验</td>
<td>1061.374</td>
</tr>
<tr>
<td>自由度df</td>
<td>21</td>
</tr>
<tr>
<td>显著性Sig.</td>
<td>.000</td>
</tr>
</tbody>
</table>
KMO 值较预测试相比由于样本数量扩大而有所下降，但结果 0.877 仍大于标准 0.7。Bartlett 球体检验结果中，显著性 sig 值为 0.000 小于 0.01，符合因子分析标准，此次收集数据适合进行因子分析。

4.2.2 因子分析

本文采用测量题项的因子负荷是否显著来检验收敛效度。从下表 4 的数据可以看出，各因子的 α 值都大于 0.7 且数值相对都较大，这说明修改后量表具有可靠性。经过信度与效度检验，最终得到了包含五个维度 35 个题项的量表，与查阅的文献保持一致。

<table>
<thead>
<tr>
<th>因子命名</th>
<th>编号</th>
<th>因子荷重</th>
<th>解释变差</th>
</tr>
</thead>
<tbody>
<tr>
<td>产品属性</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A1 该软件供应商提供的软件的各项功能操作简单，有系统操作指引。</td>
<td>0.840</td>
<td>0.923</td>
<td></td>
</tr>
<tr>
<td>A2 该软件功能布局人性化，内容清晰，导航简易，便于使用。</td>
<td>0.803</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A3 学习使用该软件不需要耗费大量时间，简单易学。</td>
<td>0.719</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A4 该软件登录浏览顺畅，访问速度快。</td>
<td>0.715</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A5 该软件供应商未曾泄露或非法使用我的个人信息，能够保证信息安全隐私安全。</td>
<td>0.851</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A6 该软件供应商未曾泄露或非法使用我公司信息资料，能够保证我公司信息隐私安全。</td>
<td>0.851</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A7 该软件供应商未曾泄露或非法使用我公司存储的数据，能够保证我公司信息隐私安全。</td>
<td>0.880</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A8 该软件供应商提供安全保障设施，保证数据传输过程安全，防止黑客攻击。</td>
<td>0.811</td>
<td></td>
<td></td>
</tr>
<tr>
<td>人员服务</td>
<td></td>
<td></td>
<td>0.860</td>
</tr>
<tr>
<td>B1 工作人员能够迅速提供我公司需要的软件服务。</td>
<td>0.833</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B2 工作人员能够提供相关系统操作培训服务。</td>
<td>0.829</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B3 工作人员会关注用户的抱怨，对用户提出的合理要求实现满足。</td>
<td>0.879</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B4 在使用过程中遇到问题，能够及时、准确的得到工作人员的帮助。</td>
<td>0.820</td>
<td></td>
<td></td>
</tr>
<tr>
<td>关系质量</td>
<td></td>
<td>0.767</td>
<td>0.716</td>
</tr>
<tr>
<td>C1 该公司代表者经常对本公司进行销售访问。</td>
<td>0.767</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C2 您的公司与该公司代表者之间的关系是融洽的</td>
<td>0.776</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C3 您所在的公司与该公司建立了比较密切的合作关系。</td>
<td>0.867</td>
<td></td>
<td></td>
</tr>
<tr>
<td>创新能力</td>
<td></td>
<td>0.795</td>
<td>0.807</td>
</tr>
<tr>
<td>D1 该软件供应商能够给予我公司个性化需求关注。</td>
<td>0.795</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D2 该软件供应商提供的软件会定期更新新的内容。</td>
<td>0.713</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D3 该软件供应商能够提供为我公司量身定制的软件产品。</td>
<td>0.828</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D4 该软件供应商能够根据我公司业务发展提供适合的产品和服务。</td>
<td>0.859</td>
<td></td>
<td></td>
</tr>
<tr>
<td>企业声誉</td>
<td></td>
<td>0.899</td>
<td>0.889</td>
</tr>
<tr>
<td>E1 该软件供应商在行业内有较高知名度。</td>
<td>0.899</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E2 该软件供应商在行业内有评价较高。</td>
<td>0.898</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4.2.3 中介效应和调节效应检验

中介效应是研究变量间的影响关系，是通过其他一个或一个以上的变量间接影响产生的，此时我们将称之为中介变量。本次研究中，通过将变量进行处理后进行中介效应的检验。首先对产品属性、人员服务、关系质量、创新能力、企业声誉、顾客信任对顾客忠诚的影响是否显著进行回归分析，其次对顾客信任是否具有中介效应进行检验，利用 SPSS22.0 进行数据分析后得出下表 5、6。

表格5. 回归系数表(1)

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>1.698E-16</td>
<td>.057</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>C 安全</td>
<td>.797</td>
<td>.058</td>
<td>3.748</td>
</tr>
<tr>
<td>2</td>
<td>(Constant)</td>
<td>3.380E-16</td>
<td>.054</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>C 易用</td>
<td>.793</td>
<td>.052</td>
<td>7.80</td>
</tr>
<tr>
<td>3</td>
<td>(Constant)</td>
<td>1.439E-16</td>
<td>.059</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>C 人员</td>
<td>.675</td>
<td>.052</td>
<td>7.31</td>
</tr>
<tr>
<td>4</td>
<td>(Constant)</td>
<td>7.906E-17</td>
<td>.060</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>C 关系</td>
<td>.763</td>
<td>.061</td>
<td>7.16</td>
</tr>
<tr>
<td>5</td>
<td>(Constant)</td>
<td>3.277E-16</td>
<td>.064</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>C 创新</td>
<td>.769</td>
<td>.070</td>
<td>.669</td>
</tr>
<tr>
<td>6</td>
<td>(Constant)</td>
<td>-3.554E-16</td>
<td>.052</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>C 声誉</td>
<td>.909</td>
<td>.057</td>
<td>.794</td>
</tr>
<tr>
<td>7</td>
<td>(Constant)</td>
<td>-3.552E-17</td>
<td>.044</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>C 信任</td>
<td>1.00</td>
<td>.048</td>
<td>.862</td>
</tr>
</tbody>
</table>

a. 因变量: C 顾客忠诚

表格6. 回归系数表(2)

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>1.961E-16</td>
<td>.043</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>C 安全</td>
<td>.753</td>
<td>.043</td>
<td>.820</td>
</tr>
<tr>
<td>2</td>
<td>(Constant)</td>
<td>3.143E-16</td>
<td>.049</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>C 易用</td>
<td>.654</td>
<td>.048</td>
<td>.746</td>
</tr>
<tr>
<td>3</td>
<td>(Constant)</td>
<td>1.705E-16</td>
<td>.045</td>
<td>.000</td>
</tr>
</tbody>
</table>
从以上两表可发现，产品属性（易用性，安全性）、人员服务、关系质量、创新能力和企业声誉对顾客信任或顾客忠诚的影响都是显著为正的，假设 H1~H11 和 H13 成立。接下来对假设 H14 顾客信任的中介作用进行检测，得出下表 7。

表格7. 回归系数表(3)

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>8.229E-17</td>
<td>.041</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>C信任</td>
<td>.707</td>
<td>.081</td>
<td>.610</td>
</tr>
<tr>
<td></td>
<td>C产品属性</td>
<td>.336</td>
<td>.077</td>
<td>.305</td>
</tr>
<tr>
<td>2</td>
<td>(Constant)</td>
<td>-2.749E-16</td>
<td>.081</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>C信任</td>
<td>.885</td>
<td>.148</td>
<td>.760</td>
</tr>
<tr>
<td></td>
<td>C人员</td>
<td>.121</td>
<td>.114</td>
<td>.134</td>
</tr>
<tr>
<td>3</td>
<td>(Constant)</td>
<td>-2.631E-19</td>
<td>.041</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>C信任</td>
<td>.803</td>
<td>.060</td>
<td>.692</td>
</tr>
<tr>
<td></td>
<td>C关系</td>
<td>.273</td>
<td>.055</td>
<td>.256</td>
</tr>
<tr>
<td>4</td>
<td>(Constant)</td>
<td>5.334E-17</td>
<td>.042</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>C信任</td>
<td>.867</td>
<td>.063</td>
<td>.748</td>
</tr>
<tr>
<td></td>
<td>C创新</td>
<td>.197</td>
<td>.062</td>
<td>.172</td>
</tr>
<tr>
<td>5</td>
<td>(Constant)</td>
<td>-3.580E-16</td>
<td>.081</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>C信任</td>
<td>.859</td>
<td>.184</td>
<td>.738</td>
</tr>
<tr>
<td></td>
<td>C声誉</td>
<td>.170</td>
<td>.181</td>
<td>.148</td>
</tr>
</tbody>
</table>

a.因变量: C 顾客信任

根据上述检验结果发现，在产品属性、关系质量和创新能力三个维度上，顾客信任起到部分中介作用，根据系数可得到标准回归方程:

顾客忠诚 = 0.707*顾客信任 + 0.336*产品属性
顾客忠诚 = 0.803*顾客信任 + 0.273*关系质量
顾客忠诚 = 0.867*顾客信任 + 0.197*创新能力
而在人员服务、企业声誉两个维度上，显著性 Sig 明显提高，说明在这两个维度上，顾客信任到了完全中介的作用。

验证假设 H14，继续通过回归分析检验转换成本、顾客信任与顾客忠诚的关系。检验结果发现，当我们在方程中引入转换成本和顾客信任的交互项后，△R²=0.012，F=10.363（P=0.002<0.05），这表明转换成本与顾客信任的交互项对方程的解释力是显著的，说明转换成本对于顾客信任的调节作用非常显著。假设 H14 成立。

5 研究结论与启示

5.1 检验结果

本文研究模型的检验结果如下表 8 所示：

<table>
<thead>
<tr>
<th>假设</th>
<th>结果</th>
<th>结论</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1, H2</td>
<td>成立</td>
<td>企业声誉对于顾客信任与顾客忠诚都有正向显著影响</td>
</tr>
<tr>
<td>H3, H4</td>
<td>成立</td>
<td>产品属性对于顾客信任与顾客忠诚都有正向显著影响</td>
</tr>
<tr>
<td>H5, H6</td>
<td>成立</td>
<td>人员服务对于顾客信任与顾客忠诚都有正向显著影响</td>
</tr>
<tr>
<td>H7, H8</td>
<td>成立</td>
<td>关系质量对于顾客信任与顾客忠诚都有正向显著影响</td>
</tr>
<tr>
<td>H9, H10</td>
<td>成立</td>
<td>创新能力对于顾客信任与顾客忠诚都有正向显著影响</td>
</tr>
<tr>
<td>H11, H13</td>
<td>成立</td>
<td>顾客信任与转换成本对于顾客忠诚有正向显著影响</td>
</tr>
<tr>
<td>H12</td>
<td>成立</td>
<td>顾客信任对于产品属性、关系质量、创新能力三个维度起部分中介作用；对于人员服务和企业声誉维度上起完全中介作用</td>
</tr>
<tr>
<td>H14</td>
<td>成立</td>
<td>转换成本在顾客信任对顾客忠诚的影响中起显著调节作用</td>
</tr>
</tbody>
</table>

5.2 研究结论和管理建议

5.2.1 研究结论

首先通过大量的文献查阅，基于学者对于组织市场顾客忠诚的研究，提出了影响顾客忠诚的五个维度，包括产品属性、人员服务、关系质量、创新能力和企业声誉。同时将顾客信任作为五个维度影响顾客忠诚的中介变量，假设通过影响顾客信任间接影响顾客忠诚；并假设转换成本作为防止顾客产生不忠诚行为的一个控制因素，对于顾客信任影响顾客忠诚起调节作用。以上述假设为基础，提出企业管理软件市场顾客忠诚的驱动模型。针对管理者软件使用者进行问卷调查、进行数据分析后得出以下结论：

第一，顾客信任是影响企业管理软件市场顾客忠诚的主要影响因素。转换成本作为顾客信任影响顾客忠诚的调节变量，起着防止顾客产生不忠诚行为的控制作用。

第二，产品属性、人员服务、关系质量、创新能力和企业声誉是企业管理软
件市场顾客忠诚的五个主要驱动因素。其中顾客信任在产品属性、创新能力以及关系质量三个维度对顾客忠诚的影响中起到了部分中介的效果，在人员服务和企业声誉上起到了完全中介的效果。

第三，通过对调研中各驱动因素均值进行比较，发现除了企业声誉与产品属性两个维度上均值显著大于5.3之外，人员服务、关系质量和创新能力均值均略偏，尤其在人员服务方面均值显著偏低，说明当前阶段除了在人员服务方面存在较为明显的问题与短板外，与顾客的关系质量以及公司整体创新能力都是下一步管理软件提供商需要加以改善的重点。

5.2.2 管理建议

根据本次研究的结论，针对管理软件市场的特点，提出了以下管理建议：

（1）提高顾客信任和顾客忠诚，关键在于安全

产品属性无论是对顾客忠诚还是顾客信任的影响都是十分显著。在实地问卷调研发现，管理软件对于自身或公司信息数据的保密性对于所有中高层管理者来说，是衡量一家管理软件企业的首要考虑因素。因此，管理软件企业在努力提高自身产品功能中，安全保障应作为首要关注点。

（2）努力提高企业形象与声誉来驱动顾客忠诚

企业管理软件在中国市场还处于新兴阶段，无论是大数据的应用还是企业内部管理软件化都是近几年提出的概念，顾客对于管理软件提供商实质上仍存在各种疑虑。努力提高企业形象与声誉对于新兴的管理软件供应商来说尤为重要，本次研究也有着同样的结论。对于首次购买管理软件的企业来说，管理软件企业的知名度与美誉度往往是购买决策者的首要考虑因素。

（3）全面提升人员服务质量是关键

在5.2章节的均值比较中已经强调了人员服务质量的重要性。相比于普通产品的属性，管理软件人员服务更具可视性，对于顾客信任和顾客忠诚都有着直接的影响作用。管理软件企业应重新审视企业内部人力资源，大力开展人员培训，提高人员服务质量，以提高顾客信任及顾客满意。

（4）提高业务理解能力是提供个性化服务的前提

对顾客业务情况的了解是管理软件二次开发的前提，提高对于顾客业务能力的理解，能够有效理解顾客的需求点，为顾客提供与线下管理模式更为契合度更高的管理软件。而通过向顾客学习业务背景，提升业务理解能力也是与顾客增进交流、共同进步的一种方式。

5.3 未来研究展望

下一阶段研究可以从以下方面开展：

（1）本次提出的企业管理软件市场顾客忠诚驱动模型，提出了七个维度的驱动因素，而对于每一个驱动因素可以继续做更深入的理论解释。对各个因素之间的相互关系也是下一步研究的方向。
（2）管理软件企业在与顾客发生合作关系的不同时期，驱动因素的侧重性显然是不同的，不同时期驱动因素的作用效果需要在今后的研究中深入讨论。

6. 致谢

感谢本文得到2017年湖北省科技计划项目（软科学）的资助，“湖北省高新技术企业供应商选择及动态评价创新研究----基于DEA数据法和合作绩效提升”（项目编号：2017ACD110）。感谢武汉科技大学管理学院肖锴老师和温琼娟老师，在本文撰写过程中您们提出了宝贵的修改建议，并在问卷调查环节和数据分析环节给与大力支持。

参考文献

Abstract

With the rapid development of self-media platforms, self-media opinion leaders in various fields have also appeared. This article starts with these self-media opinion leaders to study their impact on consumers' willingness to purchase online and analyze the mediating role of brand trust in the process. Based on 736 effective online surveys, empirical research was conducted on related hypotheses by using reliability analysis, factor analysis, and structural equation modeling. The results of the study show that the prestige of the media opinion leaders and their positive interaction with the fans will have a significant, positive and direct impact on the consumer's willingness to purchase online, while the professional competence of the media opinion leaders and consumer online purchases. There is no direct and significant influence relationship. In addition, brand trust plays a partial mediating role between opinion leaders and purchase intentions. On this basis, we suggest that self-media opinion leaders should strengthen professionalism, focus on multi-channel exposure, and keep their promises in order to keep the self-media platform
ecologically healthy.

*Keywords*: Self-media opinion leader; Brand trust; Purchase Intention
自媒体意见领袖对消费者网络购买意愿的影响

——品牌信任的中介作用

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摘要

随着自媒体平台的迅速发展，各领域的自媒体意见领袖也纷纷出现。本文从这些自媒体意见领袖入手，研究他们对消费者网络购买意愿的影响，并分析品牌信任在该过程中的中介作用。基于736次的有效在线调查，通过使用可靠性分析、因子分析以及结构方程模型等方法，对相关假设进行实证研究。研究结果显示，自媒体意见领袖的名气声望及其与粉丝的正向交互都会对消费者网络购买意愿产生显著、正向且直接的影响，而自媒体意见领袖的专业能力则和消费者网络购买意愿不存在直接显著的影响关系。此外品牌信任在意见领袖与购买意愿之间发挥着部分中介效应。在此基础上，我们建议自媒体意见领袖应该强化专业素养、并注重多渠道曝光，以及信守承诺，方可让该自媒体平台生态健康持续进行。

关键词：自媒体意见领袖；品牌信任；购买意愿；

1. 引言

自2012年，自媒体平台推陈出新，自媒体人也在逐渐发展中呈现头部现象。中国大陆则以微信自媒体公众号、微博大V以及知乎大V等为代表，经过多年的发展与淘汰，持续被关注的账号往往是某一垂直领域的意见领袖。作为“领袖”，他们洞察敏锐、见解独特，吸引了数万甚至上百万粉丝的关注，形成广泛的影响力。目前，越来越多的自媒体账号选择将广告作为自己的收入来源，即在不断尝试将影响力变现，但这个过程中仍存在许多挑战和不确定性。在这样的背景下，本文即以传播者角度切入，研究自媒体意见领袖在推荐商品过程中有自身的那些因素会对用户购买意愿产生影响。并将品牌信任引入其中，探讨其在意见领袖影响用户行为意愿中的中介作用。

本文首先对自媒体意见领袖、品牌信任与购买意愿的相关文献进行了梳理。在前人研究的基础上，结合中国国内自媒体意见领袖的发展现状和特点，将自媒体意见领袖对消费者网络购买意愿的影响因素依次划分为专业能力、名气声望及其与粉丝的正向交互三个方面。同时根据前人的研究，也将在文章中作为中介变量的品牌信任划分出三个维度，分别为品质信任、善意信任和能力信任。根据以上变量和维度划分，建立了本文的研究模型，即自媒体意见领袖对消费者网络购买意愿影响的概念模型，并提出研究假设。然后，参考国内外学者相关研究的成熟量表，制定本研究的量表并经过信度、效度检验。随后，通过线上问卷调查的
方式收集样本数据，最后利用 SPSS24.0 和 AMOS21.0 软件对有效数据进行分析研究。

研究结果表明，自媒体意见领袖的名气声望与粉丝的正向交互均会正向影响用户的购买意愿，而自媒体意见领袖自身的专业能力虽然能让用户对品牌产生信任，但这对消费者的购买意愿并没有产生直接影响。除此之外，品牌信任中的品质信任、善意信任和能力信任三个维度在上述三个方面对用户网络购买意愿的影响过程中均起了部分中介作用。

最后，本文在研究结果基础上，提出了自媒体意见领袖在开展商品推荐、自媒体营销过程中可借鉴的策略。

2. 理论回顾与分析

2.1 自媒体意见领袖

意见领袖是指“活跃在人际传播网络中，经常为他人提供信息、观点或建议并对他人施加个人影响的人物（郭庆光，2011）”。同时国内外学者在多年的学术和实证研究中，都发现了这些意见领袖对于消费者的决策会产生或多或少的影响（King 和 Summers, 1970; Zhao 等, 2018）。例如意见领袖的社交性高低可以直接影响到产品信息传播速度的快慢，而若该意见领袖在特定领域中是有着核心地位的话，该意见领袖也是可以带来更多的消费者的（Cho 等, 2012）。

随着技术的不断发展，意见领袖也不再局限于传统线下生活场景，尤其移动互联技术的发展，网络环境中也出现了越来越多的意见领袖。与线下一样，线上的他们同样会对消费者的行为产生影响。例如国外的推特意见领袖不仅和在线网络的规模之间有着强联系，更是和在线民众的行为之间呈现显著正相关关系（Park 和 Kaye, 2017）。而国内也有学者发现关键意见领袖是可以为特定产品提供信息带来更多消费者关注，不仅如此，不仅是已有消费者，对于潜在消费者，他们对产品的品牌认知甚至购买行为都可以受到该关键意见领袖的影响。（周延风,2018）。

2.2 品牌信任

无论是在学术研究中还是在现实的商业市场中，品牌信任都已经成为处理或改善消费者关系的重要因素。Delgado & Ballester 等认为，品牌信任就是消费者对该品牌的一种积极期望，即使当下面临着风险，而这些消费者仍然相信该品牌的可靠性和倾向性。国内学者的袁登华等（2007）对于品牌信任的理解也有着类似看法，她们认为品牌信任是消费者在风险情境下，因为对品牌品质、行为意向和履行承诺能力的正面预期，而产生的对品牌的认可意愿。

信任作为消费者态度的重要体现，尤其是在面对充满不确定性和未知的网络环境下，品牌信任被企业们视作可以影响消费者购买决策，或是购买意愿的重要因素。贺爱忠等（2009）发现在公益营销的情境下，信任在消费者购买意愿中会产生中介作用，其中也包括品牌信任。任一斐（2015）则证明了微信营销情境下的品牌信任的中介作用。即基于信任在搜索、分享、购买三种行为意愿上的正向作用，品牌信任作为中介变量同样影响着购买意愿。因此，品牌信任成为无论学术界或是商业界在研究消费者购买意愿时的一个重要中介变量。
2.3 购买意愿

在营销学领域，消费者的购买意愿被视为可以预测购买决策的指标，也就是说消费者的购买意愿越强烈，他就越有可能产生消费行为。1990 年 Mullet 就已经证明过消费者的购买意愿和他的购买行为之间有着显著的正向影响关系，而且购买意愿同时也受着多个外部因素的影响。国内学者对购买意愿概念的界定和研究结论与国外学者大致相同。冯建英在 2006 年对消费者购买意愿进行研究后表明购买意愿是消费者进行购买行为的基础。

本文基于前人的成熟研究，根据中国本土的自媒体平台环境，结合该平台上意见领袖推荐商品或服务的具体情境，将购买意愿定义为：用户在获得自媒体意见领袖的商品推荐内容后，购买所推荐产品或服务的一种主观概率。

3. 研究模型与假设

图 1 研究模型

<table>
<thead>
<tr>
<th>自媒体意见领袖</th>
<th>品牌信任</th>
</tr>
</thead>
<tbody>
<tr>
<td>专业能力</td>
<td>品质信任</td>
</tr>
<tr>
<td>名气声望</td>
<td>善意信任</td>
</tr>
<tr>
<td>正向交互</td>
<td>能力信任</td>
</tr>
<tr>
<td>购买意愿</td>
<td></td>
</tr>
</tbody>
</table>

在对国内外学者的学术研究做深入分析后，将自媒体意见领袖对购买意愿的影响因素划分为其自身的专业能力、名气声望和其与粉丝的正向交互三个方面。自媒体意见领袖专业能力即意见领袖自身所具备的专业知识和技能以及丰富的经验；自媒体意见领袖的名气声望则指的是他的知名度与个人声望；正向交互在此处指的是自媒体营销意见领袖能够按质按量按时地履行其在营销活动中所承诺的和本应负担的义务。

因为品牌信任研究已非常成熟且完善，我们采取使用其中认可度和使用程度均较高的袁登华的品牌信任维度划分，即将品牌信任分为品牌信任、善意信任和能力信任。其中品质信任是指消费者相信某品牌自身的产品和服务质量，即消费者对该品牌的产品服务质量感到放心满意；善意信任即消费者相信该品牌会为了维护消费者的利益而付出行动；能力信任是指消费者相信该品牌可以履行其承诺。

因此，根据研究模型做出以下假设：

H1：自媒体意见领袖的专业能力正向影响消费者对其推荐产品的品牌品质信任
H2：自媒体意见领袖的专业能力正向影响消费者对其推荐产品的品牌善意信任
H3：自媒体意见领袖的专业能力正向影响消费者对其推荐产品的品牌能力信任
H4：自媒体意见领袖的名气声望正向影响消费者对其推荐产品的品牌品质信任
H5：自媒体意见领袖的名气声望正向影响消费者对其推荐产品的品牌善意信任
H6：自媒体意见领袖的名气声望正向影响消费者对其推荐产品的品牌能力信任
H7：自媒体意见领袖与粉丝的正向交互正向影响消费者对其推荐产品的品牌品质信任
H8: 自媒体意见领袖与粉丝的正向交互正向影响消费者对其推荐产品的品牌善意信任
H9: 自媒体意见领袖与粉丝的正向交互正向影响消费者对其推荐产品的品牌能力信任
H10: 自媒体意见领袖的专业能力正向影响消费者网络购买意愿
H11: 自媒体意见领袖的名气声望正向影响消费者网络购买意愿
H12: 自媒体意见领袖与粉丝的正向交互正向影响消费者网络购买意愿
H13: 消费者对产品品牌的品质信任正向影响其购买意愿
H14: 消费者对产品品牌的善意信任正向影响其购买意愿
H15: 消费者感知的品牌能力信任正向影响其购买意愿
H16: 品质信任在专业能力与购买意愿的关系之间起中介作用
H17: 品质信任在名气声望与购买意愿的关系之间起中介作用
H18: 品质信任在正向交互与购买意愿的关系之间起中介作用
H19: 善意信任在专业能力与购买意愿的关系之间起中介作用
H20: 善意信任在名气声望与购买意愿的关系之间起中介作用
H21: 善意信任在正向交互与购买意愿的关系之间起中介作用
H22: 能力信任在专业能力与购买意愿的关系之间起中介作用
H23: 能力信任在名气声望与购买意愿的关系之间起中介作用
H24: 能力信任在正向交互与购买意愿的关系之间起中介作用

4. 研究方法

4.1 变量测量及问卷设计


本研究共有 7 个自变量，每个自变量有 3-5 个测量变量，共计 26 个题项。题项采用李克特五级标尺评判，1 代表非常不同意，5 代表非常同意。

4.2 数据收集

我们先进 30 人进行预测试，根据反馈，删除了 3 个测量问项，并对个别问项的表述进行了修改，最终确定了实测问卷。之后在公共网络上发放调查问卷，一共回收 805 份问卷，其中有效问卷 736 份，有效回收率 91.43%。在 736 份问卷中，男女比例为 48.2:51.8。86.7%的被调查者的受教育程度为大专及以上。

4.3 量表的信度和效度分析

为了评价模型测量的一致性和有效性，我们运用 SPSS24.0 和 AMOS21.0 对问卷进行了信度和效度检验。
4.3.1 信度分析

本研究采用 Cronbach α 系数测度量表各变量的内在一致信度。

表1 变量的可靠性统计

<table>
<thead>
<tr>
<th>变量</th>
<th>项数</th>
<th>Cronbach α系数</th>
</tr>
</thead>
<tbody>
<tr>
<td>专业能力</td>
<td>3</td>
<td>0.821</td>
</tr>
<tr>
<td>名气声望</td>
<td>3</td>
<td>0.782</td>
</tr>
<tr>
<td>正向交互</td>
<td>4</td>
<td>0.879</td>
</tr>
<tr>
<td>品质信任</td>
<td>4</td>
<td>0.893</td>
</tr>
<tr>
<td>善意信任</td>
<td>4</td>
<td>0.833</td>
</tr>
<tr>
<td>能力信任</td>
<td>5</td>
<td>0.904</td>
</tr>
<tr>
<td>购买意愿</td>
<td>3</td>
<td>0.868</td>
</tr>
<tr>
<td>总体</td>
<td>26</td>
<td>0.904</td>
</tr>
</tbody>
</table>

由表1可知，7个变量的 Cronbach α系数均大于0.7，总体量表数据的 Cronbach α系数也大于0.7，根据统计学观点，任何测试的信度系数在0.7以上，表示测验的内部一致性较好，因此可以说明本次量表调查数据均具有较高的可信度。

4.3.2 效度分析

因本次问卷数量较多，我们将问卷总体736份样本分成两份，每份各包含样本368份，一份样本用来做探索性因子分析（EFA），另一份样本用来做验证性因子分析（CFA），验证量表的效度，并通过检验剔除量表中不达标题项。若两份数据的效度检验均通过，则说明量表具有较好的效度，可以很好地用于后续假设检验。

表2 KMO和Bartlett的检验

<table>
<thead>
<tr>
<th>取样足够度的 Kaiser-Meyer-Olkin 度量</th>
<th>0.870</th>
</tr>
</thead>
<tbody>
<tr>
<td>近似卡方</td>
<td>5262.802</td>
</tr>
<tr>
<td>Bartlett 的球形度检验</td>
<td>df 325</td>
</tr>
<tr>
<td></td>
<td>Sig. 0.000</td>
</tr>
</tbody>
</table>

从表2检验结果可知，量表的 KMO检验值为0.870，大于0.7，说明该量表适合进行因子分析。Bartlett 球形度检验结果显示，近似卡方值为5262.802，对应的显著性水平小于0.001，具有显著的统计学意义，因此拒绝 Bartlett 球形度检验的零假设，进一步说明量表适合做因子分析且总体效度较好。

表3 验证性因子特性分析

<table>
<thead>
<tr>
<th>题项</th>
<th>Estimate</th>
<th>S.E.</th>
<th>C.R.</th>
<th>P</th>
<th>AVE</th>
<th>CR</th>
</tr>
</thead>
<tbody>
<tr>
<td>专业能力1</td>
<td>0.827</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>专业能力2</td>
<td>0.788</td>
<td>0.070</td>
<td>14.493</td>
<td>***</td>
<td>0.629</td>
<td>0.836</td>
</tr>
<tr>
<td>专业能力3</td>
<td>0.763</td>
<td>0.069</td>
<td>14.206</td>
<td>***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>名气声望1</td>
<td>0.741</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>名气声望2</td>
<td>0.747</td>
<td>0.079</td>
<td>12.518</td>
<td>***</td>
<td>0.582</td>
<td>0.807</td>
</tr>
<tr>
<td>题项</td>
<td>Estimate</td>
<td>S.E.</td>
<td>C.R.</td>
<td>P</td>
<td>AVE</td>
<td>CR</td>
</tr>
<tr>
<td>---------------</td>
<td>----------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>名气声望 3</td>
<td>0.799</td>
<td>0.097</td>
<td>12.933</td>
<td>***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>正向交互 1</td>
<td>0.821</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>正向交互 2</td>
<td>0.801</td>
<td>0.047</td>
<td>17.063</td>
<td>***</td>
<td>0.664</td>
<td>0.888</td>
</tr>
<tr>
<td>正向交互 3</td>
<td>0.829</td>
<td>0.053</td>
<td>17.834</td>
<td>***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>正向交互 4</td>
<td>0.807</td>
<td>0.049</td>
<td>17.251</td>
<td>***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>品质信任 1</td>
<td>0.799</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>品质信任 2</td>
<td>0.793</td>
<td>0.065</td>
<td>15.660</td>
<td>***</td>
<td>0.621</td>
<td>0.868</td>
</tr>
<tr>
<td>品质信任 3</td>
<td>0.802</td>
<td>0.068</td>
<td>15.852</td>
<td>***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>品质信任 4</td>
<td>0.757</td>
<td>0.066</td>
<td>14.878</td>
<td>***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>善意信任 1</td>
<td>0.715</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>善意信任 2</td>
<td>0.790</td>
<td>0.083</td>
<td>13.174</td>
<td>***</td>
<td>0.551</td>
<td>0.831</td>
</tr>
<tr>
<td>善意信任 3</td>
<td>0.734</td>
<td>0.083</td>
<td>12.440</td>
<td>***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>善意信任 4</td>
<td>0.729</td>
<td>0.087</td>
<td>12.365</td>
<td>***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>能力信任 1</td>
<td>0.795</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>能力信任 2</td>
<td>0.840</td>
<td>0.070</td>
<td>18.076</td>
<td>***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>能力信任 3</td>
<td>0.849</td>
<td>0.069</td>
<td>18.316</td>
<td>***</td>
<td>0.690</td>
<td>0.917</td>
</tr>
<tr>
<td>能力信任 4</td>
<td>0.873</td>
<td>0.063</td>
<td>19.018</td>
<td>***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>能力信任 5</td>
<td>0.793</td>
<td>0.056</td>
<td>16.758</td>
<td>***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>购买意愿 1</td>
<td>0.902</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>购买意愿 2</td>
<td>0.825</td>
<td>0.050</td>
<td>19.606</td>
<td>***</td>
<td>0.707</td>
<td>0.878</td>
</tr>
<tr>
<td>购买意愿 3</td>
<td>0.791</td>
<td>0.057</td>
<td>18.428</td>
<td>***</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

由表 3 可知，量表 7 个变量专业能力、名气声望、正向交互、品质信任、善
意信任、能力信任、购买意愿的组合信度分别为 0.836、0.807、0.888、0.868、
0.831、0.917、0.878，均大于 0.7，说明量表具有较好的组合信度。验证性分析
中因子载荷与 AVE 值是判断量表收敛效度的指标，因子载荷系数的最低标准是
0.5，AVE 的判断标准也为 0.5。由表 4-6 可知，7 个变量包含的所有题项因子载
荷均大于 0.5，AVE 值分别为 0.629、0.582、0.664、0.621、0.551、0.690、0.707，
也都高于 0.5，因此说明量表具有较好的收敛效度。

综上可知，量表的效度均较好。

5. 实证结果及研究讨论

5.1 实证结果

本研究利用 AMOS21.0 对提出的假设模型进行了估算和修正，最佳模型拟合
指数见表 4 所示，估算结果如图 2。从模型的拟合指数可以看出，量表的结构方
程模型各项指标均达标，拟合程度较为理想。

<table>
<thead>
<tr>
<th>评估项目</th>
<th>拟合指标</th>
<th>建议标准</th>
<th>指标值</th>
<th>是否达标</th>
</tr>
</thead>
<tbody>
<tr>
<td>绝对适配指标</td>
<td>CMIN/DF</td>
<td>大于 1 且小于 3</td>
<td>2.041</td>
<td>是</td>
</tr>
<tr>
<td></td>
<td>GFI</td>
<td>大于 0.9</td>
<td>0.945</td>
<td>是</td>
</tr>
</tbody>
</table>
图 2 结构方程模型

表 5 标准化路径系数结果表

<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
<th>S.E.</th>
<th>C.R.</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>品质信任 &lt;--- 专业能力</td>
<td>0.173</td>
<td>0.048</td>
<td>4.223</td>
<td>***</td>
</tr>
<tr>
<td>善意信任 &lt;--- 专业能力</td>
<td>0.244</td>
<td>0.046</td>
<td>5.869</td>
<td>***</td>
</tr>
<tr>
<td>能力信任 &lt;--- 专业能力</td>
<td>0.170</td>
<td>0.036</td>
<td>4.362</td>
<td>***</td>
</tr>
<tr>
<td>品质信任 &lt;--- 名气声望</td>
<td>0.163</td>
<td>0.046</td>
<td>3.481</td>
<td>***</td>
</tr>
<tr>
<td>善意信任 &lt;--- 名气声望</td>
<td>0.317</td>
<td>0.045</td>
<td>6.539</td>
<td>***</td>
</tr>
<tr>
<td>能力信任 &lt;--- 名气声望</td>
<td>0.030</td>
<td>0.033</td>
<td>0.688</td>
<td>0.492</td>
</tr>
<tr>
<td>品质信任 &lt;--- 正向交互</td>
<td>0.273</td>
<td>0.048</td>
<td>6.015</td>
<td>***</td>
</tr>
<tr>
<td>善意信任 &lt;--- 正向交互</td>
<td>0.221</td>
<td>0.044</td>
<td>4.924</td>
<td>***</td>
</tr>
<tr>
<td>能力信任 &lt;--- 正向交互</td>
<td>0.455</td>
<td>0.038</td>
<td>9.697</td>
<td>***</td>
</tr>
<tr>
<td>购买意愿 &lt;--- 专业能力</td>
<td>0.006</td>
<td>0.045</td>
<td>0.180</td>
<td>0.857</td>
</tr>
<tr>
<td>购买意愿 &lt;--- 名气声望</td>
<td>0.323</td>
<td>0.046</td>
<td>7.438</td>
<td>***</td>
</tr>
<tr>
<td>购买意愿 &lt;--- 正向交互</td>
<td>0.188</td>
<td>0.049</td>
<td>4.317</td>
<td>***</td>
</tr>
<tr>
<td>购买意愿 &lt;--- 品质信任</td>
<td>0.223</td>
<td>0.039</td>
<td>6.201</td>
<td>***</td>
</tr>
<tr>
<td>购买意愿 &lt;--- 善意信任</td>
<td>0.185</td>
<td>0.047</td>
<td>4.474</td>
<td>***</td>
</tr>
<tr>
<td>购买意愿 &lt;--- 能力信任</td>
<td>0.163</td>
<td>0.052</td>
<td>4.313</td>
<td>***</td>
</tr>
</tbody>
</table>

由表 5 可知，前文中的各项假设成立情况如下，见表 6:
### 表 6 假设检验汇总表

<table>
<thead>
<tr>
<th>假设内容</th>
<th>检验结果</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: 自媒体意见领袖的专业能力正向影响消费者对其推荐产品的品牌品质信任</td>
<td>支持</td>
</tr>
<tr>
<td>H2: 自媒体意见领袖的专业能力正向影响消费者对其推荐产品的品牌善意信任</td>
<td>支持</td>
</tr>
<tr>
<td>H3: 自媒体意见领袖的专业能力正向影响消费者对其推荐产品的品牌能力信任</td>
<td>支持</td>
</tr>
<tr>
<td>H4: 自媒体意见领袖的名气声望正向影响消费者对其推荐产品的品牌品质信任</td>
<td>支持</td>
</tr>
<tr>
<td>H5: 自媒体意见领袖的名气声望正向影响消费者对其推荐产品的品牌善意信任</td>
<td>支持</td>
</tr>
<tr>
<td>H6: 自媒体意见领袖的名气声望正向影响消费者对其推荐产品的品牌能力信任</td>
<td>不支持</td>
</tr>
<tr>
<td>H7: 自媒体意见领袖与粉丝的正向交互正向影响消费者对其推荐产品的品牌品质信任</td>
<td>支持</td>
</tr>
<tr>
<td>H8: 自媒体意见领袖与粉丝的正向交互正向影响消费者对其推荐产品的品牌善意信任</td>
<td>支持</td>
</tr>
<tr>
<td>H9: 自媒体意见领袖与粉丝的正向交互正向影响消费者对其推荐产品的品牌能力信任</td>
<td>支持</td>
</tr>
<tr>
<td>H10: 自媒体意见领袖的专业能力正向影响消费者网络购买意愿</td>
<td>不支持</td>
</tr>
<tr>
<td>H11: 自媒体意见领袖的名气声望正向影响消费者网络购买意愿</td>
<td>支持</td>
</tr>
<tr>
<td>H12: 自媒体意见领袖与粉丝的正向交互正向影响消费者网络购买意愿</td>
<td>支持</td>
</tr>
<tr>
<td>H13: 消费者对产品品牌的品质信任正向影响其购买意愿</td>
<td>支持</td>
</tr>
<tr>
<td>H14: 消费者对产品品牌的善意信任正向影响其购买意愿</td>
<td>支持</td>
</tr>
<tr>
<td>H15: 消费者感知的品牌能力信任正向影响其购买意愿</td>
<td>支持</td>
</tr>
<tr>
<td>H16: 品质信任在专业能力与购买意愿的关系之间起中介作用</td>
<td>不支持</td>
</tr>
<tr>
<td>H17: 品质信任在名气声望与购买意愿的关系之间起中介作用</td>
<td>支持</td>
</tr>
<tr>
<td>H18: 品质信任在正向交互与购买意愿的关系之间起中介作用</td>
<td>支持</td>
</tr>
<tr>
<td>H19: 善意信任在专业能力与购买意愿的关系之间起中介作用</td>
<td>不支持</td>
</tr>
<tr>
<td>H20: 善意信任在名气声望与购买意愿的关系之间起中介作用</td>
<td>支持</td>
</tr>
<tr>
<td>H21: 善意信任在正向交互与购买意愿的关系之间起中介作用</td>
<td>支持</td>
</tr>
<tr>
<td>H22: 能力信任在专业能力与购买意愿的关系之间起中介作用</td>
<td>不支持</td>
</tr>
<tr>
<td>H23: 能力信任在名气声望与购买意愿的关系之间起中介作用</td>
<td>不支持</td>
</tr>
<tr>
<td>H24: 能力信任在正向交互与购买意愿的关系之间起中介作用</td>
<td>支持</td>
</tr>
</tbody>
</table>

### 5.2 研究讨论

#### 5.2.1. 自媒体意见领袖因素对用户购买意愿的影响

本研究对于自媒体意见领袖专业能力的测量结果显示，意见领袖的专业能力正向影响消费者对其推荐产品品牌的品质信任（包括三个维度），但对于购买意愿影响不大。这表明，自媒体意见领袖若对所推荐的商品具有一定的专业知识、本身就是该类商品的行家，或者长期使用过该商品，用户对其推荐的产品品牌就会更加信任，但不一定是更强烈的欲望去购买该商品。

本研究对于自媒体意见领袖名气声望的研究结果显示，意见领袖的名气声望对消费者对其推荐产品品牌的品质、善意信任以及购买欲望均具有正向的影响，但对品牌的能力信任没有强烈正向影响。这说明自媒体意见领袖自身的知名度、人气声望越高，用户对其所推荐的产品或服务的品质与善意越信赖，但对于该品牌是否能达成承诺则表示不确定，但这并不会影响增强消费者的购买意愿。

本研究对于自媒体意见领袖与用户的正向交互的测量结果显示，正向交互可以显著正向影响用户的认知信任、情感信任和购买意愿。这表明，用户对于意见领袖公众号的打开、浏览频率越高，或与意见领袖之间越频繁的互动（如留言、
参与平台活动），则会更加信任该意见领袖及其推荐的商品，进而正向影响其购买意愿。

5.2.2. 品牌信任的中介作用

在本研究中，经实证检验，品牌信任是自媒体意见领袖对用户购买意愿产生影响的关键中介变量，并且通过品质信任、善意信任和能力信任三个维度共同产生影响。即在自媒体意见领袖推荐情境下，自媒体意见领袖的专业能力、名气声望和正向交互使用户对意见领袖推荐的品牌产生信任，而且名气声望和正向交互还能通过品牌信任的中介机制作用进而加强影响用户对推荐品牌或服务的购买意愿。这也说明，当用户知晓自媒体意见领袖在推荐产品时存商业目的，但由于上述三因素的作用，用户依然愿意相信意见领袖的“善意”，相信这种推荐更多的是出于一种“利他”的、与粉丝分享好产品的目的。

综上所述，本研究理论模型能够较好的解释意见领袖因素对用户购买意愿的影响，以及品牌信任在其中产生影响的中介机制。

6. 管理启示

6.1 强化专业素养，展现个人能力

研究结果表明，自媒体意见领袖在推荐产品领域越专业，他们越可以激发用户对品牌的信心，虽然这可能不会加强用户的购买意图。但用户对产品品牌信任的加强本身也是对品牌方的利好效果，尤其是对于一些不知名的小众品牌而言，这种精准式提升品牌信任比广撒网投放广告可能效果来得更好。

无论传统媒体时代还是移动互联网时代，“专业化”都是意见领袖的基本特征。因此，意见领袖应该加强他们的专业性，在推荐产品的表述中也要体现出专业性和较高的产品涉入度。

6.2 多渠道曝光，提升自身知名度

“名气声望”对用户信任和购买意愿都有着显著的积极影响。自媒体意见领袖的受欢迎程度和自身荣誉对他推荐产品的有效性会产生重大影响。在流媒体细分的全媒体时代，自媒体人要开拓渠道，尝试多线运营，多渠道发布内容，多平台吸纳粉丝，在能力范围内，让自己的知名度得到最大程度的曝光，打造属于自己的“明星效应”。

6.3 注重价值契合，承诺必实现

在移动互联网时代，消费者更加理性和聪明，他们会围绕产品或服务多方搜集信息、不会局限于“一家言”。正因为信息搜集渠道的极度方便快捷，若是广告信息含有欺骗、忽悠成分，客户不再会轻易上当。只有价值契合才是双方信任的基点，将产品信息与内容和营销模式相结合，关注客户的附加需求和利益并不断去满足。此外对于品牌自身承诺遵守的义务和责任，也必须要尽力去履行。一旦发生失信现象，自媒体意见领袖的形象会受到极大影响。

7. 致谢

此论文完成之际，首先向我的指导老师左仁淑老师表示最衷心感谢和最诚挚的敬意。左老师锲而不舍的科研精神、高深渊博的知识、事实求是的工作态
度、宽宏谦和的为人、无私奉献的精神始终激励着我不断学习知识和追求人生的境界。

再者，要感谢同门们。感谢师兄、师姐在论文写作过程中的悉心指导和帮助，感谢同门对我的鼓励和关心，感谢同窗一路求学的相伴。

言之不尽，有太多帮助过我的人，衷心感谢所有关心和帮助我的人，感谢他们给了我战胜自我，超越自我，不断追求的力量，谢谢你们。

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The Psychological Attribution of Non-green Consumer Behavior and Its Mechanism of Action
—An Exploratory Study Based on Grounded Theory

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Abstract
The pattern of public consumption has important influence on the sustainable development of the society. Guiding public green consumption has become a realistic problem that needs to be solved in the construction of ecological civilization. At present, there are many studies on green consumer behavior, but it is rarely to explore consumer behavior from the perspective of non-green consumption. This has become a blank point in current research. This study applies a grounded theory and conducts three-level coding of interview data to explore the psychological attribution of non-green consumer behavior and its mechanism of action. The study found that green consumer psychology awareness and social reference norms are the internal and social psychological attributions of non-green consumer behaviors; perceptual behavior control and institutional techniques are internal and external adjustment factors, respectively. This study provides a theoretical basis for the government to formulate effective policies to reduce non-green consumer behavior and guide consumers to green consumption.

Keywords: Non-green consumer behavior; Psychological attribution; Qualitative
非绿色消费行为的心理归因及其作用机制
——基于扎根理论的一个探索性研究

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摘要
公众消费模式对社会可持续发展有重要影响，引导公众绿色消费成为生态文明建设亟待解决的现实问题。目前有关绿色消费行为的研究已有很多，但却鲜少从非绿色消费视角探究消费行为，这成为研究上的空白点。本研究应用扎根理论，对访谈资料进行三级编码，探究非绿色消费行为的心理归因及其作用机制。研究发现，绿色消费心理意识、社会参照规范是非绿色消费行为形成的内部、社会心理归因，知觉行为控制、制度技术分别为内外部调节因素。本研究以期为政府制定有效的政策减少非绿色消费行为和引导消费者进行绿色消费提供理论依据。

关键词：非绿色消费行为；心理归因；质化研究；扎根理论

1. 引言
随着经济的快速发展，环境污染、资源耗竭问题日益突出，对人类的生存质量和未来经济发展构成极大威胁，“绿色发展”成为时代的主题，其中消费领域主要表现为“绿色消费”。绿色消费是当前国际国内社会普遍关注的焦点课题。自“十二五”规划以来，我国明确指出：坚持把建设资源节约型、环境友好型社会作为加快转变经济发展方式的重要着力点，深入贯彻节约资源和保护环境的基本国策，推动形成与我国国情相适应的绿色生活方式和消费模式。国内外学者围绕绿色消费做了大量研究，并得到重要研究成果。但是，目前研究多集中在非绿色消费视角，极少从非绿色消费视角研究消费行为，很大程度上忽视了广泛存在于日常生活中的非绿色消费行为研究。研究非绿色消费行为能有效避免“态度—行为”缺口，实际效果更为显著。此外，分析非绿色消费行为产生机理的深层次原因，政府可以具有针对性的制定各项政策，减少或抑制非绿色消费行为。

本文采用质化研究，应用扎根理论探索性研究方法，围绕非绿色消费行为的深层次心理归因、因素的作用机制、采取何种措施和措施的效果等问题展开深入研究，以期探究非绿色消费行为产生的心理机制，弥补目前研究的不足，为政府制定有效措施减轻非绿色消费行为提供理论基础。
2. 非绿色消费概念界定

关于非绿色消费的概念，目前尚无明确的共识。本文试图从两个角度对非绿色消费进行界定：一是从“绿色消费”概念入手进行提炼、总结以及推演；二是对涉及“非绿色”消费概念的相关文献进行梳理归纳。


综上所述，绿色消费着重以节约资源和保护环境为目标，强调人与自然、环境与经济的绿色、可持续以及和谐发展。绿色消费的本质就是鼓励消费者购买对环境污染最低的产品，并且尽量减少不必要的消费，包括产品获取、使用过程和废弃处理的全面绿色化。非绿色消费行为是指消费者在消费时没有做到节约资源和保护环境。具体包含四层次的含义：一是在购买前没有选择未被污染和有助于公众健康的产品；二是消费过程中没有选择低碳、绿色的消费模式；三是产品完成自身效用后没有进行绿色的妥善处理；四是没有引导消费者转变非绿色的消费观念。

3. 研究方法和数据来源

3.1 研究方法

非绿色消费行为研究是一个新的范畴，本文采用质化研究方法，且采用扎根理论这一探索性研究方法，通过对访谈获取的原始数据进行归纳总结，利用开放式编码使之概念化和范畴化，借助主轴编码找出主范畴，再进行选择性编码探究各主范畴之间的作用机制，构建本文的理论框架。

3.2 数据收集
本文采用非结构化问卷（开放式问卷），对具有代表性的消费者进行一对一的深度访谈，并结合使用焦点小组访谈，获得原始资料。深度访谈时间设为1小时左右，焦点小组访谈分为3组，每组5人，时间为1.5小时左右。在进行访谈之前，研究者会将非绿色消费的一些信息告知受访者，使受访者对非绿色消费有正确的理解，并且我们会征求受访者同意对谈话内容进行录音，以完善原始资料。本文的访谈提纲如下表1所示。

3.3 样本选择

本文采用理论抽样确定受访者，考虑到低学历者可能对非绿色消费行为影响因素的认知缺乏深度，本文受访对象学历为本科及以上，年龄在20-45周岁之间的中青年群体。这部分人群思想活跃，易于接受新事物且有自己独特的看法。依据样本饱和理论，最终确定24名受访者。受访者的基本信息如表2。

表1 访谈提纲

<table>
<thead>
<tr>
<th>访谈主题</th>
<th>主要提纲内容</th>
</tr>
</thead>
<tbody>
<tr>
<td>对非绿色消费行为的认知及现状</td>
<td>您认为在日常生活中有哪些生活方式或消费行为属于“绿色”的范畴？您常见的“非绿色”消费行为有哪些？</td>
</tr>
<tr>
<td>非绿色消费行为的影响因素</td>
<td>您觉得为什么人们会做出上述种种“非绿色”消费行为？或者说，通常是在什么情况下人们“不会”选择“绿色”的生活方式和消费模式？</td>
</tr>
</tbody>
</table>
| 转变非绿色消费行为的措施 | 1. 您认为在什么情况下人们会减少或者抑制非绿色消费行为？或者说，哪些因素会推动或促使人们采取“绿色”的生活方式和消费模式？
2. 在您看来，目前人们从“非绿色”向“绿色”的生活方式和消费模式的转变过程中，存在的主要障碍是什么？
3. 您觉得政府可以制定哪些措施来约束和减少“非绿色”消费行为？ |

4. 范畴提炼和模型构建

4.1 开放式编码

开放式编码是对原始资料进行逐级编码、登陆，进行不断比较，将原始资料概念化和范畴化，以求获得新的信息。为了提出研究个人态度的影响，我们在对原始资料进行编码时尽量使用受访者的原话。一共得到400余条原始语句和初始概念。得到的初始概念数量庞大且存在一定程度的交叉，范畴化是对原始概念的再加工，所以我们对这些初始概念进行范畴化，得到21个范畴。在进行范畴化的过程中，我们剔除了低于或等于2次的低频率的词条，只选取了出现3次及以上的词条。得到的范畴和初始概念如下表所示，为了节省篇幅，我们对每个初始概念只选取了2-4条语句。
### 表 2 受访者样本信息

<table>
<thead>
<tr>
<th>受访者序号</th>
<th>受访者</th>
<th>性别</th>
<th>年龄</th>
<th>学历</th>
<th>职业</th>
<th>访谈方式</th>
</tr>
</thead>
<tbody>
<tr>
<td>被访者 01</td>
<td>蒋小姐</td>
<td>女</td>
<td>21</td>
<td>本科</td>
<td>在读学生</td>
<td>个人深度访谈</td>
</tr>
<tr>
<td>被访者 02</td>
<td>刘小姐</td>
<td>女</td>
<td>22</td>
<td>本科</td>
<td>在读学生</td>
<td>个人深度访谈</td>
</tr>
<tr>
<td>被访者 03</td>
<td>康小姐</td>
<td>女</td>
<td>24</td>
<td>本科</td>
<td>公司职员</td>
<td>焦点小组访谈</td>
</tr>
<tr>
<td>被访者 04</td>
<td>金小姐</td>
<td>女</td>
<td>25</td>
<td>本科</td>
<td>公司职员</td>
<td>焦点小组访谈</td>
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<tr>
<td>被访者 05</td>
<td>邵小姐</td>
<td>女</td>
<td>27</td>
<td>本科</td>
<td>公司管理</td>
<td>焦点小组访谈</td>
</tr>
<tr>
<td>被访者 06</td>
<td>刘小姐</td>
<td>女</td>
<td>25</td>
<td>硕士</td>
<td>在读学生</td>
<td>焦点小组访谈</td>
</tr>
<tr>
<td>被访者 07</td>
<td>程小姐</td>
<td>女</td>
<td>24</td>
<td>硕士</td>
<td>在读学生</td>
<td>焦点小组访谈</td>
</tr>
<tr>
<td>被访者 08</td>
<td>周小姐</td>
<td>女</td>
<td>27</td>
<td>硕士</td>
<td>在读学生</td>
<td>焦点小组访谈</td>
</tr>
<tr>
<td>被访者 09</td>
<td>李女士</td>
<td>女</td>
<td>31</td>
<td>硕士</td>
<td>高校职工</td>
<td>个人深度访谈</td>
</tr>
<tr>
<td>被访者 10</td>
<td>康女士</td>
<td>女</td>
<td>44</td>
<td>硕士</td>
<td>公司管理</td>
<td>个人深度访谈</td>
</tr>
<tr>
<td>被访者 11</td>
<td>岳女士</td>
<td>女</td>
<td>37</td>
<td>博士</td>
<td>大学教师</td>
<td>焦点小组访谈</td>
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<tr>
<td>被访者 12</td>
<td>祁女士</td>
<td>女</td>
<td>39</td>
<td>博士</td>
<td>大学教师</td>
<td>焦点小组访谈</td>
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<tr>
<td>被访者 13</td>
<td>陈先生</td>
<td>男</td>
<td>28</td>
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<td>在读学生</td>
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<tr>
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<td>25</td>
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<tr>
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<td>37</td>
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<td>公司职员</td>
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<tr>
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<td>男</td>
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<td>本科</td>
<td>公司职员</td>
<td>焦点小组访谈</td>
</tr>
<tr>
<td>被访者 18</td>
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<td>27</td>
<td>本科</td>
<td>公司管理</td>
<td>个人深度访谈</td>
</tr>
<tr>
<td>被访者 19</td>
<td>李先生</td>
<td>男</td>
<td>38</td>
<td>本科</td>
<td>公司管理</td>
<td>个人深度访谈</td>
</tr>
<tr>
<td>被访者 20</td>
<td>张先生</td>
<td>男</td>
<td>25</td>
<td>硕士</td>
<td>在读学生</td>
<td>个人深度访谈</td>
</tr>
<tr>
<td>被访者 21</td>
<td>刘先生</td>
<td>男</td>
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<td>硕士</td>
<td>高校职工</td>
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<td>大学教师</td>
<td>焦点小组访谈</td>
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<tr>
<td>被访者 24</td>
<td>侯先生</td>
<td>男</td>
<td>44</td>
<td>博士</td>
<td>大学教师</td>
<td>焦点小组访谈</td>
</tr>
</tbody>
</table>

### 表 3 开放式编码

<table>
<thead>
<tr>
<th>原始资料语句（初始概念）</th>
<th>范畴</th>
<th>认知</th>
</tr>
</thead>
<tbody>
<tr>
<td>A11 说实话，现在最大的问题就是认知方面，很多消费者都意识不到环境问题。由于环境污染，刚开始在北京，大家虽然每天都讨论但没有深刻认识到雾霾的严重性。现在，雾霾变得越来越严重，大家开始戴口罩，提出治理雾霾的办法（问题认知）。</td>
<td>环境问题</td>
<td>片面认知</td>
</tr>
<tr>
<td>A20 现在由于环境问题引发的疾病越来越多，消费者也越来越意识到保护环境的重要性（保护环境重要性认知）。</td>
<td>环境问题</td>
<td>保护环境重要性认知</td>
</tr>
<tr>
<td>A07 大多数的消费者环境知识匮乏，都不知道什么是绿色消费行为，绿色消费缺乏</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
什么是非绿色消费行为，这样怎么会形成绿色消费的习惯（绿色消费知识）。
A18 现在还有一个问题是大家对绿色搞不清楚，比如现在你跟我说绿色我就想到吃绿色食品（绿色消费知识）。
A20 不知道自己叫做非绿色消费，觉得自己这样做是绿色消费呢，谁知道实际上却是非绿色消费行为（绿色消费知识）。
A21 社会上垃圾桶颜色不统一，而且图标模糊，老百姓不明白什么意思（垃圾分类知识缺乏）。

A02 利益考虑，这也是消费者消费时常有的一种心态（个人利益）。
A06 购买绿色产品可能会付出更大成本，处于经济上的考虑会购买非绿色产品（个人利益）。
A18 还有一个就是非绿色消费的成本比较低，出于经济利益的驱使消费者也会采取非绿色的消费（个体经济利益）。
A24 人都是经济人，都考虑自己，会采取对自己有好处的行为，所以这样的非绿色行为才会很难普遍（个体利益诉求）。

A08 看到周围人都没有垃圾分类的行为，那我为什么要垃圾分类，况且那样很浪费时间和精力（群体压力因素）。
A12 主要是圈子的影响，自己做的行为不合符圈子的共同规范，这样就会转变（圈子影响）。
A16 现在好多人都有一种从众心理，如果大部分人都进行绿色消费，为了保持一致和群体压力，就会带动其他人进行绿色消费（从众消费、群体压力）。
A22 家庭和周围人的影响很多（群体影响）。

A03 可能我的非绿色消费行为会有消极影响，但是总归是大家承担，自己感觉不到（个体消极效果感知）。
A12 说危害嘛，大家感觉不到这种危害对自己的影响，就像医院拍片，说有危害大家不还是没注意，当下危害感知还不够（个体消极结果感知）。
A23 没有（危害）意识，总觉得一块电池扔了就扔了，对环境没有多大的影响（危害意识感知）。
A24 昨天看了一个关于酒驾的视频，把我吓哭了，意识到对自己的危害真的很重要，要把危害血淋淋的展现在大家面前（危害感知）。

A05 自己的绿色行为效果感知不行（个体效果感知）。
A18 有的人根本不知道自己家庭中节能灯泡会节能多少电，没有具体的数字表明这种行为的影响（个体效力感知）。
A09 受到传统的消费模式的影响，不愿意改变，就像早餐喝豆浆吃茶非绿色固有
| 叶蛋一样，明明知道这样不好，但是也懒得改变 (传统消费习惯)。 | 消费习惯 |
| A12 路径依赖，我已经习惯了，你让我转变这就很困难 (习惯)。 |  |
| A18 固有消费思想的影响以致人们不愿意改变消费行为 (传统消费习惯)。 |  |
| A23 还是他们养成的消费习惯，特别是年纪较大的消费者，改变几十年养成的消费习惯会很困难 (固有的消费习惯)。 |  |
| A18 加强教育，塑造正确的消费价值观 (价值观念)。 | 绿色价值观薄弱 |
| A24 不要过多的用经济效益衡量，要从人的内部情感出发，比如价值观。价值观对人的消费行为有直接的导向作用，要想转变这种非绿色消费的现象，我觉得价值观是一个值得重点考虑的因素 (价值观)。 |  |
| A08 虽然有时非绿色消费行为费钱 (如出门开车而不乘坐公共交通工具)，但是节省时间和精力 (行为便利)。 | 非货币重视成本感知 |
| A13 看到非绿色消费行为我会很气愤，但是一些非绿色消费行为对自己很便利，比如丢垃圾，看不到垃圾桶的话就很可能随手乱丢 (个体便利程度)。 |  |
| A18 若绿色消费行为更容易获取可能就会转向绿色消费行为 (行为便利程度)。 |  |
| A11 对购买绿色产品的消费者进行补贴，在价格差不多条件下更有可能选择绿色产品 (经济补贴)。 | 经济补贴不足 |
| A16 给经济刺激，你看要是说白送一辆电动汽车，我就会要 (经济刺激)。 |  |
| A21 政府要对绿色消费行为进行补贴，用经济刺激促进绿色消费行为 (经济补贴)。 |  |
| A20 现在绿色产品总体而言还是比较贵的，如果消费者购买绿色产品的时候政府进行补贴，这样的话肯定会有更多的消费者购买绿色产品 (经济补贴刺激)。 |  |
| A12 生活习惯中的喜宴浪费很多，一桌本来没坐满人，但是因为互相不认识，大家也不会说不要浪费坐到一起 (社会风气)。 | 绿色消费不浓郁 |
| A18 社会风气影响消费行为 (社会风气)。 |  |
| A19 社会氛围没有特别浓郁，如果社会氛围很浓郁，这样也会引导人们进行绿色消费 (社会氛围)。 |  |
| A23 加强国民的素质，形成绿色消费的社会风气 (社会风气)。 |  |
| A13 炫耀心理导致非绿色消费行为 (面子文化因素)。 | 面子观较强 |
| A18 请客吃饭时，大家都要面子，点的菜吃不完就造成了浪费 (面子文化因素)。 |  |
| A20 私家车象征着一种地位，处于炫耀或者面子因素的影响，这样就不会乘坐公共交通 (面子意识、炫耀心理)。 |  |
| A06 加快创新，厂家能够生产成本很低的绿色产品 (产品技术条件)。 | 绿色产品不足 |
| A18 说实话，我还是比较倾向早期的营销观念 (产品至上，即认为产品创新需求)，如果市场上存在那种物美价廉的绿色产品，消费者何乐而不为呢？虽然现在市场上存在一些绿色产品，但是我觉得这些绿色产品并不能真正的满足人的需求，所以才会推行比较困难 (产品技术条件)。 |  |
| A22 现在市场上还是没有特别绿色的产品，就比如如果有那种可以放 |  |
在钥匙扣上，打开就会变成一个大袋子，这样的话就不会忘了带购物袋（绿色产品创新）。

| A01 加大投入绿色公共绿色基础设施（基础设施建设） | 基础设施 不完善
| A20 政府要加强基础设施建设，比如要引进智能公交系统（基础设施建设） | 基础设施 建设
| A22 加大投入绿色公共绿色基础设施，这样会为大家增加一种选择条件（基础设施建设） | 基础设施 建设
| A24 我有这种有回收的意识，但是没有渠道，我不知道回收给谁，没有相应的基础设施（基础设施建设） | 基础设施 建设

| A09 中国的消费现状，原始资源的造价低于回收的造价，这样做就没有意义（消费水平） | 经济、消费 制约水平
| A16 收入较低的家庭，即使意识到新能源汽车对环境很好，但是相比较一般的汽车价格而言还是偏贵的，这样，即使有购买绿色产品的想法，因为经济条件的限制也不可能成功实施（经济水平） | 经济条件 限制
| A18 如果有经济条件，会选择那些环保的产品，这样不仅对社会有好处也对自己有好处（经济条件限制） | 经济条件 限制
| A23 虽然明明知道这个产业对环境是有害的，但是由于这个产业是支柱产业，不能立即取缔，也不能立刻改造完成，基于经济考虑也没有办法（经济条件限制） | 经济条件 限制

| A12 施加惩罚，超市塑料袋收钱就是一种惩罚，现在可以明显地感受到白色污染大大减少，谁能说没作用（施加惩罚） | 惩罚措施 不大
| A14 没有什么严格的惩罚措施，做了非绿色行为没什么惩罚，大家就不转向绿色消费行为（加强惩罚） | 惩罚措施 不大
| A18 有这种绿色消费的意识，比如去超市的时候我想到了要带购物袋，但是忘了或者其他原因就极有可能没带购物袋，结账的时候觉得购物袋又不贵，就再买一个呗（惩罚力度） | 惩罚措施 不大

| A06 政府要起表率作用，从上往下做起（政府表率） | 参照群体示范作用
| A18 明星效应，榜样的力量会促进绿色消费行为，要是我的偶像正在这样做，那我就会跟着这样做，为了保持一致嘛（榜样标杆作用） | 参照群体示范作用
| A24 你看政府都没有做到绿色消费，大家凭什么听，这样怎么会绿色消费，政府要有表率作用（政府表率作用） | 参照群体示范作用

| A15 像国外有确定的时间收不同而垃圾，在中国，没有这么严格的制度，所以垃圾分类才没有成为普遍显现（制度保障） | 法律法规 建 设 完 善
| A13 国家制定一些关于保护环境的法律法规（指定法律法规） | 法律法规 建 设 完 善
| A18 没有落实政策方面，要是乱丢垃圾罚款，大家都不会乱丢垃圾了（政策保证） | 法律法规 建 设 完 善
| A22 在法律中明确非绿色消费行为的惩罚（法律法规政策） | 法律法规 建 设 完 善

| A16 现在政府倡导绿色消费的力度不够（政策引导力度） | 政府监督 不够
| A18 政府的执行力度还是不够，很多关于环境的法律法规，消费者根本就不知道，应该加大执行力度，比如购物袋收费，虽然效果没有太明显，但是“白色污染”还是好了很多（政策执行力） | 政府监督 不够
| A19 政府应该设置专门部门进行监督，看看厂家或者消费者有没有按照标准生产或消费，可能这样会好点吧（政策监督力度） | 政府监督 不够
| A24 还是政府的政策执行力不行，比如对于一些有污染的产业我想去举报，但是现在大家普遍有种看法就是即使举报了，也没有相关 | 政府监督 不够
的人员执行（政府执行力）。

A03 政府在进行宣传时，不要一味的宣传正面的影响，而要从危害入手，让人有直击心灵的震撼感（危害性宣传）。
A12 现在广告宣传时会注入人的情感，我觉得情感宣传是一种较好的宣传方式。大家都比较关心行为对自己的影响，一旦涉及到自己的亲人，消费者会尤其注意。（情感诉求）。
A21 在宣传教育的时候要注意取真人真事，不要是卡通之类的，这样人们对危害的认识没有那么深刻，不会这样警钟长鸣，有持久的影响（宣传内容）。
A23 给你施加一个恐惧的场景，然后再宣传，虽然很让人不舒服，但是效果真的很好（宣传内容）。

注：A**表示第**受访者回答的原始语句。每段话末尾括号中的词语表示对该原始语句进行归纳得到的原始概念。

4.2 主轴编码

主轴编码的主要任务是发现和建立概念类属之间的各种联系，以表现资料中各个部分之间的有机关系。在主轴编码中，每一次只对一个类属进行深度分析，围绕着这一个类属寻找相关关系，因此称之为“轴心”。随着分析的不断深入，有关各个类属之间的各种联系应该变得越来越具体。根据不同范畴之间的关系或逻辑，我们对其进行了重新归类，共归纳出4个主范畴，具体关系如下表所示。

<table>
<thead>
<tr>
<th>主范畴</th>
<th>对应范畴</th>
</tr>
</thead>
<tbody>
<tr>
<td>非绿色消费心理</td>
<td>环境问题认知</td>
</tr>
<tr>
<td></td>
<td>绿色消费知识</td>
</tr>
<tr>
<td></td>
<td>个体社会责任感</td>
</tr>
<tr>
<td></td>
<td>消极后果感知</td>
</tr>
<tr>
<td></td>
<td>绿色价值观</td>
</tr>
<tr>
<td></td>
<td>面子观</td>
</tr>
<tr>
<td></td>
<td>个体感知效力</td>
</tr>
<tr>
<td>社会参照规范</td>
<td>描述性社会规范</td>
</tr>
<tr>
<td></td>
<td>绿色消费社会氛围</td>
</tr>
<tr>
<td></td>
<td>参照群体示范</td>
</tr>
<tr>
<td>知觉行为控制</td>
<td>个体经济利益</td>
</tr>
<tr>
<td></td>
<td>个体便利性</td>
</tr>
<tr>
<td></td>
<td>非绿色消费习惯</td>
</tr>
<tr>
<td>制度技术情境</td>
<td>经济补贴力度</td>
</tr>
<tr>
<td></td>
<td>绿色产品创新</td>
</tr>
<tr>
<td></td>
<td>基础设施建设</td>
</tr>
<tr>
<td></td>
<td>惩罚措施</td>
</tr>
<tr>
<td></td>
<td>法律法规建设</td>
</tr>
<tr>
<td></td>
<td>政府监督引导</td>
</tr>
<tr>
<td></td>
<td>政府宣传教育力度不足</td>
</tr>
</tbody>
</table>

4.3 选择性编码
选择性编码指的是在所有已发现的概念类属中经过系统的分析以后选择一个“核心类属”，分析不断地集中到那些与核心类属有关的码号上面。根据范畴的面向以及范畴与主范畴的关系内涵，我们首先对范畴、主范畴与非绿色消费行为的联结进行了考察，其中，非绿色消费心理意识、社会参照规范两个主范畴是非绿色消费行为的主要心理归因。但其作用机制有所不同。非绿色消费心理意识是内部心理因素，属于“个体意识”变量；社会参照规范是导致非绿色消费行为的社会心理因素，属于社会“环境”变量。知觉行为控制、制度技术情境调节上述意识—行为之间的联结关系，是调节因素。其中，知觉行为控制是内部调节因素，情境结构因素是外部调节因素。由此，本文可以用“意识—情境—行为”这一故事线概括非绿色消费行为的心理归因，其核心范畴可以确定为“非绿色消费行为心理归因及其作用机制”。根据故事线以及范畴和主范畴之间的联结关系，可以初步建构“非绿色消费行为形成机理模型”（见图1）。

图1 “非绿色消费行为的形成机理”研究框架

4.4 理论饱和度检验
理论饱和度检验是指在获取额外数据的基础上，进一步发展某一个范畴特征，以作为停止采样的鉴定标准。本文的理论饱和度检验用预留的1/3访谈记录进行。结果显示，模型中的范畴已发展得足够丰富，对于消费者非绿色消费行为的五大范畴均没有发现新的范畴和关系，主范畴内部也没有形成新的构成因子。因此，我们认为本文所构建的非绿色消费行为影响因素理论模型在理论上达到饱和。

5. 非绿色消费行为形成机理模型阐述
从模型中，我们可以看出，影响消费者非绿色行为的主要因素包括非绿色消费心理意识、知觉行为控制、社会参照规范和制度技术情境，但各影响因素对于
非绿色消费行为的作用机制、影响路径不同。下文将对此进行具体阐述。

1. 非绿色消费心理的特点及作用机制

非绿色消费心理意识决定其消费过程中的心理偏好，进而促进非绿色消费行为的发生，是绿色消费行为的内部心理归因。通过深度访谈，我们发现环境问题认知、消极后果感知、个体社会责任意识、个体面子观念等因素对非绿色消费行为有显著的促成作用。这可以从受访者代表性观点看出来，如“A07 大多数的消费者环境知识匮乏，都不知道自己是绿色消费行为，什么是非绿色消费行为，这样怎么才能形成绿色消费的习惯”、“A03 可能我的非绿色消费行为会有消极影响，但是大家承担，自己感觉到”。在中国，强调牺牲“小我”完成“大我”，典型的“个人利益”服从“国家利益、集体利益”，但这很少与消费行为相联系。特别的，在中国，处处讲究排场，“面子观”根深蒂固。消费决策过程受到多种因素的影响，起到主作用的心理就是“我会从这件事中得到什么”而不是“购买这件产品会不会对社会环境造成伤害”

2. 社会参照规范的特点及作用机制

社会参照规范通过个体施加压力，使得个体的行为符合社会规范的要求，成为非绿色消费行为的社会心理归因。调查表明，消费者消费过程中受到描述性规范、参照群体示范作用及奢侈浪费风气的影响。描述性规范是指告诉你周围人在做什么，会在无形中影响个体追随周围人的做法。社会参照规范从以下两方面对非绿色消费行为施加影响：(1) 消费者环境知识缺乏或者环境问题认知不深刻时，社会群体的行为会被当做有用信息借鉴。 (2) 笔者认为，中国属于高情境、高群体的社会，为了融入群体，会趋向满足参照群体的标准或规范。这种心理可在具有代表性观点中体现，如“A18 明星效应，榜样的力量会促进绿色消费行为，要是我的偶像正在这样做，那我就会跟着这样做，为了保持一致嘛”、“A16 现在好多人都有一种从众心理，如果大部分人都进行绿色消费，为了保持一致和群体压力，就会带动其他人进行绿色消费”

3. 知觉行为控制、制度技术情境的特点及作用机制

知觉行为控制和制度技术情境充当调节因素的作用，但是其作用机制存在差别。知觉行为控制指个人认为自己所掌握的资源与机会愈多、所预期的阻碍愈少，则对个人的知觉行为控制就越强。知觉行为控制是影响消费者进行非绿色消费行为的内部情境因素，是绿色消费行为的启动因素。知觉行为控制通过衡量该行为的阻碍和机会（也可以看成成本和收益）确定是否采取非绿色消费行为。制度技术情境是影响非绿色消费行为的外部情境因素，通过影响意识—行为之间的关系强度、行为便利性及难易程度实现行为干预。

6. 结论与讨论
6.1 主要结论

本文研究表明，非绿色消费心理、社会参照规范、知觉行为控制、制度技术情境这 4 个主范畴对非绿色消费行为的产生存在显著影响。非绿色消费心理和社会参照规范是该行为的心理归因，其中，非绿色消费心理是内部心理归因，社会参照规范是社会心理归因。知觉行为控制和制度技术情境是调节因素，其中，知觉行为控制是内部调节因素，制度技术情境是外部调节因素。

6.2 理论贡献

本文的理论贡献主要在于：(1) 从非绿色消费行为入手，更直观的探究非绿色消费行为的影响因素及作用机制，避免了“知强行弱”的态度行为缺口问题，使模型更准确。此外，之前的研究大多集中在绿色消费领域，很少涉及非绿色消
费行为，本文在一定程度上弥补了这一研究缺口。2) 系统探究了非绿色消费行为的影响因素，界定了非绿色消费的内部心理因素（非绿色消费心理意识）、社会心理因素（社会参照规范）、内部情境因素（知觉行为控制）、外部情境因素（制度技术情境）。2构建了非绿色消费行为心理归因的理论模型，梳理了非绿色消费行为的形成机理，指出了非绿色消费意识与行为之间受到情境因素的调节作用。这一模型验证了态度—情境—行为理论，并且拓展了非绿色消费意识—行为之间的关系不仅受到外部情境因素的影响，还受到内部情境因素的影响。

6.3 对策建议

本文的研究结论对政府制定管制政策以抑制非绿色消费行为，提供了针对性的政策思路和实施路径。

1. 政府必须首先弱化消费者的非绿色消费心理，提高绿色消费心理。
   （1）普及消费者的绿色消费行为知识。在深度访谈过程中，我们发现，消费者进行非绿色消费行为的主要原因之一就是缺乏相应的绿色消费知识，甚至是高学历者，对绿色消费的概念的认知也比较模糊。被访谈者提出，自身的绿色消费知识多是从一些宣传彩页和公益广告中获得，这反映绿色消费知识宣传不到位。因此，政府可以采用多种手段宣传，比如和学校合作定期开展绿色知识讲座，发起能激发公众一起参与的绿色活动等。此外，宣传绿色消费知识，对于抑制非绿色消费行为，提高绿色消费心理也是十分必要的。
   （2）通过多种方式加强环境危机问题的传播沟通，切实影响消费者对非绿色消费行为消极后果的感知。目前，消费者对于非绿色消费行为对环境产生的消极结果的认知还不够深刻，一些人即使意识到其行为对环境的影响，但在心理上却消极对待、被动等待。因而，政府应该及时告知公众非绿色消费行为的消极后果，尤其要使消费者认识到环境问题对自身的危害，促使消费者从非绿色消费模式向绿色消费模式转变。
   （3）提高消费者的个体感知效力和社会责任意识。在访谈中，我们发现，消费者对于环境治理的主体往默认为政府，很少有消费者感到自己应该为环境危机问题负责任。即使消费者认识到自己的社会责任，但是对其个体行为的效果感知比较低，也倾向选择固有消费模式，不做改变。个体对此，政府应该明确个体对环境危机问题的责任，加强正式和非正式监督，以提高个体责任意识。强调消费者转变消费模式（绿色消费、低污染）会产生显著的正面效果（如利于缓解全球性环境危机）。
   （4）政府应该引导消费者淡化虚面子（如炫耀性消费、奢侈性消费等），追求实面子（如合适的角色表现，内在能力等）。在以往的研究中往往将面子视为社会参照规范，但是，在深度访谈中，访谈人员发现，个体面子弱也扮演着重要的作用。因而，政府可以加强关于“面子观”的宣传，帮助消费者树立正确的面子观。

2. 政府应该转变消费者重排场、攀比的社会风气和高群体压力的参照氛围。
   在深度访谈中发现，社会参照规范是消费者非绿色消费行为产生的社会心理归因。消费者进行非绿色消费时有可能会受到周围人异样的眼光。因此，政府应该予以抑制和约束；对于积极的社会压力氛围（如浪费资源或者危害环境会受到周围人的谴责），政府应该积极引导和推进。

3. 政府应该提供多维度的帮助，减少消费者感知进行绿色消费行为的阻
研究中发现，消费者在很大程度上认为自己进行绿色消费行为的效力较小，同时存在不便利、成本高等阻碍性问题。根据计划行为理论（TRA），知觉行为控制是决定行为意向的主要变量之一，知觉行为控制越强，行为意向就越大。当消费者认为自己所掌握的资源和机会越多、所预期的阻碍越少，则对行为控制就越强。一方面，政府可以通过管制政策措施（如配套设施、产品条件等），确保消费者进行绿色消费简单、低成本。另一方面，消费者在消费过程中比较关注自己得到什么，而不是这对环境是否会产生危害，重视个体经济利益。对此，政府应该引导消费者从“以人为本”的消费模式转移到关注自然，如有效保护生态环境、能源可持续消费。

4. 政府应该从行政法规、基础设施、产品技术条件等制度技术情境方面进行变革。

根据本文的深度访谈，基础设施建设（公共交通、分类回收垃圾筒等）、产品技术条件（降低产品成本、加大绿色产品创新力度等）、行政法规政策（政策建设、惩罚措施、经济补贴力度、监督引导力度等）情境结构在很大程度上影响消费者进行绿色消费行为的成本收益。因此，政府应从以上情境结构入手，创造必要的政策技术条件促进绿色消费行为。如政府可以加大“家电下乡”及购买其他绿色产品的经济补贴力度，完善基础设施建设、加强绿色产品技术创新、完善法律法规以及加强政府监督引导力度。

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参考文献


A Study of Consumers’ Purchase Intention of Brand Extension

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Abstract
Managing brand extension is a challenge for every business. Getting to know driving factors that influence consumer’s purchase intention is important for businesses. This paper studies what factors may influence consumers’ purchase intention of extended products and their overall brand loyalty. By using a combination of theoretical basis and empirical survey, this study results showed that perceived fitness and similarity between parent and extended brands, parent brand awareness, parent brand satisfaction, brand communication significantly and positively impact consumers’ purchase intention of the extended products, and finally, the purchase intention of extended products also significantly impact overall brand loyalty.

Keywords: Brand Extension; Consumer Purchase Intention; Brand Loyalty
消费者对延伸产品购买意愿的影响因素研究

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摘要

本文从消费者的视角出发，研究了品牌延伸过程中什么样的因素会影响消费者对延伸产品的购买意愿以及对整体品牌的忠诚度。在理论分析与实证研究结合的基础上，本研究以“旺旺”品牌为例，构建了消费者对于该品牌延伸产品购买意愿的理论模型。通过回收259份有效问卷，以及采用结构方程模型进行验证后，研究结果显示感知契合度、延伸品牌与母品牌相似度、母品牌认知、母品牌满意度和品牌营销能力均会显著正向影响消费者对延伸品牌的购买意愿，与此同时，消费者对延伸品牌的购买意愿又显著影响整体品牌的忠诚度。

关键词：品牌延伸；消费者购买意愿；品牌忠诚

1. 引言


本研究在品牌延伸理论及消费者购买意愿的基础上，以旺旺集团为例，通过实证检验，提出消费者感知契合度、延伸品牌与母品牌相似度、母品牌认知、母品牌满意度和品牌营销能力这六大因素会影响消费者对延伸品牌的购买意愿，
并进一步影响消费者对品牌整体的忠诚度。研究结果为企业在实施延伸战略时提供有益的参考信息和品牌扩展策略，避免企业在运营过程中存在盲目性延伸，从而提升消费者的整体忠诚度。

2. 文献回顾与研究假设

2.1 品牌延伸的相关研究


Kim, Lavack & Smith（2001）提出了品牌延伸的两种方式：横向延伸和纵向延伸。横向延伸是指延伸产品与产品线延伸的相似性，纵向延伸是指同一类别产品的延伸，其质量水平和价格不同。Sheinin & Schmitt（1994）发现品牌延
伸可以分为两种类型。一个是产品类别扩展。原始产品与扩展产品具有相似的特性。例如，宝洁公司将原来的佳洁士牙膏产品延伸到牙刷上。二是新产品概念的延伸，在原有的产品类别中形成新的竞争属性。例如，佳洁士牙膏是新推出的一种茉莉花茶味牙膏，同时也在市场上销售新的和原装的牙膏。

2.2 影响品牌延伸的因素

（1）感知契合度


H1：消费者感知契合度正向影响消费者对延伸产品的购买意愿。

（2）延伸产品与母品牌的相似性

Ruyter(2000)认为产品的相似性指的是母品牌的产品与延伸后的产品之间有着相似的特征。Klink & Smith(2001)将品牌延伸相似性分为三种：类型相似性、技术相似性和渠道相似性。类型相似性是指扩展产品与原产品是否属于使用中的相似或相似类型。技术相似性是指延伸产品的制造技术与原产品相同或相似。渠道相似性是指当母品牌的产品与延伸的产品通过利用共同的渠道和推广模式时，不仅可以节省成本、人力和资源，减少渠道障碍，使经济效益提升，还能减少消费者对新产品了解的时间，获得更多熟悉品牌的机会。当母品牌现有的技术和资源能够满足客户的一般需求时，具有高度相似性的延伸产品更有可能成功。因此延伸产品与母品牌的产品有越相似的属性，则品牌延伸的成功率就越大。

H2：延伸产品与母品牌相似性正向影响消费者对延伸产品的购买意愿。

（3）母品牌产品形象

品牌实力是品牌延伸十分重要的因素。Broniarczyk & Alba(1994)认为消费者对母品牌认知和母品牌的知名度都是影响品牌延伸成功的重要条件。消费
者对于品牌的认知指的是顾客能否通过第一次或多次购买的经历，在脑海中可以记录和识别出某种品牌是哪一类产品的能力，进而在顾客的潜意识里构建起品牌与产品间的关联，明白该品牌的产品可以满足顾客的哪些需求。消费者对品牌的认同和满意是指消费者对品牌的认可、信赖，消费者对母品牌越认同越满意，品牌延伸战略的实施也就越容易被消费者接受。综上所述，母品牌的产品形象越正面，可转移的品牌资产就越大，那么消费者对延伸的品牌购买意愿也会越强。因此，我们提出如下假设：

H3: 消费者对母品牌的认同度正向影响消费者对延伸产品的购买意愿。
H4: 消费者对母品牌的品牌认知正向影响消费者对延伸产品的购买意愿。
H5: 消费者对母品牌的满意度正向影响消费者对延伸产品的购买意愿。

（4）品牌的营销能力

营销能力对品牌延伸能否成功实施既有直接关系，也有复杂的间接关系。Aaker & Keller(1990)提出如果延伸产品可以有充足的资金投入到广告和促销等营销方面的支持，那么消费者越容易接触到延伸产品，并与产品建立联系。当企业对营销的支持力度越大，企业的分销商也更容易接受和销售新的产品，消费者也能从分销商那边获得更好地服务，从而使消费者更直接获得延伸产品。因此，我们提出如下假设：

H6: 品牌的营销能力正向影响消费者对延伸产品的购买意愿。

（5）消费者购买意愿与品牌忠诚的关系

品牌忠诚是一个涵盖了认知、态度、行为等多种维度的复杂领域。Oliver(1980)提出了品牌忠诚指的是消费者对于所喜爱的产品有再次购买的倾向及实质性地购买行为。当消费者选择反复购买该品牌的产品，这样购买行为说明消费者已与产品建立了联系，形成了品牌的忠诚。这个阶段的顾客通常会忽略来自同行业其他竞争对手的诱惑，可以为企业创造巨大的收益。同理，消费者如果对延伸品牌产生积极地购买意愿，这反映出消费者与品牌整体之间建立了积极正向的联系，那么进而会影响消费者对母品牌的忠诚度。因此，我们提出如下假设：

H7: 消费者对延伸品牌的购买意愿正向影响消费者对母品牌的忠诚度。

综上，本文构建了影响消费者对延伸品购买意愿的概念模型如图 2-1 所示：
图 2-1 研究模型

3 研究设计

3.1 量表设计

本研究所有题项均参考前人学者已有的成熟测量量表，各变量测量均采取 Likert 7级量表，答案从“1 非常不同意”到“7 非常同意”。表 3-1 为量表题项汇总。

3.2 数据收集

以往文献对品牌延伸的研究主要采用情景假设模拟实验法（Aaker and Keller, 1990），本文也使用假设情景来设计调查问卷。在情景假设中，本文选择广为熟知的旺旺品牌作为研究对象，旺旺品牌从最初的食品类，已经延伸到不同类别的其他产品。通过测量消费者对旺旺品牌的认知度、满意度、忠诚度、以及对旺旺品牌新延伸产品的购买意愿，来分析什么样的因素可能影响消费者对延伸品牌的购买意愿及对母品牌的忠诚度。

本次调查问卷主要以网络调查方式获得，总共向调查对象发放了 286 份问卷，删减掉错误及无效的问卷 27 份，最终的有效问卷为 259 份，有效回收率为 91%。其中，男性占比 39.4%，女性占比为 60.6%；年龄分布中，小于 25 岁占比 13.9%，26-45 岁为 70.7%，大于 45 岁为 15.4%。
<table>
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<tr>
<th>变量的维度</th>
<th>具体测量的题项</th>
<th>参考文献来源</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.XX 品牌推出 XX（延伸后的新产品）是合理的，一点也不奇怪</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.XX 产品（延伸后的新产品）与母品牌的品牌形象是匹配的</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.延伸产品与母品牌可以满足消费者类似的需求</td>
<td></td>
</tr>
<tr>
<td>母品牌认知</td>
<td>1.您对 XX 品牌是喜欢的</td>
<td>Aaker &amp; Keller, 1990</td>
</tr>
<tr>
<td></td>
<td>2.您对 XX 品牌的产品感到满意</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.XX 品牌的产品让您感觉安全</td>
<td></td>
</tr>
<tr>
<td>母品牌认同度</td>
<td>1.您信任 XX 品牌</td>
<td>Chaudhuri, 2002</td>
</tr>
<tr>
<td></td>
<td>2.您认为 XX 品牌是可靠的</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.您认为 XX 品牌使您感到放心</td>
<td></td>
</tr>
<tr>
<td>母品牌满意度</td>
<td>1.您确定认为购买 XX 品牌是个正确的决定</td>
<td>Lau &amp; Lee, 1999; Oliver, 1980;</td>
</tr>
<tr>
<td></td>
<td>2. XX 品牌总体来说，让您满意</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.在购买 XX 品牌的产品过程中一直很好</td>
<td></td>
</tr>
<tr>
<td>品牌营销能力</td>
<td>1.您认为 XX 品牌的营销方式很好</td>
<td>Aaker &amp; Keller, 1990; Reddy, 2001</td>
</tr>
<tr>
<td></td>
<td>2. XX 品牌的销售方式令您满意</td>
<td></td>
</tr>
<tr>
<td>延伸品购买意愿</td>
<td>1.我会愿意尝试购买 XX 品牌的 XX 产品</td>
<td>Dacin et al., 1994; Fullerton, 2005.</td>
</tr>
<tr>
<td></td>
<td>2.在选择购买 XX 产品类别时，您会考虑 XX 品牌的 XX 产品</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.下次您需要该物品的时候，您还会选择 XX 品牌的 XX 产品</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.您会告诉您的朋友 XX 品牌有多好</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.您会推荐其他人购买该品牌产品</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.下次买同类产品时，该品牌的产品是我的第一考虑选择</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5.您打算持续购买该品牌产品</td>
<td></td>
</tr>
</tbody>
</table>

### 3.3 数据分析与假设检验

本研究所有变量的 Cronbach’s alpha 系数如表 3-2 所示，说明问卷具有较高的可信度。模型通过验证性因子分析验证，问卷效度及维度设置合理，具体信息详见表 3-3。因子模型的适配指针结果如表 3-4 所示，所有指标均达到适配标准，总体上模型拟合情况良好，模型结果较有说服力。
### 表 3-2 研究量表信度分析表

<table>
<thead>
<tr>
<th>变量</th>
<th>Cronbach's Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>品牌认知</td>
<td>0.894</td>
</tr>
<tr>
<td>母品牌认同度</td>
<td>0.858</td>
</tr>
<tr>
<td>品牌满意度</td>
<td>0.9</td>
</tr>
<tr>
<td>营销能力</td>
<td>0.957</td>
</tr>
<tr>
<td>品牌忠诚度</td>
<td>0.941</td>
</tr>
<tr>
<td>感知契合度</td>
<td>0.886</td>
</tr>
<tr>
<td>延伸品牌相似度</td>
<td>0.967</td>
</tr>
<tr>
<td>购买意愿</td>
<td>0.798</td>
</tr>
</tbody>
</table>

### 表 3-3 验证性因子分析

<table>
<thead>
<tr>
<th>潜变量</th>
<th>测量项</th>
<th>因子载荷</th>
<th>组合信度</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>母品牌认同度</td>
<td>品牌认知 1</td>
<td>0.827</td>
<td>0.895</td>
<td>0.74</td>
</tr>
<tr>
<td></td>
<td>品牌认知 2</td>
<td>0.866</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>品牌认知 3</td>
<td>0.887</td>
<td></td>
<td></td>
</tr>
<tr>
<td>母品牌认同度</td>
<td>母品牌认同度 1</td>
<td>0.898</td>
<td>0.864</td>
<td>0.679</td>
</tr>
<tr>
<td></td>
<td>母品牌认同度 2</td>
<td>0.771</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>母品牌认同度 3</td>
<td>0.798</td>
<td></td>
<td></td>
</tr>
<tr>
<td>母品牌满意度</td>
<td>品牌满意度 1</td>
<td>0.886</td>
<td>0.9</td>
<td>0.75</td>
</tr>
<tr>
<td></td>
<td>品牌满意度 2</td>
<td>0.836</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>品牌满意度 3</td>
<td>0.875</td>
<td></td>
<td></td>
</tr>
<tr>
<td>品牌营销能力</td>
<td>营销能力 1</td>
<td>0.94</td>
<td>0.957</td>
<td>0.918</td>
</tr>
<tr>
<td></td>
<td>营销能力 2</td>
<td>0.976</td>
<td></td>
<td></td>
</tr>
<tr>
<td>感知契合度</td>
<td>感知契合度 1</td>
<td>0.872</td>
<td>0.886</td>
<td>0.722</td>
</tr>
<tr>
<td></td>
<td>感知契合度 2</td>
<td>0.856</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>感知契合度 3</td>
<td>0.821</td>
<td></td>
<td></td>
</tr>
<tr>
<td>延伸品牌与母品牌相似度</td>
<td>品牌相似度 1</td>
<td>0.953</td>
<td>0.967</td>
<td>0.935</td>
</tr>
<tr>
<td></td>
<td>品牌相似度 2</td>
<td>0.981</td>
<td></td>
<td></td>
</tr>
<tr>
<td>延伸品购买意愿</td>
<td>购买意愿 1</td>
<td>0.868</td>
<td>0.81</td>
<td>0.589</td>
</tr>
<tr>
<td></td>
<td>购买意愿 2</td>
<td>0.735</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>购买意愿 3</td>
<td>0.688</td>
<td></td>
<td></td>
</tr>
<tr>
<td>品牌忠诚度</td>
<td>品牌忠诚度 1</td>
<td>0.909</td>
<td>0.941</td>
<td>0.762</td>
</tr>
<tr>
<td></td>
<td>品牌忠诚度 2</td>
<td>0.823</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>品牌忠诚度 3</td>
<td>0.857</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>品牌忠诚度 4</td>
<td>0.861</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>品牌忠诚度 5</td>
<td>0.912</td>
<td></td>
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</table>
表 3-4 结构方程模型拟合优度

<table>
<thead>
<tr>
<th>指标</th>
<th>CMIN/DF</th>
<th>RMSEA</th>
<th>SRMR</th>
<th>GFI</th>
<th>CFI</th>
<th>IFI</th>
<th>PNFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>标准</td>
<td>&lt;3</td>
<td>&lt;.08</td>
<td>&lt;.08</td>
<td>&gt;.9</td>
<td>&gt;.9</td>
<td>&gt;.9</td>
<td>&gt;.5</td>
</tr>
<tr>
<td>模型</td>
<td>1.5</td>
<td>0.04</td>
<td>0.06</td>
<td>0.9</td>
<td>0.97</td>
<td>0.98</td>
<td>0.77</td>
</tr>
</tbody>
</table>

3.4 模型结果讨论

模型变量间的相关性系数如表 3-5 所示，研究结果显示各变量均有显著的正向相关关系。路径系数如表 3-6 所示，除母品牌认同度对延伸品牌购买意愿不显著外，其他路径系数均显著正向影响消费者延伸品牌购买意愿及母品牌忠诚度。

表 3-5 变量相关系数

<table>
<thead>
<tr>
<th></th>
<th>品牌认知</th>
<th>母品牌认同度</th>
<th>品牌满意度</th>
<th>营销能力</th>
<th>感知契合度</th>
<th>品牌相似度</th>
<th>购买意愿</th>
<th>品牌忠诚度</th>
</tr>
</thead>
<tbody>
<tr>
<td>品牌认知</td>
<td>0.86</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>母品牌认同度</td>
<td>0.32**</td>
<td>0.82</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>品牌满意度</td>
<td>0.22**</td>
<td>0.21**</td>
<td>0.87</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>营销能力</td>
<td>0.19**</td>
<td>0.03**</td>
<td>0.08**</td>
<td>0.96</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>感知契合度</td>
<td>0.23**</td>
<td>0.17**</td>
<td>0.106</td>
<td>0.21**</td>
<td>0.85</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>品牌相似度</td>
<td>0.24**</td>
<td>0.18**</td>
<td>0.119**</td>
<td>0.11**</td>
<td>0.17</td>
<td>0.97</td>
<td></td>
<td></td>
</tr>
<tr>
<td>购买意愿</td>
<td>0.48**</td>
<td>0.28**</td>
<td>0.329**</td>
<td>0.32**</td>
<td>0.38</td>
<td>0.31**</td>
<td>0.77</td>
<td></td>
</tr>
<tr>
<td>品牌忠诚度</td>
<td>0.36**</td>
<td>0.36**</td>
<td>0.38**</td>
<td>0.2</td>
<td>0.20</td>
<td>0.18**</td>
<td>0.45**</td>
<td>0.87</td>
</tr>
</tbody>
</table>

注：对角线内为相应变量的AVE正平方根，对角线下方为各潜变量之间的相关系数。

表 3-6 模型标准路径系数表

<table>
<thead>
<tr>
<th>路径关系</th>
<th>标准路径系数</th>
<th>标准误差</th>
<th>C.R.</th>
<th>假设结果</th>
</tr>
</thead>
<tbody>
<tr>
<td>购买意愿</td>
<td>&lt;---</td>
<td>感知契合度</td>
<td>0.22***</td>
<td>0.06</td>
</tr>
<tr>
<td>购买意愿</td>
<td>&lt;---</td>
<td>延伸品牌相似度</td>
<td>0.14</td>
<td>0.05</td>
</tr>
<tr>
<td>购买意愿</td>
<td>&lt;---</td>
<td>母品牌认同度</td>
<td>0.1</td>
<td>0.06</td>
</tr>
<tr>
<td>购买意愿</td>
<td>&lt;---</td>
<td>品牌认知</td>
<td>0.31***</td>
<td>0.07</td>
</tr>
<tr>
<td>购买意愿</td>
<td>&lt;---</td>
<td>品牌满意度</td>
<td>0.22**</td>
<td>0.06</td>
</tr>
<tr>
<td>购买意愿</td>
<td>&lt;---</td>
<td>营销能力</td>
<td>0.19**</td>
<td>0.05</td>
</tr>
<tr>
<td>品牌忠诚度</td>
<td>&lt;---</td>
<td>购买意愿</td>
<td>0.5</td>
<td>0.07</td>
</tr>
</tbody>
</table>

注：***表示 P 值小于 0.001；**表示 P 值小于 0.01；*表示 P 值小于 0.05
4 结语

本文通过研究何种因素会影响消费者对延伸品牌的购买意愿的过程中，通过实证分析发现感知契合度、消费者对母品牌的认知及满意度、品牌的营销能力、母品牌与延伸品的相似度会显著影响消费者对延伸品牌的购买意愿，而消费者对延伸品的购买意愿又会显著影响整体品牌的满意度。基于以上实证检验的结果，我们为品牌延伸策略提供以下建议：

第一，品牌延伸时避免推出契合度和相似度低的产品。在品牌延伸时，企业应谨慎考虑推出延伸契合度和相似度低的产品。如果新延伸产品与原先的产品相似度和契合度过低，母品牌的信誉度和竞争力也会受到损害。因此盲目的产品延伸会为企业带来潜在风险。

第二，强化品牌形象，增强品牌整体满意度。企业在运营过程中，一定要努力强化消费者对于母品牌的认可和满意。母品牌的核心价值包括是否被普遍消费者所熟知，是否有很好的认同和满意。当顾客对母品牌产品感到满意时，消费者才会对延伸产品产生购买意愿，并同时影响品牌忠诚。

第三，运用良好的营销策划。好的营销策划，如广告宣传、促销活动、还有产品试用等，都有利于延伸产品快速进入市场，能让消费者快速直接接触到该产品，从而逐渐建立消费者品牌关系，最终形成品牌购买意愿及忠诚。
参考文献


The Impact of Legacy Motivation on Individual Saving Willingness: The Mediating Role of Future Self-Continuity

WANG Lin¹, Cheng Zengxiang¹ and Xie Kunhuang¹

¹International School of Business & Finance, Sun Yat-sen University

Abstract
In recent years, China's savings rate has shown a trend of declining volatility, but it is still at a high level, far above the world average, and higher than the average level of developing and developed countries. The long-term high savings have indeed made important contributions to the rapid growth of China's economy, and it has also attracted many scholars at home and abroad to study it. This article is innovative from the perspective of legacy motivation, to explore its impact on individual willingness to save. Specifically, this paper uses the combination of econometrics and experimental research methods, from the family level to the individual level, from the relevant relationship to the causal relationship, which proves the positive influence of legacy motivation on the individual's willingness to save, and further proves that the change of future self-continuity is the intrinsic mechanism of this effect. This paper promotes the research progress of legacy motivation, links legacy motivation with future self-continuity, and provides a new perspective for explaining China's high savings rate.

Keywords: Legacy motivation; Future self-continuity; Savings; Intertemporal
传承动机对个体储蓄意愿的影响研究——未来自我连续性的中介作用

王琳\(^1\), 陈增祥\(^1\), 谢坤煌\(^1\)

\(^1\)中山大学国际金融学院

摘要

近年来，我国储蓄率呈现波动下降的趋势，但却仍居于高位，远高于世界平均水平，也高于发展中经济体和发达国家的平均水平。长期以来的高储蓄确实为我国经济的快速增长做出了重要贡献，同时也吸引了国内外众多学者对其的研究。本文则创新性地从传承动机的角度出发，探究其对个体储蓄意愿的影响。具体而言，本文采用计量经济学和实验研究法相结合的方式，从家庭层面到个体层面，从相关关系到因果关系，证明了传承动机对于提升个体储蓄意愿的正向影响，并进一步证明了未来自我连续性的变化是这一影响的内在机制。本文推进了传承动机的研究进展，将传承动机与未来自我连续性联系了起来，并为解释我国高储蓄率提供了一个崭新的视角。

关键词：传承动机；未来自我连续性；储蓄；跨期
1 引言

长期以来，我国都是世界上国民储蓄率最高的国家之一，远高于世界平均储蓄率，也高于发展中经济体和发达国家的平均水平，甚至在2010年达到了顶点51.2%。储蓄向投资的转化，是保证中国经济快速增长的重要力量，而中国的高储蓄率确实对此做出了重要的贡献。从发展历程来看，改革开放以来，我国的储蓄率便总体呈波动上行趋势，居民储蓄和企业储蓄平分秋色，居民储蓄相对更高一些。随居民收入、居民消费支出的变化，居民储蓄波动上升；企业部门的储蓄，则于20世纪90年代至21世纪初明显上升；政府部门储蓄，则于本世纪快速上升，而后保持平稳。从目前国民储蓄率的组成来看，居民储蓄和企业储蓄仍占比较高，政府储蓄则相对较低。虽然近年来我国的国民储蓄率和居民储蓄率都在持续地波动下降，但是仍处于较高的水平。

我国高储蓄率的现象吸引了国内外众多学者的关注，他们对此进行了大量的研究，企图找出一种合理的解释。从研究的角度来看，大部分学者都从储蓄的生命周期理论和预防性动机理论出发，探讨我国高储蓄率的原因，然而结果并非一致且可靠，部分学者也提出了这些西方理论对于解释中国高储蓄率的适用性问题。并且，较少学者从文化及个体心理动机层面去探究我国高储蓄率的原因。而从我国的特点来看，传承是我国人民的优良传统，五千年的中华文化更是印证了这一点，这是我国与西方较年轻的国家相比较大的差别。从父母与子女的普遍关系来看，相较于西方家庭，我国家庭的父母往往操办着子女的方方面面，更加注重下一代的传承与发展。这种传统观念带来的影响是根深蒂固的，并且随着我国经济的发展和人均GDP的不断提升，传承所需要的物质资源也变得越来越丰富。

因此，不同于以往对于中国高储蓄率的研究，本文企图从传承动机（Legacy Motivation）的角度，去探讨其通过打破“跨期”障碍来影响个体储蓄意愿的过程。通过两个研究，结合计量经济学方法和实验研究法，从相关关系到因果关系，从家庭层面到个体层面，本文验证了传承动机对个体储蓄意愿的正向作用，并探究了以未来自我连续性（Future Self-Continuity）为中介变量的上述影响的心理机制。本文在理论层面上丰富了传承动机在我国情境下的研究，并为解释我国储蓄率居高不下的现象提供一个崭新的视角；实践层面上，本文则为提升部分地区和国家居民储蓄意愿低的问题提供了一些启示。

2 理论背景与文献综述

2.1 储蓄及其实施障碍

储蓄有广义和狭义之分，广义的储蓄包括存款储蓄、购买债券、商业保险和持有现金等，而日常生活中所讲的储蓄一般指狭义的储蓄，即存款储蓄。在国民收入核算体系中，储蓄指可支配收入中扣除消费的部分。国民储蓄为国民可支配收入与总消费之差，包括居民储蓄、政府储蓄和企业储蓄，其中居民储蓄和企业储蓄占比较高。由于本文研究的是传承动机对于个体储蓄意愿的影响，故关注的是居民储蓄。

前人围绕储蓄进行了大量的研究，但我国学者多聚焦于制度层面、环境层面和家庭层面，去探讨影响储蓄的因素，例如社会需求结构、实际利率、实际收入、

此外, 中国高储蓄之谜也吸引了众多学者对其进行探究, 总结来看主要有以下几个方面: 一是储蓄的生命周期理论, 认为一个国家的储蓄率也会随工作年龄人口占总人口的比例而变化 (Modigliani and Cao, 2004), 但该理论对于解释我国家庭层面的储蓄则不适用 (Chamon and Prasad, 2010)。并且, 近年来以 Richard Thaler (理查德·塞勒) 为首发展起来的行为经济学 (behavioral economics), 对于传统生命周期-永久收入理论提出了挑战, 其中的有限理性、最优储蓄率和自我控制等必要条件在现实生活中往往会被打破, 现实中的人们往往缺少自我控制、享受即刻而非延迟的满足、自利而非他利等; 二是储蓄的预防性动机理论, 该理论认为未来收入的预期和这种收入本身的不确定性影响着消费和储蓄 (Chamon and Prasad, 2010), 但是部分学者认为这只能解释我国储蓄中的一小部分, 并且随着我国社会保障体系的不断完善, 该解释的力度也在逐渐地削弱; 三是男女比例的失衡, Wei and Zhang (2009) 的研究认为, 男女比例的增大, 会通过结婚的竞争来影响家庭的储蓄, 特别是有儿子的家庭, 并且这个效应还会溢出到其他类型的家庭中; 四是金融体系的发展情况, 部分学者认为缺乏丰富的投资渠道是导致人们储蓄率高的一大重要原因, 但随着我国金融体系的不断完备, 该解释也逐渐站不住脚跟; 五是文化和思想观念方面的因素, 这方面的研究相对较少。由上可知, 学者们对于我国高储蓄率的现象并没有得出较为一致且完备的解释, 且部分解释随着我国的发展, 其可信度还有待商榷。

从心理学层面来看, 储蓄这一决策行为对于大多数人来说, 存在着“时间距离”这一大障碍。“时间距离” 指减少现在的消费以进行储蓄和未来使用储蓄之间所跨越的时间, 而大多数人往往偏好即刻而非延迟的满足, 对未来价值赋予一个较大的折现率, 因而在现实生活中偏好即期而非远期选择。因此, 打破跨期这一大障碍, 便能有效提升居民储蓄的意愿。Wade-Benzoni and Kimberly (2018) 的研究指出, 传承动机是打破跨代决策障碍的关键因素, 而跨代决策同样涉及跨期障碍。因此, 从理论上来看, 传承动机能够打破跨期障碍, 进而提升居民的储蓄意愿。

2.2 传承动机及其内涵

传承动机是指人们希望自我以及与自我相关的物品、事件、个性、精神、价值观等, 能被后人铭记和流传的个体动机 (Fox & Wade-Benzoni, 2010)。因此,
被传承的内容既包括有形的传承物，例如所有物、器官和基因等；也包括无形的传承物，例如记忆、个性、精神和价值观等（Hunter & Rowles, 2005）。传承动机的概念最早来源于个体主义学说，代表学者 Bauman（1992）认为一个成功的生命是能够在离世后得到世人长久铭记，并且生活得富有意义和价值。由于传承的思想有助于回答个体生命价值与意义的问题，因此它是一种在世界范围内普遍存在的，根植于个体心灵深处的基本性动机，会对个体的心理与行为产生持久性影响（e.g., Hunter & Rowles, 2005; Wade-Benzoni & Tost, 2009）。值得说明的是，传承的心理并不必然涉及到死亡的概念，即使它在理论上确实缘起于个体思考自己肉体消亡后精神如何永存，自我（概念与身份）如何被铭记的问题，并且凸显死亡概念（Mortality salience）也确实是提升个体传承动机的重要方法（Wade-Benzoni et al., 2012）。但在更一般意义上，传承动机表征个体想要将自我概念赋予长久性价值，能够在未来他人中依然保有影响力（Wade-Benzoni, 2018）。比如，在组织情境中，激活员工的传承动机能够提高创造力表现，因为富有创造力的行为能够帮助创造和产出更多的成果，绩效与作品等，将有助于实现自我的传承（Sligte et al., 2013）；类似，传承动机也能够显著提升中老年领导者的领导力行为，使得个体认为自己过去的行为、当下的行为在未来都依然能够对后人产生积极并且有价值的影响（Zacher et al., 2011）。这些组织情境下的传承动机促使个体思考自己如何能够在组织中产生持久影响力，即使是在自己离开该组织以后。

从以上论述可以看出，个体要实现自我的传承必须是个体行为在未来要对他人产生影响，所以“他人”与“未来”是传承概念里面的必备要素（Wade-Benzoni, 2018）。一个人是无法通过仅仅影响自己的未来或产生无足轻重的影响来实现传承目标（Wade-Benzoni, 2006）。简言之，传承动机概念具有两个特性，分别是在时间维度上关注未来和人际维度上关注他人。正是这两个特性使得传承动机概念在跨代际决策领域得到学者关注（Wade-Benzoni et al., 2010; 2012）。跨代际决策研究主要涉及当下的自己要为未来的他人决定一些行为（比如是否为后来者留下美好的生存环境，还是只顾及当代群体的享乐），由于存在时间距离以及结果不确定性，往往会造成本当下的自己为寻求即时利益而牺牲未来他人的利益，如何解决跨代际决策的悖论一直是学界关注的议题（Ersnerhersfield et al., 2009; Wade-Benzoni et al., 2012）。现有研究表明如果启动个体的传承心理，让个体意识到自己当下的决策会影响到未来他人的福利，那么寻求积极自我传承的心理就会强化自己与未来、自己与他人的联系，于是在跨代际决策中就会更多的考虑未来他人的利益（Wade-Benzoni & Tost, 2009; Wade-Benzoni et al., 2012; Zaval et al., 2015）。比如 Wade-Benzoni 等（2010）发现对诸如债务、处理废弃资源等不受欢迎的负担（Burdens）进行分配时（相比较于对诸如利润、处理自然资源等受欢迎利益进行分配），当实验参与者拥有传承动机并为考虑对未来他人留下自己持久的影响力时，他们会倾向于将较多的负担分配给当下的自己而不是未来的他人；换言之，他们将较少的利益分配给当下的自我，较多的利益分配给未来他人。因此，传承动机从根本上扭转了跨代际决策的困境（Wade-Benzoni, 2018）。传承动机所拥有的关注未来与关注他人的双重特性也提示它与个体的未来自我连续性感知之间存在着正向的关联。

2.3 传承动机、未来自我连续性与储蓄

未来自我连续性的构念（Future Self-continuity）来源于自我在时间维度上的

传承动机提升个体未来自我连续性感知的原因在于前者在时间维度考虑我自我的延展性，在人际维度上关注他人导向的特性。首先，传承动机强调自我在时间维度上延展性，传承动机的启动强调要将当下自我有关的信念、价值观等延伸至未来，自我的未来可继续存在并获得持久性的影响。而未来自我连续性也是强调现在自我与未来自我二者之间的连续性和一致性。因此，启动传承动机很可能促使个体在时间维度上拉近未来与当下来的时间距离和心理距离，使得未来自我不再遥远，近在咫尺，于是提升了当下自我与未来自我之间的心理联结，进而提升了未来自我连续性。其次，个体之所以在当下决策中忽视未来自我连续性感知的原因在于，将未来自我视为“陌生他人”（Hershfield et al., 2009）。而个体传承动机的内涵是期待自我在未来获得持续性影响力，而要让自我在未来继续获得影响力，就必然需要考虑他人的利益，甚至是未来他人的利益（Wade-Benzoni, 2018; Wade-Benzoni & Tost, 2009; Zaval et al., 2015）。因此提升个体传承动机可以提升未来自我与未来自我之间的联结感，导致提升个体的未来自我连续性感知。

由上可知，提升个体传承动机之后，其未来自我连续性感知也会得以提升。如前所述，未来自我连续性的提升对于诸如跨期决策、健康行为和道德行为等都有正向促进作用。因此，我们认为激发个体的传承动机可以打破时间距离这一障碍，使得人们感受到与未来自我之间的联系更加紧密，进而更愿意为了未来自己进行储蓄。据此，本文提出以下研究假设：

假设 1: 激发传承动机提升个体的储蓄意愿。

假设 2: 未来自我连续性在传承动机对个体储蓄意愿的影响中起中介作用。

为了验证以上假设，本文分两个研究逐步推进：研究一采用中国家庭追踪调查数据库（China Family Panel Studies, CFPS），利用计量经济学的方法，在家庭
层面上初步探究传承动机与居民家庭储蓄率之间的相关关系；在此基础上，研究二进一步利用实验研究法，通过操纵实验参与者的传承动机，分析实验参与者将一定金额分配为长期存款、短期存款、日常消费、娱乐消遣和享乐消费四个选项的比例差异，进而验证传承动机与个体储蓄的因果关系，并探究了未来自我连续性的中介作用。

3 研究一：传承动机与储蓄的相关关系——基于二手数据

基于以上研究假设，本文首先采用中国家庭追踪调查数据库的数据，利用计量经济学的方法，在家庭层面上对传承动机与储蓄率的相关关系进行初步探索，以期从历史数据中发现两者之间的关系，并为接下来精确定识别因果关系的实验研究提供一定的参考。

3.1 数据来源与主要变量说明

3.1.1 数据来源

本研究所利用的数据均来自于中国家庭追踪调查数据库，涵盖 28 个省份的家庭数据，剔除了未作答或者记录有误的数据之后，共有 25,697 个观测值，其中 2010 年、2012 年和 2014 年分别有 11,206、7,257 和 7,234 个观测值。

3.1.2 主要变量说明

储蓄率：考虑到本研究所选数据存在年份间隔，故沿用文献中常用的居民储蓄率定义方法（Chamon and Prasad，2010），即用居民家庭可支配收入与消费性支出之差除以可支配收入。

传承动机：由于传承动机在家庭层面没有直接可用的指标，本文选取了最相关的代理变量进行衡量，即“家庭是否参与扫墓或者祭祀活动”。参与扫墓或者祭祀活动不仅是对先祖的一种缅怀，更寄予了对于家族传承和发展的一种希冀。其中“0”代表家庭不参加扫墓或者祭祀，“1”代表家庭参加扫墓或者祭祀。

3.2 模型设定

传承是我国优良传统文化之一，其思想也影响着居民的消费和储蓄行为。因此，为了初步考察传承动机对居民储蓄行为的影响，本研究构建下列基本模型：

\[
\text{Saving}_{rate_{it}} = \alpha_{1} \text{Legacy Motivation}_{it} + \alpha_{2} X_{it} + \text{year dummies} + \text{province dummies} + \mu_{it}
\]  

其中，\(\text{Saving}_{rate_{it}}\) 表示家庭 \(i\) 在第 \(t\) 年的居民储蓄率；\(\text{Legacy Motivation}_{it}\) 是家庭的传承动机，用上述“家庭是否参与扫墓或者祭祀活动”进行代理；\(X_{it}\) 包括家庭收入、家庭人口学特征、家庭主事者特征、年份和省份等控制变量（Wei and Zhang，2009；赵西亮等，2013）。

3.3 实证分析结果
3.3.1 变量描述性统计

回归分析之前，本研究对各变量进行了描述性统计分析，结果如表格1所示:

<table>
<thead>
<tr>
<th>变量描述性统计</th>
<th>观测值</th>
<th>平均值</th>
<th>标准差</th>
<th>最小值</th>
<th>最大值</th>
</tr>
</thead>
<tbody>
<tr>
<td>居民家庭储蓄率</td>
<td>25,697</td>
<td>-0.028</td>
<td>0.324</td>
<td>-0.829</td>
<td>0.295</td>
</tr>
<tr>
<td>是否参加扫墓或者祭祀</td>
<td>25,697</td>
<td>0.672</td>
<td>0.470</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>家庭在城镇还是农村:</td>
<td>25,697</td>
<td>0.483</td>
<td>0.500</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>1=城市，0=农村</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>家庭人均可支配收入的对数</td>
<td>25,697</td>
<td>8.860</td>
<td>0.737</td>
<td>6.571</td>
<td>11.020</td>
</tr>
<tr>
<td>主事者的性别:</td>
<td>25,697</td>
<td>0.754</td>
<td>0.431</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>1=男性，0=女性</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>主事者的受教育年限</td>
<td>25,697</td>
<td>7.678</td>
<td>1.459</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>主事者的年龄</td>
<td>25,697</td>
<td>50.46</td>
<td>7.250</td>
<td>41</td>
<td>62</td>
</tr>
</tbody>
</table>

3.3.2 回归结果分析

表2给出了对上述模型的基础回归结果。第（1）列是利用2010年、2012年和2014年的混合数据得到的估计结果，第（2）列、第（3）列和第（4）列分别是用2010年、2012年和2014年的数据得到的估计结果。结果显示，在控制了家庭人均可支配收入和主事者的部分特征之后，除了2014年以外，其他年份和混合数据的估计结果都初步支持了本文的第一个假设，即传承动机对于储蓄有着正向的作用。

<table>
<thead>
<tr>
<th>因变量</th>
<th>（1）</th>
<th>（2）</th>
<th>（3）</th>
<th>（4）</th>
</tr>
</thead>
<tbody>
<tr>
<td>居民储蓄率</td>
<td>总样本</td>
<td>2010年</td>
<td>2012年</td>
<td>2014年</td>
</tr>
<tr>
<td>是否参加扫墓或者祭祀</td>
<td>0.020***</td>
<td>0.011***</td>
<td>0.012***</td>
<td>0.017**</td>
</tr>
<tr>
<td></td>
<td>(4.53)</td>
<td>(3.53)</td>
<td>(3.11)</td>
<td>(3.13)</td>
</tr>
<tr>
<td></td>
<td>-0.036***</td>
<td>-0.015***</td>
<td>-0.039***</td>
<td>-0.044***</td>
</tr>
<tr>
<td>家庭在城镇还是农村</td>
<td>-11.00</td>
<td>-4.65</td>
<td>-4.73</td>
<td>-9.77</td>
</tr>
<tr>
<td></td>
<td>0.284***</td>
<td>0.165***</td>
<td>0.473***</td>
<td>0.192***</td>
</tr>
<tr>
<td>Ln（家庭人均可支配收入）</td>
<td>(126.88)</td>
<td>(80.17)</td>
<td>(110.54)</td>
<td>(66.06)</td>
</tr>
<tr>
<td></td>
<td>0.029***</td>
<td>0.010***</td>
<td>0.052***</td>
<td>0.025***</td>
</tr>
<tr>
<td></td>
<td>(8.63)</td>
<td>(3.11)</td>
<td>(6.16)</td>
<td>(5.31)</td>
</tr>
<tr>
<td></td>
<td>-0.001***</td>
<td>0.0001</td>
<td>-0.002*</td>
<td>-0.001</td>
</tr>
<tr>
<td>主事者的性别</td>
<td>-3.25</td>
<td>0.31</td>
<td>-1.94</td>
<td>-1.31</td>
</tr>
<tr>
<td></td>
<td>0.002***</td>
<td>0.001**</td>
<td>0.003***</td>
<td>0.001***</td>
</tr>
<tr>
<td></td>
<td>(-13.05)</td>
<td>(-6.42)</td>
<td>(-9.39)</td>
<td>(-7.96)</td>
</tr>
<tr>
<td>是否控制省份变量</td>
<td>否</td>
<td>是</td>
<td>否</td>
<td>是</td>
</tr>
</tbody>
</table>
### 是否控制年份变量

<table>
<thead>
<tr>
<th></th>
<th>否</th>
<th>是</th>
<th>/</th>
<th>/</th>
<th>/</th>
<th>/</th>
<th>/</th>
<th>/</th>
</tr>
</thead>
<tbody>
<tr>
<td>样本数</td>
<td>25,697</td>
<td>25,697</td>
<td>11,206</td>
<td>11,206</td>
<td>7,257</td>
<td>7,257</td>
<td>7,234</td>
<td>7,234</td>
</tr>
<tr>
<td>adj.R²</td>
<td>0.0008</td>
<td>0.5254</td>
<td>0.0019</td>
<td>0.3860</td>
<td>0.0014</td>
<td>0.5768</td>
<td>0.0040</td>
<td>0.3388</td>
</tr>
</tbody>
</table>

注：括号内为 t 检验值；* p<.1, ** p<0.05, *** p<0.01。

### 3.4 小结

虽然本研究的结果初步支持了本文的第一个假设，但受限于数据，无法更进一步地解决模型设定、代理变量选择和内生变量等方面存在的问题。因此，为了更精确的识别传承动机与储蓄之间的因果关系，并探究其中的心理机制，本文接下来利用实验研究法来进行检验。

### 4 研究二：传承动机与储蓄的因果关系——基于实验研究法

本研究通过操纵实验参与者的传承动机，将其分为两组（实验组和控制组），测量他们分配给储蓄和消费的金额比例，并检验两者之间是否存在显著的差异。同时，检验未来自我连续性在传承动机影响储蓄的过程中是否起着中介作用，具体的实验过程和结果分析如下。

### 4.1 实验参与者

本实验的参与者为中山大学的 160 名学生，他们均自愿参与此次的实验，每个人都在不了解实验意图的情况下单独进行实验，所有的实验材料和互动均采用中文。对于实验过程中选择中途放弃、作答时间过短或者过长、传承动机操纵失败的参与者，本文进行了剔除，以保证实验结果的准确性。共有 148 份有效数据，性别分布为 40.5% 是男性，59.5% 是女性，他们的平均年龄为 20.67 岁。

### 4.2 实验材料与流程

实验中，首先将实验参与者随机分为两组：实验组和控制组。两组实验参与者分别针对传承动机主题和中性主题进行写作。写作完成后，所有实验参与者均填写启动效果检验题目和未来自我连续性量表，并完成奖学金分配决策任务。研究材料如下：

启动材料：采用写作启动方式。本文在 Zaval et al. (2015) 启动方法的基础上进行了一定改进，具体的启动方式是让实验参与者在阅读引导语之后，根据自己的真实想法撰写一段文字。其中，实验组的写作引导语为“你希望后人会记住你的什么呢？为回答上述问题，请思考：你会通过何种方式对后世的人产生积极的影响，你会传承给后人哪些知识或技能，又或者你的哪些品格希望做哪些事会被后人铭记？”，控制组的写作引导语为“你觉得未来 30 年后人们会过上怎样的生活？为回答上述问题，请思考：未来 30 年后人们的生活和现在的生
活有哪些不同，他们会掌握哪些知识或技能，他们的性格和处事方式又是怎样的？”。

启动效果检验量表：本研究在 Zaval et al. (2015) 的基础上进行了改编，最终为如下 3 个测量组成的 7 分量表：（1）我希望在我死后，我将被后人长久的铭记；（2）对我而言，给社会留下正面的影响是重要的；（3）我觉得我对后人负有
责任。

中介变量测量量表：本研究借鉴 Hershfield et al.（2009）的测量方法，并进行了翻译。首先，向实验参与者展示不同重合程度的七组圆圈组合（如图六所示），其中一个圆圈代表现在的自己，另一个圆圈代表十年后的自己；接着，要求实验参与者选择最能说明现在的自己和十年后的自己的关系的一组圆圈组合，圆圈组合的重合程度越高，说明现在的自己和十年后的自己关系越密切，即未来自我连续性越高。

因变量的测量：本研究在 Tomasz et al.（2013）的测量方法的基础上，根据实验参与者的特点进行了改进。具体测量方法是，让实验参与者想象自己通过努力学习获得了某项奖学金，共 5000 元人民币，并要求他们在以下四个选项中进行分配：（1）长期存款；（2）短期存款；（3）日常开支；（4）娱乐消遣和享乐消费，计算各个选项所占的比例，其中长期存款和短期存款的占比均为本研究的因变量。

4. 3 实验结果

4. 3. 1 操纵检验

实验组和控制组的样本量分别为 64 和 84 人。研究结果发现，启动操纵效果显著，实验组在操纵检验题目上的得分显著高于控制组（$M_{\text{实验组}}=4.14, M_{\text{控制组}}=3.34, F(147)=24.16, p<0.01$），他们更倾向于死后被后人长久地铭记，对后人的责任意识更强以及更希望给社会留下积极的影响。

4. 3. 2 主效应分析

参照 Tomasz et al.（2013）的做法，本研究首先将长期存款和短期存款选项合并为储蓄，日常消费与娱乐消费和享乐消费则合并为消费，分别计算储蓄和消费占奖学金总额的比例，再对实验组和控制组在这两个选项上分配的比例进行方差分析。ANOVA 分析结果显示，实验组分配给储蓄的比例显著高于控制组（$M_{\text{实验组}}=63.63\%, M_{\text{控制组}}=44.9\%, F(147)=20.21, p<0.01$），而分配给消费的比例显著低于控制组（$M_{\text{实验组}}=36.38\%, M_{\text{控制组}}=55.10\%, F(159)=20.21, p<0.01$），如图 1 所示。
接着，本研究通过对实验组和控制组分配给四个选项的比例进行方差分析。ANOVA 检验结果显示：对于储蓄类选项，实验组分配给长期存款的比例显著高于控制组（$M_{实验组}=40.22\%$, $M_{控制组}=20.43\%$, $F(147)=22.05$, $p<0.01$），但分配给短期存款的比例则没有显著的差异（$M_{实验组}=23.41\%$, $M_{控制组}=24.48\%$, $F(147)=0.11$, $p=.745$）；对于消费类选项，实验组分配给日常消费的比例显著低于控制组（$M_{实验组}=23.00\%$, $M_{控制组}=35.67\%$, $F(147)=11.039$, $p<0.01$），分配给娱乐消遣和享乐消费的比例在 90% 的置信水平下显著低于控制组（$M_{实验组}=13.38\%$, $M_{控制组}=19.43\%$, $F(147)=3.25$, $p=.017$），如图 2 所示。
4.3.3 中介效应分析

为了验证未来自我连续性的中介效应，我们采用误差修正的自举（Bootstrap）程序来检验。样本量选择 5000，在 99% 置信区间下，控制了性别、年龄等变量后，中介检验结果显示，未来自我连续性对传承动机和储蓄关系的中介效应显著（LLCI=94.6100，ULCI=467.8869，不包括 0 在内，即中介效应显著），中介效应大小为 581.2485。此外，控制了中介变量未来自我连续性之后，传承动机对因变量储蓄的影响仍然显著（直接效应大小为 680.6611，p=0.018）。

表格 3 中介效应结果

<table>
<thead>
<tr>
<th>传承动机对于储蓄的直接效应</th>
<th>Effect</th>
<th>se</th>
<th>t</th>
<th>p</th>
<th>LLCI</th>
<th>ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>控制组</td>
<td>0.1361</td>
<td>0.0428</td>
<td>3.1777</td>
<td>.0018</td>
<td>0.0515</td>
<td>0.2208</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>未来自我连续性</th>
<th>Effect</th>
<th>BootSE</th>
<th>BootLLCI</th>
<th>BootULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0592</td>
<td>0.0232</td>
<td>0.0218</td>
<td>0.1105</td>
<td></td>
</tr>
</tbody>
</table>

因此，未来自我连续性在传承动机对储蓄的影响中发挥了部分中介的作用。
4.4 小结

研究二的结果表明：（1）相比于控制组（中性启动组），实验组（传承动机组）的未来自我连续性水平更高；（2）相比于控制组，实验组分配给储蓄的平均金额占比更高，且只对长期存款有差别；（3）未来自我连续性在传承动机和储蓄之间起到中介的作用。

5 总结与讨论

5.1 总结

本文通过两个研究，分别采用了计量经济学方法和实验研究法，验证了传承动机越强的个体，其越愿意进行储蓄，并揭示了其中的心理机制。研究一利用中国家庭追踪调查数据库，将家庭是否参加扫墓或者祭祀活动视为传承动机的代理变量，检验了其对于家庭储蓄率的影响效应，在家庭层面上初步验证了传承动机与储蓄的相关关系。研究二则采用实验研究法，通过启动实验参与者的传承动机，探究其将奖学金分配给储蓄和消费的平均金额占比的差异，精确地验证了传承动机对于储蓄的正向因果效应，即传承动机越强的个体，其越愿意进行储蓄而不是选择即刻消费；其中，传承动机只对长期存款有显著的影响，对短期存款则无显著的差异。同时，研究二还验证了未来自我连续性的部分中介效应，即传承动机除了直接影响个体储蓄之外，还会通过影响个体感觉到的现在自我与未来自我之间的联系紧密程度，进而影响其储蓄意愿。

5.2 理论贡献

本文的主要理论贡献在于将传承动机与未来自我连续性和储蓄行为的研究相结合，丰富了传承动机影响个体自我认知和跨期行为方面的研究，并为解释我国的高储蓄提供了一种新的视角。

首先，本文通过二手数据分析和实验研究法相结合的方式，从家庭层面到个体层面，从相关关系到因果关系，证明了传承动机对于储蓄的正向影响效应。从时间维度来看，储蓄也属于跨期决策的范畴，进一步验证了传承动机对于打破个体进行跨期决策障碍的作用（Wade-Benzoni et al., 2017），即克服即刻的满足而选择长期的收益或者延迟的满足。然而，储蓄又不仅局限于跨期这一属性，更体现了其传承的特性。根据 Hunter and Rowles (2005) 构建的传承动机类型图谱，物质层面的传承是现实生活中比较常见的一种类型，而金钱作为个体获取控制感、
权力和影响力的一种重要方式（Garbinsky et al., 2014; Durante and Laran, 2016），是个体价值和意义传承下去的重要保障。同时，从资源角度来看，储蓄也是将现在的资源传承给未来的自己或者下一代的重要途径，对于一个家族的兴旺和发展来说也是极其重要的。无论对于个体还是家庭，本文都为储蓄这一普遍行为里面的传承意味提供了实证。

其次，本文在我国的情境下，发现了传承动机的一个重要结果变量。传承动机作为一个较新的话题，国内学者对其的研究非常少。但是，在我国这种特殊的文化传统背景下，研究传承动机具有很强的现实意义。本文创新性地将传承动机运用于我国的金融跨期决策问题，丰富了传承动机在我国的研究，也为其进一步的研究提供了借鉴与启示。更重要的是，本文为解释我国高储蓄率现象提供了一种崭新的视角。我国具有五千年的历史文化，其中传承的思想更是根植于中华儿女心中，体现在居民生活的方方面面。例如，中国父母往往操办着儿女的一切，希望其能够更好地传宗接代，希望子孙后代能够越来越好，而储蓄则能够更好地保障这些。因此，从传承动机这个视角来解释我国的高储蓄率，更加符合我国居民的实际情况。

再次，本文将传承动机与未来自我连续性联系了起来，丰富了影响个体感知现在自我和未来自我联系紧密程度的因素方面的研究，也证明了传承动机对于激发个体未来导向、长期视角的正向作用。因此，传承动机这个概念不局限于福泽整个社会或者部分他人，同时也出有利于未来自己的角度，去留下积极的传承。前人对于影响个体未来自我连续性因素方面的研究多集中于“未来的自己”，即未来的自己是怎样的或者会因为现在自己的行为而变成怎样，而本文从现在自我的角度出发，在现在个体具有了将自己的价值、意义或者成就传承下去的动机后，会怎样感知未来的自己，更多地是将现在的自我延续至未来，甚至希望通过传承让未来的自我比现在更好，从而感知到与其联系更加紧密，进而更愿意进行有利于未来自己的储蓄或者其他跨期行为。

最后，本文也为未来自我连续性影响个体储蓄行为方面的研究提供了实证（Hershfield et al., 2009），进一步验证了未来自我连续性越高的个体，其越愿意进行储蓄。从更广泛的意义来讲，个体对未来的自己认识更清晰，越有可能去进行一些有利于未来自己的行为，例如储蓄、体育锻炼、自我控制等，也有可能为了未来自己能够有一个更好的社会环境和生活环境，去进行一些亲社会、亲环境的行为，这对于整个社会的进步、发展和延续都有着重要的启示。

5.3 实践应用

在当今人口老龄化问题不断加剧和居民储蓄率不断下降的背景下，本文的研究为提升居民的储蓄意愿提供了一定的启示。传承是中华民族的优秀传统文化之一，对于民族的发展起着重要的作用，生活中更是有很多的方式可以激发或者强化居民的传承动机，比如蕴含传承元素的广告、主打传承的商品、文化传承与学习的倡导等等，都可以潜移默化地强化个体的传承动机，进而提升其进行储蓄的意愿，以防范未来的不确定性风险，保障未来（特别是老年时）的生活水平。从宏观来看，储蓄率的维持也是降低社会养老负担，助力我国经济转向更高质量发展的保障。而对于储蓄率普遍偏低的部分西方国家而言，其也可以从传承的角度去思考如何有效地提升居民的储蓄意愿。
此外，传承动机可以强化现在自我与未来自我之间的联系紧密程度。由前人在未来自我连续性方面的研究可以知道，未来自我连续性越高，个体越愿意进行跨期决策，更有可能以符合道德的方式行事，对于违法和反社会活动的参与有负向的作用，且越愿意进行健康行为。因此，通过激发个体的传承动机，可以提高其进行财务投资等跨期决策的可能性，资产管理公司等则可以考虑在宣传的时候加入传承的因素进去；也可以提高个体参与和支持亲社会、亲环境等的意愿，比如减少不道德事件的发生，为环保组织捐赠更多的金钱等等；最后，也有利于促进个体进行锻炼等健康行为，提高人们的健康水平，促进社会的健康发展。

5.4 研究局限与未来研究方向

本研究存在一些不足，同时也为未来的研究指明了方向：第一，本文只研究了传承动机影响个体储蓄的中介机制，并未发现显著的调节机制，未来研究可以进一步探究此效应的边界；第二，本文实验研究法的对象为在校大学生，他们尚无稳定的收入来源，对于储蓄的认知可能与已经工作或者接近退休的群体存在系统的差异，进而影响本文结论的适用性，未来研究可以进一步探索不同年龄段人群在上述结论中存在的差异；第三，本文在传承动机的启动和储蓄的测量方面形式单一，可能对结论造成影响，未来研究可以进一步丰富传承动机的启动方式和储蓄意愿及行为的测量方式，以检验本文结论的稳健性。第四，未来研究可以进一步探究传承动机对于跨期决策的影响效应，以及其中的中介机制和调节机制。

6 致谢

时间如白驹过隙，悄无声息却也浓墨重彩，曾经无限憧憬的大学生活即将画上句号。在这漫长而又短暂的四年里，有所迷茫、有所无措、有所失落，幸得良师益友之指点、帮扶，终有所学、有所思、有所获，心存诸多感动和感谢。我常常于奔跑中反思，大学究竟学的是什么，也常常思索应该学什么，什么才是重要的。这一路上，幸于自我的坚守，忠于自我的选择，尽管有所跌宕与怀疑，但幸运的是不负于既定的大方向，离不开的是身边所有给予过我帮助的可爱的他们。

两年前，我的导师王琳和陈增祥副教授带我走进科研的神秘世界，精心准备每一次的 workshop，一点一滴不辞辛劳地培育着我。从基本的文献阅读与报告，到聚焦于某一领域，再到参与实验设计和实施等等，两位老师都悉心指导、答疑解惑，引导着我深入地去思考和探究。在完成毕业论文的过程中，两位老师在选题、研究方法、实验设计和实施、论文撰写和修改等方面更是给予了我莫大的帮助。在此，诚挚地感谢两位老师对我在科研方面的指导和为人处世方面的教诲，也对两位老师在学术研究上的投入、热情和执着感到深深地敬佩！
参考文献


A Study on the Mechanism of the Influence of Warm and Competence Perception on Willingness to Donate, A Moderated Mediation Model

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Abstract
Under the donation scenario, based on the stereotyped content model, 171 undergraduates were selected as subjects, and scenario experiments were used to explore the influence of warm perception and competence perception on the willingness to donate and the role of empathy in the model. The results showed that: (1) For the recipients with high warm perception, the willingness to donate for low-competence perception was significantly higher than that for high-competence. However for the recipients with low warm perception, the willingness to donate for low-competence perception and high-competence perception was equal. (2) Warm perception affected the willingness to donate through emotional empathy while competence perception affected willingness to donate through cognitive empathy. (3) Empathy orientation moderated the mediating effect of emotional empathy from warm perception to willingness to donate.

Keywords: Warm perception, Competence perception, Emotional empathy, Cognitive
热情感知和能力感知对捐赠意愿的影响机制研究，一个有
调节的中介模型

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摘要
在慈善捐赠情景下，基于刻板印象内容模型，以 171 名大学生为被试，采用
情景实验的方法，探究热情感知和能力感知对捐赠意愿的影响以及共情反应在其
中的作用机制。结果表明：(1) 对于高热情感知的受助者，低能力感知的捐赠意
愿显著高于高能力感知；而在低热情感知的受助者中，低能力感知的捐赠意愿与
高能力感知无显著差异。 (2) 热情感知通过情绪共情反应影响捐赠意愿；能力感
知通过认知共情影响捐赠意愿。(3) 共情倾向调节情绪共情反应在热情感知与捐
赠意愿之间的中介效应。

关键词：热情感知；能力感知；情绪共情；认知共情；共情倾向；捐赠意愿

1 引言
慈善捐赠在近年来已经成为不同领域研究的热点。心理学领域中，将捐赠定
义为人类的一种典型利他行为，个体出于帮助他人的目的，向处于困难中的对象
捐出自己的时间、金钱等物质，甚至是不求回报的（Nowak & Sigmund, 2005）。研
究主要关注的是个体捐赠的影响因素，大致可以分为受助者特征，助人者特征，
受助者与助人者关系，如相对于外群体而言，人们更愿意捐献给内群体的受助者
（Smith, Faro, & Burson, 2013）。而市场营销领域的研究则是站在受助者或慈善
组织的角度，目的在于提升现实情景中的捐赠意愿。如在募捐信息中，受助人表
现出悲伤的表情比中性或高兴的表情更易得到援助（Small & Verroch, 2009)。
经济学领域对捐赠的研究主要着眼于情景或外部环境对个体捐赠意愿的影响，如
Boram 和 Abelson (2010) 的研究证明人们捐赠是因为想让别人认为自己是公平的。不同的领域中对捐赠研究的侧重点各不相同，本研究则综合考虑受助者特征，助人者特征，探究两者影响捐赠意愿的机制。


2 文献回顾与假设提出

热情和能力感知来自于 Fiske, Cuddy, Glick 和 Xu (2002) 提出的刻板印象内容模型 (Stereotype Content Model, SCM)，文章中对刻板印象内容模型的来源、发生机制、具体维度做出了详细的论述，并用实证研究验证了其理论。SCM 认为，刻板印象的内容是能力和热情两个维度上的评价。之后 Cuddy, Fiske 和 Glick, (2007) 又在其理论的基础上，提出了情境情绪-刻板印象-行为趋向系统模型 (Behaviors from Intergroup Affect and Stereotypes Map, BIAS Map)，丰富了刻板印象内容模型在实践领域的应用，该理论认为感知热情高的群体会引发主动助长 (如帮助行为)，否则导致主动伤害 (如攻击行为)；感知能力高的群体会唤起被动助长 (如合作行为)，否则引发被动伤害 (如忽视和忽略行为)。随着研究的深入，热情和能力感知也被应用于人们对个人 (Judd, Jameshawkins, Yzerbyt, & Kshima, 2005)、品牌 (Kervyn, Fiske, & alone, 2012) 和社会组织 (Aaker, Vohs, & Mogilner, 2010) 的研究中。这对当受助者是个体时的捐赠意愿研究是有很大启发的，正如 BIAS Map 中提到的感知热情高时更容易引起帮助行为，那么在捐赠背景下，高感知热情的受助者会引发人们更强的捐赠意愿吗？另一方面，有学者也证明了当受助者的努力行为引起个体高能力感知时，个体的捐赠意愿会显著提高 (Liang, Chen, & Lei, 2016)。那么是否个体感知到受助者的能力和热情越高时，捐赠意愿就会越大呢？但刻板印象内容领域的研究并没有支持这一假设，老年人、弱智者和残疾人被认为是相对热情且友好但不能干，他们能够受欢迎但不值得钦佩，属于“可怜类”，会引发人们的怜悯情绪，相比于高能力高热情群体能引发人们更多的同情 (Fiske, 2004)。基于刻板印象内容模型和以往的研究，本文提出如下假设：

H1a: 相比高能力感知，低能力感知引发更高的捐赠意愿；
H1b: 相比低热情感知，高热情感知引发更高的捐赠意愿；
H1c: 能力和热情感知对捐赠意愿的影响存在交互作用。

对于捐赠意愿影响因素的机制研究得出的结论也各有不同，心理学中对于这方面的研究大概可以分为两类，即共情-帮助假设 (“empathy-helping” hypothesis) 和唤起-帮助假设 (“Inspiration-helping” hypothesis)。前者
认为强调捐赠对象的不幸处境（如贫穷）并传达消极情绪如悲伤，害怕，紧张，这些消极情绪更能使人们感受到捐赠目标的痛苦，故增加捐赠趋势（Fisher，Vandenbosch，& Antia, 2008）；而后者则认为强调受助者的勇敢、坚强的积极品质能够激发出助人者力量感，从而激发人们的捐助行为（Algoe & Haidt, 2009）。

有学者总结了前人的研究，提出共情反应是捐助意愿或行为的直接预测变量（Van Lange, 2008）。共情反应包括情绪共情和认知共情，前者指体验到他人情绪的能力，即当感知到他人得情绪状态时，激发出个体自身得情绪反应，是一个自下而上得加工过程，属于感性因素；而后者指理解他人情绪的能力，体会到他人得困境并预测其想法和行动，是一个自上而下的加工过程，属于理性因素，两者相互依存又相互独立（Decety，& Lamm, 2006）。当被试感到受助者能力低时而产生的捐赠行为更多是出于理性考虑，属于帮助弱者的心理；而当被试感到受助者热情高而产生捐赠行为时，更多是处于感性考虑，满足人际关系的需求（Vossen, Piotrowski, & Valkenburg, 2015）。虽然研究已经证明共情反应是亲社会行为的主要影响因素（肖凤秋, 郑志伟, 陈英和, 2014），但是很少有把共情反应分为认知共情和情绪共情来研究其中的差异。因此本文在前人研究的基础上提出如下假设：

H2a: 个体对受助者的热情感知通过情绪共情反应中介影响捐赠意愿。
H2b: 个体对受助者的能力感知通过认知共情反应中介影响捐赠意愿。


H3: 共情倾向调节能力和热情通过共情反应影响捐赠意愿的中介效应。

综合以上假设，本研究的概念模型图如图 1 所示。
3 研究方法

3.1 被试

采用志愿招募的方法选取天津某大学 171 名视力正常的大學生，其中男生 94 名，女生 77 名，平均年龄为 21.90 周岁，标准差为 2.71。

3.2 实验材料

3.2.1 操控能力和热情感知的募捐材料

根据能力和热情感知的定义及测试题目维度自编募捐材料，通过对受助者学习状况，课外活动参与情况，日常人际关系情况等方面的描述操控能力和热情感知。高能力感知的募捐材料对受助者的描述为：王华现在是某名牌大学的大学生，学习成绩非常优秀，曾作为学院代表在全国创新大赛上获得一等奖，并多次获得的国家奖学金。学习之余，他的爱好也十分广泛，从小就学习钢琴，小提琴等乐器，并取得很多业余比赛奖项。低能力感知的描述为：王华现在是某大学的一名大学生，从小在农村长大，家境普通，学习成绩一般。高考结束后，因为分数很低，上了一所普通本科院校。高热情感知的描述为：王华在学校也经常参加各种课外活动，生活和学习中经常的助人为乐。低热情感知的描述为：平日里王华的性格十分内向，课余时间他总是一个人在角落里独处，不善与同学交际，他总是很严肃和较真地对待身边的人和事，在同学的眼中王华是一个不容易接近的人。将上述材料按照高能力高热情、高能力低热情、低能力高热情和低能力低热情组合成四种募捐材料。最后对募捐信息进行描述如下文：不幸的是，半年前被诊断出急性白血病，由于还没有找到合适的骨髓配型，每天的治疗需要花费大量的钱，为了给王华看病，家里已经花光了所有的积蓄，也借遍了身边的亲朋好友，但高额的医药费每天还在不断的累积。希望社会各界人士能伸
出援助之手，帮王华和他的家庭度过难关。

3.2.1 热情和能力感知量表

管健和程婕婷（2011）以 SCM 和 BIAS Map 问卷相结合为蓝本，获得中国化问卷。问卷包括，描述能力词汇“有能力的”和“有才能的”；描述热情词汇“待人热情的”和“友好亲和”，采用 5 点计分方式（1 表示完全不符合，5 代表完全符合），本量表内部一致性系数为.71。

3.2.2 共情倾向量表

采用个人反应指数量表（IRI）（Davis, 1980）测量被试的共情倾向，本量表共设置 28 个项目，分为四个维度得分，分别是观点采择，共情关注，个人痛苦和幻想，每个维度包含 7 个题目，其中有 9 道题为反向计分，采用 5 点计分方式（1 表示完全不符合，5 代表完全符合），本量表内部一致性系数为.70。

3.2.3 共情反应量表

采用定险峰（2011）编制了 4 道题分别测试认知共情反应和情绪共情反应，采用 likert7 点计分方式（1 表示完全不符合，5 代表完全符合），两个维度的克伦巴赫系数分别为.80 和.74。

3.2.4 捐赠意愿

采用 7 点评分测量被试的捐款意愿，从 1 到 7 表示捐款意愿逐渐增强（邢淑芬等，2015）。

3.3 实验程序

研究共分为 3 个阶段，首先将 151 名被试分配到高能力高热情（42 人），高能力低热情（46 人），低能力高热情（40 人），低能力低热情（43 人），然后所有被试分别完成共情倾向量表，阅读情景材料，热情能力感知量表，共情反应量表，捐赠意愿量表，最后填写个人基本信息，为了避免共情倾向量表对实验的影响，每组中一半被试先完成共情倾向量表，另一半被试最后完成共情倾向量表。

4 数据分析与假设检验

4.1 热情感知和能力感知的操作性检验

采用单因素方差分析分别对 4 个组的热情感知和能力感知得分进行差异性检验。热情感知维度得分方面，高热情高能力组（M=4.16）与高热情低能力组（M=4.05）无显著差异，两者得分均显著高于低热情高能力（M=1.92）与低热情低能力组（M=1.78），且低能力高热情组与低能力低热情组热情得分无显著差异，F=132.87, df=3, p<0.001；能力感知维度得分方面，高能力高热情组（M=4.18）与高能力低热情组（M=4.27）无显著差异，两者得分均显著高于低能力高热情（M=2.11）与低能力低热情组（M=2.17），且低能力高热情组与低能力低热情组热情得分无显著差异，F=108.09, df=3, p<0.001。以上结果说明对热情和能力感知的变量操控是成功的。

4.2 热情感知和能力感知对捐赠意愿的交互效应

表 1 描述了被试对高低热情感知受助者在高低能力感知下捐赠意愿的平
均数和标准差。

表 1 对不同热情和能力感知的受助者捐赠意愿的平均数和标准差

<table>
<thead>
<tr>
<th></th>
<th>高热情感知</th>
<th>低热情感知</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>M</strong></td>
<td>4.79</td>
<td>4.29</td>
</tr>
<tr>
<td><strong>SD</strong></td>
<td>1.44</td>
<td>1.77</td>
</tr>
<tr>
<td>高能力感知</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>M</strong></td>
<td>6.15</td>
<td>4.41</td>
</tr>
<tr>
<td><strong>SD</strong></td>
<td>1.35</td>
<td>1.22</td>
</tr>
<tr>
<td>低能力感知</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

以对受助者热情和能力感知为自变量，以被试的捐赠意愿为因变量，进行方差分析，结果显示热情感知主效应显著，\( F(1, 169) = 4.70, p < 0.001, \eta^2 = 0.10 \)。对高热情感知的受助者捐赠意愿（\( M=5.45 \)）显著高于低热情感知受助者捐赠意愿（\( M=4.35 \)）；能力感知主效应显著，\( F(1, 169) = -2.96, p < 0.05, \eta^2 = 0.04 \)。对高能力感知的受助者捐赠意愿（\( M=4.53 \)）显著低于低能力感知受助者捐赠意愿（\( M=5.25 \)）；热情感知和能力感知的交互作用显著，\( F(1, 167) = 7.75, p < 0.01, \eta^2 = 0.04 \)。

简单效应分析结果显示，对高热情感知的受助者，低能力感知的捐赠意愿（\( M=6.15 \)）显著高于高能力感知的捐赠意愿（\( M=4.79 \)），\( F=11.71, df=1, p < 0.001 \)；而低热情感知对受助者，低能力感知的捐赠意愿（\( M=4.41 \）与高能力感知的捐赠意愿（\( M=4.29 \）无显著差异，\( F=0.07, df=1, p < 0.80 \)。图 2 为方差分析效应图。以上结果支持了假设 1a、1b、1c。

图 2 热情能力感知方差分析效应图

4.3 共情反应在热情感知、能力感知与捐赠意愿间的中介作用

共情反应包括认知共情和情绪共情两个维度，这两个维度对于捐赠意愿的影响可能是不同的，因此本研究分别考察情绪共情和认知共情在热情感知、能力感知与捐赠意愿间的中介作用。表 2 描述了热感情感、能力感知、共情倾向、认知共
情、情绪共情、捐赠意愿的平均数、标准差和相关系数。结果显示热情感知与情绪共情、捐赠意愿存在显著的正相关，而与认知共情相关不显著；但能力感知与认知共情、捐赠意愿存在显著的负相关，而与情绪共情相关不显著。

根据温忠麟（2004）提出的中介检验过程使用 SPSS19.0 进行层次回归。第一步分别以热情感知和能力感知为预测变量，以捐赠意愿为因变量进行回归分析；第二步以热情感知和能力感知为预测变量，分别以认知共情和情绪共情为预测变量进行回归分析；第三步分别以热情感知和认知共情或情绪共情、能力共情和认知共情或情绪共情为预测变量，捐赠意愿为因变量进行回归分析，回归参数见表 3、表 4，可以发现热情感知通过情绪共情的中介效应可以显著的影响捐赠意愿。对受助者的热情感知可以显著地正向预测捐赠意愿，$\beta=0.31, p<0.01$，即热情感知可以解释捐赠意愿改变的 31%；当热情感知和情绪共情同时预测捐赠意愿时，情绪共情的预测作用显著 $\beta=0.61, p<0.01$，热情感知的预测作用不显著，$\beta=0.12, p>0.05$，这表明情绪共情在热情感知和捐赠意愿之间起到完全中介作用，中介效应占总效应的 61%；对受助者的能力感知可以显著地负向预测捐赠意愿，$\beta=-0.30, p<0.01$，即能力感知可以解释捐赠意愿改变的 30%；当能力感知和认知共情同时预测捐赠意愿时，认知共情的预测作用显著 $\beta=-0.66, p<0.01$，能力感知的预测作用不显著，$\beta=-0.04, p>0.05$，这表明情绪共情在热情感知和捐赠意愿之间起到完全中介作用，中介效应占总效应的 46%。以上结果支持了假设 2a 和假设 2b。

### 表 2 各变量相关分析

<table>
<thead>
<tr>
<th></th>
<th>M(SD)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 长情感知</td>
<td>2.93 (1.35)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 能力感知</td>
<td>3.22 (1.28)</td>
<td>.081**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 共情倾向</td>
<td>3.36 (0.36)</td>
<td>-.01</td>
<td>.10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 认知共情</td>
<td>4.27 (1.46)</td>
<td>.02</td>
<td>-.66**</td>
<td>.20**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 情绪共情</td>
<td>4.84 (1.41)</td>
<td>.61*</td>
<td>.05</td>
<td>.26**</td>
<td>.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 捐赠意愿</td>
<td>4.88 (1.63)</td>
<td>.31**</td>
<td>-.30</td>
<td>.22*</td>
<td>.42**</td>
<td>.38**</td>
<td></td>
</tr>
</tbody>
</table>
因变量 | 预测变量 | $\beta$ | $R^2$ | $F$ | $t$  
---|---|---|---|---|---  
第一步 | 捐赠意愿 | 热情感知 | .31 | .09 | 17.43** | 4.17**  
第二步 | 情绪共情 | 热情感知 | .61 | .37 | 98.34** | 9.98**  
第三步 | 捐赠意愿 | 热情感知 | .12 | .15 | 15.16** | 1.34  
 | 情绪共情 | &nbsp; | .31 | &nbsp; | 3.43*  
第一步 | 捐赠意愿 | 热情感知 | .31 | .09 | 17.43** | 4.17**  
第二步 | 认知共情 | 热情感知 | .02 | .00 | .06 | -0.24  
第三步 | 捐赠意愿 | 热情感知 | .31 | .09 | 31.65** | 4.77**  
 | 认知共情 | &nbsp; | .43 | &nbsp; | 6.46*  

表 4 能力感知、情绪共情、认知共情对捐赠意愿的回归参数

| 因变量 | 预测变量 | $\beta$ | $R^2$ | $F$ | $t$  
---|---|---|---|---|---  
第一步 | 捐赠意愿 | 能力感知 | -.30 | .09 | 16.37** | -4.07**  
第二步 | 情绪共情 | 能力感知 | .05 | .00 | .36 | .60  
第三步 | 捐赠意愿 | 能力感知 | -.32 | .24 | 16.36** | -4.69**  
 | 情绪共情 | &nbsp; | .39 | &nbsp; | 5.86**  
第一步 | 捐赠意愿 | 能力感知 | -.30 | .09 | 16.37** | -4.07**  
第二步 | 认知共情 | 能力感知 | -.66 | .43 | 129.42 | -11.38**  
第三步 | 捐赠意愿 | 能力感知 | -.04 | .18 | 17.96** | -.41  

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4.4 共情倾向的调节作用

由表 2 可以看到，共情倾向和情绪共情、认知共情、捐赠意愿都有显著的正相关，因此我们考虑共情倾向在情绪共情中介热情感知对捐赠意愿以及认知共情中介能力感知对捐赠意愿模型中的调节效应。采用 SPSS19.0 及 Hayes（2015）编写的宏程序 PROCESS 进行分析，该程序可以简单有效的检测变量之间的中介调节效应和它们之间的混合模型，且越来越广泛的应用于研究中。采用 PROCESS 中的模型 4 进行检验，回归系数显著性检验采用 Bootstrapping（重复抽样 1000 次）获得参数估计的稳健标准误及 95%置信区间（CI）。模型如图 2

结果显示，当共情倾向高时（M-1SD），共情倾向对热情感知影响捐赠意愿的调节效应显著，置信区间为（0.037, 0.261），p<0.05；当共情倾向低时（M+1SD），共情倾向对热情感知通过情绪共情中介捐赠意愿的调节效应显著，置信区间为（0.032, 0.420），p<0.05，热情感知和共情倾向交互项对情绪共情中介捐赠意愿的预测显著置信区间为（0.002, 1.156），p<0.05，即共情情绪可以正向增强热情感知通过情绪共情影响捐赠意愿的中介作用；但共情倾向对于能力感知通过认知共情影响捐赠意愿的预测调节作用不显著。因此本研究总的模型图如下:

5 讨论

5.1 热情感知和能力感知对捐赠意愿的交互效应
BIAS-MAP 理论认为，低能力高热情的群体会唤起人们的怜悯情绪，从而引发主动助长行为，如助人行为，而与其相对的高能力低热情的群体则会引起人们的嫉妒情绪，从而引发被动助长行为（Cuddy, 2007）。本研究的实验结果验证了这一理论，结果显示人们对与高热情低能力的受助者捐赠意愿最高，而对于高能力低热情的受助者捐赠意愿很低。进一步从热情感知和能力感知的交互作用中也可以看到，当高热情感知时，能力越低人们的捐赠意愿越高；而当低热情感知时，能力的高低不会显著影响捐赠意愿。从某种意义上讲，受助者的热情感知对捐赠意愿是非常重要的，这一结果与以往研究一致，即知觉他人时，热情优先是社会知觉的基本规律（韦庆旺，2018）。

5.2 热情感知和能力感知对捐赠意愿影响的心理机制

一方面 Fiske（2002, 2007）的一系列研究已经证明，热情感知能引起人们的积极行为，包括捐赠行为。但其内在机制却鲜有研究；另一方面，前人研究证明了共情是助人行为的重要影响因素（Van Lange, 2008）。本研究的结果显示热情感知可以通过情绪共情影响人们的捐赠意愿，当被试感知到受助者是高热情时，会拉近被试与受助者之间的心理距离，以往研究表明，相对于外群体人会对内群体的人提供更多的帮助行为，而这种关系是通过共情中介的（Shang, 2008）。同时，热情感知是通过情绪共情而非认知共情影响捐赠意愿，可能因为当我们感知到受助者是高热情的时候，能够促进我们对于他们本身情绪的体验，是一种感性上的认知，个体不会是从理性角度分析受助者的心理问题导致的，而是从理性的角度分析受助者的低能力时，会从理性角度分析其困境而产生共情，从而产生捐赠意愿。

5.3 共情倾向对热情影响捐赠意愿的调节作用

本研究显示，共情倾向会正向增强热情感知通过情绪共情影响捐赠意愿的中介作用，而不会影响能力感知通过认知共情影响捐赠意愿的中介作用。这可能是因为认知共情和情绪共情的区别所致，情绪共情属于自下而上的加工，较容易受到共情倾向的影响；而认知共情属于自上而下的加工，是人们的理想判断，不容易受到共情倾向的影响。

5.4 本研究的局限和未来研究方向

本实验还存在以下不足：（1）本实验样本选取全部为在校大学生，一定意义上会降低结论的生态效度，而且大学生的普遍共情倾向较高，受社会赞许性的可能性较大。今后可以选取更多样化的被试样本进行研究。（2）本实验仅研究了捐赠意愿而没有研究捐赠行为，而捐赠意愿并不能完全预测捐赠行为。未来可以设计真实的情景实验，进一步研究被试的捐赠行为。（3）本实验材料的受助对象是大学生，而选择其他受助群体是否有同样的研究结果有待于进一步验证。

6 结论和启示

在慈善捐赠情景下，基于刻板印象内容模型，本文引入认知共情和情绪共情作为中介变量，共情倾向作为调节变量，构建了热情和能力感知对捐赠意愿的影响机制模型。这一研究不仅证明了热情感知和能力感知对捐赠意愿的积极作用，
也揭示了其作用机理。其主要研究结论和启示包括：(1) 热情和能力感知对捐赠意愿影响的交互作用显著，对于高热情感知的受助者，低能力感知的捐赠意愿显著高于高能力感知；而在低热情感知的受助者中，低能力感知的捐赠意愿与高能力感知无显著差异。(2) 个体对受助者的热情感知通过情绪共情反应中介影响捐赠意愿，能力感知通过认知共情反应中介影响捐赠意愿。基于此，募捐组织或个人在撰写募捐材料时，不能仅仅突出受助者的悲惨遭遇、无法自理的低能力描述，更应该突出受助者在平时生活中热心助人、为人亲善的高热情描述，二者结合才可以引发最高的捐赠意愿。再者，男性助人者普遍会理性的思考，因此可以多突出受助者能力低来增加其捐赠意愿，而对于女性助人者，则要突出受助者高热情来提高捐赠意愿。(3) 共情倾向会正向增强热情感知通过情绪共情影响捐赠意愿的中介作用，而不会影响能力感知通过认知共情影响捐赠意愿的中介作用。当下社会网络方便人们生活的同时也是人们之间的心理距离变远，人们的共情能力降低，因此相比以前，我们需要用更加合理有效的方式才能提高人们的捐赠意愿，促进慈善事业的发展。

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**参考文献**


Study on the Influence of Opinion Leaders on Users’ Purchase Intention

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Abstract

Social marketing and the web celebrity economy are booming, and a new kind of social e-commerce platform was born. “virtual community” + “e-commerce shopping” platform has become pastime of young people. This study takes opinion leaders in social e-commerce platforms as the research object and explores their influence. It is found that professionalism, interactivity, honesty and ease of use of contents published by opinion leaders have a positive impact on consumers' purchase intention. Finally, based on the results of this study, specific strategies are proposed for social e-commerce platforms, consumers, enterprises and opinion leaders.

Keywords: Social E-commerce; Opinion leaders; Purchase intention
电商平台中意见领袖对用户购买意愿影响的研究

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摘要

社交营销与网红经济飞速发展的当下, 一种新兴的社交电商平台随之诞生, 以“虚拟社区”+“电商购物”的平台已经成为了当代年轻人生活必不可少的部分。本文以社交电商平台中的意见领袖作为研究对象, 对其影响力进行深度研究, 发现意见领袖的专业性、交互性、诚实度和意见领袖发布信息的易用性对消费者的购买意愿具有正向影响。最后结合本研究的成果, 对社交电商平台本身、消费者、企业和意见领袖提出具体的策略。

关键字：社交电商; 意见领袖; 购买意愿

1. 引言

根据中国互联网络信息中心（CNNIC）在2019年2月发布的《第43次中国互联网络发展状况统计报告》中显示, 截止到2018年12月, 我国手机网民规模达到8.17亿, 手机网络购物用户规模达到5.92亿。手机网络购物已经成为了当代居民生活的一部分。社交电商平台是把传统的网络虚拟社区和传统的购物电商平台相结合, 消费者在平台的社区中获取信息后再进行消费和购买, 这种消费模式已经成为了年轻消费者的生活习惯, 越来越多企业开始重视产品在社交电商平台上的投放, 但同时平台也出现用户发布内容泛滥, 难以识别真伪, 发布质量参差不齐等问题, 甚至某些用户进行恶意炒作、够买水军等行为。消费者的购买意愿直接影响企业和平台的盈利, 如果长期不处理上述问题, 消费者则会对企业和平台失去信心, 对企业和平台都会造成不同程度的打击。在电商平台行业竞争激烈的时代, 社交电商平台作为信息分享平台, 用户可以根据自己的主观意识来选择社交电商平台, 如何提升消费者的购买意愿是电商平台的首要任务, 本文根据Hovland（1953）提出口碑传播模型, 把意见领袖的特征作为口碑传播的来源的特征, 把意见领袖发布资讯的特征看作口碑传播资讯的特征, 把消费者的心理活动看作资讯接收者的特征, 对社交电商平台用户的购买意愿进行深度研究, 针对社交电商平台、消费者、企业和意见领袖提出重要的策略。

2. 理论回顾与研究假设

2.1 意见领袖理论

社交电商平台是传统电商平台的延续和创新, 通过网络口碑传播对其用户造成不同程度的影响。社交电商平台中的意见领袖是口碑传播中的主要参与者, 也是虚拟社区活跃度的主力军。Flynn, Goldsmith & Eastman（1996）认为企业越
来越重视网络意见领袖对产品口碑的影响，意见领袖的发布资讯会影响消费者的决策。Weimann（1994）认为意见领袖具有专业性强、社会交互性高等特征，这些特征会对消费者的信任产生较大影响。Li & Du（2011）通过对新浪微博中的百万粉丝博主进行研究，发现新浪微博的意见领袖通常具有专业性、内容发布偏好等特征，并发现意见领袖与受众之间具有同质性与社会关联性。梦非（2012）认为意见领袖的特征包括了专业性、产品涉入度、交互性、知名度，意见领袖发布信息特征包括了时效性、推荐一致性、视觉线索。Davis, Bagozzi & Warshaw（1989）在TAM理论认为感知易用性对感知有用性具有影响，两者通过对消费者态度的影响最终影响消费者的行为。另外，Schoorman, Mayer & Davis（1996）认为诚实度也是衡量意见领袖的重要标准，诚实是信任的基础。本研究对上述文献及社交电商平台的特性进行总结和梳理，把意见领袖的专业性、交互性和诚实度作为意见领袖的特征进行测量，另外把意见领袖发布资讯的时效性、一致性和易用性作为其发布资讯的特征进行测量。

2.2 消费者理论

Davis（1989）认为感知价值能够影响消费者的购买意愿。何晓蕙（2014）认为社交电商平台是从商品或服务的推广、售后再到购买的全过程。本研究主要涉及了信息收集、方案评估和购买决策，消费者通过浏览意见领袖发布的资讯，对发布资讯的内容进行筛选和评估，最终决定是否需要购买。熊焰和李阳（2008）根据TAM理论提出B2C电子商务信任模型，该模型认为信任和感知价值对用户的使用意图具有影响。综上，本研究认为社交电商平台的用户在接收到意见领袖发布的资讯后受到信任和感知价值的影响。

2.3 意见领袖的专业性对消费者信任的影响

Mitchell & Dacin（1996）认为意见领袖比其他普通人拥有更多的专业知识，对商品或服务的本身和竞品更了解，擅长对同类产品进行分析优劣和甄别，能提出有效建议。Bansal & Voyer（2000）认为消费者更愿意去相信意见领袖发布的信息，而不是非意见领袖发布的信息，主要原因是意见领袖发布的信息相对来说是专业的，对产品属性、特点和价格都有系统的了解。Silverman & George（1997）认为口碑传播的力量来源于意见领袖把自己的经历传递给资讯接收者，让其产生信任。

本研究中意见领袖的专业性是指在口碑传播过程中，意见领袖对该产品或服务是具备丰富的产品知识，了解产品的属性、特点、价格等，对产品的熟悉度高，使用过该产品，了解该产品的使用方法，在某领域是经过专业的培训，具有一定领导力，能够为消费者提供准确信息，让消费者对其产生信任。根据上述文献研究及分析，提出假设：

H1：在社交电商平台中，意见领袖的专业性对消费者的信任有正向影响作用

2.4 意见领袖的交互性对消费者信任的影响

社交电商平台其中一个吸引用户的特性是可以让明星偶像或意见领袖能够与普通用户实时互动，了解其工作背后的真实生活。交互性是个体与个体之间通过接触的程度，体现在双方沟通过程中能否及时收到回应。Wenyu（1998）认为意见领袖中交互性是极为重要的特征，他体现了意见领袖与消费沟通过程中的重要

在本研究中意见领袖的交互性是指在社交电商平台用户与用户之间相互产生动态活动的程度，互动是双向的，在社区中表现为评论、支持、赞藏等互动行为。互动并不是单次发生的，他需要通过长时间去维持的，才能与用户产生信任。根据上述文献研究及分析，提出假设：

H2: 在社交电商平台中，意见领袖与消费者之间的交互性对消费者的信任具有正向影响作用

2.5 意见领袖的诚实度对消费者信任的影响


在本研究中的诚实度是指意见领袖所发布的言论和实际的行为是否一致。社交电商平台中意见领袖与用户素未谋面，很难判断意见领袖发布消息的真实性。但用户通过长期的观察，可判断该意见领袖是否是言行一致。诚实性能够对消费者的信任产生影响，意见领袖的诚实度是用户信任的基础，只有用户认为该意见领袖发布的内容是真实的，才会继续浏览和订阅其相关的内容。根据上述文献研究及分析，提出假设：

H3: 在社交电商平台中，意见领袖的诚实度对消费者的信任有正向影响作用

2.6 意见领袖发布信息的时效性对消费者感知价值的影响

本研究把意见领袖发布信息的时效性定义为：在某个领域中，对事情动态更新的程度和速度。信息的时效性对用户的感知价值产生影响，时效性越高，对用户的价值便越大。根据上述文献研究及分析，提出假设：

H4: 在社交电商平台中，意见领袖发布信息的时效性对消费者的感知价值有正向影响作用

2.7 意见领袖发布信息的一致性对消费者感知价值的影响

Zhang & Watts (2016) 表示推荐一致性是指意见领袖在推荐商品或服务时，与其他意见领袖推荐的商品或服务保持一致性的程度，推荐一致性表示群体之间发布的信息具有同质性，反映了不同意见领袖之间表达意见的集中度，当信息的集中度越高，推荐就越具影响力。Cheung, Luo, Sia, & Chen (2009) 发现当有多个意见领袖重复推荐一个产品时，消费者就会认为资讯是有价值的。在本研究中，意见领袖发布信息的一致性被定义为发布内容的特征或其他特性的相似程度。意见领袖的推荐一致性受到意见领袖之间在某个领域里面建立相似的审美、品位、偏好、专业水平等因素影响，当意见领袖发布的信息与其他意见领袖发布的信息推荐一致性越高，消费者则认为该信息越有价值。根据上述文献研究及分析，提出假设：

H5: 在社交电商平台中，意见领袖发布信息的一致性对消费者的感知价值有正向影响作用

2.8 意见领袖发布信息的易用性对消费者感知价值的影响

Jones, Farris & Johnson (2005) 认为易用性是指在系统中提取的信息的难易程度，用户与网站交互是为了获取信息，因此，在网站设计的过程中应该能够提供给客户这些信息，并让能够容易的去得到这些消息。Davis, Bagozzi, & Warshaw (1989) 的 TAM 模型，认为易用性会影响有用性，感知有用性是指衡量感知价值的重要因素，感知易用性会让用户花更少的时间去获取同等的信息，因此可以推断出易用性对感知价值具有正向影响。过去许多文献都把易用性用于衡量网站或电商平台设计，较少是针对网站或电商平台中发布的信息内容的本身，在设计网站或电商平台的过程中应该遵循简单、易懂的原则。本研究对象是意见领袖对消费者的影响，因此，本研究的易用性定义为意见领袖发布信息内容的易用性，即意见领袖发布的内容是否清晰、易懂，发布信息的是否一目了然，是否能够记得住。根据上述文献研究及分析，提出假设：

H6: 在社交电商平台中，意见领袖发布信息的易用性对消费者的感知价值有正向影响作用

2.9 消费者信任对消费者购买意愿的影响

很多一部分来自意见领袖和其他用户的口碑，也就是说曾经购买过该产品或服务的人对该商品所做出的评价。根据上述文献研究及分析，提出假设：

H7: 在社交电商平台中，消费者的信任对消费者的购买意愿有正向影响作用

2.10 消费者感知价值对消费者购买意愿的影响

Zeithaml（1988）认为消费者的感知价值就是消费者对产品或服务的感知程度，即消费产品或服务过程中获取的利益与得到产品或服务所要付出的成本进行权衡，是对消费产品效用的总体评价，当消费者所获得的利益大于所付出的成本，消费者的感知价值则会越高，消费者的感知价值越高，消费者的购买意愿则越强。

在电商平台中，琳琅满目的商品让消费者眼花缭乱，同类的商品可能成千上万，因此，普通用户需要意见领袖分析产品的性价比，与同类商品进行对比，再结合消费者自身的感受，让消费者形成感知价值。

H8: 在社交电商平台中，消费者的感知价值对消费者的购买意愿有正向影响作用

2.11 研究模型

通过研究背景、名词解释及研究假设的详细论述，为本研究建立的概念模型奠定了理论依据，概念模型如图1所示：

![研究模型图](image)

图1. 研究模型

3. 研究设计

3.1 变量测量样本

本研究采用国内外现有文献资料中较为成熟的量表作为参考，再根据本研究中的主题与原文献中的量表进行调整和修改，在正式问卷发放前进行小规模的测量和讨论，针对表达不清楚的问题加以修改，最终形成正式问卷进行大规模发放。各变量及变量测量题项如表1所示：

<table>
<thead>
<tr>
<th>变量测量题项</th>
<th>易用性</th>
<th>时效性</th>
<th>一致性</th>
<th>专业性</th>
<th>交互性</th>
<th>诚实度</th>
<th>感知价值</th>
<th>购买意愿</th>
</tr>
</thead>
</table>

表1. 变量测量题项
### 变量名称 | 题项 | 来源
--- | --- | ---
**专业性** | 该意见领袖在此领域具备专业的产品知识（如产品的价格、种类、品牌、产品属性等） | Netemeyer & Bearden（1992）
 | 该意见领袖在此领域拥有专业能力 | 
 | 该意见领袖在此领域拥有领导地位 | 
 | 该意见领袖在此领域受到过专业训练 | 
 | 该意见领袖在此领域是具有经验的 | 
**交互性** | 我会积极地回应该意见领袖发起的问题/话题 | Gefen & Ridings（2002）
 | 该意见领袖能积极地回应我的问题/话题 | 
 | 该意见领袖会经常回应大家的问题/话题 | 
 | 该意见领袖会迅速回应我的问题/话题 | 
**诚实度** | 该意见领袖会信守诺言 | McKnight（2002）
 | 该意见领袖是言行一致的 | 
 | 该意见领袖与人交往时是真诚的 | 
**时效性** | 该意见领袖推荐的信息是当下最流行的 | Wixom（2005）
 | 该意见领袖推荐的信息会及时更新的 | 
 | 该意见领袖推荐的信息是优先于其他人的 | 
**一致性** | 该意见领袖推荐的信息和其他意见领袖推荐的信息是相似的 | Cheung（2009）
 | 该意见领袖推荐的信息和其他意见领袖推荐的信息是一致的 | 
 | 该意见领袖与其他意见领袖的兴趣、品味经常是一致或相似的 | 
**易用性** | 该意见领袖发布的信息内容是通俗易懂的 | Gefen et al.（2003）
 | 该意见领袖发布的信息的是很清晰有条理的 | 
 | 该意见领袖发布的信息的很容易记住 | 
 | 与该意见领袖互动是很容易的 | 
**信任** | 我相信该意见领袖具有贡献专业信息的能力 | Mayer（1995）
 | 我相信该意见领袖的行为是出于善意的 | 
 | 我相信该意见领袖是正直的，值得信赖的 | 
 | 我相信该意见领袖的行为不是投机取巧的 | Gefen（2003）
**感知价值** | 意见领袖推荐的信息让我能够减少搜寻的时间 | Zeithaml（1988）
 | 意见领袖推荐的信息让我能够得到我想要的信息 | 
 | 意见领袖推荐的信息让我觉得浏览是值得的 | 
 | 意见领袖推荐的信息让我觉得付出的成本与收获讯息对等的 | 
**购买意愿** | 看完意见领袖的推荐，我可能会购买该意见领袖推荐的产品 | Dodds et al.（1991）
 | 看完意见领袖的推荐，下次需要时我会购买该意见领袖推荐的产品 | 
 | 看完意见领袖的推荐，我愿意尝试该意见领袖推荐的产品 | 

### 3.2 选择和数据收集
为了提倡环保低碳生活和提高问卷回收的效率，本研究主要采取电子问卷形式发放，利用问卷星在线平台进行编辑和发放。最终共回收 480 份问卷，剔除无效问卷后得到有效问卷 444 份，回收有效率为 91%，对于无效问卷提出的主要原因是回答时间过短、答题不认真等。

本研究根据《中国互联网信息中心第 43 次中国互联网发展状况统计报告》对用户特征进行详细的描述，再结合社交电商平台的特性，对受访者的特征（如年龄、性别、受教育程度、平均月收入）进行描述分析。

在本调查样本中，从性别上来看，男性比例占 29.5%，女性比例占 70.5%；从年龄上来看，30 岁及 30 岁以前的占比达 72.07%，31-40 岁占 18.02%，40 岁以上的占了 9.91%；从受教育程度来看，高中及以下学历达到 14.19%，大专学历达到 18.24%，本科学历达到 52.23%，硕士学历达到 14.41%，博士或以上学历达到 2.93%。从样本数据来看，大多数样本对社交电商平台熟悉度高，大多数人曾使用过社交电商平台并了解意见领袖发布的资讯，这对数据的进一步研究提供了较好的数据支持。各受访者特征如表 2 所示：

<table>
<thead>
<tr>
<th>受访者特征</th>
<th>频数</th>
<th>百分比</th>
</tr>
</thead>
<tbody>
<tr>
<td>性别</td>
<td></td>
<td></td>
</tr>
<tr>
<td>男</td>
<td>131</td>
<td>29.5</td>
</tr>
<tr>
<td>女</td>
<td>313</td>
<td>70.5</td>
</tr>
<tr>
<td>18 岁以下</td>
<td>17</td>
<td>3.83</td>
</tr>
<tr>
<td>18-24 岁</td>
<td>174</td>
<td>39.19</td>
</tr>
<tr>
<td>年龄</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25-30 岁</td>
<td>129</td>
<td>29.05</td>
</tr>
<tr>
<td>31-40 岁</td>
<td>80</td>
<td>18.02</td>
</tr>
<tr>
<td>40 岁以上</td>
<td>44</td>
<td>9.91</td>
</tr>
<tr>
<td>高中及以下</td>
<td>63</td>
<td>14.19</td>
</tr>
<tr>
<td>大专</td>
<td>81</td>
<td>18.24</td>
</tr>
<tr>
<td>受教育程度</td>
<td></td>
<td></td>
</tr>
<tr>
<td>本科</td>
<td>223</td>
<td>50.23</td>
</tr>
<tr>
<td>硕士</td>
<td>64</td>
<td>14.41</td>
</tr>
<tr>
<td>博士或以上</td>
<td>13</td>
<td>2.93</td>
</tr>
<tr>
<td>1000 元及以下</td>
<td>51</td>
<td>11.49</td>
</tr>
<tr>
<td>1001-5000 元</td>
<td>175</td>
<td>39.41</td>
</tr>
<tr>
<td>平均月收入（以人民币结算）</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5001-10000 元</td>
<td>141</td>
<td>31.76</td>
</tr>
<tr>
<td>10001-15000 元</td>
<td>47</td>
<td>10.59</td>
</tr>
<tr>
<td>15000 以上</td>
<td>30</td>
<td>6.76</td>
</tr>
</tbody>
</table>

4. 数据分析和结果
4.1 信度检验

本研究采用 Cronbach’s Alpha 值来测量结果的可靠性和稳定性，其中，意见领袖的专业性、交互性、诚实度和消费者的信任、感知价值和购买意愿 Cronbach’s Alpha 值均超过 0.90，意见领袖发布资讯的时效性、一致性和易用性 Cronbach’s Alpha 值均超过 0.80，本研究中构面的 Cronbach’s Alpha 值超过 0.7，表明本研究中的各个构面信度比较好。各构面的 Cronbach’s Alpha 值如表 3 所示：

<table>
<thead>
<tr>
<th>变量</th>
<th>测量项数</th>
<th>Cronbach's Alpha 值</th>
</tr>
</thead>
<tbody>
<tr>
<td>意见领袖的专业性</td>
<td>5</td>
<td>0.916</td>
</tr>
<tr>
<td>意见领袖的交互性</td>
<td>4</td>
<td>0.924</td>
</tr>
<tr>
<td>意见领袖的诚实度</td>
<td>3</td>
<td>0.932</td>
</tr>
<tr>
<td>意见领袖发布资讯的时效性</td>
<td>3</td>
<td>0.896</td>
</tr>
<tr>
<td>意见领袖发布资讯的一致性</td>
<td>4</td>
<td>0.890</td>
</tr>
<tr>
<td>意见领袖发布资讯的易用性</td>
<td>3</td>
<td>0.879</td>
</tr>
<tr>
<td>消费者的信任</td>
<td>4</td>
<td>0.928</td>
</tr>
<tr>
<td>消费者的感知价值</td>
<td>4</td>
<td>0.914</td>
</tr>
<tr>
<td>消费者的购买意愿</td>
<td>3</td>
<td>0.900</td>
</tr>
</tbody>
</table>

4.2 相关性分析

相关性分析的结果如表 4 所示：

<table>
<thead>
<tr>
<th>专业性</th>
<th>交互性</th>
<th>诚实度</th>
<th>时效性</th>
<th>一致性</th>
<th>易用性</th>
<th>信任</th>
<th>感知</th>
<th>购买意愿</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.786**</td>
<td>0.762**</td>
<td>0.748**</td>
<td>0.721**</td>
<td>0.759**</td>
<td>0.732**</td>
<td>0.743**</td>
<td>0.713**</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>0.705**</td>
<td>0.713**</td>
<td>0.751**</td>
<td>0.779**</td>
<td>0.755**</td>
<td>0.657**</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.746**</td>
<td>0.725**</td>
<td>0.780**</td>
<td>0.788**</td>
<td>0.767**</td>
<td>0.669**</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>0.818**</td>
<td>0.793**</td>
<td>0.792**</td>
<td>0.734**</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.798**</td>
<td>0.816**</td>
<td>0.824**</td>
<td>0.767**</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>0.827**</td>
<td>0.827**</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
结果显示，意见领袖的特征及发布信息的特征与消费者的心理活动及消费者的购买意愿具有显著的相关关系。

4.3 因子分析

运用 AMOS22.0 软件对研究中设计的变量进行验证性因子分析，验证性因子模型拟合优度如表 5 所示：

表 5. 验证性因子模型拟合优度分析表

<table>
<thead>
<tr>
<th>检验指标</th>
<th>CMIN/DF</th>
<th>RMSEA</th>
<th>RMR</th>
<th>GFI</th>
<th>CFI</th>
<th>IFI</th>
<th>PNFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>理想标准</td>
<td>&lt; 3</td>
<td>&lt;0.08</td>
<td>&gt;0.90</td>
<td>&gt;0.90</td>
<td>&gt;0.90</td>
<td>&gt;0.50</td>
<td></td>
</tr>
<tr>
<td>一般标准</td>
<td>尽可能小</td>
<td>&lt;0.1</td>
<td>&lt;0.1</td>
<td>&gt;0.8</td>
<td>&gt;0.8</td>
<td>&gt;0.8</td>
<td></td>
</tr>
<tr>
<td>本研究数据</td>
<td>2.942</td>
<td>0.066</td>
<td>0.027</td>
<td>0.837</td>
<td>0.942</td>
<td>0.942</td>
<td>0.796</td>
</tr>
</tbody>
</table>

模型检验结果显示，卡方值为 1350.402，自由度为 459，卡方自由度比值 =2.942＜3.000，符合理想标准，RMR 值=0.027＜0.08，符合理想标准，RMSEA 值=0.066＜0.080，符合理想标准，CFI 值 0.942＞0.900 符合理想标准，GFI 值 0.837＞0.800 符合一般标准，IFI 值 0.942＞0.900 符合理想标准，PNFI 0.796＞0.5 符合理想标准，适配效果良好，收敛效度较好。

表 6. 因子模型结构效度表

<table>
<thead>
<tr>
<th>潜变量</th>
<th>测量项</th>
<th>因子载荷</th>
<th>C.R.</th>
<th>P</th>
<th>组合信度</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>专业性</td>
<td>A1</td>
<td>0.811</td>
<td></td>
<td></td>
<td>0.917</td>
<td>0.688</td>
</tr>
<tr>
<td></td>
<td>A2</td>
<td>0.854</td>
<td>21.274</td>
<td>***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A3</td>
<td>0.839</td>
<td>20.739</td>
<td>***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A4</td>
<td>0.826</td>
<td>20.252</td>
<td>***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A5</td>
<td>0.818</td>
<td>19.977</td>
<td>***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>交互性</td>
<td>B1</td>
<td>0.855</td>
<td></td>
<td></td>
<td>0.926</td>
<td>0.759</td>
</tr>
<tr>
<td></td>
<td>B2</td>
<td>0.917</td>
<td>26.846</td>
<td>***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>B3</td>
<td>0.859</td>
<td>23.781</td>
<td>***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>B4</td>
<td>0.852</td>
<td>23.442</td>
<td>***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>诚实度</td>
<td>C1</td>
<td>0.905</td>
<td></td>
<td></td>
<td>0.933</td>
<td>0.822</td>
</tr>
<tr>
<td></td>
<td>C2</td>
<td>0.912</td>
<td>30.611</td>
<td>***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>C3</td>
<td>0.903</td>
<td>29.846</td>
<td>***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>时效性</td>
<td>D1</td>
<td>0.882</td>
<td></td>
<td></td>
<td>0.899</td>
<td>0.749</td>
</tr>
<tr>
<td></td>
<td>D2</td>
<td>0.89</td>
<td>26.632</td>
<td>***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>D3</td>
<td>0.823</td>
<td>22.864</td>
<td>***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>一致性</td>
<td>E1</td>
<td>0.866</td>
<td></td>
<td></td>
<td>0.902</td>
<td>0.754</td>
</tr>
<tr>
<td></td>
<td>E2</td>
<td>0.855</td>
<td>23.178</td>
<td>***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>E3</td>
<td>0.883</td>
<td>24.48</td>
<td>***</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
分析结果显示，问卷模型由 9 个因子构成，共有 33 个题项，各题项的标准差因子载荷均大于 0.5，临界比例均大于 1.96，且均在 0.01 水平上显著。同时，因子的组合信度均大于 0.7，说明模型的组合信度非常好，各因子之间的结构划分比较科学。

### 4.5 结构方程模型分析

对模型进行结构方程分析，计算整理后得到如表 7 结果：

表 7. 结构方程模型拟合优度分析表

<table>
<thead>
<tr>
<th>检验指标</th>
<th>CMIN/DF</th>
<th>RMSEA</th>
<th>RMR</th>
<th>GFI</th>
<th>CFI</th>
<th>IFI</th>
<th>PNFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>理想标准</td>
<td>&lt; 3</td>
<td>&lt;0.08</td>
<td>&gt;0.90</td>
<td>&gt;0.90</td>
<td>&gt;0.90</td>
<td>&gt;0.90</td>
<td>&gt;0.50</td>
</tr>
<tr>
<td>一般标准</td>
<td>尽可能小</td>
<td>&lt;0.1</td>
<td>&lt;0.1</td>
<td>&gt;0.8</td>
<td>&gt;0.8</td>
<td>&gt;0.8</td>
<td></td>
</tr>
<tr>
<td>本研究数据</td>
<td>2.988</td>
<td>0.067</td>
<td>0.031</td>
<td>0.837</td>
<td>0.941</td>
<td>0.94</td>
<td>0.81</td>
</tr>
</tbody>
</table>

卡方自由度比值$=2.988<3.000$，符合理想标准；RMSEA 值$=0.067<0.080$ 符合理想标准；RMR 值$=0.031<0.08$ 符合理想标准；CFI 值$=0.941>0.900$ 符合理想标准；GFI 值$=0.825>0.800$ 符合一般标准；IFI 值$=0.94>0.900$ 符合理想标准；PNFI$=0.81>0.5$ 符合理想标准。数据符合模型适配度良好，收敛效度较好。
表8. 模型标准路径分析表

<table>
<thead>
<tr>
<th>编号</th>
<th>假设路径</th>
<th>路径系数</th>
<th>验证结果</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>专业性 --&gt; 信任 (+)</td>
<td>0.193**</td>
<td>支持</td>
</tr>
<tr>
<td>H2</td>
<td>交互性 --&gt; 信任 (+)</td>
<td>0.252**</td>
<td>支持</td>
</tr>
<tr>
<td>H3</td>
<td>诚实度 --&gt; 信任 (+)</td>
<td>0.49***</td>
<td>支持</td>
</tr>
<tr>
<td>H4</td>
<td>时效性 --&gt; 感知价值 (+)</td>
<td>不显著</td>
<td>不支持</td>
</tr>
<tr>
<td>H5</td>
<td>一致性 --&gt; 感知价值 (+)</td>
<td>不显著</td>
<td>不支持</td>
</tr>
<tr>
<td>H6</td>
<td>易用性 --&gt; 感知价值 (+)</td>
<td>0.78***</td>
<td>支持</td>
</tr>
<tr>
<td>H7</td>
<td>信任 --&gt; 购买意愿 (+)</td>
<td>0.247***</td>
<td>支持</td>
</tr>
<tr>
<td>H8</td>
<td>感知价值 --&gt; 购买意愿 (+)</td>
<td>0.715***</td>
<td>支持</td>
</tr>
</tbody>
</table>

***表示P值小于0.001；显著性水平为0.05

从表8可知，假设H1、H2、H3、H6、H7、H8得到了支持，H4、H5没有得到支持。

表9. 模型路径分析效应表

<table>
<thead>
<tr>
<th>路径关系</th>
<th>直接效果</th>
<th>间接效果</th>
<th>总效果</th>
</tr>
</thead>
<tbody>
<tr>
<td>专业性 --&gt; 信任</td>
<td>0.193</td>
<td>0</td>
<td>0.193</td>
</tr>
<tr>
<td>专业性 --&gt; 购买意愿</td>
<td>0</td>
<td>0.048</td>
<td>0.048</td>
</tr>
<tr>
<td>交互性 --&gt; 信任</td>
<td>0.252</td>
<td>0</td>
<td>0.252</td>
</tr>
<tr>
<td>交互性 --&gt; 购买意愿</td>
<td>0</td>
<td>0.062</td>
<td>0.062</td>
</tr>
<tr>
<td>诚实度 --&gt; 信任</td>
<td>0.49</td>
<td>0</td>
<td>0.49</td>
</tr>
<tr>
<td>诚实度 --&gt; 购买意愿</td>
<td>0</td>
<td>0.121</td>
<td>0.121</td>
</tr>
<tr>
<td>时效性 --&gt; 感知价值</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>时效性 --&gt; 购买意愿</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>一致性 --&gt; 感知价值</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>一致性 --&gt; 购买意愿</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>易用性 --&gt; 感知价值</td>
<td>0.78</td>
<td>0</td>
<td>0.78</td>
</tr>
<tr>
<td>易用性 --&gt; 购买意愿</td>
<td>0</td>
<td>0.558</td>
<td>0.558</td>
</tr>
<tr>
<td>信任 --&gt; 购买意愿</td>
<td>0.247</td>
<td>0</td>
<td>0.247</td>
</tr>
<tr>
<td>感知价值 --&gt; 购买意愿</td>
<td>0.715</td>
<td>0</td>
<td>0.715</td>
</tr>
</tbody>
</table>

表9是模型标准路径分析表，显示了自变量对因变量直接效果、间接总效果及总效果，其中，总效果等于直接效果加间接效果。

4.6 研究小结

综合以上分析，本研究假设检验结果如表10所示：
表 10. 模型路径分析效应表

<table>
<thead>
<tr>
<th>假设</th>
<th>假设内容</th>
<th>验证结果</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>意见领袖的专业性对消费者的信任有正向影响作用</td>
<td>成立</td>
</tr>
<tr>
<td>H2</td>
<td>意见领袖与消费者之间的交互性对消费者的信任有正向影响作用</td>
<td>成立</td>
</tr>
<tr>
<td>H3</td>
<td>意见领袖的诚实度对消费者的信任有正向影响作用</td>
<td>成立</td>
</tr>
<tr>
<td>H4</td>
<td>意见领袖发布信息的时效性对消费者的感知价值有正向影响作用</td>
<td>不成立</td>
</tr>
<tr>
<td>H5</td>
<td>意见领袖发布信息的一致性对消费者的感知价值有正向影响作用</td>
<td>不成立</td>
</tr>
<tr>
<td>H6</td>
<td>意见领袖发布信息的易用性对消费者的感知价值有正向影响作用</td>
<td>成立</td>
</tr>
<tr>
<td>H7</td>
<td>消费者的信任对消费者的购买意愿有正向影响作用</td>
<td>成立</td>
</tr>
<tr>
<td>H8</td>
<td>消费者的感知价值对消费者的购买意愿有正向影响作用</td>
<td>成立</td>
</tr>
</tbody>
</table>

5. 结论与展望

5.1 理论贡献

本研究验证了在社交电商平台中，意见领袖的影响力和消费者心理活动之间的关系，其中意见领袖的影响力包括了意见领袖自身特征的影响力因素和意见领袖发布信息特征的影响力因素；其次验证了消费者心理活动在意见领袖影响力和消费者购买意愿之间的关系。具体的研究成果如下：

第一，构建了社交电商平台意见领袖影响力模型，丰富了社交电商平台及其意见领袖影响力领域的实证研究。

第二，本研究共有八条假设，其中六条假设通过验证。假设 1、2、3 回应了上述文献综述中专业性、交互性以及诚实度和消费者信任之间的关系，同时探究了在社交电商平台中意见领袖的专业性、交互性和诚实度对消费者的影响具有正向影响；假设 6 回应了意见领袖发布信息的易用性对消费者的感知价值具有正向影响；假设 7、8 消费者的信任和感知价值对消费者的购买意愿具有正向影响。

5.2 实践意义

本研究通过意见领袖对消费者购买意愿影响力的研究，验证了社交电商平台中，意见领袖的影响力会在不同程度上对消费者的购买意愿产生正向影响。但在实际情况中，越来越多的意见领袖抵挡不住金钱的利诱，帮助无牌无证的商家做夸大其词的推广，让消费者在无形中被“种草”（即看到用户推荐后，把该产品放进购物清单，并进行购买），而这些推广软文背后是高价格、低质量的产品。
在消费者购买到与预期不相符合的商品后，会对发布资讯的意见领袖产生不信任，严重则会放弃使用该社交电商平台。针对这一问题，提出了相关的营销建议，具体内容如下：

第一，对于社交电商平台来说，应当遵循《中华人民共和国电子商务法》的相关规定，打击用户伪造互动数据，扰乱社区的秩序，严格惩罚买水军、恶意炒作等行为，对屡次不改的用户进行限流或封号处理；另外，应当严格审核平台中商家的背景和资质，严查用户发布内容的真实性，打击假冒伪劣商品上架，保证平台上发布产品的品质。

第二，对于消费者来说，应当提高鉴别能力，通过长期观察意见领袖的特征及其发布的内容，鉴别出该意见领袖发布资讯的真实性和可靠性，同时，应当提升产品鉴别能力和产品的专业知识，在购买商品之前需要花更多的时间去对比商品的优劣，而不是片面地听从意见领袖的推荐。除了关注意见领袖发布内容的本身还需要结合其他普通用户的评价或其他意见领袖的评价，做到横向对比，了解所买商品的属性和竟品后再进行购买，可以降低购买产生的感知风险。

第三，对于企业来说，应当重视产品在社交电商平台的宣传和投放，可在新产品发布前让该领域的意见领袖进行测评，并让意见领袖发布真实有效的试用报告，而不是虚假传统，并针对提出问题提出相对应的解决方案。企业在选择意见领袖推广时，除了需要看意见领袖的粉丝量与互动数据以外，还需要关注意见领袖的专业性和诚实度，在推广和宣传过程中应当注重产品本身的属性和功效，切勿虚假宣传，而在宣传的形式上应当选择通俗易懂，容易让消费者接受的方式。

最后，意见领袖应当提高自身的专业性，提升产品的专业知识，如产品的价格、种类、品牌、产品属性等，培养该领域的专业能力和领导能力，加强专业训练。同时，意见领袖应当增加与用户之间的互动，能够积极和迅速的回复用户的评论和留言。意见领袖应当注重自身的诚实度，诚实度是衡量意见领袖在消费者信任的主要指标，只有发布真实、发自内心的分享，才能赢得消费者的信任，因此意见领袖在宣传的过程中，应当了解商品的属性、作用及企业的背景才进行真实的使用分享和测评。

另外，意见领袖发布的资讯应当发布更通俗易懂的内容，同时需要提升内容的逻辑性和条理性，发布的内容应能被用户吸收，推广的资讯才有价值和意义，对意见领袖产生信任和感知价值，从而产生购买意愿，最终形成意见领袖自身的商业价值。

5.3 局限与展望

本研究丰富了社交电商平台中意见领袖影响力的内容，对其理论实践具有一定的意义。但社交电商平台的文献和学术研究甚少，对社交电商中的意见领袖特征的研究更为少之，导致本研究在社交电商平台上意见领袖发布信息的特征和消费者感知价值的假设不够全面。在今后的研究当中，可增加意见领袖发布信息的特征，例如创造力、趣味性等更符合当下年轻人喜欢的特征进行研究。

本研究认为信任和感知价值都对意见领袖的影响力和消费者的购买意愿产生中介作用，但本研究在设计过程中忽略了研究信任和感知价值之间的关系，在日后的研究需要研究消费者信任和感知价值之间的关系。
在问卷的设计和变量的测量过程中存在很多的不足之处，有待日后完善。在设计模型过程中只针对了社交电商中意见领袖的影响力因素，过度重视平台中的社区功能，忽视研究电商平台的购物的属性，导致无法测量消费者产生购买意愿产生到是否在该平台直接产生购买行为，还是被“种草”后到其他平台或实体店进行消费和购买。

本研究主要是针对社交电商中的意见领袖进行探讨，涉及的领域比较广，从样本数据中可以知道平台用户对服装、化妆品、电子产品等类目比较感兴趣，日后的研究可以针对某个领域中意见领袖影响力对消费者购买意愿进行探究。

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Big Data Analytics to Repeat Buying and Price Evaluations

Affect Online Product Reviews

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Abstract

Online product reviews are the web comments of consumer satisfaction or usage with the goods after their purchase. Online product reviews have already become an important basis for consumers to make purchase decisions in online shopping. However, consumers often don’t write online reviews of products rationally and objectively. They tend to be influenced by the purchase frequency or the usage of products, and they write online product reviews with certain emotional tendency. Thus, online product reviews may fail to reflect the actual situation of the product. We conducted this study for more understand how the frequency of purchase and the price evaluation of goods affect consumers to write online product reviews. We hypothesized that it was a difference between first-time and repeat buyers in writing online reviews of products; Consumers have positive or negative emotional tendency towards a certain product attribute, and they also have differences in writing online
product reviews. In order to verify the above two hypotheses, we collected more than 300,000 cases of two baby diaper brands through the Internet in 6 months. After that, we conducted a series of data processing and analysis. The result show that it is a significant difference in the length of online product reviews between the first-time buyers and the repeat buyers, and repeat buyers posted longer reviews than first-time buyers; (2) it is a significant difference in the length of product reviews between the customers who make positive comments on the price and those who make negative comments on the price, and customers who make negative comments on the price posted longer reviews; (3) it is a significant difference in the frequency of product reviews between first-time buyers and repeat buyers, and the frequency of product reviews is higher when first-time buyers have negative reviews about prices.

**Keywords**: Length of Online Product Reviews; Repeat Buying; Price Evaluations; Big Data
基于大数据分析重复购买与价格评价对在线商品评论影响

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摘要

商品在线评论是消费者购物后对商品满意程度或使用情况的网络评论。目前在线商品评论已成为消费者在网络购物时重要购买决策依据。但是，消费者很多时候并不是理性、客观发表商品的在线评论，他们往往受到购买频率或对商品或使用情况的影响，在撰写商品在线评论带有一定情感倾向。从而，使在线商品评论未能如实反映商品的实际情况。为此，本文尝试探讨消费者对商品购买频率和价格评价是如何影响其撰写商品在线评论内容。我们假设商品初次购买者与重复购买者在撰写商品在线评论上存在差异；消费者对于商品某一属性具有正面或负面情绪倾向，其在撰写商品在线评论上同样存在差异。为了验证以上两个假设，我们用 6 个月通过网络收集到了两个婴幼儿纸尿裤品牌 30 多万条数据。然后，进行一系列的数据处理和分析。我们研究发现：（1）商品初次购买者与重复购买者在商品评论长度上具有显著的差异，且重复购买者对商品的评论长度要多于初次购买者；（2）对商品的价格正面评价的顾客与对价格负面评价的顾客在商品评论长度上存在显著差异，且对价格负面评价的顾客发表商品评论长度更长；（3）商品初次购买者与重复购买者在发表评论的频率存在显著差异，其中初次购买者对价格的负面评价的情况下发表商品评论频率更高。

关键词：评论长度；重复购买；价格评价；大数据

1. 引言

随着我国互联网的快速发展，网络购物已成为我国消费者购物重要渠道之一。据中国互联网信息中心 2019 年 2 月发布《第 43 次中国互联网络发展状况统计报告》显示截至 2018 年 12 月，我国网络购物用户规模已达 6.10 亿，较 2017 年底增长 14.4%，占总体网民的 73.6%。网络购物市场交易规模约达 7.7 万亿元。根据中国互联网信息中心 2016 年 6 月发布《2015 年中国网络购物市场研究报告》指出网络口碑、价格、网站/商家信誉成为网络购物用户决策时最为关注的因素，关注度分别为 77.5%、72.2% 和 68.7%。网络口碑为消费者在购物前提供商品状况参考，降低了购买风险。商品的在线评论作为网络口碑的一种形式 (Chen & Xie, 2008; Park & Nicolau, 2015)，它是消费者在购买商品后发表的，对商品满意程度或使用满意程度的第三方评价。由于在线商品评论来源于商品购买者
而非商家，所以具有很高说服力，经常影响消费者的购买决策。可是，顾客很多时候在发表他们对商品评论时并不是理性、客观对商品进行评价。顾客可能会受到购买频率（初次购买者与重复购买者）或对商品或使用情况的影响，在撰写商品评论时有自己一定情感倾向，使在线商品评论未能如实反映商品或商品使用的实际状况。此外，在线商品评论内容及长度是评论重要的两个因素，评论有效长度越长提供的信息量越多，越容易获得消费者认可。为了更好的了解商品购买频率和商品价格评价对消费者撰写商品在线评论内容影响。因此，我们在本研究中尝试探讨商品购买频率以及商品价格评价是如何影响消费者撰写在线商品评论长度。虽然，近年来，对于网络口碑研究已经有很多，但是探讨购买频率与价格评价对在线商品评论内容影响的研究比较少，而通过大数据手段分析这三者之间关系研究几乎没有。为此，本文尝试通过两个品牌纸尿裤 6 个月销售数据为样本研究初次或重复这两个品牌的纸尿裤顾客，以及对价格给予正面和负面评价的顾客在发表该商品在线评论长度是否存在显著差异，以探讨不同购买频率和价格评价对消费者在线商品评论撰写与发表频率的影响。本研究将使我们更好了解消费者网络购物行为特征，为企业制定相关营销策略提供理论依据。

2. 文献回顾与研究假设

2.1 商品在线评论与评论长度

消费者的在线评论是网络口碑的一种形式 (Chen & Xie, 2008; Park & Nicolau, 2015)。由于在线评论是由消费者在网站购买商品后发布信息，是顾客生成内容。因此消费者在网上消费时会倾向于依靠在线评论来做出他们购买决策。在线评论作为一种网上消费现象，已在消费者购买决策中扮演着越来越重要的角色 (Chen & Xie, 2008)。近几年来对于在线评论研究一般只关注在线评论感知有用性的影响因素，如评论特征、商品特征、评论发布者的特征信息等方面。王军等 (2016) 以淘宝网销售的运动鞋评论为分析数据，研究发现矛盾性的在线评论的消费者感知有用性要比一致性的高。吴维芳等 (2017) 在对 Tripadvisor.com 上的酒店评论信息分析后，发现在评论文本中，情感表达与满意度之间的关系呈“U”型。而对于评论的一个重要因素——评论内容长度，也有相关研究。评论长度是指消费者所发布的评论的字数 (杨东红等, 2019)。评论的字数体现着包含信息的丰富程度，评论字数越多，所包含的商品或服务的相关信息也更多，消费者能掌握更多的信息，越利于他们的购买决策 (Ghose 等, 2011; Chevalier 等, 2006)。石文华等 (2018) 研究发现商品类型对评论长度有一定的影响，对于体验型商品，评论主要体现的是个人体验和商品属性；对于搜索型商品，评论主要比对商品属性与描述相符，评论的长度可能会比较长。由以上相关研究可见，目前在线评论的有用性研究主要集中在基于评论文本内容的分析和在线评论有用性的影响因素分析，以及商品属性对评论长度的影响。而对于购买频率（初次购买或重复购买）对于评论长度影响缺乏相关的研究。为此，本文尝试通过大数据分析研究购买频率对于评论长度影响。

2.2 重复购买
Dick 和 Basu（1994）认为顾客忠诚是顾客对于商品相对态度倾向和重复购买率两个因素综合决定。而 Andreassen 和 Lindestad（1998）研究发现衡量顾客忠诚最初两个因素是顾客对其他潜在购买者进行正面宣传的可能性和重复购买的概率。在企业管理中，顾客忠诚度是衡量企业能否长期可持续发展的重要因素。稳定的目标顾客，可以为企业带来稳定的利润和资金流，为企业的发展提供源源不断的动力。以上两个研究都是发现衡量顾客忠诚度的重要测量指标是顾客的重复购买率。国内的学者对于重复购买也有相当多的研究，如王仲瑀（2012）认为重复购买的概率经常用重复购买意向来判定。网上销售渠道已成为我国重要的销售渠道之一，在网络上消费者的搜索成本和转换成本大幅的降低，因此对于网络企业来说，忠诚的顾客和重复购买率对于他们来说是极为重要。Reichheld 和 Sdiefter（2000）指出在线销售成功的关键取决于具有忠诚度用户的的重复购买行为。但网络企业在实际运行中，网上商店往往只意识到了价格、促销策略对一次购买及用户满意度的影响，却忽视了其与重复购买行为之间的关联关系，这样有可能产生只关注短期收益而忽略长期风险的风险。

顾客的重复购买意向是以对以往购买经验的认知评论为基础的。为此，本文尝试通过大数据分析研究初次购买商品与重复购买商品的消费者在购买后的在线商品评论长度是否存在差异，以探索重复购买的消费者会否为企业提供更大的无形的利益。

2.3 商品价格

虽然互联网的发展大幅降低了信息搜寻成本和商品转换成本，提高了交易的便捷度，从这一角度看线上企业趋向于完全竞争市场环境，商品线上价格离散度应该会比线下更低。Shanka 等（2001）认为互联网环境因素对消费者的价格敏感度起到一定抑制作用。但是现实际网上销售数据却并不支持这一推论。Grewal 等（2003）研究发现实际电子商务网站中的商品价格离散度往往更大，这研究结论说明在交易中，价格仍然是购物决策的重要决定因素。Cao 和 Gruca 等（2003）研究美国在线零售商品定价与顾客满意度之间的关系，将用户满意度分为价格满意和购买满意两个部分，研究发现价格满意度与购买满意度呈负相关。而只有在顾客购买满意时才会产生用户忠诚。消费者在线上购物时，首先关注的是商品在线评论信息，而价格方面的评论信息是他们主要关注因素。

2.4 研究假设

消费者重复购买某一品牌商品，可以降低搜索成本和转换风险。他们能够从重复购买中获得更多的交易利益。为此，消费者与这一品牌建立较强联系，也就是说他们对这一品牌具有一定程度。为维持这种利益关系，他们有更大意愿为这一品牌额外付出时间和精力。因此，我们假设重复购买者在购物后会比初次购买者更有可能撰写较长的在线商品评论。为此，我们提出研究假设 H1。

H1：初次购买者与重复购买者存在线商品评论长度显著差异，且重复购买者评论长度大于初次购买者。

消费者在线上购物时，由于不能直接面对面商家进行语言上沟通。当他们在
购物后对商品不满意时，他们希望发表他们不满的意见，以此抒发负面的情绪。而且，潜在的商品购买者通常认为负面信息比正面信息更具判断性价值，所以才会在购买决策时更多地依赖负面信息(Ahuwalia 等, 2000)。因此，购物后的消费者知道负面商品评论会让其他消费者更多关注。综合以上两个原因，本研究假设当消费者在购物后对商品价格不满意时，消费者更倾向于在网上详细地发表其不满意意见，以抒发自己的不满情绪。为此，我们提出研究假设 H2, H3。

H2：无论初次购买者或是重复购买者对于在线商品评论长度正面评价和负面评价有显著差异，而且负面评价长度大于正面评价长度。

H3：对于价格，重复购买者与初次购买者对于在线商品评论在频率存在显著差异，且初次购买者发表评论频率大于重复购买者。

3. 研究方法

本文通过运用一系列网络数据获取和分析技术对本文的研究假设进行实证检验，具体数据获取和处理步骤见图 3.1 所示。

3.1 研究对象

在本次研究中，我们选取的研究对象是年青女性网民，因为近年来年青女性网民网络购物增长迅速(CNNIC, 2015)，而年青女性比其他消费群体更愿意在网上发表她们意见。而研究商品选取一款年青女性网民在特定时间内使用频率高且关注高，经过多番研究，我们选取了婴幼儿纸尿裤作为本研究商品。经过我们对收集到数据中商品评论的分析，我们发现研究对象大多数为年青女性母亲，这符合我们对研究的预期。

3.2 数据获取

为了使本文中数据更具代表，我们本文数据通过使用 Python 编写的网络爬虫在分别在我国最大三大网上购物平台：淘宝，天猫，京东上跨平台抓取数据。从 2018 年 2 月 1 日开始为期 6 个月数据抓取。我们分别抓取了两个我国市场销量较好国外婴幼儿纸尿裤品牌：好奇（Huggies）和尤妮佳（Moony）的网上销售数据，共收集到数据 336,878 条，其中好奇 252,736 条，尤妮佳 84,142 条。通过初步数据整理，删除无效和缺失值多的数据，得到有效数据 334,852 条，其中好奇 250,710 条，尤妮佳 84,102 条。每条数据均包含顾客的购买日期，在线商品评论，购买价格等信息。

3.3 建立词表
我们对收集到的数据进行一系列程序化处理。我们根据研究需要建立了词表，其目的从每条评论中提取有研究价值的信息。我们共建立了5个词表：1.评论信息对象词表：主要用来识别评论点和量化评论信息。通过设定关键词作为评论点，并对评论信息进行量化处理，如表3-1所示；2.形容词表：主要用来判断该评论点的情感偏向；3.否定词表：当评论信息中的否定词不在否定词排除词典中，而且其与形容词、对象词位置不重复，则会判定此信息为否定性信息，整条评论情感得分为负；4.否定词排除表：当评论中的否定词在否定词排除词典，则会判定否定无效，整句情感得分来正。5.替换词表：原来的词语中存在一些会影响到情感判断的词语，但是按原有词语剔除这些词语会影响到整条信息情感的判断，所以对这些词语进行修正，如评论说“出不多”，替换成“差不多”；“没发比”替换成“没法比”等。我们运用SQL语言编写计算机代码，把以上五个词表的通过计算机运行实现，从每条在线商品评论中提取出对本研究所需的信息。

表1. 评论信息对象词表

<table>
<thead>
<tr>
<th>第一级分类</th>
<th>第二级分类</th>
<th>第三级分类</th>
<th>关键词</th>
<th>得分</th>
</tr>
</thead>
<tbody>
<tr>
<td>使用体验</td>
<td>产品特点</td>
<td>包装外观</td>
<td>kitty</td>
<td>0</td>
</tr>
<tr>
<td>使用体验</td>
<td>产品特点</td>
<td>安全卫生</td>
<td>肮脏</td>
<td>-1</td>
</tr>
<tr>
<td>价促</td>
<td>价格</td>
<td>价格评价</td>
<td>白菜价</td>
<td>1</td>
</tr>
<tr>
<td>使用体验</td>
<td>使用后感知</td>
<td>合身</td>
<td>包不住</td>
<td>-1</td>
</tr>
<tr>
<td>使用体验</td>
<td>使用后感知</td>
<td>皮革感</td>
<td>包裹性</td>
<td>0</td>
</tr>
</tbody>
</table>

3.4 关键词归类和提取

对于数据中有用信息的提取，我们建立一个三级的关键词归类和提取框架如图3-2所示，信息中关键词自下往上提取即从底层（第三级分类）向顶层（第一级分类）逐层归类和提取。我们首先从部分原始数据中归类出关键词，并整理这些信息形成第三级分类关键词；然后对第三级分类关键词进行整理归类，形成第二级分类关键词；再重复以上步骤形成第一级分类关键词。

3.5 数据清洗

数据清洗重新检查和验证数据以删除重复信息，纠正现有错误并提供数据一致性的过程。为完成这一过程，我们利用SQL将原始数据进行分类，并删除缺失的数据、更正错误的数据、删除重复的数据。我们利用SQL将原始数据按照关键词→第三级分类关键词→第二级分类关键词→第一级分类关键词的顺序进行归类和信息提取，使大部分评论信息最终能归属到第一级分类关键词中。

3.6 数据核查

核查已归类的评论信息，留意评论中关键词所对应的得分是否合理，如出现大量不合理，则需更改关键词的得分。
3.7 数据整理

数据整理即为满足统计分析的需要而处理原始数据，使其条理化和系统化的过程。在此过程中，我们用 Excel 将需更正的数据整理。筛选出不能归属到第一层分类关键词的评论信息，找到评论中的关键词，将其按照关键词→第三级分类关键词→第二级分类关键词→第一级分类关键词补充到词表中，最终将需添加或修改的第一级分类关键词按照原格式整理好，再用 SQL 语言编写相应程序通过计算机运行对所有数据进行分类，迭代优化。

4. 实证分析

本文使用 SPSS 19.0 对数据进行分析，主要从购买频率（初次购买或重复购买）、评论长度和价格评价三个维度验证研究假设。

4.1 购买频率对在线商品评论长度的分析

为检验消费者的购买频率（初次购买者与重复购买者）对其撰写商品在线评论长度影响，我们把两个品牌纸尿裤初次购买者和重复购买者作为因子对评论字数分析做了方差分析，其分析结果如表2和表3所示。
表2. “尤妮佳”纸尿裤初次购买者与重复购买者评论字数平均数与标准差

<table>
<thead>
<tr>
<th>购买频率</th>
<th>个数</th>
<th>评论字数均值</th>
<th>标准差</th>
</tr>
</thead>
<tbody>
<tr>
<td>初次购买</td>
<td>53419</td>
<td>26.3</td>
<td>34.42</td>
</tr>
<tr>
<td>重复购买</td>
<td>30683</td>
<td>29.21</td>
<td>32.41</td>
</tr>
<tr>
<td>总数</td>
<td>84102</td>
<td>27.42</td>
<td>33.72</td>
</tr>
</tbody>
</table>

由表2可知，初次购买者评论字数均值26.39，标准差34.42；重复购买者均值29.21，标准差32.41。方差分析结果可得 $F(1, 67134.51) = 140.46, p = 0.00$，这说明重复购买者与初次购买者在评论字数上存在显著差异。从以上分析可知，重复购买者对商品的评论高于初次购买者。

表3. “好奇”纸尿裤初次购买者与重复购买者评论字数平均数与标准差

<table>
<thead>
<tr>
<th>购买频率</th>
<th>个数</th>
<th>评论字数均值</th>
<th>标准差</th>
</tr>
</thead>
<tbody>
<tr>
<td>初次购买</td>
<td>162965</td>
<td>25.16</td>
<td>31.47</td>
</tr>
<tr>
<td>重复购买</td>
<td>87745</td>
<td>29.39</td>
<td>30.04</td>
</tr>
<tr>
<td>总数</td>
<td>250710</td>
<td>26.64</td>
<td>31.04</td>
</tr>
</tbody>
</table>

由表3可知，初次购买者评论字数均值25.16，标准差31.47；重复购买者均值29.39，标准差30.04。方差分析结果可得 $F(1, 186931.96) = 1093.89, p = 0.00$，这说明初次购买者与重复购买者在评论字数上存在显著差异。从以上分析可知，重复购买者对商品的评论高于初次购买者。

为此，经过对以上两种品牌的初次购买者与重复购买者在购买后对商品评论的字数可得，初次购买者与重复购买者在线商品评论内容长度存在显著差异，且重复购买者发表的评论内容长度大于初次购买者，故支持H1假设。重复购买者再次购买商品后更愿意发表他们的商品的意见。

4.2 正面和负面价格评价对在线商品评论长度的分析

为检验消费者的对价格正面或负面评价对其撰写商品在线评论长度影响，我们把两个品牌纸尿裤消费者对其价格正面或负面评价作为因子对评论字数分析做了方差分析，其分析结果如表4和表5所示。

表4. “尤妮佳”纸尿裤价格正面与负面评价的评论字数平均数与标准差

<table>
<thead>
<tr>
<th>价格评价</th>
<th>个数</th>
<th>评论字数均值</th>
<th>标准差</th>
</tr>
</thead>
<tbody>
<tr>
<td>正面</td>
<td>8534</td>
<td>43.27</td>
<td>52.46</td>
</tr>
<tr>
<td>负面</td>
<td>1479</td>
<td>61.38</td>
<td>68.84</td>
</tr>
<tr>
<td>总数</td>
<td>10013</td>
<td>46.48</td>
<td>55.89</td>
</tr>
</tbody>
</table>
由表 4 可知，正面评价字数均值 43.27，标准差 52.46；负面评价均值 61.38，标准差 68.84，方差分析结果可得 F（1，1787.33）= 92.92，p = 0.00，这说明正面评价与负面评价在评论字数上存在显著差异。从以上分析可知，负面评价的评论字数大于正面评价。

表 5，“好奇”纸尿裤价格正面与负面评价的评论字数平均数与标准差

<table>
<thead>
<tr>
<th>价格评价</th>
<th>个数</th>
<th>评论字数均值</th>
<th>标准差</th>
</tr>
</thead>
<tbody>
<tr>
<td>正面</td>
<td>29243</td>
<td>39.18</td>
<td>45.64</td>
</tr>
<tr>
<td>负面</td>
<td>6353</td>
<td>49.40</td>
<td>54.84</td>
</tr>
<tr>
<td>总数</td>
<td>35596</td>
<td>41.02</td>
<td>47.58</td>
</tr>
</tbody>
</table>

由表 5 可知，正面评价字数均值 39.18，标准差 45.64；负面评价均值 49.40，标准差 54.84，方差分析结果可得 F（1，8366.90）= 191.93，p = 0.00，这说明正面评价与负面评价在评论字数上存在显著差异。从以上分析可知，负面评价的评论字数大于正面评价。

为此，经过对以上两种品牌的正面评价与负面评价在购买后对商品评论的字数分析可得，正面评价与负面评价在线商品评论内容长度上存在显著差异，且发表负面评价购买者的评论内容的长度大于正面评价，故支持 H2 假设。这说明消费者在购买商品后不满意，他们更倾向撰写较长的负面商品评论，以抒发其对商品的不满。

4.3 购买频率与价格评价对发表在线商品评论频率分析

由于价格评价变量与重复购买者变量的数据类型均为类别型变量。为此，我们把数据以交叉表呈现，并进行了卡方检验，其分析结果如以下表格所示。

表 6，“尤妮佳”纸尿裤购买频率与价格评价分布交叉表

<table>
<thead>
<tr>
<th>价格评价</th>
<th>个数</th>
<th>初次购买</th>
<th>重复购买</th>
<th>合计</th>
</tr>
</thead>
<tbody>
<tr>
<td>正面</td>
<td>5573</td>
<td>2961</td>
<td>8534</td>
<td></td>
</tr>
<tr>
<td>负面</td>
<td>1032</td>
<td>447</td>
<td>1479</td>
<td></td>
</tr>
<tr>
<td>合计</td>
<td>6605</td>
<td>3408</td>
<td>10013</td>
<td></td>
</tr>
</tbody>
</table>

由交叉表的卡方检验结果显示，价格评价与购买频率的关联度显著。
表 7. “尤妮佳”纸尿裤购买频率与价格评价关联系卡方检验

<table>
<thead>
<tr>
<th></th>
<th>值</th>
<th>自由度</th>
<th>渐进双侧 p 值</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson 卡方</td>
<td>11.23</td>
<td>1</td>
<td>0.01</td>
</tr>
<tr>
<td>似然比</td>
<td>11.42</td>
<td>1</td>
<td>0.01</td>
</tr>
<tr>
<td>有效样本个数</td>
<td>10013</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

由表 7 可知，卡方检验结果表明，Pearson 卡方值为 11.23，自由度为 1，\( p = 0.01 < 0.05 \)，这说明初次购买与重复购买在价格正面评价、负面评价三个方面存在显著差异。而且，由表 6 可知，在价格的负面评价方面，初次购买者与重复购买者存在显著差异，初次购买者对于价格的负面评价（10.3%，调整后残差=3.4 显著高于重复购买者（4.5%，调整后残差=3.4），这说明初次购买者对于价格的负面评价数量显著高于重复购买者数量。从以上分析结果表明初次购买者对价格更为关注和敏感，并且对价格的不满意程度会更高。

表 8. “好奇”纸尿裤购买频率与价格评价分布交叉表

<table>
<thead>
<tr>
<th>价格评价</th>
<th>正面</th>
<th>初次购买</th>
<th>重复购买</th>
<th>合计</th>
</tr>
</thead>
<tbody>
<tr>
<td>个数</td>
<td>19705</td>
<td>9538</td>
<td>29243</td>
<td></td>
</tr>
<tr>
<td>总数</td>
<td>55.4%</td>
<td>26.8%</td>
<td>82.2%</td>
<td></td>
</tr>
<tr>
<td>调整后残差</td>
<td>-4.8</td>
<td>4.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>个数</td>
<td>4479</td>
<td>1874</td>
<td>6353</td>
<td></td>
</tr>
<tr>
<td>总数</td>
<td>12.6%</td>
<td>5.3%</td>
<td>17.8%</td>
<td></td>
</tr>
<tr>
<td>调整后残差</td>
<td>4.8</td>
<td>-4.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>合计</td>
<td>25940</td>
<td>12291</td>
<td>38231</td>
<td></td>
</tr>
<tr>
<td>总数</td>
<td>67.9%</td>
<td>32.1%</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

表 9. “好奇”纸尿裤购买频率与价格评价关联系卡方检验

<table>
<thead>
<tr>
<th></th>
<th>值</th>
<th>自由度</th>
<th>渐进双侧 p 值</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson 卡方</td>
<td>23.2</td>
<td>1</td>
<td>0.00</td>
</tr>
<tr>
<td>似然比</td>
<td>23.6</td>
<td>1</td>
<td>0.00</td>
</tr>
<tr>
<td>有效样本个数</td>
<td>35596</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

由表 9 可知，卡方检验结果表明，Pearson 卡方值为 23.2，自由度为 1，\( p = 0.00 < 0.01 \)，这说明初次购买与重复购买在价格正面评价和负面评价三个方面存在显著差异。而且，由表 8 可知，在价格的负面评价方面，初次购买者与重复购买者存在显著差异，初次购买者对于价格的负面评价（12.6%，调整后残差=4.8 显著高于重复购买者（5.3 %，调整后残差 = -4.8），这说明初次购买者对于价格的负面评价数量显著高于重复购买者数量。从以上分析结果表明初次购买者
对价格更为关注和敏感，并且对价格的不满意程度会更高。

由以上分析可得，重复购买者与初次购买者对于在线商品评论在频率存在显著差异，且初次购买者发表评论频率多于重复购买者，故支持 H3 假设。

5. 结论与建议

5.1 结论

本文主要研究了购买频率和商品价格评价对消费者购物后在线撰写商品评论及发表评论频率的影响。通过网络收集了对两个品牌婴幼儿纸尿裤在 2018 年 1 月至 6 月 30 多万条销售数据，并对数据进行一系列的数据处理，对本研究三个变量：在线商品评论、消费者购买频率（初次购买或重复购买）以及消费者对价格评价（正面和负面）进行方差分析和卡方分析，得出结论如下:

1. 初次购买者与重复购买者在评论内容长度上具有显著的差异，且重复购买者对商品的评论长度要多于初次购买者。这说明重复购买婴幼儿纸尿裤的年青女性网民会花费更多时间和精力对待她们关切商品进行评论。

2. 在本研究中，我们选取商品价格评价这个维度进行研究。我们发现对商品价格正面评价的顾客与对价格负面评价的顾客在商品评论长度上存在显著差异，其中对商品价格不满意给予负面评价的顾客，她们发表的商品评论的长度大于对商品价格满意给予正面评价的顾客。这说明本次研究对象（年青女性网民）在购买商品后，对商品价格产生负面评价，她们更倾向撰写较长的负面商品评论，以抒发其对商品的不满。这也进一步说明了，这部分消费者愿意花费更多时间和精力在她们关切的商品上，并愿意为此付出更多精力和时间。

3. 商品初次购买者与重复购买者在发表评论的频率存在显著差异，其中初次购买者对价格的负面评价的情况下发表商品评论频度更高。这说明购买商品后，如果消费者对商品价格不满意，产生负面价格评价，她们更有可能发表在线商品评论，以抒发其对商品的不满。

5.2 建议

对于本文的三个研究结论，我们给予商家三个方面的建议：第一，从结论 1 可知，对于消费者关切商品的重复购买者，她们与企业之间的关系更为密切，她们会花费更多时间和精力了解商品信息，以及给予企业更多信息反馈。为此，企业在其在线销售系统上识别这部分顾客，并且对于她们的评论信息给予及时处理，同时也应给予企业更多信息反馈。从以上研究来看，这部分女性消费者会更愿意接收和处理这样的信息。第二，从结论 2 和 3 可知，对商品产生负面情绪的年青女性消费者更有可能发表商品评论，同时也会花费更多时间和精力对商品进行在线评论。为此，企业应及时回复负面评价并合理处理她们的反馈信息。
参考文献


Knowledge Mapping Analysis of Chinese Tourism Marketing Research — Based on CiteSpace5.3

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Abstract

With the help of CiteSpace, this study analyzes 870 periodical literatures on Chinese tourism marketing from GCJC and CSSCI by CNKI until 2018 from the perspectives of literature time distribution, literature sources, the group of authors and institutions, research topics and trends. The results show that after the peak of publication number in 2011, the number of literatures in this field decreases sharply and remains at a low level; the integration of tourism marketing research with other disciplines expands the research boundary; a lack of coordination exists among authors and institutions; characteristics of the research in this field are both academic and practical; research topics are extensive which mainly include: marketing strategy, tourist destination and destination marketing, tourism marketing means, thematic tourism marketing, analysis of international tourism marketing, problems derived from domestic marketing modes and strategies, the innovation of tourism marketing etc. rural tourism marketing strategy innovation is the future research trend that deserves attention.

Keywords: Tourism marketing; Knowledge mapping; CiteSpace; Bibliometrics
中国旅游市场营销研究知识图谱分析
——基于 CiteSpace5.3

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摘要
本研究借助 CiteSpace，对截止到 2018 年收录于 CNKI 的中文核心期刊和 CSSCI 期刊中关于中国旅游市场营销相关主题文献，从文献时间分布、文献来源、作者群体与研究机构、研究主题与研究趋势等方面进行了分析。结果显示：经过 2011 年发文量高峰期后，本领域文献数量急剧减少且一直处于较低水平；旅游市场营销研究与其他学科的融合扩展了研究边界；研究者之间、研究机构之间缺乏合作，学术性与实用性兼具是本领域研究的特点；研究主题广泛，主要包含营销策略、旅游目的地以及目的地营销、旅游市场营销手段、主题型旅游市场营销、国际旅游市场营销的分析、国内旅游市场营销模式和营销策略衍生的问题、旅游市场营销的创新问题等；乡村旅游营销策略创新是未来值得关注的研究趋势。

关键词：旅游市场营销；知识图谱；CiteSpace；文献计量学

1. 引言
近年来我国国内旅游市场人数一直保持 10%以上的增长率，截止到 2017 年，国内旅游市场游客人数已达到 50 亿人次，国内旅游总收入达到 4.57 万亿元（艾瑞咨询，2018）。旅游业的发展为旅游业相关企业带来更多收入的同时也给旅游业带来更加激烈的竞争，因此旅游市场营销受到了越来越多的关注，旅游业从业者急需相关的市场营销理论知识指导实践活动，这也推动了学术界对该领域的关注。

国内的学者从旅游市场营销战略、旅游目的地营销、旅游市场具体营销手段、主题型旅游市场营销、国际旅游市场营销的分析、国内旅游市场营销模式和营销策略衍生的问题等方面入手，对中国旅游市场营销进行了研究探讨，相关文献已经比较丰富，其中一些研究者对我国的旅游市场营销做出了综述性的研究，多以定性研究为主，但面对海量的数据，需要用定量研究的方式来进行补充以更好地揭示该领域的发展历程和趋势。田里、席婷婷与杨懿（2017）就借助 Bicob 对 2013 年到 2015 年发表于 CSSCI 的 216 条相关主题文献进行了定量化知识图谱分析，展现了这 3 年我国旅游市场营销研究的状况，对揭示本领域研究热点和研究前沿有一定借鉴意义。
本研究同样采用定量化知识图谱分析方法，主要借助 CiteSpace 软件，分析中国知网中截止到 2018 年发表于中文核心期刊和 CSSCI 期刊的 870 条相关主题文献，以期更完整的对中国旅游市场营销研究做出综述性分析。首先从文献时间分布、文献期刊来源、发文作者与机构等方面对中国旅游市场营销研究领域做出基本研究概况的展示，再借助关键词、高频关键词、高中心度关键词的图谱分析，概括出本领域主要的研究主题，最后通过对突现词的提取和分析，发现中国旅游市场营销研究的发展趋势。

2. 研究设计

2.1 研究方法

知识图谱技术是在数据可视化背景下，结合计算机科学和科学计量学的跨学科研究方法，通过对生成图形的分析，可以直观地展现文献之间的联系、有效地揭示研究领域的热点和趋势（辛宇，2014）。目前常见的科学计量与可视化软件包括 CiteSpace、VOSviewer、SCI of SCI、SciMAT 等，相较于 VOSviewer、SCI of SCI 和 SciMAT 软件，CiteSpace 对中文数据库有良好的支持，另外，与 VOSviewer 不同，CiteSpace 对于数据的预处理不需要外部程序就可独立完成。所以本研究主要借助由陈超美教授开发的 CiteSpace 5.3 版本对我国旅游市场营销研究进行知识图谱绘制并展开分析。

2.2 研究数据来源

本研究数据来源于中国知网（CNKI）的 China Academic Journal Network Publishing Database，该数据库是全球最大的连续动态更新的中国学术期刊全文数据库。进入该数据库，选择“高级检索模式”，文献分类目录选择“经济与管理科学”，为保证最大限度的包含研究领域文献，本研究使用主题检索加精确匹配的方式，以“旅游营销”为主题词，时间选择“从不限年到 2018 年”，同时为了更好地分析中国旅游市场营销发展历程和现状，需要对用于分析的文献质量加以控制，特将来源类别限制为“核心期刊”和“CSSCI”，最后得到 870 篇文献用以图谱分析。

3. 文献统计

3.1 文献时间分布

紫（2004）关于旅游目的地营销系统区域整合的探讨（被引 112 次），高静、肖江南与章勇刚（2006）对国外旅游目的地营销的研究（被引 113 次），王素洁与刘海英（2007）对于国外乡村旅游的论述（被引 250 次），李君轶（2010）对旅游目的地网络营销系统的评价（被引 98 次）为被引次数靠前的研究论文。这一阶段的高被引论文可以窥见，旅游目的地营销系统的构建和国外旅游市场营销的评析是本领域研究成果高速增长时期被广泛关注的研究点。从 2012 年开始到 2018 年，中国旅游市场营销研究文献数量急剧减少，此阶段的最高峰出现在 2016 年，但也仅有 42 篇，其余年限基本在 30 篇左右徘徊，最新的文献是梁力（2018）以旅游文学资源为切入点进行体验营销水平提升的研究。

图片 1. 1992—2018 年中国旅游市场营销研究文献数量时间分布

3.2 文献来源分析

对选定的 870 篇文献来源期刊进行统计分析，总结出国内刊登旅游市场营销相关主题排名前 30 位的期刊，如表格 1 所示。这 30 本期刊的发文量合计达到 590 篇，占总分析文献量的 67.8%。发文量前三位的期刊分别为《中国商论》、《旅游学刊》、《商业现代化》。旅游市场营销的综合性及交叉性在文献来源期刊上得到充分的体现，除了旅游学核心期刊《旅游学刊》和《旅游科学》外，商业管理、社会学、农学、地理学等学科也与旅游市场营销进行了结合，这在很大程度上拓展了旅游市场营销研究的边缘性问题，丰富了旅游市场营销研究的内容。

表格 1. 1992—2018 年中国旅游市场营销期刊发文量（前 30）

<table>
<thead>
<tr>
<th>序号</th>
<th>期刊</th>
<th>发文量</th>
<th>序号</th>
<th>期刊</th>
<th>发文量</th>
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<td>2</td>
<td>旅游学刊</td>
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<td>17</td>
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</tr>
<tr>
<td>3</td>
<td>商场现代化</td>
<td>73</td>
<td>18</td>
<td>中国市场</td>
<td>9</td>
</tr>
<tr>
<td>4</td>
<td>商业经济研究</td>
<td>38</td>
<td>19</td>
<td>资源开发与市场</td>
<td>8</td>
</tr>
<tr>
<td>5</td>
<td>商业研究</td>
<td>35</td>
<td>20</td>
<td>生态经济</td>
<td>7</td>
</tr>
<tr>
<td>6</td>
<td>江苏商论</td>
<td>30</td>
<td>21</td>
<td>企业经济与管理</td>
<td>7</td>
</tr>
<tr>
<td>7</td>
<td>企业经济</td>
<td>19</td>
<td>22</td>
<td>西南民族大学学报（人文社科版）</td>
<td>8</td>
</tr>
</tbody>
</table>

4. 图谱分析

4.1 作者群体分析

本研究对作者群体的分析主要从作者的论文产量和作者之间的合作网来展开。将 CNKI 的文献转换为 CiteSpace 可以识别的格式后导入软件。时间段设定为 1992-2018 年，Years Per Slice 设置为 1，Node Types 选择 Author，Selection Criteria 选择 Top N (N=50)，即在单位时间切片内排名前 50 的数据，对生成的图谱进行调整以得到更清晰的图谱，如图片 2 所示。作者名字（或节点）的大小表示作者在 1992 年到 2018 年时间段内发文总数有多少，名字越大代表总数越多，名字之间存在连接证明作者之间有合作，连接线越粗表示合作越紧密。从图 2 中可以发现，虽然研究旅游市场营销的学者已经有一定数量，但彼此间合作较少，只有 6 条连线被显示出来，说明这 6 组研究者的联系比较显著。其中李建与向月波（2011）针对成都古镇品牌形象统一问题进行了合作，苏维欢与郭晓东（2017）探讨了工业旅游体验营销对品牌形象的正面影响，熊国保与郑玉洁（2006）探析了欠发达地区旅游市场营销战略问题，汪德根与钱佳（2014）思考了旅游规划体系的创新，郭英与花金龙（2006）分析了客户关系管理在旅游网络营销中的价值，图谱中肖江南与章勇刚有合作但连线显示较高，原因在于李丽、肖江南与章勇刚（2006）三人共同完成了对国外旅游目的地的综述研究。图片 2 中甄选的作者具体发文量见表格 2。从表格 2 中可以发现，在符合设定条件下，发文量最多的研究者为郭英之（4 篇），其次为袁俊（3 篇），总的来说，该领域研究者的研究成果数量还有很大的提升空间，彼此间的合作紧密度还需加强。

![图片](1308)
4.2 研究机构分析

在 Node Types 选择 Institution，其他设置与作者群体分析类似，即可借助 CiteSpace 实现对研究机构的分析，见图片 3。由于字体（或节点）越大，代表机构发文量越多，从图片 3 可知，发文量较多的机构有西安科技大学体育部、陕西师范大学旅游与环境学院、北京第二外国语学院旅游管理学院、吉首大学商学院、西安工业大学体育系、渤海大学旅游学院，具体机构发文量见表格 3。图片 3 中河北建材职业技术学院与中国环境干部管理学院、西安工业大学体育系与信阳供电公司科技信息部、清华大学旅游学院与杭州职业技术学院存在连接线，表明以上机构有合作关系，其余的机构均为单独完成研究成果，这与作者合作关系分析结果一致，说明无论是作者之间还是机构之间，在该领域合作紧密度都还需加强。从图片 3 还可以发现，我国旅游市场营销的研究还是以本科院校为主，同时职业院校的研究者对于该领域也有较高的关注度，还有少量的公司参与到本领域的研

<table>
<thead>
<tr>
<th>发文量</th>
<th>作者</th>
<th>发文量</th>
<th>作者</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>郭英之</td>
<td>2</td>
<td>李荣</td>
</tr>
<tr>
<td>3</td>
<td>袁俊</td>
<td>2</td>
<td>韩笑</td>
</tr>
<tr>
<td>2</td>
<td>孙丽坤</td>
<td>2</td>
<td>朱创业</td>
</tr>
<tr>
<td>2</td>
<td>任春</td>
<td>2</td>
<td>肖江南</td>
</tr>
<tr>
<td>2</td>
<td>章勇刚</td>
<td>2</td>
<td>董正秀</td>
</tr>
<tr>
<td>2</td>
<td>马学梅</td>
<td>2</td>
<td>李建</td>
</tr>
<tr>
<td>2</td>
<td>赵西萍</td>
<td>2</td>
<td>冯琼兰</td>
</tr>
<tr>
<td>2</td>
<td>郑玉洁</td>
<td>2</td>
<td>向月波</td>
</tr>
<tr>
<td>2</td>
<td>梁儒谦</td>
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<td>苏维欢</td>
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<td>李岳</td>
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<tr>
<td>2</td>
<td>李文英</td>
<td>2</td>
<td>汪德根</td>
</tr>
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<td>赵立增</td>
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<td>钱佳</td>
</tr>
<tr>
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<td>杨絮飞</td>
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<td>蒋满元</td>
</tr>
<tr>
<td>2</td>
<td>高峰</td>
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<td>郭英</td>
</tr>
<tr>
<td>2</td>
<td>王有成</td>
<td>2</td>
<td>迟燕平</td>
</tr>
<tr>
<td>2</td>
<td>王芳</td>
<td>2</td>
<td>王素珍</td>
</tr>
<tr>
<td>2</td>
<td>邓明艳</td>
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<td>郭晓东</td>
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<td>李悦</td>
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<td>吕本勋</td>
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<tr>
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<td>王晓斐</td>
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<td>巫宁</td>
</tr>
<tr>
<td>2</td>
<td>王淑华</td>
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<td>熊国保</td>
</tr>
<tr>
<td>2</td>
<td>刘艳华</td>
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</table>
研究，一定程度上说明目前旅游市场营销领域的研究，既注重研究成果的学术价值又强调其实用价值。

图片 3. 1992—2018 年中国旅游市场营销研究机构合作图谱

表格 3. 1992—2018 年中国旅游市场营销研究机构发文量

<table>
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<tr>
<th>发文量</th>
<th>机构</th>
<th>发文量</th>
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<th>发文量</th>
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<td>6</td>
<td>西安科技大学体育部</td>
<td>2</td>
<td>鞍山师范学院商学院</td>
<td>2</td>
<td>南京师范大学旅游系</td>
</tr>
<tr>
<td>4</td>
<td>陕西师范大学旅游与环境学院</td>
<td>2</td>
<td>浙江工商大学旅游学院</td>
<td>2</td>
<td>哈尔滨商业大学</td>
</tr>
<tr>
<td>4</td>
<td>北京第二外国语学院旅游管理学院</td>
<td>2</td>
<td>信阳供电公司科技信息部</td>
<td>2</td>
<td>安阳师范学院</td>
</tr>
<tr>
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<td>2</td>
<td>河北建材职业技术学院</td>
<td>2</td>
<td>复旦大学旅游系</td>
</tr>
<tr>
<td>3</td>
<td>西安工业大学体育系</td>
<td>2</td>
<td>四川工商职业技术学院</td>
<td>2</td>
<td>南京师范大学地理科学学院</td>
</tr>
</tbody>
</table>
4.3 研究主题分析

论文的主要研究内容可以通过关键词进行直接表述，所以对关键词进行分析能有效反映某一学科领域的研究主题（Zhang, Zhang, Yu & Zhao, 2015）。CiteSpace 可以从作者的原始关键词和数据库的补充关键词中进行关键词提取与分析（李杰, 陈超美, 2016），本研究将利用 CiteSpace 这一功能进行我国旅游市场营销研究主题分析。时间段设定为 1992-2018 年，Years Per Slice 设置为 1，Node Types 选择 Keyword，Selection Criteria 选择 Top N (N=50)，Pruning 设置为 Minimum Spanning Tree+Pruning the merged network+Pruning the sliced networks，对生成图谱进行修整以便于分析，得到中国旅游市场营销研究关键词图谱，见图片 4。对图片 4 中的关键词进行筛选，选取频率超过 10 的关键词形成高频关键词，见表格 4，频
率越高，表明越是研究的热点方向，由表格 4 可以发现，旅游市场营销中营销策略的研究是一个重要的研究方向。旅游目的地以及目的地营销也是学者关注的重点，同时，研究者对旅游市场营销中的一些营销手段如体验营销、绿色营销、整合营销等也有着较强的研究兴趣，除此之外，主题性旅游如乡村旅游、体育旅游、滑雪旅游、登山旅游、生态旅游、红色旅游等旅游形式中的市场营销问题也成为重要的研究方向。

图片 4 中节点紫色越明显的关键词表示其中心度越高，而关键词中心度越高，表示这个关键词在整个关键词网络中越重要。筛选中心度大于等于 0.1 的关键词，归纳出高中心性关键词表，见表格 5。由表格 5 可以发现，旅游市场营销的研究是把游客（旅游者）与企业管理放在中心位置的，国际旅游市场的分析研究对中国旅游市场营销研究是一种参考和对照，而营销模式和营销策略衍生的问题丰富了中国旅游市场营销研究的内容，另外，创新问题是中国旅游市场营销研究中不可忽视的内容。

图片 4. 1992—2018 年中国旅游市场营销研究关键词图谱
### 表格 4. 1992—2018年中国旅游市场营销研究高频关键词

<table>
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<tr>
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### 表格 5. 1992—2018年中国旅游市场营销研究高中心度关键词

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1313
4.4 研究趋势分析

CiteSpace 能够通过对文本数据的分析提取出选择的时间段内频率快速增长的关键词，这类关键词被称为突现词，突现词能帮助研究者了解该领域的研究热点和趋势。CiteSpace 运行完数据后，选择 Visualization 后点击 Citation/Frequency Burst History 即可生成突现词图谱，如图片 5 所示。


图片 5. 1992—2018 年中国旅游市场营销研究突现词图谱

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5. 研究结论与展望

5.1 研究结论

本研究的数据来自中国知网 China Academic Journal Network Publishing Database 中的中文核心期刊库和 CSSCI 源期刊库，共筛选了 870 篇从 1992 年到 2018 年关于旅游市场营销相关主题的文献，运用 Citespace5.3 进行知识图谱分析，首先从文献发表的时间及数量分布、文献期刊来源、主要研究者群体、研究机构分布及发文数量展示了该领域的基本研究概况，其次通过对关键词知识图谱的绘制、对高频关键词和高中心度关键词的提取，实现了对该领域研究主题的分析，最后借助对突现词的分析展示了本领域的研究趋势，具体结论如下：


（2）从文献来源的期刊可以发现，除了旅游学核心期刊《旅游学刊》和《旅游科学》外，本领域的文章也发表在商业管理、社会学、农学、地理学等学科的核心期刊上，这反映了旅游市场营销研究的交融性，与其他学科的结合扩展了旅游市场营销研究的边界。

（3）通过对主要研究者群体、研究机构的分析发现无论是研究者之间还是研究机构之间都缺乏合作，一定程度上影响了本领域研究成果的产出量，本科院校是本领域研究的主体，也有高职院校和少量企业的加入，实践应用型机构的加入能为科研与实际产业的结合提供助力，使得本领域研究兼顾了学术性和实用性。

（4）中国旅游市场营销研究的主题主要包括营销策略的研究、旅游目的地以及目的地营销研究、旅游市场营销手段研究、主题性旅游市场营销研究、国际旅游市场营销的分析研究、国内旅游市场营销模式和营销策略衍生的问题研究、旅游市场营销的创新问题等。

（5）乡村旅游中可持续发展的问题要求对乡村旅游营销策略进行创新，移动互联网时代的到来也为乡村旅游中的市场营销问题带来更多的思考空间和挑战，这也是未来中国旅游市场营销研究值得重点关注的研究主题。

5.2 展望

用 CiteSpace 做知识图谱分析的研究结果会受到文献来源和文献数量的影响，本研究所选取的 870 篇文章是本领域较权威的文献，但依然无法完整的展现本领域研究的所有情况。接下来的进一步研究除了选取来自中文核心期刊和 CSSCI 期刊的本领域文献用以分析外，还可以加入非以上两种期刊但被引量较高的其他期刊文献，以实现更全面的对中国旅游市场营销研究成果的总结与更准确的研究趋势预测。

6. 致谢

衷心感谢中国市场营销国际学术年会提供的国际化专业交流平台和审稿专家的细心评审。
通讯作者简介

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参考文献


A Review on the Concept, Dimension and Measurement of Socially Responsible Consumption: A Comparative Perspective of Chinese and the Western Studies

Nan Ye¹, Hang Yu¹, Xiao Zhang¹

¹ Jiangsu Normal University, Business School

Abstract

With the progress of science and technology, the improvement of social productivity and the increase of the consumer purchasing power, more and more people are taking into account the social and ethical issues arising from the purchase of products and services. Therefore, socially responsible consumption has gradually become a research hotspot in recent years. Based on the literature review of socially responsible consumption, this paper presents and reviews the definitions, the division of dimensions and the measurement scales of socially responsible consumption. It is hoped to provide a more comprehensive cognitive framework of socially responsible consumption for subsequent studies and to propose the research gap and the possible future research directions in this field.

Keywords: Socially responsible consumption; Conceptual definition; Dimension division; Measurement scale; Research review
社会责任消费的概念、维度及测量述评：中西比较研究

叶楠1，余航1，张潇1
1江苏师范大学商学院

摘要
随着科技的进步，社会生产力的提高，消费者购买力的增强，在消费环境中，人们越来越多地考虑到购买产品和服务所产生的社会和伦理问题。这所涉及的社会责任消费问题逐渐成为近年来的一个研究热点。本文基于中西方学者有关社会责任消费研究文献的回顾，对社会责任消费的概念界定、维度的划分以及测量的量表进行了梳理和述评，并进行了比较分析。希望为后续研究提供一个更全面的社会责任消费认知框架，并指出该领域现有研究的不足及未来可能的发展方向。

关键词：社会责任消费；概念界定；维度划分；测量量表；研究述评

1. 引言
“天下兴亡，匹夫有责”。消费者在促进社会经济及环境良性可持续发展中起到必不可少的重要作用。消费者作为一个庞大的群体，其自身的一些消费行为可能会给社会带来重大的影响和改变。然而，大多消费者还没有意识到在消费行为中个体应该承担起相应的社会责任。近年来，社会责任消费逐渐成为一个热点话题。但对于什么是社会责任消费、如何测量社会责任水平，以及如何有效促进社会责任消费，现有文献还存有许多不一致的观点。为了更清晰全面地认知社会责任消费，本文围绕社会责任消费的概念内涵、维度划分及测量量表等问题，对中国及西方学者的研究成果进行了系统的文献回顾和梳理，并做出比较分析，为后续研究指明了方向。

2. 社会责任消费的概念界定
2.1 西方学者对社会责任消费的概念界定

社会责任消费的学术研究兴起于西方国家。在西方学界，早在 20 世纪 70 年代初，Anderson & Cunningham（1972）、Webster（1975）基于社会学概念——社会意识，提出了“社会意识消费者”这一概念。他们认为这类消费者在消费时考虑到个人消费的公共后果，或者企图利用其购买力来带来社会改变。基于此，Webster（1975）认为社会意识消费者必须意识到社会问题，必须积极参与社区活动并相信自己有能力改变社会。Fisk（1973）认为“责任消费”就是合理并有效地利用与全人类相关的资源。之后，Roberts 在 1993 年提出将“负责任的消费者”定义为购买对环境有正面（或较少负面）影响的或者对社会变革产生积极影响的企业（或较少）的产品的消费者。这个定义有两个维度：生态意识消费和社会意识消费。Roberts 的定义更强调消费对环境的影响以及消费者对社会问题的关注。
随着人们社会责任意识的觉醒，一些企业开始展开社会责任营销，吸引消费者的眼球。由此，消费者逐渐关注企业的社会责任表现。Mohr, Webb & Harris (2001) 基于企业社会责任 CSR 的概念定义了社会责任消费行为的概念，认为消费者对 CSR 的感知程度存在差异，高支持的消费者更倾向于对企业的 CSR 行为做出积极的响应；他们指出，所谓“社会责任消费行为”（SRCB），即消费者在购买、使用和处理产品时，基于减少或者消除对社会的危害，使其对社会利益最大化的行为（Webb, Mohr & Harris, 2008）。在这个定义中，西方学者第一次将购买后对产品的使用和处置的行为包含在社会责任消费行为之中，这是对社会责任消费行为研究的拓展和延伸，对社会责任消费行为的认知趋向完整。

2.2 中国学者对社会责任消费的概念界定

在我国，社会责任消费的学术研究较晚一些。于阳春（2007）提出，社会责任消费是在购买、使用商品，应该自觉对于不利于社会的产品和服务进行抵制，以保证社会的利益。阎俊和余秋玲（2009）认为，社会责任消费行为是在消费过程的各个环节中主动履行保护环境、节约资源的社会责任，有意识的发挥消费权利的作用，以维护社会正义、促进良好社会风尚、支持本国经济发展、追求和谐可持续发展的行为。王天仁和李建锋（2011）认为，所谓“社会责任消费”，一般是指具有社会责任感和公民意识的消费者，自觉将自身消费与国家经济发展、社会文明进步及社会可持续相联系，通过有鲜明价值导向的“选择消费”、“货币投票”和维权监督等方式，支持符合国家标准及产业政策的优质商品与服务，摒弃和抵制不符合国家标准及产业政策的商品与服务，以促进国家经济健康发展、社会文明进步、人与自然和谐相处，在消费过程中的社会责任消费行为和消费方式。王财玉和雷雳（2015）指出，社会责任消费是亲社会行为在消费领域的一种体现，即消费者通过个人努力来促进环境保护和社会良性发展的一种消费模式。

2.3 对社会责任消费概念研究的总结

通过以上梳理可以发现，社会责任消费是一个多维、动态、复杂的概念，学者们对社会责任消费概念的界定存有许多差异，但其核心内涵基本一致，即在消费过程中强调个人消费的社会结果。此外，不同学者对于社会责任消费的概念可能分为广义和狭义两类，广义的概念强调个人消费行为造成的公共后果，这是一个宽泛的概念，强调私人消费决策中考虑对环境影响以及对社会问题消费的行为。在最近的一项研究中，社会责任消费被赋予了更广泛的含义（Ulusoy, 2016）。即社会责任消费不应局限于将后代纳入考虑，在发展中国家，关注社会或环境问题，或仅由利他主义驱动，而是一个具有多重维度的复杂现象。

为了更深层次的理解社会责任消费，本文进一步对社会责任消费具体所包含的维度及测量量表进行了梳理和总结。

3. 社会责任消费的维度划分

3.1 西方学者对社会责任消费的维度划分

对于社会责任消费所包含的维度，各国学者基于自身研究对社会责任消费概念的界定给出了相应的看法。在早期的西方研究文献中，学者们将社会责任消费划分为两个维度：一是生态意识维度，二是社会意识维度，但主要侧重于生态环


3.2 中国学者对社会责任消费的维度划分

相比较而言，中国学者对社会责任消费维度的研究主要是基于中国的消费情境，维度划分相对较为细致。其中，阎俊和佘秋玲 (2009) 的研究涵盖了社会责任消费的九个维度，分别是环境、节约能源、保护动物、监督企业和维权、支持企业的负责任行为、抵制企业的负责任行为、支持中小企业的适度消费、支持国货。辛杰 (2011) 将社会责任消费划分为六个维度，分别是利益相关者责任、维权与监督、环保节约与循环经济、适度消费与自然性情、品质保证与感知质量、保护动物与消费禁忌。肖捷 (2012) 研究指出，我国消费者的负责任行为可分为六个维度，包括支持企业善因营销、支持履行高级社会责任的企业行为、惩罚不负基本责任的企业行为、购买习惯环保、回收再用和生活习惯低碳。

3.3 国内外对消费者社会责任类型的划分


4. 社会责任消费的测量量表
基于对社会责任消费的维度划分，中西方的学者们开发了测量社会责任消费行为的量表，这些量表大都是建立在研究者所在国家情境基础之上的。

4.1 西方学者关于社会责任消费的测量量表

早期的测量以一般性社会意识为主，第一个接近社会责任消费的量表是 Berkowitz & Lutterman（1968）关于社会意识的量表，研究了传统上负责人的个人的特点。这一量表在社会学中被用来衡量个人的社会责任程度。然而这一量表并未涉及消费领域的社会责任。真正涉及消费行为的测量是从 20 世纪 70 年代开始的，不过起初的测量侧重于环境责任维度。Anderson 等（1974）的测量主要涉及社会责任意识和环保意识，开发了 2 个维度——社会责任行为、回收行为，共 8 个题项的量表。Webster（1975）测量社会意识消费者的量表也涉及 2 个维度——生态维度、抵制劳动争议的产品，共设计了 8 个题项，但其中仅有 1 项涉及对不负责任企业的抵制，其余 7 项均为环保态度测量。Brooker（1976）的量表主要测量的是生态意识消费行为，仅涉及生态意识一个维度，以购买无磷洗涤剂和无铅汽油 2 个题项来测量。Antil（1984）设计了 40 个题项来测量社会责任消费，但这些题项都仅与环保有关，主要涉及因购买而产生的环境问题。

正如 Roberts（1995）所指出的那样，社会责任消费的动态性质使得其测量的不断完善是必要的，因为随着时间的推移，学者们对该领域的理解也在不断发展，测量内容也不断完善。Roberts（1993、1995）对社会责任消费行为的测量中明确区分了 2 个维度——环境意识消费者行为、社会意识消费者行为，前后设计了两个版本的量表，早一点的版本为 40 个题项，随后又精简至 18 个题项。但是这这两种版本都对环境维度赋予了较高的权重，而对社会维度并没有很好地覆盖。几乎所有涉及社会问题的项目都要求避免购买不负责任的公司。

Francois-Lecompte & Roberts（2006）结合了 Roberts（1995）和 Crane（2001）的研究框架，提出一个包含 20 个题项、涵盖 5 个维度的社会责任消费行为量表，包括：基于企业责任的消费（比如：我尽量不去购买那些雇佣童工的公司的产品）；购买有善因行为的产品（如：我买了一些产品，其中一部分价格转移到了人道主义事业上）；支持中小企业（如：我避免在大商场购物）；支持国货（如：我购买在我国生产的产品）；适度消费（如：我尽量把我的消费量减少到我真正需要的）。这一量表纳入了消费者基于产品层面、营销层面、公司层面和国家层面对社会责任的考量，同时还加入了对自身消费适度的考量。相对而言，该量表对社会责任消费的测量更具新意、趋向完善。

Webb, Mohr & Harris（2008）开发的社会责任购买和处置量表（SRPD 量表），包含 26 个测项，涵盖 3 个维度，包括：基于企业社会责任绩效的购买（比如：我试着从那些帮助穷人的公司买东西）；基于环境影响的购买和使用（如：我避免购买伤害濒危动植物的公司）；消费者回收行为（如：我回收纸板）。这一量表最为突出的地方表现在强调了消费行为全过程中的社会责任，不仅包括购买行为、回收行为，还考虑了使用行为。Pepper, Jackson & Uzzell（2010）的社会意识购买量表仅涉及购买阶段的负责任消费行为，包含 2 个维度、6 个测项，主要是基于对企业道德声誉、公平贸易、保障劳动权益、企业慈善行为的购买。

4.2 中国学者关于社会责任消费的测量量表

我国学者关于社会责任消费的测量研究，主要是基于中国的情境、针对中国
消费者面临的社会责任消费现状，在整合了前人研究的基础上，开发了较多维度的测量量表，少则6个维度，多则9个维度。与西方国家的学者研究结果有所不同的是，新增了有中国特色的维度，诸如：“监督企业和维权”，“维权和监督”，“支持民族工业”等。

其中，阎俊和余秋玲（2009）通过文献分析和深入访谈，并采用大规模问卷调查，建立了中国消费者会责任消费的测量量表（SRCB-China量表）。该量表共34个题项，涵盖9个维度。与国外研究相比，环保、节能行为是国内外社会责任消费行为共有的，支持中小企业、支持国货和适度消费反映了国内外在该领域研究内涵的共同变化。而积极对企业的行为进行监督和积极维权被中国消费者认为是社会责任之一，这一维度是西方研究中没有提及的。

辛杰（2011）基于中国消费者的消费经验与价值观，通过借鉴Webb, Mohr & Harris（2008）以及阎俊和余秋玲（2009）开发的社会责任消费行为量表，并在焦点小组和专家访谈的基础上，开发建立了中国消费者社会责任消费行为量表。该量表区分了六个维度，共34个题项。在此基础上，对中国消费者进行聚类分析，共形成维权监督型、适性自然型、无谓无识型、盲目过度型、节约淡漠型、责任消费型六个聚类群体。这一量表具有典型的中国化本土适用特点，相比国内学者阎俊开发的九个维度的量表，概括性更高。

肖捷（2012）在中国情境下检验了Webb, Mohr & Harris（2008）开发的社会责任购买和使用量表（26个题项、3个维度），结果显示，删去了1个题项后，25个题项被分到六个维度中。与原量表对比，之前关于购买时对企业社会责任表现的考量这样一个维度在中国情境下被细分为三个维度：支持企业善因营销、支持履行较高层次社会责任的企业行为和惩罚不负基本责任的企业行为；并且增加了一个“生活习惯低碳”的维度。这反映了中国消费者对企业履行社会责任不同情况的理性区分，并显示了中国当前生活消费习惯的低碳特点。

5. 研究总结与未来展望

社会责任消费的概念界定、维度划分及测量量表是一脉相承、密不可分的。通过对现有文献的梳理可以发现，中西方学者们对社会责任消费概念的界定众多，维度划分也较为多元化，而且已经有一些比较成熟的测量量表，可以说该领域的研究成果已比较丰富。但对于西方而言，中国的社会责任消费问题仍是一个较新的话题，相关研究方兴未艾。

总的来看，社会责任消费是一个多维、动态、复杂的概念，虽然学者们的研究各有侧重，其核心内涵是基本一致的。简言之，社会责任消费就是在消费过程中把消费行为对于社会的影响考虑进去，自觉承担对他人、对社会、对环境等各方面的社会责任。随着时代的推移以及对社会责任消费认知的深入，社会责任消费的维度也在不断扩展，逐渐趋于多元化，但其核心维度主要集中在环境影响和社会影响两个方面。与其相应的社会责任消费量表也呈现出多元化的特征，并日趋细致、完整。

虽然社会责任消费的研究已取得了丰硕的成果，但仍有许多值得深入探讨的问题。一方面，目前学者们对于社会责任消费的研究主要集中于消费者的购买阶
段，而消费这一行为也包括购买后的使用和处置，而对于后两个阶段的相关研究少之又少。应该引起注意的是，个体使用和处置消费品的行为同样与承担社会责任有重要联系，比如垃圾的分类回收，废品的循环利用，闲置物的处置等。未来研究可以进一步扩展对使用和处置阶段的社会责任消费行为的研究，同时，有必要进一步明确消费者应当承担的社会责任范畴，以帮助消费者提高社会责任认知，进而促进个体采取相应的社会责任消费行为。此外，考虑到中西方文化及发展水平的差异，仍有必要进一步探讨社会责任消费概念内涵及维度、测量在不同国家的适用性及解释力，并随着时代发展与时俱进地作出调整和修正。

另一方面，“言行不一”在社会责任消费领域的研究中也是一个普遍存在的问题。现有的研究中，有些学者关注的是社会责任消费行为的态度(Antil, 1984)，有些学者则倾向于研究行为意向(François-Lecompte & Roberts, 2006)，还有一些研究关注实际的行为(Mohr, Webb & Harris, 2001; Webb, Mohr & Harris, 2008; Yan & She, 2011)。根据理性行为理论和计划行为理论，行为意向是行为的前因。然而，意向和实际行为之间仍然有一个差距。其中一个重要原因就是“社会期许”效应(Sudbury-Riley & Kohlbacher, 2016)，即在使用自我报告式量表测度消费者社会责任消费时，消费者往往倾向于将自己美化成一个社会责任消费，而自己的真实感受和实际行为表现却未必如此。基于其本身的动态属性及适用情境的考虑，对社会责任消费行为的测量需要相应的调整和升级，并应注意控制和减少社会期许效应的影响。测量时可使用匿名测试、随机响应、设置强制选择题项以及选择替代物等方式方法，以此增强测量的有效性，缩减社会责任消费的态度/意向-行为缺口。

此外，大多数关于社会责任消费的研究都认为这是一种本质上积极的消费方式，会对消费者产生积极的影响。但实际上社会责任消费导致了挫败感，给人的印象是做了很多事情，但收效甚微，遗憾或不满(Ertz, 2016)。未来的研究可以关注对这些负面影响的识别，这不仅可以帮助我们深入探索社会责任消费行为的形成机理，也将有助于市场营销人员提高其责任消费产品的价值，并更有效地向消费者推销它们。

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参考文献


Research on Time Difference of Tourism Experience Based on Big Data Analysis
——Taking the First Batch of National AAAAAA Level Tourist Attraction in China as an Example

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Abstract

The Chinese semantic analysis of online reviews of tourists is a hot topic in the study of tourism experience. However, due to the complexity of Chinese semantics, in the past, automatic analysis by computer often has many problems such as inaccurate analysis of tourism experience. Based on a combination of manual and computer automatic analysis, this paper mines all online commentary data of the first batch of National AAAAA level tourist attraction in Mafengwo and Xiecheng, and constructs tourism in three time dimensions: month, season and year. Experience the corpus. At the same time, qualitative sampling of the review data is carried out to construct a tourism experience feature vocabulary. Afterwards, the concept of Tourism Experience Index (EEI) was introduced, and the word frequency retrieval statistics were carried out on the two databases. The changes and analysis characteristics of the tourism experience index under the three time dimensions of the first batch of National AAAAAA level tourist attraction were obtained. The research results can be beneficial to the tourism service industry such as scenic spots to improve the quality
of products or services, and also help tourists to optimize tourism decisions.

**Keywords:** tourism experience; database; tourism experience index; time change

基于大数据分析的旅游体验时间差异研究
——以全国第一批 5A 级景区为例

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**摘要**
对旅游者的在线评论进行中文语义分析是现在研究旅游体验的热点，但由于中文语义的复杂性，以往通过计算机进行自动分析时往往出现旅游体验分析不准确等诸多问题。本文基于一种人工与计算机自动分析相结合的方法，对全国第一批 5A 级景区在马蜂窝、携程在线平台所有线上评论数据进行挖掘，以月、季节、年三种时间维度构建出旅游体验语料库。同时对评论数据进行定性饱和抽样，构建旅游体验特征词库。之后引入旅游体验指数（TEI）概念，对两种数据库进行词频检索统计，得出了第一批 5A 级景区月、季节、年三种时间维度下的旅游体验指数变化与分析特征。研究结果能够有利于景区等旅游服务业提升产品或服务质量，也能够帮助旅游者优化旅游决策。

**关键词:** 旅游体验；数据库；旅游体验指数；时间变化

1. 引言

旅游体验是指个人在决策过程中所经历的包括感觉、情绪和心态等方面的体验。在旅游过程中，无论是由于游客的自身因素还是景区、旅行社、酒店等其他的外在因素而导致人们的旅游体验的好与坏，都会让游客产生独特而丰富的旅游情感。在游客的旅游体验过程中，旅游体验对游客的旅游行为影响越来越大。每个人的旅游过程不一样会使得每个人的旅游体验产生差别。

作为旅游的重要组成部分，旅游体验在旅游者的旅游过程中发挥着重要作用。有的学者甚至认为旅游体验应该是整个旅游中最核心的要素。又有学者认为情感因素不仅能够影响旅游者对目的地的选择，还能直接影响旅游者的消费行为。
可见对于旅游体验的深入研究有利于更好地改善游客的旅游体验。他们甚至认为，这还会对旅游后的体验记忆的形成有着影响。在国内，关于旅游体验的研究一般采用质性研究方法，对分析游客在旅游过程中产生不同的旅游体验影响因素以及其中情感和影响要素分类。国内学者方敏、潘澜等从日常经验法（EEM）的角度来对国内旅游者的旅游体验进行了研究，通过微信实时的对旅游者和非旅游者的旅游体验进行连续追踪调查。对在假日中的国内旅游者情感进行了总体描述，并和非旅游者进行了对比，研究表明一个愉快的假期结尾对游客好的旅游体验非常重要。邹本涛则从内容分析法出发，从人我体验的角度对旅游体验的内容进行分类。用他人旅游体验的视角和自我旅游体验视角研究旅游体验的内容。

从国外学者对旅游体验的研究看，Mitas 等通过采用民族志的方法来研究 45 岁以上成熟成年游客社会关系与积极情感两者之间的关系。分析出一定的社会情境对积极情感的塑造有着很大的影响。游客的积极情感一般产生于一定的社会情境，同时又会影响他们以后社会感的建立以及激发游客未来的重游意愿。Lin 等通过调查问卷的实证方法对被调查者进行了旅游体验的分析，分析出了旅游情感在不同时间阶段呈倒 U 型曲线发生变化，同时旅游者的个体特征对其在不同时间段也会发生相应的影响。Falconer 则运用半结构化访谈、焦点小组、参与观察和感官日记（sensual diaries）等方法研究了女性背包客在美食旅游中对食物的动态身体体验和旅游体验变化。研究发现，不同食品与饮品的多种感官体验对不同背包客的地方感产生不同的影响，同时，游客旅游体验的阶段性变化也受到游客最初情感的影响。如果旅游者最初没有达到期望的状态，那么接下来游客的旅游体验将会发生从兴奋变为失望，内疚、羞愧、生气、沮丧、恩外、厌恶以及时的缓和等几种情绪的变化。Bigné 和 André 指出“情绪”可以作为主题公园和互动型博物馆旅游者市场细分的一个变量，他们对受访者完成主题公园或博物馆之后获得的旅游体验进行了评估，结果发现旅游体验更加积极正面的旅游者在行为表现上也更加积极（比如忠诚度和支付意愿更高），而且满意度也更高。

Hunterhe 和 Csikszentmihalyi 利用日常经验法收集青少年日常的情感变化，最后发现日常生活中更加快乐的青少年，相比与闷闷不乐的年轻人来说，心理更加健康和健康。Laurenceau 和 Bolger 通过对日常生活夫妻相处的情绪和行为变化，分析了如何获得更美好婚姻和家庭生活。

当今，人们在旅游过程中产生的旅游体验往往借助于互联网而表露出来。对游客而言，发布自己旅游体验最便捷的途径是在一些在线旅游平台发布在线评论。一些学者认为，游客的在线评论中，一些出现在点评文字中具有明显含义的情感词最能反映出游客的真实情感。那么，如何分析游客在在线评论中反映的真实的旅游体验变化则有着很重要的学术与实践意义。国内学者屈小爽通过 ROSTCM6 文本分析软件对网络文本的数据进行分析，采用扎根理论方法提取出“特定情境下旅游者旅游体验的生成”这一核心范畴，经过开放性编码、主轴性编码和选择性编码对西湖旅游者旅游体验的生成进行研究，分析得出西湖景区的游客旅游体验以积极情感为主，同时旅游者自身认知、感官等多重体验也在影响着旅游者游览的旅游体验。何佳瑛、矫丽会等基于内容分析法的网络文本法，同样通过 ROSTCM6 文本分析软件对所收集的网络文本进行处
理，然后进行高频词以及网络语义分析，得出游客对五台山宗教旅游景区的整体印象等旅游体验信息，同时辅以访谈法来研究游客对五台山宗教旅游景区的旅游体验。

基于在线评论，进行情感分析，是中文语义人工智能研究的热点。但由于中文语义的复杂性，对景区在线评论特别是海量评论的情感分析还缺乏成功应用案例。

本文采用了一种人工与计算机自动分析相结合的方法，完成了针对景区海量评论的旅游体验分类与量化分析。其基本思路是：首先通过定性饱和抽样，确定旅游体验类型，基于不同旅游体验类型，构建旅游体验特征词库。最后，在数据库中自动检索情感特征词库中每种类型情感的词频数，完成旅游体验类型的定量分析。此方法操作简便，准确率高。

2. 研究方法与数据来源

2.1 数据来源

本文研究数据主要为马蜂窝、携程在线平台上的景区点评数据。景区点评数据涵盖 2007年被确立的第一批 66 家全国 5A 级旅游景区所有游客评论数据。

游客点评是人们在旅游过程中在旅游在线平台发布的评论内容，游客点评数据以其大容量、大范围和便捷性等优点不仅为游客决策与执行提供各种海量信息，同时也为广大学者研究旅游消费者动机、旅游目的地发展和消费者满意度评价提供重要的数据支撑。与传统的公开和调研数据相比，游客点评数据更具有时效性、真实性和直接性。

本文采用八爪鱼软件挖掘游客评论数据，采集对象为第一批 5A 级景区，共计 201586 条评论。最后通过进一步的删除重复、无效数据，最终得到 199856 条有效评论数据。

2.2 研究方法

本文基于景区评论的全数据，挖掘游客旅游体验类型，并对不同类型的旅游体验进行量化分析，分析游客体验的时间分布特征。具体研究路径如图 1 所示。

图片 1. 研究路径图
研究过程主要包括3个主要步骤：首先，构建旅游体验特征词库；其次，基于词频计算，量化分析不同情感类型比重；最后从年度变化、季节变化、月份变化三个时间尺度，分析旅游体验的时间分布特征。

### 2.2.1 旅游体验特征词库构建

（1）旅游体验特征词库构建基本思路。首先对每一个第一批5A景区的评论数据，采用饱和抽样的方法，发现旅游体验词。如，“来了才发现，庐山这么美丽，风景秀丽。庐山瀑布也真的好壮观啊，只是庐山门票价格有点贵。”这条关于庐山风景区的在线评论，就可以挖掘出其中“美丽”、“秀丽”、“壮观”和“贵”四个旅游体验词。通过大量的抽样方法，可以挖掘出一系列不同类型的情感词，本文采用饱和抽样的方法，直到没有发现新的旅游体验词才结束抽样分析过程。其次，对所有挖掘出的旅游体验词，进行进一步的分类，如“壮观”、“壮丽”和“雄伟”等词就可以归为同一类型，该类型旅游体验词标注为壮观类；然后再对该类型词进行延伸，扩充其旅游体验词，进一步将该类型的同义或近义词与已经挖掘出的情感词一起，构建为该类型的情感词库，如壮观类可以进一步增加如“壮美”、“磅礴”等。本文之所以采用饱和抽样的方式，构建旅游体验特征词库，主要基于以下理由：第一，目前的中文计算机自动识别，难以挖掘出本文所需的旅游体验特征分析要求；第二，饱和抽样的数据是直接来源于游客的评论，因为不是研究者主观性构建，所以该数据可以更加真实地反映游客旅游体验。

（2）词库构建结果。最终，本文构建起两种结构形式的旅游体验特征词库表，如表格1：

<p>| 表格1. 旅游体验特征词库表（部分） |  |</p>
<table>
<thead>
<tr>
<th>类型</th>
<th>关键词</th>
<th>类型</th>
<th>关键词</th>
<th>类型</th>
<th>关键词</th>
<th>类型</th>
<th>关键词</th>
</tr>
</thead>
<tbody>
<tr>
<td>历史久</td>
<td>历史</td>
<td>壮观</td>
<td>壮观</td>
<td>合算</td>
<td>便宜</td>
<td>价美</td>
<td>热</td>
</tr>
<tr>
<td></td>
<td>悠久</td>
<td>伟</td>
<td>免费</td>
<td>良心价</td>
<td>低温</td>
<td>价高</td>
<td>高温</td>
</tr>
<tr>
<td></td>
<td>长久</td>
<td>大气</td>
<td>价格低</td>
<td>经济</td>
<td>流汗</td>
<td>不合算</td>
<td>酷暑</td>
</tr>
<tr>
<td>古色</td>
<td>古香</td>
<td>壮美</td>
<td>良心</td>
<td>实惠</td>
<td>高价</td>
<td>高价</td>
<td>热</td>
</tr>
<tr>
<td>古风</td>
<td>古味</td>
<td>壮丽</td>
<td>经济</td>
<td>宜价</td>
<td>轻汗</td>
<td>不合算</td>
<td>酷暑</td>
</tr>
<tr>
<td>博大</td>
<td>精深</td>
<td>壮观</td>
<td>经济</td>
<td>物廉</td>
<td>汗流</td>
<td>汗流</td>
<td>酷暑</td>
</tr>
<tr>
<td>美</td>
<td>积淀</td>
<td>美</td>
<td>物廉</td>
<td>亏</td>
<td>酷日</td>
<td>炎</td>
<td>烈日</td>
</tr>
<tr>
<td>原始</td>
<td></td>
<td>美丽</td>
<td>低价</td>
<td>亏</td>
<td>挥汗</td>
<td>酷日</td>
<td>酷日</td>
</tr>
<tr>
<td></td>
<td></td>
<td>大美</td>
<td>大美</td>
<td>亏</td>
<td></td>
<td></td>
<td>酷日</td>
</tr>
<tr>
<td></td>
<td></td>
<td>美</td>
<td>价格高</td>
<td>合</td>
<td></td>
<td></td>
<td>热</td>
</tr>
<tr>
<td></td>
<td></td>
<td>美</td>
<td>不合算</td>
<td>高价</td>
<td></td>
<td></td>
<td>热</td>
</tr>
<tr>
<td></td>
<td></td>
<td>优美</td>
<td>浪费</td>
<td>亏</td>
<td></td>
<td></td>
<td>热</td>
</tr>
<tr>
<td></td>
<td></td>
<td>秀丽</td>
<td>不经济</td>
<td>不经济</td>
<td></td>
<td></td>
<td>热</td>
</tr>
<tr>
<td></td>
<td></td>
<td>秀美</td>
<td>畅通</td>
<td>方便</td>
<td></td>
<td></td>
<td>热</td>
</tr>
<tr>
<td></td>
<td>清凉</td>
<td>新鲜</td>
<td>不便宜</td>
<td>易</td>
<td></td>
<td></td>
<td>热</td>
</tr>
<tr>
<td></td>
<td>凉爽</td>
<td>不免费</td>
<td>轻便</td>
<td></td>
<td></td>
<td></td>
<td>热</td>
</tr>
<tr>
<td></td>
<td>凉爽</td>
<td>不实惠</td>
<td>轻便</td>
<td></td>
<td></td>
<td></td>
<td>热</td>
</tr>
<tr>
<td></td>
<td>清新</td>
<td>不合理</td>
<td>轻便</td>
<td></td>
<td></td>
<td></td>
<td>热</td>
</tr>
<tr>
<td></td>
<td>清爽</td>
<td>不低价</td>
<td>顺畅</td>
<td></td>
<td></td>
<td></td>
<td>热</td>
</tr>
<tr>
<td></td>
<td>清爽</td>
<td>不价美</td>
<td>无阻隔</td>
<td></td>
<td></td>
<td></td>
<td>热</td>
</tr>
</tbody>
</table>

2.2.2 旅游体验语料库构建

旅游体验语料库采用 SQL SERVER 2008 构建，语料库的基本结构如表格 2：

<table>
<thead>
<tr>
<th>字段名</th>
<th>说明</th>
</tr>
</thead>
<tbody>
<tr>
<td>旅游体验语料库基本结构</td>
<td></td>
</tr>
</tbody>
</table>

1333
<table>
<thead>
<tr>
<th>景区名称</th>
<th>景区的正式名称或者简要名称</th>
</tr>
</thead>
<tbody>
<tr>
<td>景区简介</td>
<td>景区的简介</td>
</tr>
<tr>
<td>评论作者名</td>
<td>用户在在线旅游平台注册时使用的名称</td>
</tr>
<tr>
<td>评论作者等级</td>
<td>用户在在线旅游平台的活跃等级</td>
</tr>
<tr>
<td>评论内容</td>
<td>对景区评论的文本内容</td>
</tr>
<tr>
<td>评论等级</td>
<td>对景区持有的综和评价，例如 X 星评价、好/差评</td>
</tr>
<tr>
<td>评论时间</td>
<td>用户评论发布的时间</td>
</tr>
</tbody>
</table>

旅游体验语料库基本结构由两部分组成，分别为字段名和说明文本。分成字段名和说明文本两部分组成能够更直观、更丰富的展现在线评论的各种信息，同时也方便我们查找信息和测量词频。

最终的旅游体验语料库涉及到景区名称和景区简介等七类共计 1398992 条语料信息。

2.2.3 旅游体验特征词频计量

（1）旅游体验类型词频查询。采用 SQL SERVER 2008 查询语料库中旅游体验特征词的词频，并计算出每种类型所有的特征词的总词频。例如计算出属于“壮观类”下“壮观”、“磅礴”、“壮丽”等所有特征词总词频数。

（2）词频计量校正。由于中文点评中，常出现“不+X”结构的词，如“不贵”、“不美”、“不便宜”这种类型的特征词，为方便各类型特征词词频准确计算，避免词频产生重复或错误计算（例如“贵”与“不贵”两种特征词词频），本研究采用以下公式对查询出的词频进行“不+X”结构的特征词词频进行补偿处理。具体公式如下：

$$ CP = x - y - z $$

注： x 为 A 形式词（例如特征词“好”）， y 为 AB 形式词（例如特征词“好美”）， z 为 BA 形式词（例如特征词 “不好”）

2.2.4 旅游体验指数构建

为方便对游客旅游体验进行量化分析，本文创新性的构建出旅游体验指数。将旅游体验指数测算方法设置为：各正向词频总数占负向词频总数所占比例，再将其赋一定的值得到各旅游体验指数。旅游体验指数测算具体公式如下：

$$ TEI = \frac{X_i}{Y_i} \times 100 $$

注： Xi 为正向词频数， Yi 为负向词频数

带入游客旅游体验指数测算公式可分别的出第一批 5A 级景区各月、各季节和各年游客旅游体验指数。

3. 结果分析

3.1 旅游体验月变化特征

通过查询各月正负向旅游体验特征词词频发现，各月影响旅游体验的因素均有显著差异。具体如表格 3:
### 表格 3. 旅游体验词各月词频差异（排名前十）

<table>
<thead>
<tr>
<th>月份</th>
<th>序号</th>
<th>关键词</th>
<th>词频</th>
<th>月份</th>
<th>序号</th>
<th>关键词</th>
<th>词频</th>
<th>月份</th>
<th>序号</th>
<th>关键词</th>
<th>词频</th>
</tr>
</thead>
<tbody>
<tr>
<td>1月</td>
<td>1</td>
<td>冷</td>
<td>546</td>
<td>2月</td>
<td>1</td>
<td>贵</td>
<td>624</td>
<td>3月</td>
<td>1</td>
<td>美</td>
<td>627</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>人少</td>
<td>501</td>
<td></td>
<td>2</td>
<td>冷</td>
<td>507</td>
<td></td>
<td>2</td>
<td>贵</td>
<td>601</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>方便</td>
<td>504</td>
<td></td>
<td>3</td>
<td>人多</td>
<td>506</td>
<td></td>
<td>3</td>
<td>方便</td>
<td>528</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>贵</td>
<td>477</td>
<td></td>
<td>4</td>
<td>方便</td>
<td>499</td>
<td></td>
<td>4</td>
<td>特别</td>
<td>502</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>特别</td>
<td>418</td>
<td></td>
<td>5</td>
<td>特别</td>
<td>495</td>
<td></td>
<td>5</td>
<td>人多</td>
<td>425</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>悠闲</td>
<td>412</td>
<td></td>
<td>6</td>
<td>悠闲</td>
<td>381</td>
<td></td>
<td>6</td>
<td>悠闲</td>
<td>421</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>设施全</td>
<td>356</td>
<td></td>
<td>7</td>
<td>设施全</td>
<td>379</td>
<td></td>
<td>7</td>
<td>设施全</td>
<td>332</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>闻名</td>
<td>348</td>
<td></td>
<td>8</td>
<td>美</td>
<td>347</td>
<td></td>
<td>8</td>
<td>闻名</td>
<td>301</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>不美</td>
<td>223</td>
<td></td>
<td>9</td>
<td>闻名</td>
<td>307</td>
<td></td>
<td>9</td>
<td>壮观</td>
<td>249</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>历史久</td>
<td>201</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 表格 3. 旅游体验词各月词频差异（排名前十）（续表 1）

<table>
<thead>
<tr>
<th>月份</th>
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<th>月份</th>
<th>序号</th>
<th>关键词</th>
<th>词频</th>
<th>月份</th>
<th>序号</th>
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<th>词频</th>
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### 表格 3. 旅游体验词各月词频差异（排名前十）（续表 2）

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表格 3. 旅游体验词各月词频差异（排名前十）（续表 3）

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（1）气候类旅游体验特征词月变化差异明显。在各月词频表排名中，无论是词频数和词频排名变化中，诸如“热”、“冷”和“暖和”等属于气候类型的旅游体验特征词变化差异明显。旅游体验特征词“冷”分别在 1 月、2 月和 12 月的词频排名均居于前十。其中 1 月和 12 月为排名第一，词频数分别为 546 和 517。在 2 月排名中下滑一位，词频数也相应降为 507。情感特征词“热”在 6 至 8 月存在先上升后下降的趋势，但排名均居于前三位。分别是 6 月的第三位、7 月排名的第一位和 8 月排名的第二位。在词频数变化上也由 6 月的 532 上升为 7 月的 651，再降为 8 月的 612。旅游体验特征词“凉快”在 9 至 10 月存在下降趋势，分别排名第四位和第十位，词频数也由 511 降为 212。而旅游体验特征词“暖和”和“潮湿”分别在 3 月和 4 月出现在排名前十的表中，排名均居于第十位。不难发现，这些气候类旅游体验特征词在排名和词频数变化明显的原因也主要由各月气候温湿变化导致。例如全年最热和最冷的时间分别集中在 6、7、8 月份和 12 月、次年 1、2 月几个时间段，而 3 月刚好是天气逐渐暖和的时间，4 月则是雨量较多的月份，大多潮湿阴暗。

（2）人流量类旅游体验特征词月变化差异明显。在各月排名的前十中，都有人流量类旅游体验特征词“人多”、“人少”其中一个词，但在具体排名和频数变化也存在一定差异。

旅游体验特征词“人多”除了在 1 月排名未进前十位，其他各月均在前十。在其他各月（从 2 月至 12 月）的排名和词频数变化中，该词存在波动变化，2 至 4 月排名由第三位降为第七位，5 月又上升至第三位，6、9 月分别为第六、第七位，7、8、10 月则上升为第三位。从 10 月过后，则逐渐成下降趋势，从第三位开始降为第九位。同样的，该词的词频数也与排名存在相应的波动变化。先从 2 月的 506 降为 4 月的 325，再升为 8 月的 595，最后降为 12 月的 276。而旅游体验特征词“人少”则在 12 月和 1 月进入前十位，且排名靠前，分别为 12 月的
第五位和1月的第二位。12月至次年1月的词频数也由400上升为501。这些人流量类旅游体验特征词在排名和词频数发生变化的原因一方面由一年中人们的淡旺季旅游时间导致，例如全国景区旺季大多为2月至11月、12月份。另一方面则由一年中某些月份的节假日所致。例如旅游体验特征词“人多”在节假日集中的2、5、7、8、和10月排名很靠前，且词频数都很高。

（3）景区资源环境类旅游体验特征词月变化差异明显。景区资源环境类的旅游体验特征词诸如“美”、“不美”、“壮观”在排名和词频数变化较大。旅游体验特征词“美”在2月至11月排名中靠前，词频数也很高，但12月和次年1月都未进前十。其中，3、4、5、6、9月都在前两位。词频数从2至11月存在一定的波动变化。其中3月是一年中该词的最高点，达到627。旅游体验特征词“壮观”在3至11月排名中进入前十，词频数在200至300之间。但在其他三个月却并未进入。而旅游体验特征词“不美”则只在1月排名中进入前十，词频数为223，其他月份跌入前十。可以发现，影响景区资源环境类的旅游体验特征词的排名和词频数变化主要是因为第一批5A级景区多为自然资源型景区。这种自然资源型景区最大的特点是受气候变化影响大。在一年中，3、4月或9、10月恰逢是大多数景区景色最美的月份，而12、次年1月则是景色一般的月份。

3.2 旅游体验季节变化特征

（1）出现春夏季节体验低，秋冬季节体验高的特点。冬季的游客旅游体验指数为77.06，是四季中游客旅游体验最好的季节。夏季的游客旅游体验指数为75.201，是四季中游客旅游体验最差的季节。而春季和秋季的游客旅游体验指数分别为75.72和75.499，四季度平旅游体验指数为76.131。具体如图片2：

（2）春季中5月体验最低，秋季中11月旅游体验最高。具体如图3：

![图片2. 各季节旅游体验指数图](image2)

![图片3. 各月旅游体验指数图](image3)
### 3.3 旅游体验的年变化特征

通过查询 2012 年至 2017 年语料库旅游体验特征词词频，可以发现，影响旅游体验的年变化差异的主要为景区交通、景区价格、景区人流量、游客需求、旅游时间和景区环境类六类因素。具体见表格 4:

**表格 4. 旅游体验词各年词频差异（排名前十）**

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<th>词频</th>
<th>月份</th>
<th>序号</th>
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4 结论与讨论
4.1 结论
4.1.1 旅游体验时间差异的规律

游客旅游体验在时间变化上并不是一成不变，总体上都呈现不断变好的总趋势。

（1）春夏旅游体验差，秋冬旅游体验好。在各季节上，夏季是人们一年中旅游体验最差的季节，冬季是人们一年中旅游体验最好的季节。在四季的旅游中，人们好的旅游体验普遍发生在下两季度，而上两季度，人们普遍是不好的旅游体验。

（2）季初月份的旅游体验普遍好于季尾月份。3月（春季初）、6月（夏季初）、9月（秋季初）和11月（冬季初）是一年各月里人们旅游体验最好的几个月。而2月（冬季末）、5月（春季末）和8月（夏季初）则是一年各月里人们
旅游体验最差的几个月。在一年中，5月是旅游体验最不好的一个月，而11月是体验最好的月份。

4.2.2 旅游体验时间差异的特征

(1) 气候气温变化影响游客的旅游体验。不同的时间变化带来了气候气温的变化，直接影响的是游客差异化的旅游体验。一方面，气候变化影响景区自身的资源环境，不同的资源环境带来游客不同的旅游客观体验。另一方面，气温变化也直接游客游玩本身的舒适度。舒适的气候易使人们产生良好的旅游体验，而不舒适的气温总让人们游玩体验差。

(2) 高人流量和景区的控制不当导致人们的差体验。旺季大量的旅游人流、节假日的高峰人流以及近几年逐年上涨的旅游人流量都带来游客出行体验的不满意，而景区控制不当的措施又加剧游客的差体验。

(3) 旅游交通环境的改善导致人们好的旅游体验。旅游交通环境包括景区的交通环境和游客出行方式。近年来，景区的交通环境得到逐年改善，而游客的出行方式也越来越多样化，这些因素不仅方便了游客出行，更带来了游客旅游过程中悠闲的旅游体验。

(4) 高昂的旅游支出成本始终是影响游客体验的首要因素。在旅游体验季节、月、年变化中，门票价格高昂和其他上涨的旅游支出成本直接影响游客的旅游体验。高出门季许多的旺季门票价格使得人们普遍在旺季是差体验。近些年来门票价格不合理的上涨在影响游客体验上越来越重要。同时除了门票价格，节假日不平衡的其他消费价格也带来了游客的差体验。

(5) 景区自然资源的变化对游客旅游体验的影响逐年下降。近年来，游客的游玩需求也越来越差异化，人们更加追求个性化、富有景区特色的旅游方式。这样直接影响游客在旅游过程中对景区自然资源的重视程度，景区的景色和知名度对游客体验的影响也越来越小。

4.2 讨论

本研究数据来源于马蜂窝、携程在线旅游平台自平台线上全部评论数据，相对较长的时间尺度和较全的空间范围有利于更好更全面地揭示游客旅游体验在时间分布的客观规律。

与之前单一的研究旅游体验时间分布相比，本研究创新性地从季节变化、月变化和年变化三种视角下研究不同景区在不同时间段内游客旅游体验的变化差异。

基于正负向情感词、点评数据分别构建了旅游体验特征词库和旅游体验语料库。并以可量化的旅游体验指数分析不同时间段人们旅游的旅游体验差异，然后分析其旅游体验的时间特征。一方面能为景区管理者提供基于比较的游客游客旅游体验发展定位，也为基于大数据的游客游客旅游体验评价研究提供新的方法和视角。

但本研究对于旅游体验在时间上仅仅是区分到季节层次、月度层次、年层次而并没有精确到每日层次或每日早中晚层次来区别不同游客的旅游体验的变化。因此，在接下来的研究中，我们将对影响景区在其他时间段内的变化差异做深入的研究，努力探究旅游体验在时间变化的深层次特征。
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Quantitative Analysis of Tourists' Emotional Experience in 5A Level Scenic Spots

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Abstract
The 5A level scenic spot is the most popular scenic spot in China, representing the best quality tourism resources in China, and also an important part of China's tourist destinations. By the first half of 2018, there were 249 scenic spots in the country. After visitors experiencing these scenic spots, they will have their own feelings about the scenic spots, and more and more tourists will express their feelings on the online platform of tourism. In addition, with the continuous updating and advancement of big data method technology, it is possible to use large data methods to analyze network comments and texts on a large scale. We analyze the comments of these scenic spots on the online travel website, explore whether the emotional experience of tourists has obvious spatial distribution rules, and quantitatively study the factors affecting the emotional experience of tourists, which is helpful to understand the needs of tourists and improve the experience of tourists effect.

Keywords: 5A level scenic spot; Tourist emotional experience; Distribution law; Influencing factors
5A 级景区游客情感体验量化分析

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摘要

5A 级景区是国内最热门的景区，代表着我国最优质的旅游资源，同时也是我国旅游目的地的重要组成部分。截止 2018 年上半年，全国共有 5A 级景区 249 家。游客在这些景区游览体验过后，会形成自己对景区的情感，同时越来越多的游客将这些情感发表在旅游在线平台上。另外随着大数据方法技术的不断更新与进步，运用大数据的方法，大规模的分析网络评论和文本成为可能。对这些景点在在线旅游网站上的评论进行分析，探究游客的情感体验是否有明显的空间分布规律，以及对影响游客情感体验效果的因素进行量化分析，有助于了解游客需求，改善游客体验的效果。

关键词：5A 级景区；游客情感体验；分布规律；影响因素

1. 引言

旅游情感体验是旅游研究中一个重要的内容，人类任何情感体验活动，最终将沉淀为一种内在的、主观的东西，比如愉悦的情感、平和的心境、人生感悟等。游客在旅游体验中，通过各种体验方式，达到抚慰情感的目的，使情感世界达到丰富和满足。情感是旅游体验的核心与主体，它影响着旅游者的旅游动机、行为与体验质量。具体而言，旅游者的情感是指在旅游活动中，伴随着一系列旅游刺激物的变化，产生如愉悦、兴奋、沮丧、愤怒等正面或负面的心理体验。这些情感不仅构成了旅游者重要的旅游经历，同时也有他们的目的选择决策、旅游过程中的满意度判断、行为意图等产生重要影响。对旅游者情感体验进行研究，具有重要学术价值与现实意义，一方面，它能够深化对旅游者的认识，为旅游企业和旅游目的地的营销策划提供参考；另一方面，它也可以对游客自身旅游质量的提升有所帮助。

随着生活水平的提高，人们的需求层次不断提高，在旅游过程中则表现为游客不再满足于简单的观光游览，而是开始追求更高层次的情感体验和精神满足。在热衷于游客满意度的相关研究之后，情感作为影响满意度的重要因素之一，也随之成为旅游研究领域越来越关注的一个话题。人的情感虽然捉摸不定，但是大数据背景下，借助于逐渐完善的情感分析技术，游客情感的量化研究已经成为可能。通过大数据挖掘，去了解游客真实的情感状态，从而为其提供更加智能化和人性化的服务，将会很大程度上满足游客的精神需求，提高游客的满意度。随着旅游政府部门和企业对于游客情感的重视程度的不断提高，旅游领域对于游客情感的研究成果也将更加丰富。另外，旅游者情感体验是旅游景区规划、旅游线路设计的重要科学依据。通过挖掘旅游者关于目的地的真实
情感体验表现、情感体验即时变化、情感体验时空变化规律以及情感体验影响因素等信息，对于目的地的旅游规划开发、旅游企业精准经营、景区管理部门提高服务质量、营销策略的制定等具有重要的指导意义。同时，旅游者情感数据可以作为景区旅游项目设置、服务设施配套、旅游线路规划、旅游推荐系统设计的重要参考。

邹本涛认为旅游情感体验作为动词，是旅游者对旅游情感的认识与反应过程，它的主体仅指旅游者，是单一的，其客体是旅游情感。谢彦君认为旅行体验是指处于旅游世界中的旅游者在与其当下情境深度融合时，所获得的一种身心一体的畅爽感受，这种感受是旅游者的内在心理活动与旅游个体所呈现的表面形态和深刻含义之间相互交流或相互作用后的结果，借助于观赏、交往、模仿和消费等活动方式实现的一个序时过程。另外，他从心理学和现象学的角度出发，构造了一个可以描述游客旅游体验的旅游行为情境预测模型。

Girish等通过实证研究构建了旅游者情感体验、满意度和行为意图之间的关系模型。Mitas等假定每一种情感都承载相同的权重，以特定情感的正向/负向平均强度，来计算总体正向/负向情感的得分值。Pearce没有考虑特定情感的表达，而是对正向/负向情感体验的频率进行了加总计算。Veenhoven等提出采用“影响平衡模型”（AffectBalance），在这种模型框架下计算平均正向情感的分值，要减去平均负向情感的分值。李恒、崔婷婷运用实证研究方法，构建了游客情绪体验影响因素模型，分析景区资源独特性、景区内外服务质量对游客情绪体验的影响。研究结果表明，景区资源独特性、景区内外服务质量均对游客积极情绪体验有正向显著影响，景区资源独特性和外部服务质量对游客消极情绪体验有负向显著影响。景区内服务质量对游客消极情绪体验负向影响并不显著。黄潇婷等以世界著名主题公园香港海洋公园为例，以时间地理学的时空路径为研究工具，采用手持GPS设备获取旅游者时空行为轨迹信息，采用日志调查方法获取旅游者消费信息、情感量化信息等，将旅游情感体验过程进行量化研究基于时空路径分析旅游者的情感体验结果和过程。研究结果表明，旅游者情感体验各节点的愉悦度与总体愉悦度之间均存在显著相关关系。

基于在线评论，进行情感分析，是中文语义人工智能研究的热点。但由于中文语义的复杂性，对景区在线评论特别是海量评论的情感分析还缺乏成功应用案例。本文采用了一种人工与计算机自动分析相结合的方法，完成了针对景区海量评论的情感体验分类与量化分析。其基本思路是：首先通过定性饱和抽样，确定情感体验类型，基于不同情感体验类型，构建情感体验特征词库。最后，从数据库中自动检索情感特征词库中每种类型情感的词频数，完成情感体验类型的定量分析。此方法操作简便，准确率高。

2. 研究对象和方法

2.1 研究对象

马蜂窝旅游网是中国领先的自由行服务平台，创立于2006年，是广受中国年轻一代追捧的旅行网站。携程旅行网创立于1999年，是国内知名的旅行网站。马蜂窝和携程旅游网上有丰富的游客评论数据。游客评论是人们在旅游过程中在旅游在线平台马蜂窝旅游网、携程旅行网发布的评论内容，游客评论数据以其大容量、大范围和便捷性等优点，不仅为游客决策与执行提供各种海量信息，
同时也为广大学者研究旅游消费者动机、旅游目的地发展和消费者满意度评价提供重要的数据支撑。与传统的公开和调研数据相比，游客点评数据更具有时效性、真实性和直接性。

本文根据国家旅游局官方网站上公布的目前我国5A级景区的名单，截止2018年上半年全国共有5A级景区249家。利用网络爬虫软件八爪鱼爬去这些景区在在线旅游平台马蜂窝、携程旅游网是上游客发表的评论，评论总数约500000条。

2.2 研究方法

本文基于景区评论的全数据，挖掘游客情感体验类型，并对不同类型的情感体验进行量化分析，分析游客体验的分布特征。具体研究路径如图片1示。

图片1. 研究路径图

研究过程主要包括3主要步骤：首先，构建情感体验特征词库、构建游客评论语料库；其次，基于词频计算，量化分析每个景区情感体验指数、不同情
感类型比重，不同省区的旅游情感体验指数及其分布规律；最后分析影响旅游情感指数的基本模型。

2.2.1 情感体验特征词库构建

（1）情感体验特征词库构建基本思路

首先，对每一个5A景区的评论数据，采用饱和抽样的方法，发现情感体验词。如，“之所以留到今天才去，是因为11月开始算是淡季，门票便宜了20块”这条评论，可以挖掘出其中“便宜”的情感体验词，“九寨沟的瀑布令人着迷！”可以挖掘出其中“着迷”的情感体验词，“兴奋的同时又有点失望。”可以挖掘出其中“兴奋”、“失望”的情感体验词，通过大量的抽样方法，可以挖掘出一系列不同类型的情感词，本文采用饱和抽样的方法，直到没有发现新的情感体验词，才结束抽样分析过程。

其次，对所有挖掘出的情感体验词，进行进一步的分类，如壮观、壮丽、雄伟，可以归为同一类型，该类型标注为壮观类；然后再对该类型，扩充情感词，进该类型的同义或近义词与已经挖掘出的情感词一起，构建为该类型的情感词库，如壮观类可以进一步增加，如“壮美”、“大美”等。

本文之所以采用饱和抽样的方式，构建情感体验特征词库，主要基于以下理由：第一，目前的中文计算机自动识别，难以挖掘出本文所需的情感体验特征词，以满足分析要求；第二，饱和抽样的数据，直接来源于游客的评论，不是研究者主观构建，该数据可以真实地反映游客情感体验。

（2）词库构建结果。

最终建立的情感特征词词库包括：正向情感体验词语表，见表格1；负向情感体验词语表，见表格2。

表格1. 正向情感体验词语表

<table>
<thead>
<tr>
<th>“历史悠久”类型</th>
<th>“好心情”类型</th>
<th>“悠哉”类型</th>
<th>“特别”类型</th>
<th>“壮丽”类型</th>
<th>“闻名”类型</th>
<th>“清凉”类型</th>
</tr>
</thead>
<tbody>
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<td>好心情</td>
<td>悠哉</td>
<td>特别</td>
<td>壮丽</td>
<td>闻名</td>
<td>清凉</td>
</tr>
<tr>
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<td>开心</td>
<td>安逸</td>
<td>稀有</td>
<td>宏伟</td>
<td>名气</td>
<td>新鲜</td>
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<td>乐融融</td>
<td>畅意</td>
<td>少有</td>
<td>雄厚</td>
<td>名副其实</td>
<td>凉爽</td>
</tr>
<tr>
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<td>幸福</td>
<td>享受</td>
<td>不同</td>
<td>壮美</td>
<td>扬名</td>
<td>凉快</td>
</tr>
<tr>
<td>人文的积淀</td>
<td>满足</td>
<td>悠闲</td>
<td>不相同</td>
<td>壮观</td>
<td>盛名</td>
<td>清澈</td>
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<td>无忧无虑</td>
<td>不类似</td>
<td>大美</td>
<td>名篇</td>
<td>清新</td>
</tr>
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<td>兴奋</td>
<td>自由</td>
<td>不一样</td>
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<td>愉悦</td>
<td>舒服</td>
<td>特点</td>
<td>赫赫有名</td>
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<td></td>
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<td>快乐</td>
<td>平易近人</td>
<td>独特</td>
<td>歌颂</td>
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<td></td>
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<td>鸣鹿</td>
<td>放松</td>
<td>独一无二</td>
<td>有名</td>
<td></td>
<td></td>
</tr>
<tr>
<td>古典</td>
<td>你愉</td>
<td>季世无双</td>
<td>名声斐然</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>渍海桑田</td>
<td>怡悦</td>
<td>没有之一</td>
<td>名不虚传</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>积厚流光</td>
<td>喜悦</td>
<td>独有</td>
<td>名山</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>人文荟萃</td>
<td>欢喜</td>
<td>不凡</td>
<td>名片</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>遗迹</td>
<td>欣喜</td>
<td>绝无仅有</td>
<td>都知道</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

### 表格 2. 负向游客情感体验词语表

<table>
<thead>
<tr>
<th>“旧”类别</th>
<th>“价格高”类别</th>
<th>“人多”类别</th>
<th>“生气”类别</th>
<th>“脏”类别……</th>
</tr>
</thead>
<tbody>
<tr>
<td>老了</td>
<td>不合算</td>
<td>人太多</td>
<td>没心情</td>
<td>脏</td>
</tr>
<tr>
<td>很旧陈旧</td>
<td>坑难死你</td>
<td>人山人海</td>
<td>无语</td>
<td>乱</td>
</tr>
<tr>
<td>破败</td>
<td>浪费钱</td>
<td>拥挤</td>
<td>烦死了</td>
<td>不干净</td>
</tr>
<tr>
<td>破旧</td>
<td>有点亏</td>
<td>不方便</td>
<td>生气</td>
<td>不整洁</td>
</tr>
<tr>
<td>破烂</td>
<td>贵</td>
<td>挤死了</td>
<td>恼气</td>
<td>不清洁</td>
</tr>
<tr>
<td>旧</td>
<td>价格高</td>
<td>排队</td>
<td>气人</td>
<td></td>
</tr>
<tr>
<td>不划算</td>
<td>排不过气</td>
<td>生厌</td>
<td></td>
<td></td>
</tr>
<tr>
<td>不便宜</td>
<td>人多</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2.2.2 游客情感体验语料库构建

将采集的评论导入 SQL Server2008 数据库中，语料库采用 SQL SERVRL 2008 构建，语料库中包含全国 249 个 5A 级景区的评论，基本结构如表格 3。
### 表格 3. 数据库基本结构展示

<table>
<thead>
<tr>
<th>景区名称</th>
<th>作者昵称</th>
<th>作者等级</th>
<th>评论内容</th>
<th>发表时间</th>
</tr>
</thead>
<tbody>
<tr>
<td>老虎滩海洋公园</td>
<td>浅洛嫣</td>
<td>LV.12</td>
<td>除了小剧场的表演非常不错……</td>
<td>2018-06-24 21:13:06</td>
</tr>
<tr>
<td>老虎滩海洋公园</td>
<td>不具意义</td>
<td>LV.6</td>
<td>公园里一共五个馆，……</td>
<td>2018-05-28 15:06:35</td>
</tr>
<tr>
<td>老虎滩海洋公园</td>
<td>Jasmine</td>
<td>LV.17</td>
<td>园方还邀请了一些 coser……</td>
<td>2018-05-18 11:52:41</td>
</tr>
<tr>
<td>老虎滩海洋公园</td>
<td>齐小米</td>
<td>LV.3</td>
<td>戏环节奖励哒哈哈哈不要太羡慕……</td>
<td>2018-05-17 13:36:49</td>
</tr>
<tr>
<td>老虎滩海洋公园</td>
<td>黑咻</td>
<td>LV.9</td>
<td>许多人纠结大连的两个海洋公园……</td>
<td>2018-05-11 08:51:38</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2.2.3 情感体验特征词频计量

（1）情感体验特征词频计量

通过 SQL Server2008，利用 SQL Server 查询语句查询出每一个 5A 级景区，每一个情感体验词语出现的频数。根据情感体验词语正、负向分类，分类汇总每一个景区正向游客情感词语词频、负向游客情感词语词频。

（2）情感体验类型词频

情感体验类型词频等于此类别所有的特征词频的总和。

（3）词频计量校正

中文点评中，常出现“不+X”结构的词，如“不漂亮”、“不美丽”、“不好看”等。为避免词频产生重复或错误计算（例如“好”与“不好”词频），本研究采用以下公式对查询出的词频进行“不+X”的词处理。例如，“好”的最终词频=“好”的初次查询词频—“不好”的初次查询词频。

2.2.4 计算出每一个景区的游客体验情感指数

游客体验情感指数=该景区正向游客情感词语词频/该景区负向游客情感词语词频

2.3 多元线性回归模型的一般形式

由于游客情感体验效果的形成机制较为复杂，故影响游客情感体验效果的因素也是多方面的。多元线性回归模型在解决实际问题中考虑多元因素而被广泛应用，也是研究游客情感体验影响因素中常见的模型之一。多元线性回归模型的一般形式如下:

\[ Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \cdots + \beta_n X_n + \epsilon \]
公式中: $Y$ 为游客情感体验指数, $X_n$ 为第 $n$ 个影响因素的观测值; $\beta_1$, $\beta_2$, $\beta_3$, $\ldots$, $\beta_n$ 为 $n+1$ 个待估计的参数值，也就是回归系数; $\varepsilon$ 为随机干扰项目。

3. 全国 5A 级景区游客情感体验结果

3.1 全国 249 个 5A 级景区游客情感体验结果

表格 4. 游客情感体验前 50 位的 5A 级景区

<table>
<thead>
<tr>
<th>序号</th>
<th>省份</th>
<th>景区名称</th>
<th>正向</th>
<th>负向</th>
<th>游客体验情感指数</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>吉林省</td>
<td>吉林敦化六鼎山文化旅游区</td>
<td>67</td>
<td>64</td>
<td>3 21.33333333</td>
</tr>
<tr>
<td>2</td>
<td>浙江省</td>
<td>浙江天台山风景名胜区</td>
<td>61</td>
<td>58</td>
<td>3 19.33333333</td>
</tr>
<tr>
<td>3</td>
<td>江苏省</td>
<td>江苏云龙湖景区</td>
<td>739</td>
<td>700</td>
<td>39 17.94871795</td>
</tr>
<tr>
<td>4</td>
<td>湖南省</td>
<td>湖南东江湖风景旅游区</td>
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<td>3597</td>
<td>223 16.1304484</td>
</tr>
<tr>
<td>5</td>
<td>陕西省</td>
<td>陕西金丝峡景区</td>
<td>488</td>
<td>459</td>
<td>29 15.82758621</td>
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<tr>
<td>6</td>
<td>浙江省</td>
<td>浙江开化根宫佛国文化旅游区</td>
<td>32</td>
<td>30</td>
<td>2 15</td>
</tr>
<tr>
<td>7</td>
<td>江苏省</td>
<td>江苏太湖旅游区</td>
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<td>67 13.43283582</td>
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<td>江苏金鸡湖景区</td>
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<td>2624</td>
<td>214 12.26168224</td>
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<td>黑龙江省</td>
<td>黑龙江五大连池风景区</td>
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<td>770</td>
<td>64 12.03125</td>
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<td>江西龟峰景区</td>
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<td>182</td>
<td>16 11.375</td>
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<td>12</td>
<td>四川省</td>
<td>四川朱德故里景区</td>
<td>37</td>
<td>34</td>
<td>3 11.33333333</td>
</tr>
<tr>
<td>13</td>
<td>河北省</td>
<td>河北野三坡景区</td>
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<td>495</td>
<td>45 11</td>
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<td>14</td>
<td>山东省</td>
<td>山东南山风景区</td>
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<td>220</td>
<td>20 11</td>
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<td>15</td>
<td>湖北省</td>
<td>湖北东湖景区</td>
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<td>8508</td>
<td>780 10.90769231</td>
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<td>增长率</td>
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<td>16</td>
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<td>江苏南京钟山风景区</td>
<td>2205</td>
<td>2016</td>
<td>189</td>
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<td>17</td>
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<td>广西青秀山风景区</td>
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<td>202</td>
<td>19</td>
</tr>
<tr>
<td>18</td>
<td>吉林省</td>
<td>吉林净月潭国家森林公园</td>
<td>1717</td>
<td>1564</td>
<td>153</td>
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<tr>
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<td>湖南省</td>
<td>湖南花明楼景区</td>
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<td>24</td>
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<tr>
<td>20</td>
<td>广东省</td>
<td>广东清远连州地下河景区</td>
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<td>312</td>
<td>31</td>
</tr>
<tr>
<td>21</td>
<td>黑龙江省</td>
<td>黑龙江汤旺河林海奇石风景区</td>
<td>316</td>
<td>287</td>
<td>29</td>
</tr>
<tr>
<td>22</td>
<td>新疆维吾尔自治区</td>
<td>新疆喀拉峻草原景区</td>
<td>1960</td>
<td>1778</td>
<td>182</td>
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<td>23</td>
<td>河南省</td>
<td>河南龙潭大峡谷景区</td>
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<td>331</td>
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<td>238</td>
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<td>安徽省</td>
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<td>333</td>
<td>37</td>
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<tr>
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<td>河南省</td>
<td>河南恐龙遗迹园－伏牛山－老界岭旅游区</td>
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<tr>
<td>28</td>
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<td>新疆白沙湖景区</td>
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<td>北京市</td>
<td>北京颐和园景区</td>
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<td>1578</td>
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<td>30</td>
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<td>广西桂林漓江风景区</td>
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<td>7932</td>
<td>892</td>
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<tr>
<td>31</td>
<td>浙江省</td>
<td>浙江雁荡山风景区</td>
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<td>89</td>
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<td>湖南省</td>
<td>湖南岳阳楼景区</td>
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<tr>
<td>33</td>
<td>江苏省</td>
<td>江苏沙家浜虞山尚湖旅游区</td>
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<td>1055</td>
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</tr>
<tr>
<td>34</td>
<td>河南省</td>
<td>河南西华山</td>
<td>68</td>
<td>61</td>
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<tr>
<td></td>
<td>省份</td>
<td>景区名称</td>
<td>门票</td>
<td>景区面积</td>
<td>人文风情</td>
</tr>
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<tr>
<td>35</td>
<td>福建省</td>
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<td>福建省</td>
<td>福建太姥山景区</td>
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<td>101</td>
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<tr>
<td>37</td>
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<td>辽宁鞍山市千山景区</td>
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<td>998</td>
<td>117</td>
</tr>
<tr>
<td>38</td>
<td>湖北省</td>
<td>湖北三峡大坝屈原故里文化旅游区</td>
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<td>2151</td>
<td>254</td>
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<tr>
<td>39</td>
<td>辽宁省</td>
<td>辽宁本溪水洞景区</td>
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<td>2273</td>
<td>270</td>
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<tr>
<td>40</td>
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<td>辽宁大连市金州区金石滩景区</td>
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<td>4546</td>
<td>540</td>
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<td>41</td>
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<td>湖北清江画廊景区</td>
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<td>1308</td>
<td>156</td>
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<tr>
<td>42</td>
<td>北京市</td>
<td>北京奥林匹克公园</td>
<td>22248</td>
<td>19874</td>
<td>2374</td>
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<tr>
<td>43</td>
<td>安徽省</td>
<td>安徽天堂寨国家级自然保护区</td>
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<td>543</td>
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<td>44</td>
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<tr>
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<td>新疆天山大峡谷景区</td>
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<td>1302</td>
<td>158</td>
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<tr>
<td>46</td>
<td>河南省</td>
<td>河南洛阳白云山景区</td>
<td>277</td>
<td>247</td>
<td>30</td>
</tr>
<tr>
<td>47</td>
<td>西藏省</td>
<td>西藏扎什伦布寺景区</td>
<td>2158</td>
<td>1924</td>
<td>234</td>
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<tr>
<td>48</td>
<td>云南省</td>
<td>云南腾冲热海景区</td>
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<td>1454</td>
<td>177</td>
</tr>
<tr>
<td>49</td>
<td>山西省</td>
<td>山西五台山景区</td>
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<td>895</td>
<td>109</td>
</tr>
<tr>
<td>50</td>
<td>重庆市</td>
<td>重庆大足石刻景区</td>
<td>2283</td>
<td>2035</td>
<td>248</td>
</tr>
</tbody>
</table>

通过对比全国 249 家 5A 级景区的旅游情感体验指数，吉林省敦化六鼎山文化旅游区以 21.33 排在第一位，浙江天台山风景名胜区以 19.33 排在第二位，江苏云龙湖景区以 17.95 排在第三位，湖南东江湖风景旅游区以 16.13 排在第四位，陕西金丝峡景区以 15.83 排在第五位。游客体验情感指数超过 10 的景区有吉林敦化六鼎山文化旅游区、浙江天台山风景名胜区、江苏云龙湖景区、湖
南东江湖风景旅游区、陕西金丝峡景区、浙江开化根宫佛国文化旅游区、江苏太湖旅游区、重庆巫山小三峡、江苏金鸡湖、黑龙江五大连池风景区、江西龟峰景区、四川朱德故居景区、河北野三坡、山东南山风景区、江苏金鸡湖、黑龙江五大连池风景区、广东清远连州地下河共计 19 个景区。但是相比总体水平吉林敦化六鼎山文化旅游区、浙江天台山风景名胜区词频数量较少，评论数量较少，游客量并不是很大。游客体验情感指数的大小和词频没有必然的联系，并不是游客体验情感指数越大的景区词频就越高。词频和评论条数有正相关关系，评论条数和游客量存在一定联系，由此可以得出游客体验情感指数的大小和游客量之间没有必然的联系。

3.2 游客体验情感指数省区分布规律

表格 5. 游客体验情感指数省区分布

<table>
<thead>
<tr>
<th>序号</th>
<th>省份</th>
<th>词频</th>
<th>游客体验情感指数</th>
<th>序号</th>
<th>省份</th>
<th>词频</th>
<th>游客体验情感指数</th>
<th>序号</th>
<th>省份</th>
<th>词频</th>
<th>游客体验情感指数</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>辽宁省</td>
<td>14675</td>
<td>7.522</td>
<td>12</td>
<td>西藏自治区</td>
<td>18921</td>
<td>6.153</td>
<td>23</td>
<td>河北省</td>
<td>7921</td>
<td>5.514</td>
</tr>
<tr>
<td>2</td>
<td>重庆市</td>
<td>14616</td>
<td>7.488</td>
<td>13</td>
<td>四川省</td>
<td>42386</td>
<td>6.126</td>
<td>24</td>
<td>海南省</td>
<td>36313</td>
<td>5.432</td>
</tr>
<tr>
<td>3</td>
<td>青海省</td>
<td>21468</td>
<td>6.784</td>
<td>14</td>
<td>黑龙江省</td>
<td>7577</td>
<td>6.081</td>
<td>25</td>
<td>甘肃省</td>
<td>5415</td>
<td>4.925</td>
</tr>
<tr>
<td>4</td>
<td>湖南省</td>
<td>20119</td>
<td>6.753</td>
<td>15</td>
<td>安徽省</td>
<td>19476</td>
<td>6.064</td>
<td>26</td>
<td>陕西省</td>
<td>57820</td>
<td>4.812</td>
</tr>
<tr>
<td>5</td>
<td>新疆维吾尔自治区</td>
<td>14744</td>
<td>6.631</td>
<td>16</td>
<td>吉林省</td>
<td>24633</td>
<td>6.004</td>
<td>27</td>
<td>云南省</td>
<td>113181</td>
<td>4.693</td>
</tr>
<tr>
<td>6</td>
<td>浙江省</td>
<td>58413</td>
<td>6.566</td>
<td>17</td>
<td>内蒙古自治区</td>
<td>11123</td>
<td>5.956</td>
<td>28</td>
<td>福建省</td>
<td>99632</td>
<td>4.587</td>
</tr>
<tr>
<td>7</td>
<td>广西壮族自治区</td>
<td>15321</td>
<td>6.481</td>
<td>18</td>
<td>山西省</td>
<td>14727</td>
<td>5.921</td>
<td>29</td>
<td>天津市</td>
<td>12792</td>
<td>4.538</td>
</tr>
<tr>
<td>8</td>
<td>宁夏回族自治区</td>
<td>9975</td>
<td>6.444</td>
<td>19</td>
<td>江西省</td>
<td>4363</td>
<td>5.903</td>
<td>30</td>
<td>上海市</td>
<td>16241</td>
<td>4.461</td>
</tr>
<tr>
<td>9</td>
<td>山东省</td>
<td>38467</td>
<td>6.298</td>
<td>20</td>
<td>河南省</td>
<td>20877</td>
<td>5.881</td>
<td>31</td>
<td>贵州省</td>
<td>10253</td>
<td>3.8</td>
</tr>
<tr>
<td>10</td>
<td>湖北省</td>
<td>28641</td>
<td>6.167</td>
<td>21</td>
<td>广东省</td>
<td>16386</td>
<td>5.865</td>
<td>32</td>
<td>全国整体</td>
<td>952891</td>
<td>5.569</td>
</tr>
<tr>
<td>11</td>
<td>北京市</td>
<td>92965</td>
<td>6.158</td>
<td>22</td>
<td>江苏省</td>
<td>83450</td>
<td>5.74</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

从上图可以看出全国 34 省级行政单位，除去港澳台，正向情感词汇数量/负向情感词汇数量的比值排名前三位的辽宁、重庆、青海，排名后三位的是天
津、上海、贵州；全国 249 家 5A 级景区正向情感词汇数量/负向情感词汇数量的比值是 5.569，高于次平均值的省份有辽宁、重庆、青海、湖南、新疆、浙江、广西、宁夏、山东、湖北、北京、西藏、四川、黑龙江、安徽、吉林、内蒙古、山西、江西、河南、广东、江苏，共计 22 个省份，低于平均值的省份有河北、海南、甘肃、陕西、云南、福建、天津、上海、贵州，共计 9 个省份。

从图片 2 中，可以看出：以省份为单位，各个省份的游客体验情感指数总体上相对平稳，31 个省区呈现出三级阶梯分布，辽宁、重庆两个省市位于第一阶梯，另外只有辽宁和重庆的游客体验情感指数高于 7。青海、湖南、新疆、浙江、广西、宁夏、山东、湖北、北京、西藏、四川、黑龙江、安徽、吉林、内蒙古、山西、江西、河南、广东、江苏、河北、海南等 22 个省区位于第二阶梯，甘肃、陕西、云南、福建、天津、上海、贵州等 8 个省区位于第三阶梯。

3.3 情感体验类别分布情况

表格 6. 情感体验类别分布表

<table>
<thead>
<tr>
<th>类别 1</th>
<th>词频</th>
<th>情感正负向</th>
<th>类别 2</th>
<th>词频</th>
<th>情感正负向</th>
<th>类别 3</th>
<th>词频</th>
<th>情感正负向</th>
</tr>
</thead>
<tbody>
<tr>
<td>方便</td>
<td>55869</td>
<td>正向</td>
<td>传说</td>
<td>8716</td>
<td>正向</td>
<td>秀美</td>
<td>1301</td>
<td>正向</td>
</tr>
<tr>
<td>特别</td>
<td>53552</td>
<td>正向</td>
<td>秀</td>
<td>8503</td>
<td>正向</td>
<td>安全</td>
<td>1240</td>
<td>正向</td>
</tr>
<tr>
<td>人多</td>
<td>22499</td>
<td>负向</td>
<td>静</td>
<td>8137</td>
<td>正向</td>
<td>壮美</td>
<td>1086</td>
<td>正向</td>
</tr>
<tr>
<td>价格高</td>
<td>21453</td>
<td>负向</td>
<td>脏</td>
<td>4943</td>
<td>负向</td>
<td>华丽</td>
<td>1042</td>
<td>正向</td>
</tr>
<tr>
<td>------</td>
<td>------</td>
<td>------</td>
<td>----</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>悠闲</td>
<td>21038</td>
<td>正向</td>
<td>旧</td>
<td>4872</td>
<td>负向</td>
<td>偏僻</td>
<td>764</td>
<td>负向</td>
</tr>
<tr>
<td>完善</td>
<td>20421</td>
<td>正向</td>
<td>服务好</td>
<td>4513</td>
<td>正向</td>
<td>生态好</td>
<td>729</td>
<td>正向</td>
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<tr>
<td>闻名</td>
<td>20003</td>
<td>正向</td>
<td>爽</td>
<td>4354</td>
<td>正向</td>
<td>山清</td>
<td>656</td>
<td>正向</td>
</tr>
<tr>
<td>奇</td>
<td>18501</td>
<td>正向</td>
<td>独特</td>
<td>4134</td>
<td>正向</td>
<td>传奇</td>
<td>481</td>
<td>正向</td>
</tr>
<tr>
<td>壮观</td>
<td>17775</td>
<td>正向</td>
<td>壮丽</td>
<td>4068</td>
<td>正向</td>
<td>交通不便</td>
<td>330</td>
<td>负向</td>
</tr>
<tr>
<td>便宜</td>
<td>14434</td>
<td>正向</td>
<td>天气差</td>
<td>3708</td>
<td>负向</td>
<td>唯美</td>
<td>307</td>
<td>正向</td>
</tr>
<tr>
<td>绝佳</td>
<td>13687</td>
<td>正向</td>
<td>累</td>
<td>2907</td>
<td>负向</td>
<td>冷气氛</td>
<td>214</td>
<td>负向</td>
</tr>
<tr>
<td>历史悠久</td>
<td>13207</td>
<td>正向</td>
<td>优美</td>
<td>2887</td>
<td>正向</td>
<td>舒心</td>
<td>206</td>
<td>正向</td>
</tr>
<tr>
<td>清凉</td>
<td>12940</td>
<td>正向</td>
<td>仙气</td>
<td>2558</td>
<td>正向</td>
<td>乏味</td>
<td>179</td>
<td>负向</td>
</tr>
<tr>
<td>代表</td>
<td>12577</td>
<td>正向</td>
<td>幸运</td>
<td>2523</td>
<td>正向</td>
<td>忧伤</td>
<td>116</td>
<td>负向</td>
</tr>
<tr>
<td>商业化</td>
<td>9814</td>
<td>负向</td>
<td>坑人</td>
<td>1389</td>
<td>负向</td>
<td>服务差</td>
<td>51</td>
<td>负向</td>
</tr>
<tr>
<td>净</td>
<td>9679</td>
<td>正向</td>
<td>没有特色</td>
<td>1358</td>
<td>负向</td>
<td>没意思</td>
<td>35</td>
<td>负向</td>
</tr>
<tr>
<td>赶</td>
<td>8775</td>
<td>负向</td>
<td>压抑</td>
<td>1304</td>
<td>负向</td>
<td>设施差</td>
<td>33</td>
<td>负向</td>
</tr>
</tbody>
</table>

4. 游客情感体验的影响因素分析

4.1 变量的选取

通过相关性检验发现：特别、闻名、壮观、历史悠久、净等类别与游客情感体验指数不具有相关性，方便、奇、悠久、人多、清凉、秀、价格高等类别与游客情感体验具有显著相关性，其中方便、奇、悠久、清凉、秀等类别与游客情感体验呈正相关，人多、价格高等类别与游客情感体验呈负相关。由此我们得出特别、闻名、壮观、历史悠久、净是相对较多的5A级景区具备的基础条件，对于大部分5A级景区来说，在这些方面它们的差距不大。景区想要让游客获得更好的情感体验效果，除了在特别、闻名、壮观、历史悠久、净等基础上条件满足以外，要加强使游客感到方便、奇、悠久、清凉、秀等相关方面的建设与努力，除此之外，要逐步减少或避免使游客产生负面情感的因素，如人多、拥挤、价格高等。
4.2 建构回归模型

利用 SPSS 软件，采用逐步多元回归分析方法，构建多元回归模型，分析各个因素对于 5A 及景区游客情感体验指数的影响。通过相关性检验分析，最后有 5 个变量进入模型，拟合优度 $R^2$ 为 0.572，说明模型对观测值的拟合程度较好。对游客情感体验指数的显著解释力变量依次为方便类占比、人多类占比、清凉类占比、秀占类比、价格高类占比，每个自变量进入回归模型后所增加的个别解释量均达到显著（P<0.05）。回归模型的结果见表 3。

![表格 7. 模型的回归系数](image)

有以上分析及表 3 可知，
非标准化的回归方程为：

$$Y = 7.049 + 0.159X_1 - 0.450X_2 + 0.261X_3 + 0.144X_4 - 0.577X_5 + \varepsilon$$

标准化的回归方程为：

$$Y = 0.154X_1 - 0.259X_2 + 0.147X_3 + 0.126X_4 - 0.356X_5 + \varepsilon$$

4.3 模型结果分析

通过建立的回归模型分析 5A 级景区游客情感体验指数的影响因素，结果表
“方便”类与游客情感体验指数呈现正相关关系，影响系数为 0.159；“人多”类与游客情感体验指数呈现负相关关系，影响系数为 -0.450；“清凉”类与游客情感体验指数呈现正相关关系，影响系数为 0.261；“秀”与游客情感体验指数呈现正相关关系，影响系数为 0.144；“价格高”与游客情感体验指数呈现负相关关系，影响系数为 -0.577。

由此可知，方便、清凉、秀与游客情感体验指数正相关，其中“清凉”类影响程度最大；价格高、人多与游客情感体验指数负相关，其中价格高类影响程度较大。

参考文献

Science and Technology Innovation, Industry Transformation and Business Model Innovation: Practice Summary and Trend Forecast

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Abstract

Based on systematically reviewing the literatures about the science and technology development and industry transformation, this paper divides the time series of science and technology development into three stages: the industrialization era, the information economy era, and the intelligent era. It focuses on the three stages of science and technology innovation and how to impact the industry development. Combined with the characteristics of the intelligent era in the future, it puts forward the impact of the future industry transformation by the science and technology innovation. Based on the perspective of value creation, it proposes a path of business model innovation in the intelligent era. It can also provide guidance for the innovation development and industrial upgrading in China in the new era.

Keywords: Science and technology innovation; Industry transformation; Business model innovation; Trend forecast
科技创新、产业变革与商业模式创新：实践总结及趋势预测

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摘 要

本文在系统梳理科技发展和产业变革相关文献基础上，把科技发展时间序列划分为工业化时代、信息经济时代和智能化时代三个阶段，重点剖析三个阶段的科技创新成果及对产业发展的影响，结合未来智能化时代的特点，提出科技创新对未来产业变革的影响，基于价值创造视角，提出智能化时代商业模式创新路径，为新时代中国创新发展和产业升级提供指导。

关键词：科技创新；产业变革；商业模式创新；趋势预测

1 引言

近年来随着各国创新驱动战略的实施，创新已成为当今最热门的概念和研究内容。最早在1912年熊彼特首次提出“创新”概念时，它不仅包括技术性变化的技术创新，还包括非技术性变化的商业模式创新和组织管理创新[1]，其中，两类创新中，技术创新是研究最早最广泛的领域[2]，20世纪60年代以后，随着新技术革命的突破性发展，技术创新在创新中处于主导地位，故研究较为成熟，商业模式创新从创新概念提出后，就一直在创新范畴内，近年来在以互联网为代表的新一代信息技术推动下逐渐成为创新研究的热点。众多研究得出技术创新和商业模式创新存在密切的关系[3]。Teece认为新产品上市过程必须与商业模式相融合，才能保证新产品顺利打开市场和实现产品价值[4]。王雪冬、董大海以苹果公司为例，总结了“苹果”成功的经验，即较好的实现了技术创新与商业模式创新的融合，凭借两类创新的融合使苹果公司从濒临破产转向主导市场的地位，并指出在商业模式创新过程中，最重要的是找到商业与技术的最佳结合点，提出未来的研究应该探索商业与技术最佳结合的理论、方法和实现路径[5]。除了技术创新会推动商业模式创新外，科学发展也会推动商业模式创新。已有学者对科学技术和商业模式创新展开研究，唐德淼提出在工业革命过程中，科技变革与互联网的融合渗透是现代产业发展主要推动力，由于两者的融合，不断产生新产业、新技术、新业态和新商业模式[6]。科技发展将成就未来产业发展新格局、世界经济的未来走向和世界格局的未来变化。随着科技发展对产业的影响，学术界和理论界需要关注科技创新、产业变革和商业模式创新关系的研究。

基于蒸汽时代和电气时代都是因为机器的发明（蒸汽机和发电机）所导致工业上的改革，使人类从农业社会进入工业社会，体现出科技对工业发展的巨大推动作用，故将两者合称为工业化时代。本文的研究将从工业化时代、信息经济时代和智能化时代三个阶段作为时间维度来分析。由于商业模式的定义是20世纪90年代最早由波特提出的，因此在工业化时代侧重研究科技创新对产业变革的影响，随着互联网技术的突破性创新，在信息经济时代和智能化时代，科技创新在推动产业发展的创新和促进商业模式的创新的同时，促进了新商业模式的出现，因此在这两个阶段中科技创新成果不仅推动产业变革还加快商业模式创新的步伐。
2 论文内容

2.1 工业化时代的科技创新及对产业发展的影响

（1）蒸汽时代的科技创新及对产业发展的影响。很多学者将蒸汽时代成为工业 1.0 时代，是以瓦特改良蒸汽机作为第一次工业革命的主要标志，科技创新的动因是技术创新。科学、技术、生产三者关系是技术——科学——生产的位次，三者关系较为紧密且科学和技术已成为生产力中较为重要的因素，但当时的科学、技术因素在国民生产总值增长中的比重还不算很高。科技创新对产业的影响体现在：一是蒸汽机的广泛运用推动了工业大发展。蒸汽机广泛应用于纺织、煤炭、冶金、交通运输和机器制造等行业，提高了生产力，促进了这些行业发展，使得产品供不应求，市场以卖方市场为主导。二是生产模式由手工制造变革为作坊式单件生产模式。该模式的主要特点是雇佣熟练技术工人使用通用设备来加工单件产品，灵活性大，但生产成本仍然较高且周期长、生产品种多批量小互换性差、产品质量难以得到保证、生产过程组织分散和管理高度集中等等。三是消费者需求较为单一，产品相对较为单一。企业需要在产量和规模上有所突破以满足消费者产量和价格的需要。四是采用传统的交易方式。交易方式仍然是传统的产销结合。随着产销量的增加，货币作为交换媒介在经济交往中普遍应用，交易方式由手工时代的物物交易转变为有纸化交易。对制造企业而言，收入来源是货物的销售收入，通过货币实现一手交钱一手交货的货款两清或者货款分离。

（2）电气时代的科技创新及对产业发展的影响。第二次工业革命是以电气化为特征的科技革命，故将该阶段成为电气时代，亦有学者将此称为工业 2.0 时代。科学研究中电磁理论的创立及应用促成了发电机、电动机等电磁机器的发明，引起发电机技术的重大突破，电力成为科技创新的主要动因之一。科学、技术、生产三者联系已相当紧密，科学走在技术之前，科学和技术已成为生产力中的重要因素，两者在国民生产总值增长中的比重上升，发达国家从 20 世纪初的 5%-20%提高到 50 年代的 50%。科技创新对产业发展的影响体现在：一是发电机、电动机等电磁机器的发明促进了电力的广泛应用。电力广泛促使无线电报和无线电话的出现，带来通信业的革命，这促进了钢铁业、石油化工业以及内燃机、拖拉机、汽车和飞机等制造业的迅猛发展。二是生产模式从作坊式单件生产模式朝大批量生产模式转变。其特点采用生产线、流水线进行生产，生产效率大大提高，成本大大下降，体现了生产过程的专业化、标准化。生产规模由自然经济、家庭经济向工业、市场经济转变。三是提高了全社会生产力。大规模生产一直是工业化的主要特征，美国福特汽车公司创立第一条汽车生产流水线，它以标准化、大批量生产来降低生产成本，提高生产效率，之后迅速应用到其他行业，普及到全世界，其影响延续到现代。四是公司管理实践和管理理论的创新。由上所知，流水线生产最初的运用就是福特公司在“T 型车”生产线上的应用，福特之所以做到这一点是因为他借用并吸收了两个重要理论：劳动分工和零件互换性。这促使大批量生产方式在制造业的应用普及，也使得美国汽车产业称霸世界多年，并成为全球制造业的领导者[8]。

2.2 信息经济时代的科技创新及对产业发展的影响

信息技术的发展推动人类由大工业时代进入信息经济时代，并对产业发展产生重大影响，故有学者将该时代成为工业 3.0 时代。信息技术从早期的计算机技术发展到目前的万物互联技术，每一次技术升级都带来产业变革，并出现新的商
业模式。

2.2.1 计算机时代的科技创新及对产业的影响

20世纪50年代，电子计算机的发明成为计算机时代科技创新的动因，其广泛应用，掀起了第三次技术革命（也称为新科技革命）。发达国家科技进步因素在国民生产总值增长中的比重已由60年代的50%上升到2000年的80%。科学、技术、生产和紧密结合，科学和技术在劳动者、劳动资料、劳动对象、科学技术等生产力诸因素中处于第一的位置，并已成为最重要的生产力。科技创新对产业发展的影响体现在：一是计算机的广泛应用带来信息产业发展快速。在发达国家计算机普遍应用到自动化工业技术、经济管理、军工管理、医疗实践、数据库等5000多个领域，并产生了巨大的效能，在能源技术、空间技术、材料技术、生物工程、海洋工程等领域出现一大批应用成果。二是科技发展带来需求结构的变化。科技发展促使经济发展和人们收入增加，消费者的需求结构普遍向高层次发展。顾客在产品品种规格、花色式样、数量上呈现个性化、多元化的需求特点，消费者对产品性能、功能、可靠性有更高要求，更加关注产品种类和功能，产品的生命周期越来越短，顾客由于其购买目的、个人特征、经济能力等差异造成购买过程的不确定性，由此带来企业促销方式的变化。三是先进制造模式应运而生。为满足顾客驱动下的市场需求而追求利润最大化，企业经营理念由生产导向转为市场导向，开始以系统观念、工业工程（IE）为指导，借助于计算机技术，通过科学组织和计算机辅助管理，促使企业增加产品品种、规格、功能和提高产品质量、降低生产成本的，缩短交货期来提升顾客让渡价值。从20世纪50年代中期苏联最早提出成组技术（GT）后，通过数字计算机控制自动化作业的自动化流水线、精细化生产模式等先进制造模式诞生并应用到生产中。如美国典型企业常用的生产管理方法有“订货点法”和由此改进后的MRP、MRPII、ERP、SCM和AM等；日本企业代表性模式有：丰田根据生产实践所提出的“精益生产”和日产的QCD生产管理改善方法，还有OPT、TOC和WCM等形式的先进生产模式。四是交易方式仍然是货款两清或者货款分离的有纸化交易[8]。

2.2.2 互联网时代的科技创新及对产业的影响

互联网技术发展，经过了早期的PC互联网、移动互联网到当前的互联网+，其对生产、消费、供需对接等产生不同程度的影响。

（1）PC互联网及对产业影响。互联网技术成为此阶段科技创新的动力。PC互联网对产业的影响体现在：一是互联网使交易场所从线下到线上、延伸了交易时间、丰富了交易产品种类、加快了买卖方交易速度、减少了中间环节。因此网上交易比传统交易方式更方便、更便捷、更灵活，能够降低交易费用、节省交易时间、打破流通壁垒、提高物流效率、加快资金流通速度等优点。体现在获取信息渠道的变化和购买方式的变化，支付手段由货币、银行卡转为电子支付手段。二是基于互联网的新兴产业发展迅速。网络基础设施发展诞生了基于互联网的门户、搜索、社交、游戏等新的产业，但产业链条较短，网络营销主要限于线上推广；参与者较少，消费者对互联网持谨慎态度，基于互联网的新兴产业对生活、消费影响较小，对传统产业冲击较弱。此时诞生了众多互联网门户网站，美国依托软件优势发展了最早的一批互联网企业，中国紧随其后，如雅虎和亚马逊成立于1995年，网易成立于1997年，腾讯、搜狐和新浪成立于1998年，阿里巴巴成立于1999年，百度成立于2000年。三是新商业模式出现。第一代互联网企业
商业模式的核心逻辑是盈利模式的变化:通过“流量变现”实现价值创造,再通过免费或者低成本提供产品服务来增加客户访问流量,然后通过植入式广告或第三方来获得收入。传统企业开始构建信息系统。四是互联网发展增加了企业与消费者之间的连接,提高了市场响应速度。

2) 移动互联网及对产业影响。互联网技术和移动通讯技术的共同发展成为此阶段科技创新的动力。一是智能手机的发展使得手机支付成为主要生活支付方式。原因是移动互联网技术的发展,提供的应用服务不断丰富、与用户的工作、生活、消费、娱乐需求紧密结合。二是手机作为最重要的终端,其技术和功能的变化带来各产业商业模式的变化和创新。其 GPS 定位功能,为滴滴、华为、小米以商业模式创新取胜,后者成功的关键是让消费者参与价值创造过程,通过社交和交易平台让厂商与消费者建立良好的连接。二是从技术创新尤其是产品创新转向了商业模式创新。在移动互联时代出现脱媒以后,供需双方在没有渠道情况下进行互动,分销渠道曾经是工业化时代传统商业模式的重要组成元素之一,无法起到创造价值和协调资源的作用,在移动互联网时代逐步被新的商业模式所取代。典型代表是苏宁易购从家电零售商靠压货资金取得收入来源到实施线上线下 O2O 模式创新[9]。三是促进了互联网产业尤其是移动互联网产业的迅猛发展,诞生了众多基于移动支付的平台企业。以中国为代表的新经济体在移动互联网应用领域发展迅猛,从紧密跟随到通过商业模式的二次创新实现追赶。如 2004 年-2014 年,百度的雇员人数由 349 人增加到 46391 人,年收入由 1340.01 万美元增加到 79.06 亿美元;阿里巴巴员工由最初的 18 人到 2017 年的 4.7 万人 1582.73 亿元人民币收入。2018 年 BrandZ 发布世界品牌 500 强中,排名前十的品牌分别为:谷歌、苹果、亚马逊、微软、腾讯、Facebook、VISA、麦当劳、阿里巴巴、AT&T,大多是基于移动互联网的科技型企业,与传统制造型企业偏重于技术创新中的产品创新不同,他们主要通过商业模式创新产生新的价值提升竞争力,如“BAT”中增长最快的腾讯,成立于 2003 年,凭借 QQ、微信及 We Chat 业务,以创新方式促进用户互动及分享,强化了公司的“连接”策略,到 2017 年总收入 2377.6 亿元。

(3) 互联网+及对产业的影响。李克强总理在 2015 年政府工作报告中提出“互联网+”。互联网技术朝万物移动互联网技术的发展成为此阶段科技创新的动力。传统的商业关系、竞争优势,在“互联网+时代”已发生变化,传统的“连接”关系也已经被互联网改造成“联结”关系,同样的元素被重构之后却爆发出了与以往完全不同的力量。其影响体现在:一是促进传统产业的重塑、升级。互联网经济发展提速,不仅应用在互联网产业本身和电子商务领域,而是延伸到制造业、金融业、服务业、商贸流通业等领域,并对各行业进行全面的渗透和融合,产业链拉长,从线上朝线下延伸,从产业下游朝上游拓展。新应用和新商业模式层出不穷。二是参与者和消费结构、产品发生巨大变化。参与者日益增多且多样化,包括各行业的主体和普通网民,对互联网更加认可、理性和积极,并充分发挥互联网的潜力为己所用。消费结构从传统的同质化需求向分散化和个性化需求和定制化发展,产品朝多样化、定制化、分散化和个性化发展。三企业创造价值的逻辑发生重要变化。互联网技术不仅能大幅提高传统产业链运行效率、降低成本,还在传统产业中的用户需求,开发新应用和解决方案扩大需求和供给。
四是生产模式转变。互联网促进电子商务发展和生产智能化，大数据供应链协同、生产组织方式协同等变革，导致生产模式由工业时代的大规模同质化生产方式转变为按需制造、快速成型、CAD、敏捷制造等，柔性化程度增加。五是交易方式实现产销分离。数字化交易方式出现并得到迅速发展，无纸化交易得以实现，电子货币的出现推动了无纸化交易的发展，并节约了交易费用和提高了流通效率。⑥去中心化，互联网文化体现“联结、分享、创新、合作”[10]。工业化时代，企业在经济活动中是指挥者和主导者，处于中心地位，也是财富的主要获得者，供需分离，企业通过大规模、高效率的生产和销售标准化产品创造价值，顾客是产品的购买者和接受者。互联网+时代，市场去“中心化”，产业链上的核心企业不再是主导控制，而是联结分享；产业链上下游的每个主体不再处于核心企业的从属地位，而是成为价值网络中地位平等的节点，这些节点作为信息传播者和接受者双向传递信息和价值，顾客由价值的接受者变为价值共创者。在新商业模式的价值体系中，企业、顾客及合作伙伴相联结，实现价值共创和价值分享。

图1：传统商业关系的“连接”和重构后商业关系的“联结”

2.3 智能化时代的科技创新及产业变革、商业模式创新趋势

利用信息技术促进产业变革的时代，即智能化时代。有学者将其看做是互联网+时代的延伸，需要充分发挥互联网在生产要素配置中的优化和集成作用，将互联网的创新成果与社会经济各领域深度融合，亦可称为后互联网时代。不同国家对此的称谓不同，如德国“工业4.0”，于2013年由德国政府和西门子等知名企业联合提出美国的IBM公司和GE公司先后提出“智慧地球”和“工业互联网”计划，日本于2015年提出“推进成长战略的方针”，开启了智能化时代的到来。可以看出在时代，通信技术和互联网技术、人工智能技术、区块链技术、计算机技术、自动化生产线、物联网、大数据和云计算技术成为科技创新的动因，对社会经济产生重要影响。

（1）数据成为重要的生产要素。互联网成为像公路、铁路、码头、电力、热力等一样重要的基础设施，数据成为如同土地、资本、自然资源一样的经济生产活动的重要投入要素[11]，近五年来随着大数据概念的提出逐渐成为研究的热点。原因在于阿里巴巴的核心业务是淘宝网、天猫商城、聚划算等电商平台和阿里云、蚂蚁金服和菜鸟网络等关联业务，拥有大量客户数据。掌握有海量的客户资源，成为众多企业合作的对象。

（2）技术范式的变革促进产业业态和生产模式的变化。技术范式的变革体现在重大科技创新成果，代表性的如以互联网为核心的新一代信息技术、以可再
生能源为核心的新能源技术、以数字化制造、3D打印、智能机器人为核心的智能制造技术、以新材料为核心的材料技术、以基因工程和细胞工程为核心的生物技术等，将以技术群的形式出现，并且各技术相互融合、渗透，形成新的技术领域，诞生新兴产业，并迅速扩散到经济社会生活各领域。同时，各项技术的研发周期缩短，新技术引领并应用于社会生产和生活的速度加快，导致制造模式、产业组织、营销模式等方面的重要变革。基于以上技术范式的变革，产业业态从跨界融合、制造业服务化和服务业产品化、生产组织形式小型化发展的网络型产业生态演变；制造方式由规模化制造向绿色制造、智能制造、个性化制造转变，区别于在大批量制造时代提高效率和降低成本的主要途径是通过标准化大批量生产和低成本所带来的规模经济；生产模式朝社会化生产和定制化生产发展。

（5）未来商业模式创新趋势。随着以新一代信息技术、通信技术、大数据技术和云技术的发展，新技术在消费领域的应用升级，在生产领域的应用也将大大促进生产力的提升和生产关系的变革。基于价值创造视角，各相关主体间的商业关系发生变化，引发商业模式创新路径的变化。

图2：三个时代的商业关系的变迁

一是价值主张侧重顾客的价值体验。价值主张是商业模式成功的起点。随着社会经济环境的变化，顾客需求呈现多样化和个性化的特点，这就要求企业通过整合多种技术、知识、产品和服务给顾客提供完美的价值体验。以苹果公司为例，从生产销售电脑，通过商业模式创新，为消费者提供一站式的数字生活解决方
案，将硬件和软件、服务和内容进行整合，实施“iPod/iPhone/iPad+iTunes+iMusic/App Store/iBooks”的商业生态系统，创造出巨大的顾客价值。由此可以看出，在智能化时代，顾客价值主张将发生三大转变：从关注主流顾客群转向边缘顾客群；从注重产品的交换价值转向使用价值和感知价值；从产品到服务再到全面解决方案。

二是顾客价值传递系统（企业业务活动系统）强调价值共创。工业化时代，制造企业创造和传递顾客价值主张的载体是线性、单向流动的价值链。网络经济时代，企业创造价值的载体转变为动态、双向互动的价值网络或商业生态，强调企业与顾客及其他利益相关者协同合作，共创和分享价值，顾客参与、去中介化、网络化合作、从核心能力到动态能力将成为发展趋势。

三是价值获取以顾客价值做为企业盈利的基础。价值获取主要指企业的盈利模式，包括收入模式和成本结构。商业模式创新强调在创造顾客价值的基础上实现企业利润。顾客价值是企业盈利的基础，是企业长远发展的根本。未来盈利方式的变革趋势体现在“免费”方式或“多元化补贴收入”方式日益普遍、降低成本结构、资产结构轻型化。

2.4 结论

智能化时代的科学研究有助于产业领域的技术创新，技术创新同时又进一步促进科学研究，这将带来客户购买行为及使用行为的转变和产业内企业间竞争格局的变化，最终促使产业链各利益相关方商业模式的转变。目前智能化应用较多的行业是商贸流通、汽车、房地产、医疗服务、城市建设等领域，在产品上具体体现在智能互联汽车、住宅智能化系统或者楼宇智能化系统、医院智能化系统和智慧城市系统，如特斯拉电动汽车，既有科技创新也有商业模式创新。中国的海尔、小米和华为，正是因为通过在产品研发设计、销售服务和商业模式上的创新，很快成为全球该细分市场的领导者。中国众多的后发企业也需要借鉴经验，进行二次商业模式创新，引领行业内企业创新发展、行业间跨界融合，最终促进产业升级。

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Does the Product Recommendation Really Promote the Purchase Decision? Research on the Influence of Recommended Timing on Purchase Deferral

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Abstract

Based on two-stage decision process and choice overload theory, this paper explores the influence of product recommendation in different decision phases on consumers’ choice deferral and the mechanism. In the first experiment, the influence and the mediating role of decision difficulty was tested through online questionnaire. Results showed that, compared to those without recommendation, the recommendation during the screening phase significantly reduced consumers’ purchase deferral; while recommendation during the comparison phase significantly increased the decision difficulty perceived by consumers, thus leading to choice deferral and inhibiting purchase decisions. In the second lab experiment, we further explored the moderating role of product type (search product VS. experience product) and found the above effect was significant in the experience product but insignificant for search products. Further analysis leveraging mediated moderator model illustrated that the interaction effect was mediated by decision difficulty perceived by consumers. Based on these findings, theoretical contributions and managerial implications were provided.

Keywords: product recommendation; decision phase; purchase deferral; product type; decision difficulty
商品推荐真的促进了购买决策吗？推荐时机选择对延迟购买行为的影响研究

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摘要

本文基于两阶段决策情境和选择过载理论探究了不同决策阶段的商品推荐对消费者延迟购买行为的影响及其作用机制。实验一采用网络问卷研究了不同阶段的商品推荐对延迟购买意愿的影响及决策难度的中介作用。结果发现，与前人研究结论类似，浏览阶段推荐（相比于无推荐）显著降低了延迟购买意愿，对购买决策产生促进作用；而选择阶段推荐（相对于无推荐）反而显著提高了消费者感知到的决策难度，进而提高了他们的决策延迟，对购买决策产生了抑制作用。实验二在实验室进一步探究了产品类型（搜索品 vs. 体验品）对推荐时机效应的调节作用，结果发现上述商品推荐的推荐时机效应在体验型商品中更加显著；而对于搜索型商品，这种推荐时机效应并不显著。进一步对有中介的调节作用分析表明，这种交互效应主要是被消费者感知到的决策难度所中介。

关键词：商品推荐；决策阶段；延迟购买；产品类型；决策难度

1. 引言

电子商务的蓬勃发展催生了万亿级规模的网购市场，2018 年，全国网上零售额 9 万亿元，占社会消费品零售总额 18.4%（国家统计局）。与传统实体购物相比，网络购物由于其高度虚拟特性，使得消费者在线购物更容易感到不确定性（张耕等，2010）。为了改善消费者购物体验，目前绝大多数网上零售平台均为顾客提供商品推荐，帮助消费者决策的同时提升网站的交易额和利润（Huang et al., 2018；孙鲁平等，2016；Lu et al., 2015；Zhang et al., 2011）。

然而研究发现，商品推荐既可能帮助消费者选择，给其决策带来正向影响，例如展示消费者感兴趣的商品，减少用户搜索时间和成本、加速购买决策等（Pathak et al., 2010；Liang et al., 2006；Häubl et al., 2000），也有可能给消费者决策带来负面影响（Chan et al., 2010；余英磊等，2013），例如，使消费者信息过载，造成更困难的决策行为和更低的决策满意度等（Zhou, Xu and Cox, 2012；Fitzsimons and Lehmann, 2004），进而抑制购买。那商品推荐到底是促进还是抑制了消费者的购买决策呢？

众多的商品中挑选出一些感兴趣的商品形成选择集（choice set）；第二个阶段是选择阶段，消费者仔细比较和评价选择集中的商品，做出最终购买决策。在不同的决策阶段，消费者的目标、信息处理方式、记忆、卷入度、态度、情感不同（Puccinelli et al., 2009）。浏览阶段，消费者面临大量与需求看似匹配的选择，此时偏好尚未完全建立，过多相似备选项造成选择过载，此时的商品推荐往往帮助消费者进行决策，降低选择过载（Ho et al., 2011；Xiao and Benbasat, 2007；Häubl and Trifts, 2000）。而在选择阶段，消费者偏好已基本建立但需要找到决策理由（史雅妮, 2011；Shafir et al., 1993），此时会对选择集中每个产品全部属性进行仔细的评估。此时推荐具有较高吸引力的商品，容易使消费者决策任务复杂化、造成选择过载（史雅妮, 2011；Chernev et al., 2016）进而抑制购买决策。因此，在不同决策阶段（浏览阶段和选择阶段），商品推荐将产生不同的作用，对决策的效果不尽相同。

通过回顾商品推荐文献，我们发现前人的研究在计算机领域中推荐的个性化算法和模型（Ansari et al., 2018；Mishra et al., 2015）、信息系统领域中消费者对推荐系统的评价（Martínez-López et al., 2015；Choi et al., 2014）和商品推荐对消费者购买行为的直接影响（Ho and Bodoff, 2014；Dellaert and Häubl, 2012）等方面取得了丰富的成果，但仍存在两个研究盲区：其一，少有研究关注推荐时机的作用（Salonen and Karjaluoto, 2016）。更鲜有研究区分不同决策阶段的推荐效果及其边界条件和作用机制。其二，现有研究未注意到商品推荐对延迟购买的这种消极作用，而延迟购买本身就是真实情境中一项重要的决策结果（William et al., 2016）。大多忽略消费者放弃选择这一情况的决策研究，其得出的结论是具有偏差的（Dhar and Simonson, 2003）。

为了填补商品推荐研究领域的空白并提出具有管理价值的建议，本文基于两阶段决策情境和选择过载理论探究：（1）不同决策阶段的推荐是否会对延迟购买产生不同的影响？（2）不同类型的产品，推荐时机对延迟购买的影响大小是否会存在显著不同？（3）如果存在以上效应，其背后的作用机制是什么？本文研究通过2个实验对上述问题进行了验证，研究结果具有理论和实践价值。从理论上来说，本研究一定程度上填补了推荐时机对消费者决策行为影响的空白；从实践上来讲，本研究结果为经营不同类型产品类型的企业何时进行商品推荐提供了具有实际意义的指导。

2. 理论背景与研究假设

2.1 理论背景

两阶段决策理论（Two-stage Decision Process）起源于Payne（1976）的研究。该理论认为，在决策阶段的早期，低认知成本的决策方式会被使用，目的是将备选项减少到只有很少一部分，进而简化决策任务。然后，会采用高认知要求的决策方式进行最终评估与决策。此后，诸多学者（Lussier et al., 1979；Sheridan et al., 1975）对两阶段决策达成了共同的认识。Gensch（1987）首次用实证研究的方法研究了两阶段购买决策，发现两阶段预测模型的精度显著高于单一阶段的模型，表明两阶段决策更符合真实购买过程的。在真实网购过程中，虚拟的购物车帮助消费者简化决策，引导消费者采用两阶段策略。因此，基于前人文献，本文对两阶段决策进行了如下定义：
第一阶段是浏览阶段。其主要任务搜索产品信息、寻求偏好、检查商品，进而建立一个选择集（choice set）。这个阶段采取的决策往往是非补偿性的策略，通过这一策略尽可能地减少由备选项过多造成的信息过载。本实验中，我们将浏览阶段推荐操作化定义为进入购物车界面之前，即当消费者仍然在购物网站浏览产品时所作出的推荐，这个时候购物车内的商品尚未完全确定。

第二阶段是选择阶段，即比较和行动阶段。消费者比较选择集（choice set）中的商品，然后做出最终购买决策。在这个阶段，消费者所采用的原则大多数补偿性的原则（compensatory strategy），各个备选方案被全方位的评估和比较，选择过程更加仔细、全面（Sheridan et al., 1975）。本实验中，我们将选择阶段操作化定义为消费者进入购物车界面挑选最终商品之时。由于购物车内的商品是经过挑选而进入选择集的，消费者对它们的评估会更加全面。


其一，备选项复杂性（Choice set complexity）主要是通过选项的相似性、属性非齐和产品互补性造成选择过载。选项相似性指，当增加具有相似竞争力的选择时，消费者会感到选择过载进而延迟购买（Dhar, 1997；Dhar and Simonson, 2003；Tversky and Shafir, 1992）；属性非齐（nonalignable attributes）指不同产品具有不同的属性构成；而产品互补性指不同产品在多个属性上各有优劣、难以权衡（Chernev, 2005）。

其二，决策任务困难（Decision task difficulty）主要通过产品属性维度和决策难证明造成选择过载。当消费者面临的产品属性维度较多时且较难判断时，消费者就需要了解更多的信息来对产品进行评估，因此会感到选择过载（Scheibehenne and Kleber, 2010；Chernev et al., 2016）。此外，当需要消费者从大量的备选项中证明自己的决策是正确时，他们的选择过载会增加。

因此，由上述理论背景结合可知，消费者在不同阶段具有不同的决策任务、面临不同的选择过载。基于此，本文探究不同阶段出现的商品推荐是否会对不同的决策任务和选择过载产生不同的效果，进而对延迟购买产生不同作用。同时，本文还基于搜索品和体验品的区别探究了该作用的横向边界。此外，本文从消费者决策过程中的心理层面纵向剖析了决策难度的中介作用。
2.2 商品推荐时机对延迟购买的影响

由前所述，消费者在不同决策阶段面临不同的决策任务和选择过载。这意味着，在不同决策阶段出现的商品推荐可能会对决策任务和选择过载发挥不同的作用，进而对延迟购买产生不同的效果。具体来说，

浏览阶段，消费者的主要决策任务是建立选择集（choice set）。面对大量可选商品，消费者的选择过载主要是由备选项的相似性和属性非齐（nonalignable attributes）所造成的。尽管消费者可以采用非补偿性（non-compensatory）的策略以减轻这一阶段的认知成本（Payne, 1976），但如今网购环境下，大规模产品比较相似且属性并非整齐可比，不同产品往往具有不同的属性构成。而此阶段消费者的偏好尚未完全建立（Bettman, 1998），消费者缺乏产品属性知识。面对相似的产品，他们的认知成本较高，挑选困难、选择过载的可能性很大，消费者难以权衡、购买可能性降低（Broniarczyk, 2014; Nagar and Gandotra, 2016; Gourville and Soman, 2005; Chernev et al., 2015）。这种情况下商品推荐为他们提供参考，减少其产品搜索成本（Product Screening Cost）（Zhang et al., 2011），搜索更具效率，进而降低由备选项相似性和属性非齐造成的过载选择，帮助消费者快速找到高质量的商品提升决策质量（Häubl and Trifts, 2000），促进消费者的购买决策。因此，我们认为浏览阶段的商品推荐能降低延迟购买意愿。

而在选择阶段，消费者的主要决策任务是对选择集内所有产品的全部属性进行仔细地评估，做出最终选择。消费者面临的主要选择过载是决策任务本身的困难（产品属性维度过多和决策较难被证明）。我们认为，选择阶段提供具有相当竞争力的推荐商品会增加消费者的选择过载。首先，这个阶段采取的策略通常是补偿性的（compensatory），需要衡量商品的所有属性，决策任务本身容易造成认知过载（Chernev and Hamilton, 2009; Choi and Fishbach, 2011; Hamilton and Chernev, 2010），消费者更偏好更小的集合（Chernev, 2006; Huffman and Kahn, 1998）。而此时若出现商品推荐则增加了产品集合，消费者除了要仔细评估选择集中的商品外还要评估可能具有较高吸引力的被推荐商品，这将使得消费者决策任务变得更加复杂和困难（Chernev et al., 2015）。其次，最终决策阶段，顾客于其说是在寻找产品，不如说是在寻找一个理由来证实自己的选择是最佳的（史雅妮，2011; Shafir et al., 1993）。当消费者要从可选选项中证明自己的选择之时，他们更偏好较小的集合，因为这样的决策更容易被证明成立（Scheibehenne, Greifeneder, and Todd, 2010; Gourville and Soman, 2005）。而推荐的相似商品扩大了选择阶段的集合，让消费者感到更难找到理由支撑自己的决策，更难证明自己的选择，此时他们可能会选择延迟购买或者等待（Tversky and Shafir, 1992）。也就是说，选择阶段的商品推荐极有可能反而抑制了购买决策。

综上，本文认为，相比于无推荐，浏览阶段的商品推荐会促进消费者的购买决策，降低延迟购买意愿；而选择阶段进行商品推荐则会抑制购买决策，提高消费者的延迟购买意愿。因此，我们提出如下假设:

\[ H_1: \] 相对于无推荐，浏览阶段的商品推荐会降低延迟购买意愿，而选择阶段的商品推荐会提高延迟购买意愿。
2.3 产品类型的调节作用

不同类型的产品，消费者偏好建立和决策过程的难度不同，因此不同决策阶段商品推荐对延迟购买的效果可能受到产品类型（搜索品 VS. 体验品）的调节作用。根据 Mudambi et al. (2010) 的研究，搜索品（search good）是使用（试用、购买）前相对容易获得质量信息的产品，其主要的属性是客观、易于比较的，没有特别需要人的“感官”去评估产品质量，例如电子产品；体验品（experience good）是在试用（使用）前较难或要以高代价获得质量信息的产品，其主要的属性是主观或者难以比较的，需要用人的“感官”去评估产品质量，例如食品。

搜索品的主要属性相对客观、易评估或比较，消费者评估搜索产品时更倾向于依赖自我决策 (King and Balasubramanian, 1994)，受商品推荐的影响较小。浏览阶段，消费者大都依赖自主建立偏好和决策，商品推荐帮助消费者找到高质量商品、减少选择过载的作用很弱。选择阶段，由于消费者可以自主地判断产品彼此之间的好坏，此时的商品推荐也难以对其偏好造成挑战。同时，产品属性客观使得品质产品数量增加，选择过载也不会显著增大。此外，搜索品的好坏容易判断，增加产品集合不会使决策变得难以证明。因此，不同决策阶段的商品推荐不会对搜索品的延迟购买意愿有显著影响。

相对于搜索品，体验品属性的评价则更加主观，消费者难以评估和比较其质量，评估时更依赖于基于他人的决策过程 (King and Balasubramanian, 1994)，因此，可能会在很大程度上受到商品推荐的影响 (Senecal and Nantel, 2004)。浏览阶段，面对大量相似且较难判断好坏的商品，消费者的搜索和认知成本较大，难以形成清晰的偏好，因此更加依赖商品推荐，因此此阶段推荐，促进购买决策的作用较大；然而在选择阶段，同样由于体验品的产品属性难以判断，消费者的偏好更难以受到商品推荐的挑战，偏好不确定性更凸显。因而，消费者更容易再次重新仔细权衡自己的偏好进而感受到决策困难 (Guo, 2016)。体验品属性较主观的特点也使得消费者的选择更难以被证明，消费者更可能因为商品推荐夸大了产品选择集而难以找到客观理由支撑选择 (Tversky and Shafir, 1992; Scheibehenne et al., 2010; Gourville and Soman, 2005)。因此，对于体验型商品，选择阶段推荐对消费者的购买决策的抑制作用更强，即显著提升延迟购买意愿。

因此，我们提出如下假设：

\(H_2\): 不同阶段的商品推荐对决策的效果受到产品类型的调节作用。

\(H_{2a}\): 对于搜索品，两个决策阶段的商品推荐对延迟购买意愿无显著影响。

\(H_{2b}\): 对于体验品，浏览阶段的商品推荐能显著地降低延迟购买意愿，选择阶段的商品推荐能显著地提高延迟购买意愿。

2.4 决策难度的中介作用

我们认为，在两阶段决策情境下，不同决策阶段的商品推荐会引发消费者不同的决策难度，进而影响延迟购买意愿。决策难度（Decision difficulty）反映了决策任务的一般性结构特点 (Payne et al., 1993)，是消费者决策过程

据前文所述，不同决策阶段选择过载不同，而作为选择过载的一种主观测量指标（Inbar et al.，2011），决策难度在不同决策阶段的呈现形式也不同。浏览阶段，消费者需要不断识别和评估大量相似的备选项，并需要在这一过程中建立偏好。偏好建立过程增加了比较和权衡的困难（Broniarczyk, 2014; Chernev, 2003）。而浏览阶段商品推荐的作用正是减少消费者的建立偏好过程中的信息搜索成本，因此会降低决策难度进而降低延迟购买意愿；选择阶段，消费者由于信息认知资源能力有限，在面对复杂和高认知需求的任务（e.g. 全面衡量产品的所有维度）时会感到任务复杂，决策困难（Broniarczyk, 2014），此时出现的商品推荐加大了选择集使消费者感知到的决策难度提升，进而提高了延迟购买意愿。

因此，我们认为之所以不同决策阶段的商品推荐会对消费者延迟购买产生不同作用，是因为对消费者决策难度有不同影响。因此，我们提出如下假设：

H₃a：决策难度在不同阶段的商品推荐对延迟购买的影响中起中介作用。浏览阶段推荐，决策难度减小进而延迟购买意愿降低；选择阶段推荐，决策难度增大进而延迟购买意愿提高。

除了商品推荐对不同产品类型不同决策阶段的决策难度影响可能不同。对于搜索品，其质量较为容易评价和衡量，因此，商品推荐较难对消费者决策难度产生显著的影响。对于体验品，浏览阶段容易受到商品推荐帮助其决策的影响而降低决策难度，从而降低延迟购买意愿；选择阶段，容易受到商品推荐的挑战决策难度加大，因而延迟购买意愿会显著提升。由此，我们认为不同阶段的产品推荐与产品类型的交互作用被决策难度中介，并提出如下假设：

H₃b：相比于无推荐，浏览阶段的商品推荐，体验品（相对于搜索品）的决策难度有显著降低进而导致延迟购买意愿有显著降低。

H₃c：相比于无推荐，选择阶段的商品推荐，体验品（相对于搜索品）的决策难度有显著提升进而导致延迟购买意愿有显著提升。

整体研究框架如图1。
为验证上述假设，本文共设计了两个实验。实验一用于检验H1和H3a。在此基础上，为保证实验的内部有效性和普适性，实验二召集被试到实验室参与实验并更换了刺激物。在再次验证H1的基础上，实验二选择移动硬盘和电动牙刷分别作为搜索品和体验品探寻了商品类别的调节作用并验证了H2、H3b和H3c，并采用有中介的调节模型检验了H3b和H3c。

3. 实验一

实验一的主要目的是为了验证假设H1和H3a。根据假设，相比于无推荐，浏览阶段有推荐的消费者延迟购买意愿更低，选择阶段有推荐的消费者延迟购买意愿更高。过程中，决策难度会起到中介作用。本次实验中选择头戴式蓝牙耳机作为实验刺激物。

3.1 实验设计与流程

实验一采用了单因素（推荐阶段：无推荐 vs. 浏览阶段 vs. 选择阶段）组间设计。我们邀请在校本科生参与了实验，他们被随机分配成3组：无推荐（N=32）、浏览阶段（N=34）、选择阶段（N=33），其中男性占48.5%。本次实验通过网络问卷的形式，利用问卷网平台将链接通过邮件发给填卷者，被试主要以研究者易获取的便捷样本为主。

正式实验前，被试被告知从两组（每组8款）产品中每组选出自己最喜欢的一款或多款产品，并告诉被试：在之后的实验中会根据其偏好选择为其推荐相应商品（无推荐组无这句提示）。这一步的操作主要是为了使被试相信后面的商品推荐是值得选择的，这一情况也与真实的个性化推荐更相符合。

商品及推荐时机的操控

正式实验中，有12款商品，均来自真实电商平台。其中常规商品8款，推荐商品4款。8款常规商品中有2款商品是明显表现较差的产品，其它商品则相应各有优势。而4款推荐的商品为电商网站评价较高的、购买较多且不同风格的商品。对于浏览阶段推荐组，被试在浏览阶段看到8款常规商品+4款推荐商品（以推荐商品的形式呈现）；对于选择阶段推荐组，在浏览阶段看到8款常规产品，进入购物车决策时，在购物车页面下端看到4款推荐商品（以推荐商品的形式呈现）；而无推荐组则在浏览阶段看到8款常规+4款推荐商品（但以常规商品的形式呈现）。有推荐组的被试在相应阶段被告知，页面最下方有部分根据其偏好选择为其推荐的产品，其也可选择。

正式流程

首先，实验最初告知被试，请想象自己正打算或考虑网购一款头戴式蓝牙耳机。然后，给出被试具体情景：“您登陆了某购物平台，在平台的搜索框输入了头戴式蓝牙耳机，平台出现了如下产品供您选择，您可点击商品详情对产品进行大致评估，大致评估后请选择至少两件您最可能购买的产品加入购物车。之后，您将进入购物车详细对比并决定购买最终产品。”点击商品详情后，呈现该商品在真实电商平台上的截图。如前所述，此阶段无推荐组和浏览阶段推荐组均有12款产品，只是呈现方式不同；而选择阶段推荐组只有8款常规商品。
挑选完毕后，被试进入购物车进行决策，选择一款最终购买产品。在购物车界面前，被试被提前告知：“实验的情境为正考虑购买。因而，您可能不想选择这些产品而想继续找寻其它产品。该情况下，请您仔细评估后再选择一款意向产品。”（Dhar et al., 2003）。购物车界面，仅选择阶段有推荐组有4款推荐商品，另外两组仅含被试自己挑选进入购物车的产品。在这一界面，被试需要最终挑选一款购买产品或意向产品。

完成购买试验后，被试立即回答了延迟购买意愿，因为这种延迟购买意愿可能随着情境的变化而较快消失（Dhar et al., 2003）。延迟购买意愿的测量包括三个题项（1表示非常不同意，7表示非常同意）：我不会购买该款耳机，而想继续搜索其它耳机；有些迟疑，考虑把购买的决定推迟一段时间；下一步支付时，经考虑后我可能会放弃支付（Cho et al. 2006；Walsh et al.，2007；Lichters et al., 2016）。三个题项具有较高的信度（Cronbach’s $\alpha=0.817$），我们取三者的均值作为延迟购买意愿。接着，被试回答了决策难度，包括三个题项（1表示非常不同意，7表示非常同意）：头戴式蓝牙耳机难以比较权衡，作出决策比较困难；我难以选择一款头戴式蓝牙耳机，作出决定较难；作出决定不容易，我觉得比较困难（Bottomley et al., 2000；Walsh et al., 2007; Steenkamp et al., 1997）。三个题项具有较高的信度（Cronbach’s $\alpha=0.833$），我们取二者的均值作为决策难度。最后，被试回答了年龄、性别、生活费、网购频率等人口统计学变量。

3.2 实验结果

主效应。单因素ANOVA检验发现不同组之间的延迟购买意愿具有显著差异 \[F(2, 96)=26.885, p<0.001\]，说明不同决策阶段推荐对延迟购买意愿有显著影响（见图2）。如表1所示，多重比较的结果表明，相比于无推荐组，浏览阶段推荐组能显著降低延迟购买意愿（M浏览阶段-无推荐=-0.904，P<0.001），而选择阶段会显著提升延迟购买意愿（M选择阶段-无推荐=0.888，P<0.001），因此，H1得到了支持。

表1 多重比较（LSD）

<table>
<thead>
<tr>
<th>比较</th>
<th>均值差值</th>
<th>标准误</th>
<th>95% 置信区间</th>
</tr>
</thead>
<tbody>
<tr>
<td>浏览阶段-无推荐</td>
<td>-.904</td>
<td>0.171</td>
<td>-1.24</td>
</tr>
<tr>
<td>选择阶段-无推荐</td>
<td>.888</td>
<td>0.172</td>
<td>0.55</td>
</tr>
<tr>
<td>选择阶段-浏览阶段</td>
<td>1.791</td>
<td>0.169</td>
<td>1.46</td>
</tr>
</tbody>
</table>

注：***表示p<0.001

图2 商品推荐阶段的影响效应

中介效应。由于自变量为分类变量，故我们采用自变量为多水平分类变量的Bootstrap检验相对中介效应（陈瑞等，2013）。在SPSS里面利用Process程序的Model4完成。设定Bootstrap检验样本量为5000，置信度为95%，以无推荐组为参照组，生成两个哑变量（浏览阶段D1；选择阶段D2）。中介检验结
果发现：① 决策难度在浏览阶段（VS. 无推荐）对延迟购买的作用中，中介效应显著（indirect effect=-0.52，LLCI=-0.8239，ULCI=-0.2103），哑变量 D1（浏览阶段 VS. 无推荐）对因变量的直接效应显著（direct effect=-0.3835，LLCI=-0.5741，ULCI=-0.1928），说明决策难度在浏览阶段（VS. 无推荐）对延迟购买的作用中充当部分中介作用；② 决策难度在选择阶段（VS. 无推荐）对延迟购买的作用中，中介效应显著（indirect effect=0.8021，LLCI=0.5062，ULCI=1.1101），哑变量 D2（选择阶段 VS. 无推荐）对因变量的直接效应不显著（P=0.41>0.05），说明决策难度在选择阶段（VS. 无推荐）对延迟购买的作用中充当完全中介作用。

中介过程路径如图3所示。至此，H_{3a}得到了支持。

![图3 多水平分类变量中介效应检验路径图](image)

**注:** 图中斜体加粗表示浏览阶段相对于无推荐的相对中介效应路径系数。
常规字体表示选择阶段相对于无推荐的相对中介效应路径图。
自变量到因变量的路径中，括号内表示未控制中介变量时的直接效应。

***表示 p<0.001；** 表示 p<0.01

3.3 结果讨论

实验一的结果初步证明，相比于无推荐，浏览阶段推荐能够显著地降低延迟购买意愿，而选择阶段则恰恰相反，并且不同阶段商品推荐的作用都受到了决策难度的中介作用，首次证实了商品推荐和延迟购买之间的关系，拓展了前人的研究。但由于实验一是以线上问卷形式进行且样本有限，其内部效度有待进一步验证；且由于实验只有一种产品作为刺激物，推荐阶段的作用容易受到产品的限制，故需要更换产品再次验证，以保证研究的普适性。同时，由于实验一中产品详情是以真实网页截图的形式呈现，与网购情境相差较大且未控制好潜在的复合变量（如价格、评论总数等），实验结果可能受到影响。此外，前文所述的产品类别的调节作用及其作用机制也有待进一步研究。

4 实验二

实验二在实验一的基础上进一步探究了产品类型对推荐时机效用的调节作用及决策难度的中介机制，采用 3（推荐阶段：无推荐 VS. 浏览阶段 VS. 选择阶段）×2（产品类型：搜索品 VS. 体验品）的组间设计。我们邀请本科生到实验室参与实验，模拟消费者网购决策，严格控制实验的内部有效性。此外，实验二利用有中介的调节模型检验决策难度是否会中介产品类型的调节效应。
### 4.1 预实验及操纵检验

根据以往学者对搜索品和体验品的定义和分类（Nelson, 1970&1974; Mudambi et al., 2010），我们分别选择了移动硬盘和电动牙刷作为搜索品和体验品的代表。这两种产品的决策情境为大学生非常熟悉的且在男女之间无明显偏好。由于学界对于 Nelson（1974）表格外产品的搜索性和体验性通常具有不同意见（Huang et al., 2009）。因此，为了确保本实验的关键变量操纵成功，在正式实验前我们首先开展了预实验并进行了操纵检验（Manipulation Checks）。

在借鉴前人研究的基础之上，我们设计了一个多维搜索-体验性量表（1=非常不同意，7=非常同意）来测量被试对移动硬盘和电动牙刷的搜索/体验属性感知（见表 2）。

此外，我们还检验了被试对两类商品的产品熟悉度、实用性感知，以确保被试在这些维度的感知上不具有显著差异。最后，我们向被试展示 12 个电动牙刷和 12 个移动硬盘（产品类型顺序随机，按照正式实验中商品推荐的形式列出：为避免两类型产品价格差异所带来的影响，我们在某购物平台利用价格筛选出价格相近的产品，并对其价格进行相应的调整，同时隐去产品品牌），请被试回答购买每个商品的可能性。可能性得分最高的 4 款商品作为正式实验中的推荐商品。

共 66 名被试参与了预实验，其中男生占比 43.9%，93.9%的被试为 18-25 岁，基本与正式实验情况一致。经计算，电动牙刷和移动硬盘量表的克朗巴哈系数都达到 0.7 以上，说明量表信度较高。量表中移动硬盘（A）/电动牙刷（B）各个语句的描述、平均得分及相应的配对样本 t 检验结果如表 2 所示。

从检验结果来看，被试认为电动牙刷的商品属性更加偏向体验性，移动硬盘的属性更加偏向搜索性，两者的差异显著。同时，被试对于两种产品的熟悉度都高于 4 分且无显著差异，说明被试对两种产品具有相当的熟悉度。两者在实用性上也无明显差异。说明关键变量操纵成功。

<table>
<thead>
<tr>
<th>量表语句</th>
<th>来源</th>
<th>均值 (Mean) (A)</th>
<th>均值 (Mean) (B)</th>
<th>配对样本 t 检验 (Paired T-test)</th>
<th>A-B</th>
<th>标准差 (Standard Deviation)</th>
<th>t 值 (t)</th>
<th>P 值 (P)</th>
</tr>
</thead>
<tbody>
<tr>
<td>在购买之前，我能通过网上的产品描述很容易地判断该产品的性能和质量</td>
<td>Nelson, 1970&amp;1974</td>
<td>4.76</td>
<td>4.38</td>
<td>0.38</td>
<td>1.37</td>
<td>2.25</td>
<td>0.028</td>
<td></td>
</tr>
<tr>
<td>只有在真正接触、购买、使用该产品之后，消费者才能判断其质量好坏</td>
<td></td>
<td>4.80</td>
<td>5.73</td>
<td>(0.92)</td>
<td>1.11</td>
<td>(6.74)</td>
<td>&lt;0.001</td>
<td></td>
</tr>
<tr>
<td>判断该产品的性能时，有客观明确的标准</td>
<td>Lee, 2011</td>
<td>5.00</td>
<td>4.21</td>
<td>0.79</td>
<td>1.45</td>
<td>4.41</td>
<td>&lt;0.001</td>
<td></td>
</tr>
<tr>
<td>消费者才能判断其质量好坏</td>
<td></td>
<td>3.86</td>
<td>4.73</td>
<td>(0.86)</td>
<td>1.59</td>
<td>(4.42)</td>
<td>&lt;0.001</td>
<td></td>
</tr>
<tr>
<td>网购该产品时，我评估时间会较长，因为产品质量较难判断</td>
<td>Huang, 2009</td>
<td>4.59</td>
<td>5.20</td>
<td>(0.61)</td>
<td>1.36</td>
<td>(3.63)</td>
<td>0.001</td>
<td></td>
</tr>
<tr>
<td>我非常需要评论中其他消费者的体验，因为这样才能很好地评估该产品的质量</td>
<td></td>
<td>5.05</td>
<td>5.45</td>
<td>(0.41)</td>
<td>0.91</td>
<td>(3.65)</td>
<td>0.001</td>
<td></td>
</tr>
</tbody>
</table>

控制变量：
- 实用性
- 熟悉度

<table>
<thead>
<tr>
<th></th>
<th>(A)</th>
<th>(B)</th>
<th>A-B</th>
<th>标准差</th>
<th>t 值</th>
<th>P 值</th>
</tr>
</thead>
<tbody>
<tr>
<td>实用性</td>
<td>5.48</td>
<td>5.15</td>
<td>0.33</td>
<td>1.65</td>
<td>1.64</td>
<td>&gt;0.1</td>
</tr>
<tr>
<td>熟悉度</td>
<td>4.74</td>
<td>4.36</td>
<td>0.38</td>
<td>1.85</td>
<td>1.67</td>
<td>&gt;0.1</td>
</tr>
</tbody>
</table>
4.2 实验设计与流程

与实验一相比，实验二做出了如下改变。

第一，为弥补实验一内部效度的不足，实验二召集被试到实验室进行实验。本次实验邀请204名北京某高校在校学生到实验室使用电脑参与实验，正式实验采用3（推荐阶段：无推荐 VS. 浏览阶段 VS. 选择阶段）×2（产品类型：搜索品 VS. 体验品）的组间设计。参与的所有被试都将得到一定的基础奖励（零食一份）。除基础奖励外，所有的被试在实验之初即被告知实验完毕后会立即进行抽奖，中奖者将得到在其在实验中选中的电动牙刷或移动硬盘，以保证被试根据自己的真实偏好来做出购买决策。本次实验共送出2个移动硬盘和2支电动牙刷。剔除无效被试后（即完成时间过短、未通过实验逻辑检验），得到187份数据（男性占42%），有效率91.4%。

实验当天，这些有效被试事先被随机分配成6组：搜索品—无推荐（N=33）、搜索品—浏览阶段（N=31）、搜索品—选择阶段（N=31）、体验品—无推荐（N=30）、体验品—浏览阶段（N=29）、体验品—选择阶段（N=32）。每个被试前面均有一台计算机，用来阅读情境、模拟网购两阶段决策并回答相关测试问题。

第二，为防止实验一中商品详情采取真实截图对实验结果的干扰，实验二中商品详情采取标准化的处理方式，即所有商品详情经过2位专家编码，以更好地控制潜在的复合变量。

经过专家编码的商品详情包括基本属性和产品评价两个板块。基本属性上，电动牙刷和移动硬盘的属性数量不存在差异，均包含两个最重要的属性和三个次要的属性（通过预实验结果和专家共同确定）；产品评价上，评论总数无显著差异，而具体的产品评论则全部来自于真实电商平台。这些评论标准化后，包含同样的维度，仅表述方式和产品好坏不同。此外，所有商品的品牌经过隐去处理。以移动硬盘为例，具体实验情况如图4-1，4-2，4-3所示（电动牙刷见附录），被试若点击蓝色的商品详情字符即可查看商品详情信息。

第三，增加了操控检验问题。测试最后增加搜索品和体验品的操纵检验。除上述区别外，实验二的设计与流程与实验一完全相同。因此，与实验一相同，有推荐的被试在相应阶段被告知，页面最下方有部分系统根据其偏好选择为其推荐的产品，其也可选择。具体如图4-4。

![图4-1 浏览阶段挑选产品](image1)
![图4-2 点开商品详情后](image2)
4.3 实验结果

4.3.1 信度与操纵检验

延迟购买意愿量表三个测项（Cronbach’s α=0.702）和决策难度三个测项（Cronbach’s α=0.732）均表现出良好的测量信度。

作为操控检验，我们在实验最后告知被试搜索品和体验品的定义后，要求被试回答了所购商品属于具体哪类商品。在移动硬盘组，93.7%的被试回答该商品为搜索品；电动牙刷组，96.7%的被试回答所购商品为体验品，说明操纵检验成功（$\chi^2=148.31$, df=1, $p<0.001$）。

4.3.2 假设检验

方差分析结果显示（见表3），推荐时机的主效应显著[F(2, 180) =30.943, $p<0.001$]，表明不同决策阶段的商品推荐对延迟购买意愿具有显著影响，且多重比较发现，浏览阶段进行商品推荐能显著降低延迟购买意愿[M 浏览阶段-无推荐 = -0.439, $p=0.001$]，选择阶段推荐显著提高延迟购买意愿[M 选择阶段-无推荐=0.540, $p<0.001$]，H1再次得到验证。产品类型的主效应不显著[F(1, 180) =3.84, $p>0.05$]，说明产品本身对延迟购买意愿无显著影响，但产品类型和推荐时机的交互作用显著[F(2, 180) =22.726, $p<0.001$]，说明不同决策阶段的商品推荐对延迟购买的作用受到产品类型影响（见图5），支持H2。

<table>
<thead>
<tr>
<th>变差来源</th>
<th>第三类平方和</th>
<th>自由度</th>
<th>均方</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>截距</td>
<td>3338.219</td>
<td>1</td>
<td>3338.219</td>
<td>6964.282</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>推荐阶段</td>
<td>29.664</td>
<td>2</td>
<td>14.832</td>
<td>30.943</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>产品类型</td>
<td>1.841</td>
<td>1</td>
<td>1.841</td>
<td>3.841</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>推荐阶段 * 产品类型</td>
<td>21.787</td>
<td>2</td>
<td>10.893</td>
<td>22.726</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>误差</td>
<td>86.28</td>
<td>180</td>
<td>0.479</td>
<td></td>
<td></td>
</tr>
<tr>
<td>总计</td>
<td>3503.667</td>
<td>186</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>校正的总计</td>
<td>139.79</td>
<td>185</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

注：$R^2=0.38$，调整后的 $R^2=0.366$
商品推荐阶段和产品类型对延迟购买意愿影响效应

简单效应分析（见表4）表明，不同决策阶段的商品推荐能使体验品的延迟购买发生显著变化（F(2, 180) = 52.941, P<0.001），但搜索品在商品推荐的影响下延迟购买无显著变化（P>0.05）。就体验品内具体成对比较来看，浏览阶段能显著降低延迟购买意愿（M 浏览阶段-无推荐 = -0.852, P<0.001），选择阶段能显著提升延迟购买意愿（M 选择阶段-无推荐=0.971, P<0.001），H_a和H_b得到支持。

表4 推荐阶段简单效应检验结果

<table>
<thead>
<tr>
<th>产品类型</th>
<th>F检验</th>
<th>多重比较</th>
<th>置信区间(95%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F(2,180)</td>
<td>P</td>
<td>推荐阶段</td>
</tr>
<tr>
<td>搜索品</td>
<td>0.32</td>
<td>0.726</td>
<td>浏览阶段-无推荐</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>选择阶段-无推荐</td>
</tr>
<tr>
<td>体验品</td>
<td>52.941</td>
<td>&lt;0.001</td>
<td>浏览阶段-无推荐</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>选择阶段-无推荐</td>
</tr>
</tbody>
</table>

注：***表示在p<0.001

为了进一步检验决策难度是否会介产品类型的调节效应，我们采用有中介的调节变量（Mediated Moderator）检验模型（陈瑞等, 2014）。为便于理解，我们分两个阶段分别检验决策难度在产品类型对商品推荐影响的调节作用中的中介效应。

浏览阶段。首先，建立以延迟购买意愿为因变量，以有无推荐、产品类型以及两者交互项为自变量的回归模型一，有无推荐与产品类型的交互效应显著（β=-0.796, P<0.01）。之后，构建以决策难度为因变量，有无推荐、产品类型以及两者交互项为自变量的回归模型二，交互项同样显著（β=-0.680,
进而建立以延迟购买意愿为因变量，有无推荐、产品类型、有无推荐与产品类型交互项、决策难度为自变量的回归模型三，决策难度的回归系数显著（β = 0.812，P < 0.001），有无推荐和产品类型交互项回归系数不显著（β = -0.244，P > 0.05）。以上三步说明：浏览阶段，商品推荐对消费者延迟购买意愿影响中产品类型的调节效应受到了决策难度的完全中介（见表 5）。中介作用路径如图 6-1 所示。

表 5 浏览阶段决策难度中介作用检验 (N=123)

<table>
<thead>
<tr>
<th>变量</th>
<th>模型 1 延迟购买意愿</th>
<th>模型 2 决策难度</th>
<th>模型 3 延迟购买意愿</th>
</tr>
</thead>
<tbody>
<tr>
<td>有无推荐（有）</td>
<td>-0.056</td>
<td>0.132</td>
<td>-0.163</td>
</tr>
<tr>
<td>产品类型（体验品）</td>
<td>0.169</td>
<td>0.071</td>
<td>0.111</td>
</tr>
<tr>
<td>有无推荐×产品类型</td>
<td>0.796**</td>
<td>-0.680**</td>
<td>-0.244</td>
</tr>
<tr>
<td>决策难度</td>
<td>-3.192</td>
<td>-2.665</td>
<td>-1.699</td>
</tr>
</tbody>
</table>

注：* p < 0.05, ** p < 0.01, *** p < 0.001

图 6-1 浏览阶段

图 6-2 选择阶段

图 6 不同决策阶段决策难度对调节效应中介作用路径分析图

选择阶段。同理，按照浏览阶段决策难度中介检验的步骤做选择阶段决策难度中介检验。结果见表 6。由结果可知，选择阶段，商品推荐对消费者延迟购买意愿影响中产品类型的调节效应受到了决策难度的完全中介。中介作用路径如图 6-2 所示。由于若中介效应显著，逐步法依次检验中介比 Bootstrap 方法更具效力、第一类错误更低（温忠麟等，2014），故本文不再进行 Bootstrap 检验。至此，H3a 和 H3b 得到支持。

表 6 选择阶段决策难度中介作用检验 (N=126)

<table>
<thead>
<tr>
<th>变量</th>
<th>模型 1 延迟购买意愿</th>
<th>模型 2 决策难度</th>
<th>模型 3 延迟购买意愿</th>
</tr>
</thead>
<tbody>
<tr>
<td>有无推荐（有）</td>
<td>0.084</td>
<td>0.218</td>
<td>-0.089</td>
</tr>
<tr>
<td>产品类型（体验品）</td>
<td>0.169</td>
<td>0.071</td>
<td>0.113</td>
</tr>
<tr>
<td>有无推荐×产品类型</td>
<td>0.887***</td>
<td>0.817**</td>
<td>0.238</td>
</tr>
<tr>
<td>决策难度</td>
<td>3.707</td>
<td>3.160</td>
<td>1.857</td>
</tr>
</tbody>
</table>

注：* p < 0.05, ** p < 0.01, *** p < 0.001
4.4 结果与讨论

研究二探讨了推荐阶段对消费者延迟购买影响的边界条件——产品类型并再次验证了决策难度的中介机制。对于体验品，浏览阶段推荐能降低延迟购买意愿，选择阶段推荐能提升延迟购买意愿，再一次验证了前面实验的结论，提升了实验的外部效度。而对于搜索品，不同阶段的商品推荐不能对延迟购买意愿有显著影响。实验再次验证了决策难度作为中介机制的合理性。

5 结果与讨论

5.1 研究结论和理论贡献

本研究以两阶段决策为视角并基于选择过载理论，通过两个递进实验深入探讨了商品推荐对消费者延迟购买的影响及其作用机制。实验一的结果发现，相比于无推荐，浏览阶段的商品推荐能显著降低延迟购买意愿、加速决策，而选择阶段的商品推荐则显著提升延迟购买意愿。同时，决策难度在不同推荐阶段对延迟购买的影响中起到中介作用，即浏览阶段的商品推荐能降低决策难度进而加速决策，而选择阶段则相反增大了决策难度进而导致延迟购买意愿的提升。实验二的结果发现产品类型能调节不同阶段商品推荐对延迟购买意愿的影响。当消费者购买体验品时，实验一中不同决策阶段商品推荐对延迟购买意愿影响的作用存在；而对于搜索品，商品推荐对延迟购买意愿的影响似乎“失灵”了。利用有中介的调节作用模型检验发现，决策难度的确在产品类型的调节影响中发挥了中介作用，进一步证明了决策难度作为中介变量的合理性。

上述研究结论对于商品推荐对消费者网购行为这一研究领域具有重要的理论意义。以往的研究较多关注商品推荐的积极方面，如加速决策（Häubl et al., 2000）、改善顾客购物体验、提高忠诚度、增加交叉销售的机会（Srinivasan et al., 2002；Pathak et al., 2010；孙鲁平等，2016）等，而较少关注商品推荐的消极方面。本研究从两阶段决策的视角探讨不同决策阶段时，消费者面临商品推荐可能出现的延迟购买行为和心理机制，发现了决策阶段和产品类型与延迟购买行为的关系。本研究的理论创新之处体现在以下3点。

首先，本文以两阶段决策的视角，从产品类型调节机制的研究扩展了推荐时机对消费者决策影响的研究。商品推荐的研究少有关注推荐中的时机问题（Ho et al., 2011; Huang et al., 2018）。事实上，人机交互研究中，时间或许是被研究的最少的元素（Zhang et al., 2002），但实际上掌握类似于购买决策阶段这样的情境因素的影响是商品推荐成功的重要因素，因为消费者的偏好是难以预测的、且依赖情境的（Salonen et al., 2016）。Ho等（2011）基于消费者搜寻理论，利用动态贝叶斯模型推导并利用实验证明了时机和个性化对推荐系统效果的影响，是推荐时机领域最著名的文章，但该研究的局限性在于仅研究了书籍和音乐这两个体验品，这类产品的信息处理模式类似，在试用或使用前难以判断产品质量的优劣（Nelson, 1970&1974; Mudambi et al., 2010）。实际网购情况下，消费者会购买多种类型的产品，商品推荐的作用有所不同。本研究将商品类型分为搜索品和体验品，探讨了不同产品类型对商品推荐时机的调节作用。
其次，本研究首次探究了商品推荐和延迟购买之间的关系。事实上，大多数消费者决策的研究忽略了真实情境中消费者放弃选择的情况，得出的结论是具有偏差的（Dhar and Simonson, 2003）。而特别是在产品繁多、信息负载过大的今天，消费者网购决策时延迟购买频繁发生（Sohn and Moritz, 2017；黄敏学等，2019；Mourali et al., 2018）。因此，考虑延迟购买行为的情境与真实决策情况更为相符。事与愿违的是，在商品推荐的研究中，据我们所知，尚未有文献研究商品推荐对延迟购买意愿的影响，因此，我们的研究具有一定的创新性且与真实情境更为相符。

最后，前人关于商品推荐的研究多停留在推荐的直接行为结果，如浏览和选择（Ho et al., 2011），而本研究则重点研究了消费者在不同决策阶段面临商品推荐的心理机制，即所感受到的决策难度。通过对决策难度中介机制的验证，本研究扩展了商品推荐的感知研究，为商品推荐的优化方案提供了潜在的指导意见，具有一定的创新性。

5.2 管理启示

在本研究尤其实验二中，为保证被试真实模拟网购行为，我们邀请被试到实验室使用电脑参与实验，被试的购物过程与真实情境非常相符。因此，我们得出的上述结论非常具有管理启示，对于电商企业改善推荐效果进而帮助消费者决策、提升平台利润具有一定的意义。

首先，本研究发现，浏览阶段的推荐能降低延迟购买意愿，选择阶段则相反。因此对于电商企业来说，在消费者输入关键字开始浏览产品之时，应当提供适时的商品推荐以减少消费者浏览阶段面对大量相似产品时的信息过载，加速决策。例如，可以在消费者搜索关键字开始浏览后以弹出框的形式在电脑或手机屏幕上出现相似的产品，以此方式引导消费者，提高消费者搜索效率，减少消费者浏览阶段的认知和搜索成本，加速决策，提高平台利润。但当消费者进入购物车进行挑选时，最好不要进行其它类似且大量商品的推荐，因为此时，消费者需要全方位地评估且已经有一定的偏好，再进行商品推荐消费者难以寻找理由支撑自己的选择，进而导致延迟购买行为、降低平台利润。

其次，不同阶段商品推荐的不同效果是决策难度造成的，在浏览阶段面对推荐决策难度降低，在选择阶段则提升了决策难度。这意味着，电商平台通过合理的设计是可以降低决策难度让推荐帮助决策的效果达到更好的。例如，在浏览阶段，商品推荐的呈现形式可以为“销量较高的还有”，进一步降低消费者的延迟购买；选择阶段，商品推荐可以是支持消费者购物车中的某一个决策，降低决策难度，例如根据消费者购物过程停留时间预测其最有可能购买的商品，进而在购物车界面显示该商品的推荐。通过支持其决策，让消费者的购买更具理由的推荐形式降低其延迟购买意愿。

最后，可以看出商品的搜索性或体验性对于不同阶段商品推荐的影响具有调节作用。具体来说，电商平台可以在搜索阶段强调产品的体验性，让消费者更加依赖商品推荐，使商品推荐帮助决策的作用更大。例如浏览阶段搜索品的商品展示不要将具体的属性在商品简介中就告知消费者，而在选择阶段，平台可以提供属性比对工具将体验品“搜索化”，降低由多个类似商品推荐所引起的决策难度提升。
5.3 研究不足与展望

本研究主要探讨了不同阶段的商品推荐对延迟购买的影响及其作用机制。本文发现决策难度在其中起着重要的中介作用。但值得注意的是，浏览阶段商品推荐对消费者延迟购买意愿降低的影响中，决策难度只起到了部分中介的作用，说明这其中还可能存在其它中介，如偏好建立（Preference Construction）视角（Gediminas et al., 2013）、决策自信（Haynes, 2009）等。例如在未来的研究中，可以探究偏好建立作为浏览阶段潜在的中介变量。同时，本研究未对决策难度或商品的搜索/体验属性进行操纵，中介和调节机制有待未来的研究进一步验证。此外，尽管我们通过两个递进实验验证了研究假设并通过实验室实验最大程度上地模拟了真实网购行为，但两个研究均采用学生样本，模拟行为始终与真实行为存在差异，因此未来的研究中可以与电商平台合作，做实地实验（Field Experiment）进一步验证假设，保证研究的外部有效性。

6. 致谢

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avoidance result from reason and emotion. *Psychological Bulletin*. 129(1), 139-166.


on consumers’ online choices. *Journal of Retailing*. 80(2), 159-169.


附录

体验品展示界面：

商品展示界面

<table>
<thead>
<tr>
<th>商品属性</th>
<th>价格</th>
<th>评价</th>
</tr>
</thead>
<tbody>
<tr>
<td>颜色</td>
<td>白色、黑色</td>
<td>适中人群</td>
</tr>
<tr>
<td>电池</td>
<td>1800mAh</td>
<td>清洁、护龈</td>
</tr>
<tr>
<td>保修</td>
<td>2年</td>
<td>启动方式</td>
</tr>
<tr>
<td>工作类型</td>
<td>旋转</td>
<td>价格</td>
</tr>
</tbody>
</table>

总评：设计较一般，外观还是挺好卖的。功能偏中，噪音稍高。使用感一般，使用一段时间后，清洁效果一般。

顾客评价：外形不错，刷毛干净，刷毛柔软。旋转声音大，用了两周后感觉刷毛有变短，但是刷毛的软硬比一般，刷毛变短不明显，用后刷毛变硬，整体一般。
Entrepreneurial Learning, Opportunity Ability and Innovation of Business Model in New Ventures

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Abstract

Business model and entrepreneurial learning are powerful weapons for new enterprises in the fierce market competition. Following the market changes and business model innovation are sufficient conditions for the growth of new enterprises. Scholars actively carry out research on the relationship between entrepreneurial learning and business model innovation from multiple angles, but ignore the role path between entrepreneurial learning and new business model innovation. After field research, it is found that the grasp and realization of market opportunities have a key impact on the new business model innovation. Based on the theory of entrepreneurial learning, entrepreneurial opportunity theory and business model theory, this paper starts with the opportunity recognition ability and opportunity utilization ability of entrepreneurs, and builds a new enterprise entrepreneurship learning, opportunity ability and business model innovation relationship model, and explores entrepreneurs opportunities. The intermediary role of competence between entrepreneurial learning and business model innovation. The results show that: (1) entrepreneurial learning has a significant positive impact on opportunity recognition ability and opportunity
utilization ability; (2) both opportunity recognition ability and opportunity utilization ability have a significant positive impact on new business model innovation; (3) Both opportunity recognition and opportunity utilization capabilities play a mediating role in entrepreneurial learning and new business model innovation.

*Keywords*: New Enterprise; Entrepreneurial Learning; Opportunity Ability; Business Model Innovation

创业学习、机会能力与新企业商业模式创新

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摘要

商业模式与创业学习是新企业在激烈的市场竞争中的有力武器，跟随市场竞争变化进行商业模式创新是新企业成长的充分条件。学者们积极地从多个角度展开创业学习对商业模式创新关系的研究，却忽略了创业学习与新企业商业模式创新之间的作用路径。经过实地调研发现，对于市场机会的把握与变现对新企业进行商业模式创新有着关键影响。本文以创业学习理论、创业机会理论以及商业模式理论为理论基础，从创业者的机会识别能力与机会利用能力着手，构建新企业创业学习、机会能力与商业模式创新的关系模型，探究创业者机会能力在创业学习和商业模式创新之间的中介作用。研究结果表明：（1）创业学习对机会识别能力和机会利用能力有显著的正向影响；（2）机会识别能力与机会利用能力都对新企业商业模式创新有显著的正向影响；（3）机会识别能力与机会利用能力都在创业学习和新企业商业模式创新中起中介作用。

*关键词*: 新企业；创业学习；机会能力；商业模式创新
1. 引言

参与市场竞争的企业都会明确或隐含地采用商业模式来描述其所使用的创造价值、传递价值以及获取利润的商业设计或运营架构（Teece，2010），来自各个行业中的企业员工都认可“商业模式创新是企业获得成功的关键驱动因素”这一观点（Sosna，2010），对于资源匮乏的新企业而言尤其如此，商业模式创新能够为企业提供生存契机，是影响新企业生存的重要因素（Zott 和 Amit，2007）。虽然新企业与成熟企业相比在自身资源储备、获取资源能力、社会网络等方面都存在先天弱势，但是规模小的特征使新企业没有组织惯性的束缚，反而有助于新企业进行小成本试错、快速迭代的学习。

在本文进行的调研过程中，被访谈的大多数创业者都认可创业是一个不断迭代的过程，创业者以及创业团队都是在不断学习的，他们提及到的学习方式包括模仿、复盘等，即通过观察其他企业的行为表现来反思自身创业过程中存在的问题并找出适合自身企业发展的方法，这是通过创业学习获取知识的过程（Cope，2003；Holcomb 等，2009；Crick，2011）。然而，事实上并不是所有在创业过程中进行了创业学习的新企业都能够成功进行商业模式创新或使商业模式创新的效用最大化。创业学习对于创业者而言更多的是积累经验，获得新知识的过程，创业者需要将通过创业学习所获得的经验，知识转化成自身以及团队的能力，并通过创业能力进行更有效的商业模式创新（张红和葛宝山，2016）。通过梳理相关文献发现，创业学习作为驱动商业模式创新的重要前因因素，其两者之间的关系及创业学习的作用机理越来越成为学术界关注的热点。但学者们并没有就学习行为对商业模式创新的作用机制做出清晰的解释和实证验证。

对于创业者而言，创业学习能够帮助创业者提高机会识别与开发以及获取资源两方面的能力，创业者通过经验学习可以提高机会警觉性，而较强的机会能力可以帮助企业进行资源搜集，也能够提升创业者的决策能力（Rasmussen，2011）。创业者的决策能力在新企业成长过程中的重要性也得到了更多关注。

本文以新企业创业者为研究对象，借鉴创业学习、创业能力和商业模式理论，探讨创业学习与商业模式创新之间的作用路径，以及创业者的机会能力在创业学习和新企业商业模式创新之间的中介效应。

2. 理论分析与研究假设

2.1 理论分析

2.1.1 创业学习

小规模、新创组织学习理论的相关研究者以及文献逐年见长，创业学习表明创业领域代表了一个研究管理学习的独特背景（Cope，2003）、Deakins 和 Freel（1998）通过案例研究指出，中小企业面临的企业环境更加复杂，并且其面临动态环境的反应力有限，但是创业者通过学习过程能够制定更好的战略以及决策。

从社会学视角来看，创业学习是情境学习过程的产物，创业者对创业机会的识别、评价与有效利用都受到创业学习的直接影响。同时，不同的因素也影响着创业学习过程，比如先验知识和启发式方法引导创业者找到信息线索并采取行动，产生新的知识，企业家通过这些知识来识别和利用机会（Holcomb 等，2009；
创业学习理论及术语的运用多来自于组织学习理论，但是由于新企业的学习主体是创业者，所以创业学习理论的研究层面通常分为个体层面以及组织层面。从组织层面的研究视角来看，创业学习已成为战略更新的有效途径（Lumpkin 和 Lichtenstein，2005）。也有学者指出创业学习可以加强企业识别机会的能力并帮助企业发展有效追求新事业的能力（Cope，2011；谢雅萍和黄美娇，2014）。这些学者认为创业学习的结果变量通常为提高组织的机会识别与开发能力从而进一步提升企业绩效，实现创业企业的生存与持续性成长。从个体层面的研究视角来看，针对创业者的研究也已成为探索创业学习机制的独特情境。创业领域的研究最初集中对创业者特质理论的探讨上，学者们认为创业者是新企业的核心，是学习的主体以及决策的关键（蔡莉，2012）。Cope（2003）通过案例研究表示创业学习是一个自我反思的探索式批判过程，在此基础上，他通过分析创业者的经验，发展了一种基于社会学习和建构主义视角的创业学习概念，并认为创业学习意味着创业者要学习认识并在机会上行动，并通过社交互动发起，组织和管理企业（Cope，2005）。本研究沿用 Man 等（2012）的观点，即创业者是创业学习的主体，是新企业发展过程的关键。所以，本研究将从个体角度探索创业学习对于商业模式创新的作用机制。

2.1.2 机会能力

创业的本质在于对各种机会的发现和利用（刘晓敏，2017），机会能力通常是学者们从机会视角出发所界定的创业能力。具体而言，就是创业者通过不同手段识别与开发市场机会的能力即机会能力（Man 和 Lau，2002）。Chandler 和 Hanks（1994）指出对于机会的识别与开发能力是优秀创业者的必备能力。

机会的识别与开发过程是创业研究的关键问题（McMullen 和 Shepherd，2006）。学者们从创业者特质视角、机会视角、管理视角、关系视角等对创业能力相关研究做了研究分析。创业机会不仅会正面影响创业企业绩效，同时创业绩效与创业机会之间存在相互作用关系，Chandler 和 Hanks（1992）验证了创业绩效的强大影响力会使创业者更好地识别可行的商业机会，为潜在的创业者提供帮助他们识别创业机会的工具。张红和葛宝山（2014）就创业机会的内涵及界限做了综述，并对创业机会的主观性与客观性、创业机会与利润机会是否存在概念
重叠的问题做了解释。在国外学者的相关研究中，基于机会视角的创业能力研究把创业能力定义为创业者发现机会、识别机会与利用机会的能力（Shane和Venkataraman, 2000; Nicolaou等, 2009; Zahra等, 2011）。其中，机会识别能力主要指创业者通过学习获得对企业环境的探索、搜集以及分析能力，从而实现对机会的识别能力。机会评估能力主要指创业者对于所发现的机会进行评估，准确评估所掌握的机会的潜在价值的能力（尹苗苗和蔡莉，2012）。机会开发能力是指在识别和评估发现的能力之后，能够开发适应新机会的新产品或进入新机会匹配的新市场的能力，机会的开发能力与创业企业绩效具有较为直接的关系。也有研究认为，机会的评估能力是机会识别能力的一个维度，也就是说机会识别能力包括对机会的搜索与评价（Shane和Venkataraman, 2000），体现了创业者对于创业企业内外部环境中对机会和威胁的感知能力（汤淑琴等，2014）。

机会能力的研究层次同样分为个体层面的研究和组织层面的研究。通过对国内外学者的相关研究进行整合对比发现，从机会视角出发对创业能力进行的研究观点基本趋于一致。机会能力主要表现在个体层面，是创业者自身发出或培养的一种创业能力，比如机会的识别能力，是创业者通过以往经验以及不断试错或向他人学习而形成的一种对于机会的掌握能力。在新企业的经营活动中，创业者作为新企业学习的主体，同时也是培养机会能力的主体，机会能力的识别与开发是个体通过向他人学习或自身不断试错而形成的隐性知识。

2.1.3 商业模式创新


2.2 研究假设

2.2.1 创业学习与机会能力的关系

创业学习是情境学习过程的产物，直接影响创业机会的有效识别、评价与利
并且创业学习受多种不同因素的影响，比如先验知识和启发式方法引导创业者找到信息线索并采取行动，产生新的知识，企业家通过这些知识来识别和利用机会（Holcomb等，2009；严杰等，2018）。有国外学者研究显示，先前经验和知识以及创业者的认知特点决定了有些人能发现别人发现不了的机会（Shane和Venkataraman，2000）。对于创业者而言，创业学习指的是通过创业者以往形成的知识体系，获得、综合、吸收新知识并对其进行重组形成新认知的过程（Corbett，2005），而这一过程的直接目的是培养并激发创业者对创业机会的敏感度和利用能力。创业者通过创业学习行为，有利于提高自身对于机会的识别和利用能力（Lumpkin和Lichtenstein，2005）。在复杂多变的创业环境中，想要获得对于机会的识别与利用能力，创业者更多的是依靠创业学习行为，通过经验学习或通过模仿以及向他人学习等方式重构知识体系的认知学习来提高自己对机会的识别与利用能力，并且创业者不同的学习行为也会导致不同的机会能力，经验的不同以及认知能力的不同都会导致不同水平的机会能力（Shane，2000）。余红剑等（2017）通过相关研究提出了创业学习对创业者洞察、捕获机会能力以及变革更新机会能力有重要影响的命题。张红和葛宝山（2016）通过珠海众能的纵向案例研究得出命题——在创业过程中，创业学习方式与机会识别方式之间存在着匹配关系。

Lecler和Kinghorn（2014）通过案例研究提出结论：创业者能够通过创业学习与专业学习解决新企业在成长过程中遇到的技术问题和相关组织问题，在解决好内部问题的基础上能够增加发现创业机会的几率。同时，国内学者对国内新企业进行研究也发现新企业创业者一般会通过相关的专业学习，比如为自己或团队投资继续教育，或者通过经验学习、认知学习和实践学习提升新企业的动态能力，创业者的学习行为不仅能够解决新企业技术创新与组织变革方面的问题，还能够帮助创业者提高机会识别的能力（张秀娥和赵敏慧，2017）。有学者认为，创业学习是指人们在识别和开发机会以及组织和管理新企业的过程中重构企业存在意义，是利用信心和自信心驱动学习资源利用以实现创业目标的过程（Rae和Carswell，2001）。创业学习是通过创建、组织和管理新企业来识别和利用机会的学习（Rae，2006）。因此，本文提出如下假设：

H1a：创业学习对提高创业者机会识别能力具有显著的正向影响；
H1b：创业学习对提高创业者机会利用能力具有显著的正向影响。

2.2.2 机会能力与新企业商业模式创新的关系
具备机会能力的创业者能够在发展新企业的过程中发现很多的创业机会，并会在机会窗口关闭之前将其转化为可盈利的渠道，所以机会能力越强的创业者或新企业就能够产生更多的创业活动，创业活动使新企业能够更好更快的成长，并能促使新企业尽快完善其商业模式，并在不同的创业活动之间发现更适合本企业发展的商业模式，对其进行创新。机会识别能够促进商业模式创新（Guo等，2016）。张红和葛宝山（2016）通过研究发现创业者通过主动搜寻的识别能力能够给新企业带来商业模式创新，这一结论与Gielnik等指出的机会识别能力能够直接影响产品或服务的创新的论断一致，同时多数学者也通过案例或实证研究证明了创业者的机会识别能力是新企业进行商业模式创新或转换的动因，张红的研究结论认为他们的研究验证了张敬伟和王迎军通过多案例研究得出的新企业有可能在创业者期望改变、认知改变等因素的驱动下去主动搜寻有利可图的市场机会，并在主动搜寻市场机会的基础上进行新企业的商业模式创新，他们也就此提出了机会识别会引发商业模式创新的命题。一般而言，新企业所设计的
商业模式并不能在成熟的市场中发挥作用，所以创业者需要建立相应的组织和机制来应对或开发市场尚未准备好的活动。因此，在现实世界中，创业者和管理者必须密切关注商业模式的设计，甚至要建立企业来执行在市场上尚未实现的交易（Teece, 2010）。机会利用能力作为将创业机会资本化、利润化的关键能力，也对新企业的商业模式创新起到了重要作用。从一定程度上而言，机会利用能力是对机会识别之后的补充，创业者具备机会利用能力能够将市场机会转换为新企业成长和获利的渠道，从而有助于加快机会识别能力促成的新企业的商业模式创新。因此，本文提出如下假设：

H2a：创业者机会识别能力对提高新企业商业模式创新具有显著的正向影响；
H2b：创业者机会利用能力对提高新企业商业模式创新具有显著的正向影响。

2.2.3 机会能力的中介效应
Osiyevskyy 和 Dewald（2015）采用实证研究方法分析了“先前经验（风险管理、工作经验）”如何直接或间接影响在位者对破坏性商业模式创新的行为反应”这一问题，发现先前成功的风险经验对于机会感知具有显著的正向影响，从而正向影响开发式与利用式商业模式创新行为。创业学习是创业者们在进行创业活动时的重要过程，而创业学习导致的最直接结果就是创业者机会能力的产生和培养（张秀娥和赵敏慧，2017），学习行为能够给船业带来独特的隐性知识，能够提升创业者在创业过程中对有价值的机会的感知以及通过有效管理和配置企业内外部资源成功的利用机会（蔡莉等，2014；Chandler 和 Hanks, 1994; Shane 和 Ventakaraman, 2000）。"创业学习对新企业商业模式创新的影响不是直接产生的，而是通过创业学习培养创业者的创业能力，创业者依据自身的创业能力进而促进新企业的商业模式创新，创业者的机会能力是创业学习的直接结果，而机会识别能力与机会利用能力能够促进新企业在复杂多变的市场环境下完成商业模式创新。而现在与机会能力的影响因素、机会识别的过程和机会识别的结果相结合的相关研究几乎没有，即现有研究中更多的停留在探讨因果层面，缺少将创业学习、机会识别和商业模式有机联系在一起的探讨创业过程内在机理的研究（张红和葛宝山，2016）。
而创业者对于机会的识别能力和利用能力能够帮助新企业在多变的创业环境中，更准确地识别有利于新企业发展机会，并通过合理规划企业资源，设计新企业发展的商业模式，以及在不断变化的市场环境中对其进行更新，一方面使本企业的商业模式降低交易成本，提高交易效率；另一方面，提高本企业商业模式的创新性，提高模仿的壁垒。因此，本研究提出如下假设：
H3a：机会识别能力在创业学习和新企业商业模式创新之间起中介作用；
H3b：机会利用能力在创业学习和新企业商业模式创新之间起中介作用。

图片 1 研究模型图

3. 研究设计与数据分析
3.1 研究样本与数据检验

为了保证本研究收回问卷的质量，通过研究团队成员通过对山东境内创业园区的创业者发放问卷，共收集预测试问卷 101 份，并根据反馈结果询问他们对问卷的理解程度以及修改意见并进行汇总并修改。正式调研时间从 2018 年 6 月开始，到 2018 年 10 月结束。为保证本研究收回问卷的填写质量，通过多种渠道对山东、河北、北京、江苏、广东、四川、黑龙江、天津、山西、福建等多省市创业者发放问卷，创业者所在行业涉及了制造业、批发零售业、商务服务业、科学研究和技术服务业、计算机服务和软件业等多行业，受访对象均为各行业的创业者或创业团队成员。此次调研共发放问卷 380 份，回收问卷 369 份，回收率 97.2%。剔除成立年限 8 年以上的、填写不完整的以及所有题目均选择同一选项的无效问卷 71 份，得到有效问卷 298 份，有效率为 78.4%。

3.2 变量测量


3.3 数据检验

3.3.1 共同方法方差检验

在问卷收集过程中，创业学习、机会能力以及商业模式创新的题项都由创业者主观填写，有可能会产生同源数据偏差的问题影响数据效度，本研究对原始数据进行了 Herman 单因子检验，检验结果显示，问卷所有题项未旋转时提取的第一个主成分解释了 39.914% 的变异量，小于 40% 的临界标准，研究获得的数据满足相关要求。

3.3.2 信度分析

对于调查问卷收回的数据都具有随机性的问题，应该用度量工具尽量排除随机误差从而更加准确的测量研究变量及其之间的关系。在实证测量分析中，信度（reliability）代表了一个量表的一致性或稳定性，该信度系数在项目分析中，也是检验同质性的指标之一，本研究采用的李克特 5 级打分量表，对信度高低的测量采用最多的是克隆巴赫 α（Cronbach α）系数来表示，具体结果如表 1 所示，
本研究采用的量表具有较好的内部一致性。表格1 变量的信度分析结果

<table>
<thead>
<tr>
<th>构念与维度划分</th>
<th>题项数</th>
<th>Cronbach α</th>
</tr>
</thead>
<tbody>
<tr>
<td>创业学习</td>
<td>9</td>
<td>0.892</td>
</tr>
<tr>
<td>机会识别能力</td>
<td>4</td>
<td>0.825</td>
</tr>
<tr>
<td>机会利用能力</td>
<td>4</td>
<td>0.857</td>
</tr>
<tr>
<td>商业模式创新</td>
<td>15</td>
<td>0.929</td>
</tr>
<tr>
<td>总体</td>
<td>32</td>
<td>0.950</td>
</tr>
</tbody>
</table>

3.3.3 效度分析
本研究的各变量的量表均选自权威期刊公开发表并被多次引用的成熟量表，也将选取因子分析法对整体量表以及个变量的内容效度进行检验。在进行探索性因子分析之前，首先要进行 Bartlett 和 KMO 检验，标准为KMO>0.9 是非常合适做因子分析，KMO 介于 0.8 与 0.9 之间则表示很合适做因子分析，KMO 介于 0.7 与 0.8 之间适合做因子分析，并且在这个过程中需要观察 P 值的显著性，本研究总体量表的 KMO 值为 0.935，三个变量的 KMO 值均大于 0.8，P 值均为 0.000，符合上述要求，适合做因子分析。经检验，创业学习的 9 个题项的因子载荷均大于 0.7，累计解释总方差的 66.934%，机会能力的 8 个题项根据因子载荷水平能够提取出机会识别能力以及机会利用能力两个因子，在各自对应的题项上的载荷均在 0.7 以上，并且机会能力及其两个维度的累计解释总方差均在 65%以上，商业模式创新的累计解释的总方差为 61.592%，以上说明该量表具有较好的内容效度。

4. 假设验证

4.1 相关性分析

如表 2 所示，创业学习与机会识别能力的相关系数 r=0.613，小于 0.7，说明变量之间不存在多重共线性，并且显著性 p<0.01，这说明创业学习与机会识别能力之间存在显著的正相关关系，同样，其与机会利用能力的相关系数为 0.517，且显著性 p<0.01，机会识别能力与商业模式创新的相关系数 r=0.578，小于 0.7 且 p<0.01，机会利用能力与商业模式创新的相关系数 r=0.683，p<0.01。由此可知，变量相关性的测量结果与本研究的假设相一致，至此，本研究的各个假设得到初步验证。

附注：*表示 p<0.05；**表示 p<0.01。

4.2 回归分析

4.2.1 创业学习与机会能力的回归分析
为检验创业学习对机会能力的影响机制，分别对创业学习与机会识别能力和机会利用能力进行回归分析，分析结果具体如表3所示，模型2中创业学习与商业模式创新的标准化回归系数为0.626且在0.01水平上显著（β=0.626，p<0.01），根据控制变量对机会识别能力和机会利用能力的回归系数，在创业学习与机会能力的回归分析模型中，控制变量对机会能力没有显著的影响。R²数值分别为0.376和0.257，F值为26.514和15.712，显著性p<0.01，D-W值分别为2.052和1.848，VIF最大值为1.333，说明模型不存在明显的变异方差及共线性问题，回归结果显著且具有良好的拟合优度，即创业学习对机会识别能力和机会利用能力有显著地正向影响，本研究的假设H1a和H1b得到验证。

### 表格3 创业学习与机会能力的回归分析结果

<table>
<thead>
<tr>
<th>变量</th>
<th>机会识别能力</th>
<th>机会利用能力</th>
</tr>
</thead>
<tbody>
<tr>
<td>模型</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>控制变量</td>
<td></td>
<td></td>
</tr>
<tr>
<td>性别</td>
<td>0.019</td>
<td>-0.023</td>
</tr>
<tr>
<td>年龄</td>
<td>0.013</td>
<td>-0.042</td>
</tr>
<tr>
<td>文化程度</td>
<td>0.046</td>
<td>-0.015</td>
</tr>
<tr>
<td>创业年限</td>
<td>0.076</td>
<td>0.072</td>
</tr>
<tr>
<td>公司规模</td>
<td>0.011</td>
<td>-0.046</td>
</tr>
<tr>
<td>所在行业</td>
<td>0.058</td>
<td>0.091</td>
</tr>
<tr>
<td>自变量</td>
<td></td>
<td></td>
</tr>
<tr>
<td>创业学习</td>
<td>0.626**</td>
<td>0.532**</td>
</tr>
<tr>
<td>F</td>
<td>26.514**</td>
<td>15.712**</td>
</tr>
<tr>
<td>R²</td>
<td>0.013</td>
<td>0.002</td>
</tr>
<tr>
<td>△R²</td>
<td>0.013</td>
<td>0.002</td>
</tr>
<tr>
<td>D-W</td>
<td>2.052</td>
<td>1.848</td>
</tr>
<tr>
<td>VIFmax</td>
<td>1.325</td>
<td>1.333</td>
</tr>
</tbody>
</table>

附注：*表示p<0.05；**表示p<0.01。

4.2.2 机会能力与商业模式创新回归分析

机会能力与商业模式创新的回归分析结果如表4所示，模型2与模型4中机会识别能力和机会利用能力与商业模式创新的标准化回归系数分别为0.575和0.679且在0.01水平上显著（p<0.01），根据控制变量对商业模式创新的回归系数，在机会能力和商业模式创新的回归分析模型中，控制变量对商业模式创新没有显著的影响。R²数值分别为0.345和0.480，F值为21.886和38.173，显著性p<0.01，D-W值分别为1.816和2.041，VIF最大值为1.326和1.325，说明模型不存在明显的变异方差及共线性问题，回归结果显著且具有良好的拟合优度，即机会识别能力和机会利用能力对商业模式创新有显著地正向影响，本研究的假设H2a和H2b得到验证。

### 表格4 机会能力与商业模式创新回归分析

<table>
<thead>
<tr>
<th>变量</th>
<th>商模式创新</th>
</tr>
</thead>
<tbody>
<tr>
<td>模型</td>
<td>1</td>
</tr>
<tr>
<td>控制变量</td>
<td></td>
</tr>
<tr>
<td>性别</td>
<td>-0.017</td>
</tr>
<tr>
<td>年龄</td>
<td>-0.063</td>
</tr>
</tbody>
</table>
4.2.3 机会能力的中介效应

本研究采用 Durbin-Waston 值与 VIF 最大值进行检验以排除模型的共线性问题。机会能力在创业学习与商业模式创新中的中介作用的具体分析结果如表 5 所示。与模型 2 相比较，模型 3 在引入机会识别能力变量后，创业学习对商业模式创新的系数由 0.456 降到 0.181，依然显著，这说明机会识别能力在创业学习和商业模式创新中具有部分中介效应，使得本研究的假设 H3a 得到验证。机会利用能力的中介作用的具体分析结果如模型 4 所示。与模型 2 相比较，模型 4 在引入机会利用能力变量后，创业学习对商业模式创新的系数由 0.456 降到 0.180，依然显著，这说明机会利用能力具有部分中介作用，使得本研究的假设 H3b 得到验证。

表格 5 机会识别能力与机会利用能力中介效应的回归分析结果

<table>
<thead>
<tr>
<th>变量</th>
<th>机会识别能力</th>
<th>机会利用能力</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.575**</td>
<td>0.679**</td>
</tr>
</tbody>
</table>

附注：*表示 p<0.05；**表示 p<0.01。
附注：*表示 $p<0.05$；**表示 $p<0.01$。

5 研究结论与讨论

5.1 研究结论

本研究以新企业及其创业者为研究对象，旨在探究创业学习、机会能力与商业模式创新之间的作用机制，揭示了创业学习对商业模式创新的作用机制并厘清了机会能力在创业学习和商业模式创新中的影响机理。具体研究结论如下：第一，创业者或创业团队通过向他人学习也能够提高自身企业在面临复杂多变的市场环境和稍纵即逝的市场机会时，能够掌握时局，从而创新适应市场的商业模式。第二，创业学习活动的直接结果是创业者创业能力的提高，由此增强善于利用不同的市场机会给企业提供多的发展可能性的能力。第三，在创业学习对新企业商业模式创新的影响上，机会能力是其中一个重要作用路径，创业学习的结果需要通过转换成创业者的机会能力进而才能对新企业的商业模式创新发挥作用。

5.2 理论贡献与管理启示

本研究在一定程度上丰富了创业学习理论，引入机会能力变量更深入的解释了创业学习对新企业商业模式创新的作用机制。在一定程度上丰富了商业模式创新理论，探讨了机会能力在创业学习和商业模式创新中的中介效应，为创业学习对新企业商业模式创新的关系研究提供了新思路，完善了创业学习与商业模式创新的关系模型。同时，对创业机会理论做了一定的补充。通过探究创业学习、机会能力和新企业商业模式创新之间的关系，从机会识别能力和机会利用能力的角度对创业学习对商业模式创新的影响进行了进一步的研究。

本研究通过规范的实证研究范式对创业学习和商业模式创新之间的作用路径进行了剖析，并探讨了机会能力在创业学习和商业模式创新中的作用机理，这对创业领域的管理实践具有重要的启示。第一，新企业创业者应有意识的培养自己以及创业团队的机会能力。机会识别能力能够帮助创业者比竞争对手更快的抓住市场机会，抢先一步根据市场变化情况进行对企业进行变革，并且通过培养自身及创业团队的机会利用能力，能够增加机会利润化的几率，降低新企业的发展成本。第二，新企业的创业者应该通过科学合理的方式进行商业模式创新。本研究显示创业者的创业学习以及机会识别与利用能力都能够促进新企业的商业模式创新，所以创业者应该采用科学、合理的方式促进本企业的商业模式创新。

5.3 研究局限与未来展望

5.3.1 研究局限

第一，尽管本研究的调查问卷经过专家讨论进行了翻译，并借鉴了国内学者对相关量表的引用及翻译，但因为调查问卷的形成所借鉴的量表都是由国外学者开发，而国内外的创业环境不同，并且调查问卷的填写具有很大的主观性，被调研者难免会受到自我认知及偏见的影响，数据的真实性会在一定程度上受以上两方面的影响。

第二，创业者的创业学习以及企业的商业模式创新都是一个动态发展的过程，但本研究所回收的数据属于截面数据，应用截面数据的研究范式进行研究，
只能保证在一段时间内数据的可靠性。

5.3.2 未来展望

对新企业商业模式创新的研究是近年来学术界研究的焦点，围绕商业模式创新的驱动因素及影响展开了多方位的讨论，本研究在前人研究的基础上，提出并探讨了商业模式创新形成的一种路径，但囿于各方面条件的制约，本研究还存在上述局限性，为了更好的进行新企业商业模式创新的探讨，未来的相关研究可以从以下几个方面展开：

第一，在创业研究领域，多数研究聚焦于新企业商业模式创新对新企业绩效的影响等方面的问题，却较少探究新企业商业模式创新的形成过程，对于其前因因素与商业模式创新之间作用机制的探讨还不够丰富。商业模式创新作为促进企业绩效产生的重要路径，探讨新企业如何进行商业模式创新的重要性不言而喻，多将研究角度聚焦于商业模式创新前因因素，将能够更好地解释新企业取得企业绩效的原因。

第二，在问卷设计方面，学者可通过对中国本土的创业者或创业企业进行调研，依据中国创业环境设计出适合我国创业情境的相关量表，提高研究的信效度，更有利于本土的创业管理研究。

第三，对于创业者的相关研究，今后可以尽量的扩大样本来源的覆盖面，做以新企业为样本的数据库，在调研时，进行多方位多维度的量表回收，这有助于在创业领域进行多种路径的相关变量的测量。

第四，由于新企业的成长速度一般较快，做截面数据无法保证能够较为全面的反映所测量变量的真实性，因此，在以后的研究中，可以尝试结合纵向研究，对新企业或创业者进行动态追踪或采用案例研究等研究方法丰富创业管理研究。

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The Impact of Virtual Community Experience on User Loyalty Under Precision Marketing Model

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¹ Zhongnan University of Economics and Law

Abstract

With the progress of the Internet age and the rapid development of the economy, the relationship between the market and the consumers has changed greatly. The demand for consumers is more and more unique, and their demand for products and services is more personalized. This promotes the pursuit of high accuracy in marketing and raises high efficiency and high returns at the same time. Information search is an important step for consumers to make a purchase decision, and consumers are constantly starting to pursue the efficiency and quality of decision-making. as an example of the new marketing model, the rise of virtual community breaks the obstacle between the enterprise and users, making the enterprise provide more accurate service and more effective information for the users. The cultivation of consumers' sense of community does great help to the establishment of consumer trust and satisfaction indirectly, so as to improve the consumer's attention and loyalty. This article summed up the factors affecting the loyalty of virtual community members from the scholars who did relevant research about the virtual community and customer loyalty. And then the article determines the research model with reference to previous research. The factors are divided into two aspects, which are the quality of community and members of the community awareness.

Key words: Virtual community quality; Community consciousness; Customer satisfaction;
精准营销模式下虚拟社群体验对用户忠诚度的影响

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摘要
随着互联网时代的进步和经济的飞速发展，市场与消费者之间的关系发生了重大的变化。消费者需求越来越独特，对产品和服务的要求更个性化，这促使市场营销方式不断追求高精准，在提高效率的同时获得高回报。信息搜寻是消费者做出购买决策的一个重要步骤，消费者不断开始追求决策的效率和质量。以虚拟社群为例的新型营销模式的兴起打破了企业和用户之间的障碍，使各企业更精准地服务于用户，为用户提供更多有效信息，通过提升用户在虚拟社群中的体验，培养消费者的社群意识间接影响消费者信任感和满意度的建立，从而提高消费者的专注度和忠诚度。

本文通过对学者们关于虚拟社群和用户忠诚度研究的学习和理解，总结了影响虚拟社群成员忠诚度的因素，参照前人的研究方法和思路，确定了本次研究的模型。以社群质量和成员的社群意识代表用户的虚拟社群体验，探究其对社群成员信任感、满意度及转换成本的影响，进而诠释各变量对虚拟社群成员忠诚度的综合影响。

关键词：虚拟社群体验、社群质量；社群意识；用户忠诚度
1. 引言

网络强大的通讯能力以及消费者的消费行为和习惯的不断改变使原有的市场销售理论和模式受到冲击和影响。商家、企业不断借助网络技术和信息技术实现企业营销目标，不断向销售无形化目标前进（张成勇，2016）。为了更加了解用户、用户的需求，商家开始不断尝试能够迅速锁定用户群的方法，准确把握消费者的喜好，从而不断提升产品和服务的质量和营销成果。但是随着互联网的发展，无效信息不断增多，消费者注意力资源严重稀缺，促使消费者希望快速获得有效信息做出购买决策，并且最终能够获得自己想要的产品或服务。网络技术的快速发展突破了地理和熟人网络的限制，使得有相似需求的消费者可以自由组成互助群体或者被商家邀请组成一个群体，即虚拟社群，每个社群成员都可以在社群中分享知识经验。

对企业而言，本次研究可以为领导者提供充分的依据，让企业利用相关技术收集大量有关消费者的信息，深入分析消费者行为，从而制定更加准确的营销策略，充分利用网络技术的发展进一步拉近消费者和企业之间的距离，摆脱传统的营销手段，准确定位，和消费者产生更多的互动。对消费者而言，作为互联网主要的发言者，他们不再被传统营销领域的权威所束缚和主宰。消费者对产品的需要和购买意愿更多取决于自己的判断，在产品同质化严重的时代，消费者的注意力资源严重稀缺，但是通过虚拟社群他们可以掌握更多有效的产品信息来帮助他们更好地了解产品和评价产品。本次研究也可以让消费者提升自身的品牌意识。

2. 文献综述

2.1 精准营销

营销手段会随着网络科技的变化而发展，其特质也会因互联网时代的发展而变化（沃德.汉森，1996），这一说法既奠定了精准营销的基础，又有助于理解精准营销的发展。

营销大师菲利普.科特勒（2006）在对精准营销的总结中提到企业与用户之间的沟通应该更加精确，并且能够让企业衡量沟通所产生的价值，注重营销战略和营销结果的相互检验，从战略层面去改变企业的营销方法，获得符合企业目标的利益。

在《精准营销的思想的方法》一文中，作者伍青生（2006）认为精准营销的方法应该分为三类，一是建立完整的用户资料数据库；二是利用互联网的方式进行营销；三是利用第三方渠道进行营销。

2.2 虚拟社群

2.2.1 虚拟社群的概念

社群本是社会学专有名词，是指居住在一定范围内，具有共同目标和生活习性的群体。如今社群已经不再局限于空间范围，网络的出现打破了空间的障碍，让社群虚拟化。社群存在于网络空间中而非现实世界中，在社群中的成员一般拥有相同的需求和目标，他们通过互动交流建立彼此信任的关系和默契。早在1993年学者Howard Rheinggol提出了虚拟社群的概念，后来随着时代的发展，虚拟社群的定义被不断更新，如表所示：
表 1. 虚拟社群的不同定义

<table>
<thead>
<tr>
<th>作者</th>
<th>社群定义</th>
</tr>
</thead>
<tbody>
<tr>
<td>Howard Rheinggold (1993)</td>
<td>虚拟社群是由足够多的成员集合成的社会意识, 并通过网络空间让成员彼此沟通交流所产生的集合体</td>
</tr>
<tr>
<td>Baym (1994)</td>
<td>虚拟社群是成员以不同的沟通形式沟通产生的</td>
</tr>
<tr>
<td>Komito (1998)</td>
<td>虚拟社群是不同成员互相分享话题、观点的共同空间</td>
</tr>
<tr>
<td>廖元祯 (1998)</td>
<td>虚拟社群是成员利用网络技术和电子工具进行交流分享的网络社群, 社群拥有自己的价值观和文化</td>
</tr>
<tr>
<td>Parter (2008)</td>
<td>虚拟社群是企业和用户的集合, 两者产生有价值的互动, 互动的价值可以用相关技术衡量</td>
</tr>
</tbody>
</table>

2.2.2 虚拟社群的分类

虚拟社群在当今社会有各种不同的用途, 它们随着人们的需求不断发展成不同的类型。随着电子商务模式的不断成熟，由于社群的特征不同，虚拟社群不断发展成各种类型。Hagel III and Armstrong (1997) 将社群分成兴趣型、人际关系型、幻想型和交易型四类。

表 2. 虚拟社群的分类

<table>
<thead>
<tr>
<th>类型</th>
<th>特征</th>
</tr>
</thead>
<tbody>
<tr>
<td>兴趣型</td>
<td>成员拥有共同的爱好, 在虚拟社群中交流分享彼此的心得感受</td>
</tr>
<tr>
<td>人际关系型</td>
<td>具有相似经验或生活、工作体验的人通过社群建立虚拟的网络人际关系</td>
</tr>
<tr>
<td>幻想型</td>
<td>社群提供虚拟的世界供成员进行创作，满足其对虚拟事物随意想象的需求</td>
</tr>
<tr>
<td>交易型</td>
<td>社群类似交易平台，成员可以在社群内交换商品信息，实现商品交易</td>
</tr>
</tbody>
</table>

2.3 客户忠诚度的内涵

消费者对特定的产品和服务产生了依赖性, 且在未来较长时间内不断购买该产品和服务的行为称为客户忠诚。该类用户对企业的服务产生特定的好感, 并且愿意进行消费。王新新等人 (2011) 在研究中提出, 忠诚的客户是最有价值的用户, 他们的消费会循环往复地促使更多的消费, 用户忠诚度对提升企业利润有很大的作用。Dick and Basu (1994) 在对用户忠诚分析时, 认为用户的忠诚度由低到高有五个层次, 层次的高低取决于用户对企业产品的购买意愿以及是否有不断购买的行为。影响用户忠诚度的基本因素包括以下几个: 第一, 服务质量。包括产品质量、服务水平和技术能力, 这些因素影响消费者对该品牌的直接感受; 第二, 服务效果。能够影响用户对企业所提供服务的满意度; 第三, 客户关系维持。是指企业与消费者之间的互动交流, 有利于培养消费者对品牌的关注度和忠诚度 (戚虹, 2007)。
3. 理论模型和研究假设

3.1 研究变量

上海交通大学的马力行、蒋馥（2004）曾对客户忠诚度的影响因素和相互作用进行了研究，李弘、戚虹（2007）也通过总结客户忠诚度的研究成果得出用户忠诚度的驱动因素，可以总结为以下影响因素。

表 3. 变量及其定义

<table>
<thead>
<tr>
<th>一级变量</th>
<th>二级变量</th>
<th>定义</th>
<th>资料来源</th>
</tr>
</thead>
<tbody>
<tr>
<td>社群质量</td>
<td>-</td>
<td>包括个性化、定制化、方便性等方面的质量程度</td>
<td>Li Hoglei (2004)</td>
</tr>
<tr>
<td>社群意识</td>
<td>归宿感</td>
<td>指虚拟社群中的成员能感受到的存在感和归宿感</td>
<td>周涛, 鲁耀斌 (2009)</td>
</tr>
<tr>
<td></td>
<td>影响力</td>
<td>指虚拟社群对成员的影响程度</td>
<td>周涛, 鲁耀斌 (2009)</td>
</tr>
<tr>
<td></td>
<td>需求满足</td>
<td>指虚拟社群自身的优势使得成员能够获得更好的信息资源，心理需求和物质需求所得到的满足</td>
<td>周涛, 鲁耀斌 (2009)</td>
</tr>
<tr>
<td>用户满意</td>
<td>-</td>
<td>指用户对产品和服务的评价，是一种心理体验</td>
<td>马力行, 蒋馥 (2004)</td>
</tr>
<tr>
<td>用户信任</td>
<td>-</td>
<td>指用户对产品、服务的认可和肯定，从用户满意程度表现出来</td>
<td>马力行, 蒋馥 (2004)</td>
</tr>
<tr>
<td>转换成本</td>
<td>-</td>
<td>由迈克.波特提出，是指当消费者改变产品或服务的提供者时所产生的成本，包括时间、经历和情感等各个方面的成本</td>
<td>马力行, 蒋馥 (2004)</td>
</tr>
<tr>
<td>用户忠诚度</td>
<td>-</td>
<td>指用户重复购买该企业产品或者服务的程度</td>
<td>马力行, 蒋馥 (2004)</td>
</tr>
</tbody>
</table>

结合学者的研究成果，初步认为社群质量、归宿感、影响力、需求满足、情感分享所得到的认可程度影响用户的满意度、用户的信任以及用户的转换成本，用户的满意度、用户的信任以及用户的转换成本综合影响用户的忠诚度。
3.2 研究假设

根据前文提出的社群的特征和消费者的主观心理感知，结合各影响因素之间可能存在的关系，笔者做出以下假设，如下表所示：

<table>
<thead>
<tr>
<th>变量</th>
<th>假设</th>
</tr>
</thead>
<tbody>
<tr>
<td>虚拟社群质量</td>
<td>H1: 虚拟社群质量越高，用户满意度越高</td>
</tr>
<tr>
<td></td>
<td>H2: 虚拟社群质量越高，用户信任度越高</td>
</tr>
<tr>
<td></td>
<td>H3: 虚拟社群质量越高，用户转换成本越高</td>
</tr>
<tr>
<td>归宿感</td>
<td>H4: 归宿感越高，用户满意度越高</td>
</tr>
<tr>
<td></td>
<td>H5: 归宿感越高，用户信任度越高</td>
</tr>
<tr>
<td></td>
<td>H6: 归宿感越高，用户转换成本越高</td>
</tr>
<tr>
<td>影响力</td>
<td>H7: 影响力越大，用户满意度越高</td>
</tr>
<tr>
<td></td>
<td>H8: 影响力越大，用户信任度越高</td>
</tr>
<tr>
<td></td>
<td>H9: 影响力越大，用户转换成本越高</td>
</tr>
<tr>
<td>需求满足</td>
<td>H10: 需求满足程度越大，用户满意度越高</td>
</tr>
<tr>
<td></td>
<td>H11: 需求满足程度越大，用户信任度越高</td>
</tr>
<tr>
<td></td>
<td>H12: 需求满足程度越大，用户转换成本越高</td>
</tr>
<tr>
<td>情感分享</td>
<td>H13: 情感分享程度越大，用户满意度越高</td>
</tr>
<tr>
<td></td>
<td>H14: 情感分享程度越大，用户信任度越高</td>
</tr>
<tr>
<td></td>
<td>H15: 情感分享程度越大，用户转换成本越高</td>
</tr>
<tr>
<td>用户满意度</td>
<td>H16: 用户满意度越高，用户忠诚度越高</td>
</tr>
<tr>
<td>用户信任</td>
<td>H17: 用户信任程度越高，用户忠诚度越高</td>
</tr>
<tr>
<td>转换成本</td>
<td>H18: 用户转换成本越大，用户忠诚度越高</td>
</tr>
</tbody>
</table>

3.3 问卷设计和调研

本次研究中各个变量的测量题项如下表所示：
### 表 5. 问卷设计

<table>
<thead>
<tr>
<th>变量</th>
<th>标签</th>
<th>测量题项</th>
<th>参考文献</th>
</tr>
</thead>
<tbody>
<tr>
<td>社群质量</td>
<td>Var A₁</td>
<td>虚拟社群的存在让我感觉更加人性化</td>
<td>Koufaris（2004）</td>
</tr>
<tr>
<td></td>
<td>Var A₂</td>
<td>虚拟社群能及时准确地让我获得相关信息</td>
<td></td>
</tr>
<tr>
<td>归宿感</td>
<td>Var B₁</td>
<td>我觉得我是虚拟社群中的一个成员</td>
<td>周涛, 鲁耀斌（2009）</td>
</tr>
<tr>
<td></td>
<td>Var B₂</td>
<td>我可以把虚拟社群中的其他人当作朋友</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Var B₃</td>
<td>虚拟社群中的其他成员也把我当朋友</td>
<td></td>
</tr>
<tr>
<td>影响力</td>
<td>Var C₁</td>
<td>我在这个社群中能够对别人产生一定的影响</td>
<td>周涛, 鲁耀斌（2009）</td>
</tr>
<tr>
<td></td>
<td>Var C₂</td>
<td>我发布的信息会被其他成员浏览回复</td>
<td></td>
</tr>
<tr>
<td>需求满足</td>
<td>Var D₁</td>
<td>我在这个社群中收获了有价值的信息</td>
<td>周涛, 鲁耀斌（2009）</td>
</tr>
<tr>
<td></td>
<td>Var D₂</td>
<td>当别的成员接受我的信息我感到有成就感</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Var D₃</td>
<td>社群成员的互动让我感到轻松快乐</td>
<td></td>
</tr>
<tr>
<td>情感分享</td>
<td>Var E₁</td>
<td>我在社群中分享自己的情感时能得到一定的安慰</td>
<td>周涛, 鲁耀斌（2009）</td>
</tr>
<tr>
<td></td>
<td>Var E₂</td>
<td>我在社群中发表的观点能得到一定的认可</td>
<td></td>
</tr>
<tr>
<td>用户满意</td>
<td>Var F₁</td>
<td>虚拟社群让我感到轻松愉快</td>
<td>Pavlou, Kim（2005）</td>
</tr>
<tr>
<td></td>
<td>Var F₂</td>
<td>虚拟社群让我能得到自己想要的信息</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Var F₃</td>
<td>我对虚拟社群成员分享的信息表示满意</td>
<td></td>
</tr>
<tr>
<td>用户信任</td>
<td>Var G₁</td>
<td>我觉得虚拟社群有安全感</td>
<td>Kim, Shankar（2005）</td>
</tr>
<tr>
<td></td>
<td>Var G₂</td>
<td>我觉得虚拟社群成员之间互相信任</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Var G₃</td>
<td>我会关注虚拟社群成员分享的信息</td>
<td></td>
</tr>
<tr>
<td>转换成本</td>
<td>Var H₁</td>
<td>不想转到其他社群，不想失去和其他社群成员的联系</td>
<td>Lee（2001）</td>
</tr>
<tr>
<td></td>
<td>Var H₂</td>
<td>不想转到其他社群，因为得花时间和精力熟悉新环境</td>
<td></td>
</tr>
<tr>
<td>用户忠诚度</td>
<td>Var I₁</td>
<td>我会向其他人推荐这个社群</td>
<td>Zeithaml（2002）</td>
</tr>
<tr>
<td></td>
<td>Var I₂</td>
<td>如果想获得相关信息时我首先会考虑该社群</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Var I₃</td>
<td>我愿意投入时间和精力在这个虚拟社群中</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Var I₄</td>
<td>我会在较长时间内一直保持该社群成员的身份</td>
<td></td>
</tr>
</tbody>
</table>

### 4. 实证分析

#### 4.1 预调研分析

为了确保数据的质量，笔者在小范围内先收集了 90 份问卷，对这 90 份问卷的数据进行简单的信度和效度分析。问卷各个变量的 Cronbach’s Alpha 值都大于 0.9，问卷整体的 Cronbach’s Alpha 值也大于 0.9，所以问卷的信度非常高。
表 6. 预调研问卷信度检验结果

<table>
<thead>
<tr>
<th>变量</th>
<th>名称</th>
<th>校正的项总计相关性</th>
<th>项已删除的 Cronbach’s Alpha 值</th>
<th>变量的 Cronbach’s Alpha 值</th>
<th>问卷整体 Cronbach’s Alpha 值</th>
</tr>
</thead>
<tbody>
<tr>
<td>社群质量</td>
<td>Var A</td>
<td>0.975</td>
<td>0.987</td>
<td>0.987</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Var A2</td>
<td>0.972</td>
<td>0.987</td>
<td></td>
<td></td>
</tr>
<tr>
<td>归宿感</td>
<td>Var B1</td>
<td>0.965</td>
<td>0.978</td>
<td>0.987</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Var B2</td>
<td>0.964</td>
<td>0.975</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Var B3</td>
<td>0.974</td>
<td>0.988</td>
<td></td>
<td></td>
</tr>
<tr>
<td>影响力</td>
<td>Var C1</td>
<td>0.966</td>
<td>0.991</td>
<td>0.991</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Var C2</td>
<td>0.963</td>
<td>0.991</td>
<td></td>
<td></td>
</tr>
<tr>
<td>需求满足</td>
<td>Var D1</td>
<td>0.977</td>
<td>0.989</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Var D2</td>
<td>0.977</td>
<td>0.980</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Var D3</td>
<td>0.980</td>
<td>0.981</td>
<td></td>
<td></td>
</tr>
<tr>
<td>情感分享</td>
<td>Var E1</td>
<td>0.961</td>
<td>0.986</td>
<td></td>
<td>0.998</td>
</tr>
<tr>
<td></td>
<td>Var E2</td>
<td>0.977</td>
<td>0.986</td>
<td></td>
<td></td>
</tr>
<tr>
<td>用户满意</td>
<td>Var F1</td>
<td>0.982</td>
<td>0.991</td>
<td></td>
<td>0.992</td>
</tr>
<tr>
<td></td>
<td>Var F2</td>
<td>0.978</td>
<td>0.986</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Var F3</td>
<td>0.987</td>
<td>0.986</td>
<td></td>
<td></td>
</tr>
<tr>
<td>用户信任</td>
<td>Var G1</td>
<td>0.980</td>
<td>0.978</td>
<td></td>
<td>0.992</td>
</tr>
<tr>
<td></td>
<td>Var G2</td>
<td>0.976</td>
<td>0.975</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Var G3</td>
<td>0.978</td>
<td>0.992</td>
<td></td>
<td></td>
</tr>
<tr>
<td>转换成本</td>
<td>Var H1</td>
<td>0.976</td>
<td>0.988</td>
<td></td>
<td>0.988</td>
</tr>
<tr>
<td></td>
<td>Var H2</td>
<td>0.978</td>
<td>0.988</td>
<td></td>
<td></td>
</tr>
<tr>
<td>用户忠诚</td>
<td>Var I1</td>
<td>0.968</td>
<td>0.989</td>
<td></td>
<td>0.991</td>
</tr>
<tr>
<td></td>
<td>Var I2</td>
<td>0.972</td>
<td>0.987</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Var I3</td>
<td>0.973</td>
<td>0.988</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Var I4</td>
<td>0.966</td>
<td>0.990</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

其次，利用 SPSS 对问卷的效度进行分析，用 KMO 值和 Bartlett 球形度检验的显著性检验问卷的信度。从表 7 可知，各个变量的 KMO 值都在 0.7 以上，且显著性水平都是 0.000，表示每个测量题项能够有效代表相应的变量。问卷的总体效度高达 0.963，且结果是显著的，说明问卷收集到的数据与本次研究的内容非常吻合，可以继续使用问卷进行下一步数据的收集。
### 表 7. 问卷效度检验结果

<table>
<thead>
<tr>
<th>变量</th>
<th>名称</th>
<th>KMO 值</th>
<th>显著性水平</th>
<th>因子载荷水平</th>
</tr>
</thead>
<tbody>
<tr>
<td>社群质量</td>
<td>Var A1</td>
<td>0.721</td>
<td>0.000</td>
<td>0.994</td>
</tr>
<tr>
<td></td>
<td>Var A2</td>
<td></td>
<td></td>
<td>0.994</td>
</tr>
<tr>
<td>归宿感</td>
<td>Var B1</td>
<td>0.780</td>
<td>0.000</td>
<td>0.989</td>
</tr>
<tr>
<td></td>
<td>Var B2</td>
<td></td>
<td></td>
<td>0.991</td>
</tr>
<tr>
<td></td>
<td>Var B3</td>
<td></td>
<td></td>
<td>0.983</td>
</tr>
<tr>
<td>影响力</td>
<td>Var C1</td>
<td>0.762</td>
<td>0.000</td>
<td>0.996</td>
</tr>
<tr>
<td></td>
<td>Var C2</td>
<td></td>
<td></td>
<td>0.996</td>
</tr>
<tr>
<td>需求满足</td>
<td>Var D1</td>
<td>0.783</td>
<td>0.000</td>
<td>0.991</td>
</tr>
<tr>
<td></td>
<td>Var D2</td>
<td></td>
<td></td>
<td>0.991</td>
</tr>
<tr>
<td>情感分享</td>
<td>Var E1</td>
<td>0.735</td>
<td>0.000</td>
<td>0.993</td>
</tr>
<tr>
<td></td>
<td>Var E2</td>
<td></td>
<td></td>
<td>0.993</td>
</tr>
<tr>
<td>用户满意</td>
<td>Var F1</td>
<td>0.790</td>
<td>0.000</td>
<td>0.993</td>
</tr>
<tr>
<td></td>
<td>Var F2</td>
<td></td>
<td></td>
<td>0.993</td>
</tr>
<tr>
<td></td>
<td>Var F3</td>
<td></td>
<td></td>
<td>0.993</td>
</tr>
<tr>
<td>用户信任</td>
<td>Var G1</td>
<td>0.767</td>
<td>0.000</td>
<td>0.992</td>
</tr>
<tr>
<td></td>
<td>Var G2</td>
<td></td>
<td></td>
<td>0.991</td>
</tr>
<tr>
<td></td>
<td>Var G3</td>
<td></td>
<td></td>
<td>0.982</td>
</tr>
<tr>
<td>转换成本</td>
<td>Var H1</td>
<td>0.701</td>
<td>0.000</td>
<td>0.994</td>
</tr>
<tr>
<td></td>
<td>Var H2</td>
<td></td>
<td></td>
<td>0.994</td>
</tr>
<tr>
<td>用户忠诚</td>
<td>Var I1</td>
<td>0.880</td>
<td>0.000</td>
<td>0.985</td>
</tr>
<tr>
<td></td>
<td>Var I2</td>
<td></td>
<td></td>
<td>0.985</td>
</tr>
<tr>
<td></td>
<td>Var I3</td>
<td></td>
<td></td>
<td>0.988</td>
</tr>
<tr>
<td></td>
<td>Var I4</td>
<td></td>
<td></td>
<td>0.985</td>
</tr>
</tbody>
</table>

### 4.2 样本基本信息描述性统计

本次研究采用线上线下发放问卷的形式收集数据，历时一个星期，共收集 222 份问卷，经过整理筛选，剔除不符合实际情况的问卷，最终有效问卷为 178 份。

有效问卷中有 78 份来自男性被调查者，100 份来自女性被调查者，分别占 44% 和 56% 的比例，说明本次调研过程中的被调查者男女比例较为平衡，可以客观代表本次问卷数据的可靠性：本次问卷来自 3 个高中生，142 个本科生，33 个硕士学历以上的被调查者，分别占 2%，80%，18%。从以上数据可以发现，本次参与调研的被调查者学历普遍偏高，他们平时接触虚拟社群的机会更多，对虚拟社群有更深的了解，能够准确理解本次问卷的内容，从而确保问卷数据的可靠性；从被调查者参与虚拟社群的时间可以看出有 81% 的人参与到虚拟社群中的时间超过半年，说明被调查者在作为虚拟社群成员的时间内对社群的运营方式有一定的主观心理感受，能够产生有关归宿感、信任感、满意度等方面的感知并做出合理的评价；此外，只有 7% 的人不会随时关注社群的消息，62% 的人会根据自身需求查看相关消息，31% 的人则明确表示会比较注意查看社群中的消息。从该角度分
析，大部分人偏向于认为虚拟社群是用来获取有价值信息的渠道，会根据自身需求查看相关消息甚至注重关注社群中的消息，符合虚拟社群的本质特征。

4.3 问卷的信度分析

通过对最终有效问卷数据的分析和处理，本次信度分析结果显示，问卷整体的 Cronbach’s Alpha 值高达 0.934，各个变量的信度系数也都大于 0.7，表示问卷的一致性非常好。

<table>
<thead>
<tr>
<th>变量</th>
<th>名称</th>
<th>校正的项总计相关性</th>
<th>项已删除的 Cronbach’s Alpha 值</th>
<th>变量的 Cronbach’s Alpha 值</th>
<th>问卷整体 Cronbach’s Alpha 值</th>
</tr>
</thead>
<tbody>
<tr>
<td>社群质量</td>
<td>Var A1</td>
<td>.448</td>
<td>.933</td>
<td>.771</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Var A2</td>
<td>.430</td>
<td>.934</td>
<td></td>
<td></td>
</tr>
<tr>
<td>归宿感</td>
<td>Var B1</td>
<td>.663</td>
<td>.930</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Var B2</td>
<td>.689</td>
<td>.930</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Var B3</td>
<td>.601</td>
<td>.931</td>
<td></td>
<td></td>
</tr>
<tr>
<td>影响力</td>
<td>Var C1</td>
<td>.642</td>
<td>.931</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Var C2</td>
<td>.591</td>
<td>.931</td>
<td></td>
<td></td>
</tr>
<tr>
<td>需求满足</td>
<td>Var D1</td>
<td>.636</td>
<td>.931</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Var D2</td>
<td>.618</td>
<td>.931</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Var D3</td>
<td>.661</td>
<td>.930</td>
<td></td>
<td></td>
</tr>
<tr>
<td>情感分享</td>
<td>Var E1</td>
<td>.544</td>
<td>.933</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Var E2</td>
<td>.583</td>
<td>.932</td>
<td></td>
<td></td>
</tr>
<tr>
<td>用户满意</td>
<td>Var F1</td>
<td>.717</td>
<td>.930</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Var F2</td>
<td>.565</td>
<td>.932</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Var F3</td>
<td>.593</td>
<td>.931</td>
<td></td>
<td></td>
</tr>
<tr>
<td>用户信任</td>
<td>Var G1</td>
<td>.594</td>
<td>.931</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Var G2</td>
<td>.519</td>
<td>.932</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Var G3</td>
<td>.624</td>
<td>.931</td>
<td></td>
<td></td>
</tr>
<tr>
<td>转换成本</td>
<td>Var H1</td>
<td>.544</td>
<td>.932</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Var H2</td>
<td>.493</td>
<td>.933</td>
<td></td>
<td></td>
</tr>
<tr>
<td>用户忠诚</td>
<td>Var I1</td>
<td>.583</td>
<td>.932</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Var I2</td>
<td>.616</td>
<td>.931</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Var I3</td>
<td>.656</td>
<td>.930</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Var I4</td>
<td>.569</td>
<td>.932</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.4 样本变量的效度分析

本次研究量表 KMO 检验和巴特利特球形检验结果如下表所示，除了转换成本和影响力两个变量，其他变量的 KMO 值都在 0.7 以上，且显著性水平都是 0.000。问卷整体 KMO 值为 0.901，大于 0.9，球形检验的显著性值为 0.000，代表问卷测量的数据总体上十分符合本次研究的内容。
表 9. 问卷效度检验结果

<table>
<thead>
<tr>
<th>变量名称</th>
<th>名称</th>
<th>KMO 值</th>
<th>显著性水平</th>
<th>因子载荷水平</th>
<th>问卷整体 KMO 值</th>
</tr>
</thead>
<tbody>
<tr>
<td>社群质量</td>
<td>Var A</td>
<td>0.720</td>
<td>0.000</td>
<td></td>
<td>0.904</td>
</tr>
<tr>
<td></td>
<td>Var A</td>
<td></td>
<td></td>
<td></td>
<td>0.904</td>
</tr>
<tr>
<td>归宿感</td>
<td>Var B</td>
<td>0.776</td>
<td>0.000</td>
<td></td>
<td>0.885</td>
</tr>
<tr>
<td></td>
<td>Var B</td>
<td></td>
<td></td>
<td></td>
<td>0.695</td>
</tr>
<tr>
<td>影响力</td>
<td>Var C</td>
<td>0.693</td>
<td>0.000</td>
<td></td>
<td>0.845</td>
</tr>
<tr>
<td></td>
<td>Var C</td>
<td></td>
<td></td>
<td></td>
<td>0.845</td>
</tr>
<tr>
<td>需求满足</td>
<td>Var D</td>
<td>0.789</td>
<td>0.000</td>
<td></td>
<td>0.629</td>
</tr>
<tr>
<td></td>
<td>Var D</td>
<td></td>
<td></td>
<td></td>
<td>0.763</td>
</tr>
<tr>
<td>情感分享</td>
<td>Var E</td>
<td>0.745</td>
<td>0.000</td>
<td></td>
<td>0.901</td>
</tr>
<tr>
<td></td>
<td>Var E</td>
<td></td>
<td></td>
<td></td>
<td>0.882</td>
</tr>
<tr>
<td>用户满意</td>
<td>Var F</td>
<td>0.796</td>
<td>0.000</td>
<td></td>
<td>0.625</td>
</tr>
<tr>
<td></td>
<td>Var F</td>
<td></td>
<td></td>
<td></td>
<td>0.733</td>
</tr>
<tr>
<td>用户信任</td>
<td>Var G</td>
<td>0.708</td>
<td>0.000</td>
<td></td>
<td>0.793</td>
</tr>
<tr>
<td></td>
<td>Var G</td>
<td></td>
<td></td>
<td></td>
<td>0.773</td>
</tr>
<tr>
<td>转换成本</td>
<td>Var H</td>
<td>0.685</td>
<td>0.000</td>
<td></td>
<td>0.506</td>
</tr>
<tr>
<td></td>
<td>Var H</td>
<td></td>
<td></td>
<td></td>
<td>0.872</td>
</tr>
<tr>
<td>用户忠诚</td>
<td>Var I</td>
<td>0.775</td>
<td>0.000</td>
<td></td>
<td>0.873</td>
</tr>
<tr>
<td></td>
<td>Var I</td>
<td></td>
<td></td>
<td></td>
<td>0.573</td>
</tr>
</tbody>
</table>

4.5 模型的验证性因子分析

首先根据之前的假设用 AMOS 软件建立相应的模型，如下图所示。本模型变量较多，不确定变量之间的相关关系，所以初始模型较为复杂，测量题项用问卷变量名称表示。
4.5.1 初始模型的适配度检验

根据 AMOS 计算结果，其中 CFI 值为 0.878，小于 0.9，RMSEA 值为 0.086，大于 0.08，综合起来表示模型拟合程度不好。另外，从初始模型聚合权重分析表可以发现，部分变量之间是负相关关系，说明根据数据计算出的变量之间的关系不够合理。由于笔者在前文对各个变量之间的关系做了充分的假设，事实上可能部分关系并不存在，所以在修正模型时应该根据运算结果考虑删除存在或者不显著的关系。此外，部分变量之间虽有正相关关系，但是其 P 值大于 0.05，说明相关关系不显著，也应在修正模型的过程中考虑删除。

表 10. 初始模型聚合权重分析

<table>
<thead>
<tr>
<th>变量</th>
<th>Estimate</th>
<th>S.E.</th>
<th>C.R.</th>
<th>P</th>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>满意度</td>
<td>&lt;---- 社群质量</td>
<td>.158</td>
<td>.098</td>
<td>1.613</td>
<td>.107</td>
</tr>
<tr>
<td>信任度</td>
<td>&lt;---- 社群质量</td>
<td>.238</td>
<td>.117</td>
<td>2.030</td>
<td>.042</td>
</tr>
<tr>
<td>转换成本</td>
<td>&lt;---- 社群质量</td>
<td>-.126</td>
<td>.141</td>
<td>-.894</td>
<td>.371</td>
</tr>
<tr>
<td>满意度</td>
<td>&lt;---- 归宿感</td>
<td>.172</td>
<td>.099</td>
<td>1.746</td>
<td>.081</td>
</tr>
</tbody>
</table>
### 信任度
- **信任度** <--- **归宿感**
  - Estimate: 0.466
  - S.E.: 0.130
  - C.R.: 3.440
  - **P**: ***
  - Label: par_20

### 转换成本
- **转换成本** <--- **归宿感**
  - Estimate: 0.450
  - S.E.: 0.161
  - C.R.: 2.796
  - **P**: .005
  - Label: par_21

### 满意度
- **满意度** <--- **影响力**
  - Estimate: -1.128
  - S.E.: 0.109
  - C.R.: -1.176
  - **P**: .240
  - Label: par_22

### 信任度
- **信任度** <--- **影响力**
  - Estimate: -1.180
  - S.E.: 0.137
  - C.R.: -1.317
  - **P**: .188
  - Label: par_23

### 转换成本
- **转换成本** <--- **影响力**
  - Estimate: -1.457
  - S.E.: 0.196
  - C.R.: -2.434
  - **P**: .015
  - Label: par_24

### 满意度
- **满意度** <--- **需求满足**
  - Estimate: 0.030
  - S.E.: 0.068
  - C.R.: 0.434
  - **P**: .664
  - Label: par_25

### 信任度
- **信任度** <--- **需求满足**
  - Estimate: -0.180
  - S.E.: 0.137
  - C.R.: -1.317
  - **P**: .188
  - Label: par_26

### 转换成本
- **转换成本** <--- **需求满足**
  - Estimate: 0.450
  - S.E.: 0.161
  - C.R.: 2.796
  - **P**: .005
  - Label: par_27

### 满意度
- **满意度** <--- **情感分享**
  - Estimate: 0.045
  - S.E.: 0.064
  - C.R.: 0.696
  - **P**: .487
  - Label: par_33

### VARA1
- **VARA1** <--- **社群质量**
  - Estimate: 1.000

### VARA2
- **VARA2** <--- **社群质量**
  - Estimate: 0.705
  - S.E.: 0.089
  - C.R.: 7.939
  - **P**: ***
  - Label: par_1

### VARB3
- **VARB3** <--- **归宿感**
  - Estimate: 1.000

### VARB2
- **VARB2** <--- **归宿感**
  - Estimate: 1.161
  - S.E.: 0.088
  - C.R.: 13.162
  - **P**: ***
  - Label: par_2

### VARB1
- **VARB1** <--- **归宿感**
  - Estimate: 0.949
  - S.E.: 0.093
  - C.R.: 10.197
  - **P**: ***
  - Label: par_3

### VARC2
- **VARC2** <--- **影响力**
  - Estimate: 1.000

### VARC1
- **VARC1** <--- **影响力**
  - Estimate: 1.205
  - S.E.: 0.113
  - C.R.: 10.685
  - **P**: ***
  - Label: par_4

### VARD3
- **VARD3** <--- **需求满足**
  - Estimate: 1.000

### VARD2
- **VARD2** <--- **需求满足**
  - Estimate: 1.084
  - S.E.: 0.112
  - C.R.: 9.712
  - **P**: ***
  - Label: par_5

### VARD1
- **VARD1** <--- **需求满足**
  - Estimate: 0.926
  - S.E.: 0.106
  - C.R.: 8.719
  - **P**: ***
  - Label: par_6

### VARE2
- **VARE2** <--- **情感分享**
  - Estimate: 1.000

### VARE1
- **VARE1** <--- **情感分享**
  - Estimate: 1.021
  - S.E.: 0.088
  - C.R.: 11.566
  - **P**: ***
  - Label: par_7

### VARF1
- **VARF1** <--- **满意度**
  - Estimate: 1.000

### VARF2
- **VARF2** <--- **满意度**
  - Estimate: 0.995
  - S.E.: 0.118
  - C.R.: 8.412
  - **P**: ***
  - Label: par_8

### VARF3
- **VARF3** <--- **满意度**
  - Estimate: 0.854
  - S.E.: 0.104
  - C.R.: 8.174
  - **P**: ***
  - Label: par_9

### VARG1
- **VARG1** <--- **信任度**
  - Estimate: 1.000

### VARG2
- **VARG2** <--- **信任度**
  - Estimate: 0.912
  - S.E.: 0.079
  - C.R.: 11.549
  - **P**: ***
  - Label: par_10

### VARG3
- **VARG3** <--- **信任度**
  - Estimate: 0.610
  - S.E.: 0.099
  - C.R.: 6.189
  - **P**: ***
  - Label: par_11

### VARH1
- **VARH1** <--- **转换成本**
  - Estimate: 1.000

### VARH2
- **VARH2** <--- **转换成本**
  - Estimate: 0.860
  - S.E.: 0.101
  - C.R.: 8.535
  - **P**: ***
  - Label: par_12

### VARI1
- **VARI1** <--- **忠诚度**
  - Estimate: 1.000

### VARI2
- **VARI2** <--- **忠诚度**
  - Estimate: 1.198
  - S.E.: 0.126
  - C.R.: 9.480
  - **P**: ***
  - Label: par_13

### VARI3
- **VARI3** <--- **忠诚度**
  - Estimate: 1.073
  - S.E.: 0.135
  - C.R.: 7.954
  - **P**: ***
  - Label: par_14

### VARI4
- **VARI4** <--- **忠诚度**
  - Estimate: 1.078
  - S.E.: 0.133
  - C.R.: 8.085
  - **P**: ***
  - Label: par_15

注：***代表0.1%显著性水平。
4.5.2 模型修正

结合初始模型的计算结果，删除部分变量之间的相关关系，当模型的各拟合指标达到标准之后，最终确定 AMOS 模型如图 3 所示。

图 3.修正后结构模型

从最终确定的模型可以发现，之前确定的变量 “影响力” 和 “转换成本” 都不能很好地解释对用户忠诚度的影响，所以修正后的假设调整为：

H1: 虚拟社群的质量越高，用户的信任感越高；
H2: 社群成员的归宿感越强，他们对所处社群的信任感越强；
H3: 社群成员需求得到满足的程度越高，他们的满意度越高；
H4: 社群成员情感分享得到的认可越高，他们的满意度越高；
H5: 社群成员情感分享得到的认可越高，他们越容易信任该社群；
H6: 社群成员对所处社群的满意度越高，他们对社群的忠诚度越高；
H7: 社群成员对所处社群的信任感越强，他们对社群的忠诚度越高。

修正后的模型各指标如表 11 所示：
### 表 11. 修正后模型适配度指标

<table>
<thead>
<tr>
<th>拟合指标</th>
<th>检验结果数据</th>
<th>参考值</th>
<th>模型匹配判断</th>
</tr>
</thead>
<tbody>
<tr>
<td>绝对拟合度</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>卡方自由度比</td>
<td>1.336</td>
<td>&lt;3</td>
<td>满足</td>
</tr>
<tr>
<td>平均近似值误差平方根</td>
<td>0.044</td>
<td>&lt;0.05</td>
<td>满足</td>
</tr>
<tr>
<td>增值拟合度</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>规范拟合指标 NFI</td>
<td>0.916</td>
<td>&gt;0.9</td>
<td>满足</td>
</tr>
<tr>
<td>IFI</td>
<td>0.978</td>
<td>&gt;0.9</td>
<td>满足</td>
</tr>
<tr>
<td>TLI</td>
<td>0.967</td>
<td>&gt;0.9</td>
<td>满足</td>
</tr>
<tr>
<td>比较拟合指标 CFI</td>
<td>0.977</td>
<td>&gt;0.9</td>
<td>满足</td>
</tr>
<tr>
<td>简约适配度指数</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>简约基准拟合指标 PNFI</td>
<td>0.641</td>
<td>&gt;0.5</td>
<td>满足</td>
</tr>
<tr>
<td>简约拟合指标 PCFI</td>
<td>0.684</td>
<td>&gt;0.5</td>
<td>满足</td>
</tr>
</tbody>
</table>

从修正后模型的聚合权重表可以发现，各变量之间都有正相关关系，且 P 值都小于 0.05，说明结果显著。

### 表 12. 修正后模型的聚合权重

<table>
<thead>
<tr>
<th>Label</th>
<th>Estimate</th>
<th>S.E.</th>
<th>C.R.</th>
<th>P</th>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>par_1</td>
<td>0.762</td>
<td>0.090</td>
<td>8.433</td>
<td>***</td>
<td>par_1</td>
</tr>
<tr>
<td>par_2</td>
<td>0.944</td>
<td>0.091</td>
<td>10.408</td>
<td>***</td>
<td>par_3</td>
</tr>
<tr>
<td>par_3</td>
<td>1.043</td>
<td>0.086</td>
<td>12.169</td>
<td>***</td>
<td>par_2</td>
</tr>
<tr>
<td>par_4</td>
<td>1.035</td>
<td>0.101</td>
<td>10.257</td>
<td>***</td>
<td>par_4</td>
</tr>
<tr>
<td>par_5</td>
<td>0.929</td>
<td>0.106</td>
<td>8.771</td>
<td>***</td>
<td>par_5</td>
</tr>
<tr>
<td>par_6</td>
<td>1.028</td>
<td>0.101</td>
<td>10.219</td>
<td>***</td>
<td>par_6</td>
</tr>
<tr>
<td>par_7</td>
<td>1.018</td>
<td>0.110</td>
<td>9.212</td>
<td>***</td>
<td>par_7</td>
</tr>
<tr>
<td>par_8</td>
<td>0.882</td>
<td>0.101</td>
<td>8.770</td>
<td>***</td>
<td>par_8</td>
</tr>
<tr>
<td>par_9</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>par_10</td>
<td>1.056</td>
<td>0.142</td>
<td>7.449</td>
<td>***</td>
<td>par_10</td>
</tr>
</tbody>
</table>
表 12 的数据显示，各变量值之间的路径系数都为正，且具有显著的相关关系，所以修正模型后的假设假设成立。即社群质量、社群成员的归属感以及情感分享得到的认可度与正向影响社群的信任感；社群成员需求的满足程度正向影响他们对社群的满意程度；社群成员对社群的满意程度和信任感正向影响他们对社群的忠诚度。

5. 结论

5.1 研究结论分析

本次研究使用结构模型探究了精准营销模式下虚拟社群对用户忠诚度的影响。首先，从最终模型运算得到的数据来看，虚拟社群的质量、社群成员的归属感和需求得到的满足程度、情感分享得到的认可度等方面对用户信任感和满意度有显著的影响，这些因素综合起来对虚拟社群成员的忠诚度有显著的影响。研究发现，虚拟社群质量的高低直接影响用户信任感，包括加入社群的便捷程度、商家对社群的经营程度、社群的亲近程度等都是消费者能够感受到的。其次，从消费者的归属感、需求满足程度、情感分享得到的认可度三个角度来看，这是他们在虚拟社群中所获得的三种不同的心理感受。如果社群成员能够感觉自己是社群中的一个成员，并且也可以把社群中的其他人当作朋友，那么他的归属感就是很强的。对于归属感较高的社群成员来说，他们会更加信任社群中分享的相关消息，会经常参与社群中的各种活动，这种影响是正向的。其次，消费者进入虚拟社群的最初的目的就是为了实现自身利益的最大化，他们期望在社群中能够获得更多有价值的信息或者福利，所以如果社群能够很好地满足消费者的需求，那么他们对社群的满意度越高。在获得自己所需要的价值信息的同时，消费者如果在社群中愿意分享自己的情感，那么说明他们对社群是存在较高的信任感的；此外，若有社群成员对他们所分享的情感给予一定的反馈，他们的信任感会更强烈。当社群成员的满意度和信任感都不断提高，他们对社群的依赖和偏好会更加强烈。

其次，笔者在研究过程中发现社群质量、社群成员的归属感对社群成员的满意度没有显著的影响；社群成员需求满足程度对社群成员的信任感没有显著的影响。此外之前根据前人研究总结出的影响力和转换成本两个变量与社群成员的满意度、信任感以及最终的忠诚度都没有显著的影响。本文在对影响力这一变量进行研究时，设计的测量题项是“我在这个社群中能够对别人产生一定的影响”以及“我在社群中发布的消息会得到一定的浏览和回复”。从收集到的数据来看，被调查者们对自己会在虚拟社群中给别人带来一定的影响这一观点并不抱有积极的态度。
是社群成员获得有价值消息的主要来源。所以对于大部分被调查者来说，微弱的影响力不足以影响他们对社群的信任感和满意度。

对于转换成本，Burnham, Frels 和 Mahajian（2003）在研究中指出，转换成本包含以下三大类，如表13所示：

<table>
<thead>
<tr>
<th>转换成本类型</th>
<th>描述</th>
</tr>
</thead>
<tbody>
<tr>
<td>程序转换成本</td>
<td>包括经济风险转换成本、评估成本、学习成本和建置成本，主要与实践和精力付出有关</td>
</tr>
<tr>
<td>财务转换成本</td>
<td>包括利益损失成本和财务损失成本，可以用实际财物损失来估量</td>
</tr>
<tr>
<td>关系转换成本</td>
<td>由人际关系损失和品牌关系损失构成，主要是由所感知的损失和关系被破坏所导致的心理和情感不适</td>
</tr>
</tbody>
</table>

因此根据转换成本的分类可知，对于虚拟社群成员来说，首先，他们的程序转换成本低，因为虚拟社群大部分是自愿加入，低成本，消费者主要是为了获取更多的信息资源，并不用在社群中花费过多的精力；其次，他们的财务转换成本低，退出社群的实际财物损失几乎为零；最后，由于虚拟社群成员关系都是陌生的，而且消费者不仅仅只参与了这一个社群。可能对于大部分的消费者而言，他们没有付出过多的精力来维持与众多社群成员之间的人际关系，失去该社群后他们所感知的损失和关系被破坏所导致的心理和情感不适并没有笔者之前想象得那么强烈。

综上所述，本次研究主要突出虚拟社群质量；虚拟社群成员归宿感、需求满足程度、情感分享得到的认可度与他们满意度和信任感之间的关系，从而综合体现成员对虚拟社群忠诚度的影响。

5.2 研究建议

5.2.1 虚拟社群质量方面

研究结果显示：对于商家来说，应该注重提高虚拟社群的质量，从而能够赢得消费者的信任，消费者对社群的信任感越强，就越能感到满意，能够提高他们对社群的忠诚度。

（1）信息有用性

虚拟社群中的信息丰富，社群成员自己会提供各种资源，大家互相分享。但是社群的管理者为了让社群朝着自己预期的方向发展，也应及时整理和补充各种有价值的资源。社群的经营者要重视社群中发布的消息的准确性、即时性、可靠性。对于商家来说，他们在发布信息时应该注意用词，避免表达不清晰。对于过时的消息应该及时更新，更要确保发布的信息都是准确有效的。坚持跟进社群成员的动态，了解他们的需求，保证用户能够及时获得有价值的信息。有效的信息不仅能够满足现有成员的需求，还能够吸引更多新用户进入社群。众所周知，目
前所有的网络用户面临着信息过量的现状，他们厌恶各类垃圾信息。当社群所提供的信息资源能够较好地满足消费者的需求，那么他们就更加可能对社群表示忠诚，表现为更愿意参加社群组织的各类活动，甚至购买社群推荐和经营的商品。

（2）信息安全性

即使是简单的一个社群也将要保证社群成员的信息可以得到很好的保障，网络安全问题是全体网民都十分重视的问题。虚拟社群在为社群成员带来便捷的同时，也要保证交易信息的有效性、完整性和保密性。

（3）社群使用便捷性

如今虚拟社群的形式多种多样，既有简单的直接进行交流的微信群、QQ群，也有类似豆瓣小组等需要商家提供众多功能的社群。对于前者来说，商家要确保社群成员使用相关文件、搜索相关链接的便捷性。社群经营者要对有价值的资源进行整合，做最简单明了的说明，便于社群成员获取，即使是新进入虚拟社群的成员也能够快速理解社群的运作模式，快速获得自己想要的资源。对于后者，要保证社群功能板块的设计，要保证页面设计美观简洁，便于使用。消费者进入社群后最先看到的是界面，美观简洁的界面能够给用户留下良好的印象。

（4）个性化

在精准营销模式下，即使各成员汇聚在相同的社群中，但是任何一个社群成员都有不同的需求，社群经营者需要考虑对不同的社群成员提供不同的服务，丰富其产品和服务。社群经营者除了为所有社群成员提供相同的信息资源的分享，还可以建立一套为社群成员提供个性化服务的流程制度。当社群成员有特殊的需求时，社群经营者可以与相应的成员得到联系，然后满足他们的需求。

5.2.2 归宿感方面

虚拟社群成员日常的交流使得他们在网络空间中构建关系，商家日常发起的交流活动能够增强社群的凝聚力。当社群成员在参加活动时，他们会和其他人产生交流，寻找志同道合的伙伴，互相分享心得，在这一系列过程中，他们会觉得自己是社群中的一员。通过成员之间的互动形成群体规范、社区认同感和社区意识。与现实群体不同的是，虚拟社群成员的从众心理以消费者的社区归宿感为基础，商家应该注重提高消费者的归宿感，通过组织线上的交流活动、福利活动甚至线下的活动来促进社群成员之间关系，能够让社群成员对彼此之间的关系更加信任，消费者会觉得自己是社群中的一个成员，建立社群成员之间良好的人际关系。消费者的归宿感的提升意味着他们对社群的信任感越来越强，从而影响他们对社群的忠诚度。

5.2.3 需求满足方面

研究结果显示，社群成员需求得到满足的程度越高，他们的满意度越高，进而对社群的忠诚度越高。

马斯洛需求层次理论提出，人的需求层次按从低到高划分为生理需求、安全需求、社会需求、受尊重需求、自我实现需求五个层次。消费者在虚拟社群中获得有价值的信息，在社群中产生的信息能够得到安全的保障，分别满足了他们的生理需求、安全需求。当他们能够和其他成员友好地交流时，把自己当作社群中的
一个成员，社会需求得到了满足；当社群成员在社群中分享信息或者分享情感时能够得到其他成员的认可时，消费者的尊重需求能够得到满足；最后最重要的是社群成员自我实现的需求，即消费者可以从社群中可以实现自己的价值，体现在他们能够合理运用社群的信息资源、人际关系充分提升自己，让自己变得更加优秀，从而实现自我价值。

所以商家应该从五个需求层次出发，让社群成员在其所处的社群中获得更多有价值的信息，让社群成员主动分享有价值的信息并得到其他人的认可，提高社群成员的成就感，更要注重加强自身和社群成员的互动、社群成员之间的互动等。从满足消费者的生理需求到最终能够满足消费者的自我实现需求，这样能够在很大程度上提升社群成员对社群的忠诚度。

5.2.4 情感分享方面

虚拟社群也是一个灵活、小规模的群体，他们也期望从社群中获得更多情感支持。Kimetal（2004）在对虚拟社群研究后发现成员间的感情联系、成员相互影响、相互联系程度都对用户忠诚度有着显著的影响。他们在社群中获得的支持越多，就更愿意继续留在社群中。

在精准营销模式下，情感营销也是赢得消费者信任的一种方式。当虚拟社群越来越人性化时，社群成员之间的交流会越来越多。他们除了在社群中获得自身想要的信息资源、产品或者服务，还会把虚拟社群当作一种情感寄托，存在社群成员愿意在社群中发泄自己的情感以及寻求其他成员安慰的情况。她们会在这个平台上互相分享日常生活的心得、经验等。社群成员之间的互动性对虚拟社群的信任具有正向的影响，他们的情感分享所得到的认可程度直接影响其对社群的信任感。商家应该重视社群成员在日常生活中的情感状态，主动加强联系，给予一定的反馈和认可，不断让他们感到满意。改变社群成员的信任感和满意程度能够直接影响他们对社群的忠诚度。

5.2.5 用户忠诚度方面

随着时代的发展，技术的进步和生活水平的提高会让更多消费者接触虚拟社群，并且虚拟社群的形式会不断发展，不断改善，这意味着消费者会有更多的选择。研究结果显示用户对社群的信任感和满意度能够直接影响其对社群的忠诚度，那么为了保持和社群成员的联系且不断吸引更多消费者参与到社群中来，商家在经营社群的过程中要充分利用社群成员的归属感、需求和情感，注重提升消费者的信任感和满意度。

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Contemporary Value of Confucian Work Ethics from the Perspective of Comparison between China and the West

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Abstract

Work ethics is a concept introduced from the West. From the perspective of cultural comparison, Confucianism, as a cultural tradition inherited for thousands of years, also has its own "work ethics" with local characteristics. Confucianism is a philosophy of life with a deep sense of realistic concern and social integration. It is diligent, frugal, self-disciplined and friendly, advocating the realization of transcendental value in real life, which corresponds to Western religious ethics and reflects the unique value of Chinese ethical culture. To sum up, first of all, the Confucian sense of self-improvement and diligence provides a sense of responsibility, learning awareness and innovation spirit for the work ethics of the new era. Secondly, the concept of "respect" and the sense of thrift provide a good attitude and habit of dedication and self-discipline. Thirdly, the concepts of harmony, difference and the same profession provide the spirit of cooperation for work ethics in the new era. All these provide useful reference for us to construct work ethics in the new era.

Keywords: Work ethics; Self-improvement; Dedication and duty; Different professions lead to the same path.
中西比较视域下儒家工作伦理的现代价值

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摘要

工作伦理是由西方引进的一个观念，在文化比较的视域下，儒家作为一种传承数千年的文化传统，也有着本土特色的“工作伦理”。儒学是一种深具现实关怀意识与社会融入感的人生哲学，它勤勉担当、节俭自律、友善合群，主张在现实的人生中实现超越的价值，这与西方的宗教伦理恰相对应，体现出中国伦理文化的独特价值。归纳说来，首先，儒家自强不息、勤勉进取的忧患意识，为新时代的工作伦理提供了担当感、学习意识及创新精神；其次，“敬”的观念、节俭意识提供了敬业与自律的良好工作态度与习惯；再次，和而不同、异性同道的观念为新时代的工作伦理提供了合作精神。这些都为我们建设新时代的工作伦理提供了有益借鉴。

关键词：工作伦理；自强不息；敬业守职；异性同道

1. 引言

工作伦理是由西方引进的一个观念，该术语最初源于德国社会学家韦伯的《新教伦理与资本主义精神》一书，在该书中，韦伯认为新教伦理所拥有“天职”观念，勤奋、节俭、禁欲与理性主义等精神为资本主义的发展提供了精神动力。那么，工作伦理？刘德春顺着韦伯的思路，将工作伦理定义为“一种宗教或文化传统施加于个人和群体的对社会经济活动的持续不断的精神力量，它使得人们的经济活动具有宗教意义上的神圣性和庄严性”[1]。儒家作为一种传承数千年的文化传统，能不能通过自身的现代化形成本土特色的“工作伦理”？

对于此问题，于英时、杜维明两位新儒家代表人物都不约而同地认为，“现代化”是多元的，“现代化”不等同于“西化”。以儒家为主导的中国传统文化应该也能够为中国市场经济及现代化提供可资借鉴的文化资源，本文试图通过对儒家相关思想的考察，梳理出儒家意义上的工作伦理精神，以期为现代市场经济下的工作伦理、商业伦理的建构提供借鉴。

对于儒家思想及整个中国传统文化，近代著名文人林语堂在他的名著《吾国与吾民》中写道，“道教是中国人民的游戏姿态，而孔教为工作姿态”。诚如林语堂所言，儒学是一种深具现实关怀意识与社会融入感的人生哲学，它勤勉担当、节俭自律、友善合群，主张在现实的人生中实现超越的价值，这与西方的宗教伦理恰相对应，体现出中国伦理文化的独特价值。作为文人的林语堂对儒家的理解还是非常准确的，儒家的确有一种热爱生活、投身社会、建构文化的承担意识与
奋斗热情，而这种承担感与奋斗热情就引发了一种自强不息、勤勉上进的担当感，诚敬负责的工作态度以及和而不同的协作精神。这些都对现代工作伦理的构建深具启发意义。

2. 正文

在现代全球化的背景下，文化越来越出现相互影响相互交融的倾向。如何在这种形势下，借鉴西方文化以构建具有中国本土特色的企业精神及工作伦理？这就比较的视角下，剖析儒家文化的核心，提炼出其核心价值，为构建本土化、现代化的工作伦理服务。具体看来，以儒家文化为核心的中国传统的伦理系统，主要表现在以下几个方面，即：自强不息、勤勉进取的担当感；敬业守职、宁俭勿奢的自律意识；和而不同、业同仁道的合作精神。

2.1 自强不息、勤勉进取的担当感

与西方文化相比，儒学是一种深具现实关怀意识与担当感的人生哲学，它反对消极无为，提倡自强不息、刚健有为。这与西方文化提倡向前进取的文化表面相似，但其实质又有诸多不同。与西方注重向往进取的“人对物”的文化不同，中国文化是一种既强调“自强”又主动担当、关怀群体的文化，是一种“人对人”的文化。这种特质融入到传统文化的长河中，塑造中国人的民族性格与人生态度，成为构建现代工作伦理的最有益养分。孔子树立“知其不可为而为之”（《论语·宪问》）的担当精神，《易传》高标“天行健，君子以自强不息”（《易传·象传上》）的奋斗精神，《大学》力倡“修、齐、治、平”的家国情怀。孟子敲响“生乎忧患，死于安乐”（4）的人生警示，都表现出儒家的积极进取的人生态度。“成以成物”（5）《礼记·中庸》，“立人达人”（6）《论语·雍也》，“立德立功立言”“苦其心志，劳其筋骨”（4）《孟子·告子下》中，更体现出一种成就精神与担当精神。这种成就感与担当精神扩散开来，产生了诸如“发蒙受教”、“锤炼本事”、“成家立业”、“大展宏图”的民间意识。在这种思想支配下，经济活动就自然被看作自立并立人达人、济世担当、兼善天下的正当途径。明末儒者陈确所讲的“天下岂有白丁圣贤，败子圣贤哉，岂有学为圣贤之人而父母妻子弗能养，而待养于人者哉！仰事俯育，决不可责之他人，则勤俭治生，洵是学人本事”（6）正是这种思想的准确表达。我们知道，中国传统的经济模式是以小农经济为主，但自唐宋以来，特别是宋元明清以后，商品经济逐渐发达。商品经济不同于自然经济的最大特点是，自然经济主要依赖的是天气环境等自然条件，所以要求经营主体遵循自然规律；而商品经济却是一种充满变数与风险的经济，更需要应变的能力和勇于担当的进取精神，特别是新时代瞬息万变的市场经济环境下更是如此。这就要求当代的经营者更要磨练出一种自强自励、勇往直前的担当意识和坚韧不屈、处变不惊的强大意志。显然，儒家自《周易》至孔孟诸贤在此方面依然有着可供挖掘的深厚资源。

一以儒家为核心的传统文化这种自强不息的担当感催生了经济发展中所需要的工作精神。于是，在中国文化传统下，产生出了“建功立业”意识与“担当感”，形成了中国人的“天职”观念。不同的是，中国人的天职观念，宗教的成分淡漠，这符合中国人“理性早启，文化早熟”的特征。朱熹讲，“只可过于勤劳，不可失之怠惰。”（7）《劝农文》中“勤是人成就自己的基本方式，是人的天命道德义务和职责。在儒者“尽人事而知天”之话下，人生一世即是在“苦其心志，劳其筋骨”内磨练劳作践行天命，履行自己的义务。尊敬自己，为自己负责人，“尽己之心谓忠”，“尽其心者，知其性也，知其性，则知天也”（4）《尽心上》），在儒家的阐释与倡导下，形成了中国人具
有鲜明现世色彩的“天职观”，并催生了民间“天道酬勤”的信念和乐观精神。儒家的担当感同时也催生了重视教育、重视学习以提高自身的意识，这对现代商业精神的塑造也具有积极的作用。自孔子首倡“有教无类”的私人讲学之风开始，儒家就极其重视教育的普及性，而孔子自身“发愤忘食、乐以忘忧，不之老之将至”（《述而》）的学习精神也可以催生出现代商业所需要的终身学习意识与创新精神。

儒家的这种自强不息、勤奋进取的担当感和学而不厌的终身学习意识及由此生发的创新精神，在海尔总裁张瑞敏先生身上得到了完美的体现。这位“学者型”、拿过工商管理的硕士学位的“儒商”企业家极具学习精神与创新意识。张瑞敏曾经自述成功的秘诀是“学习和读书”，他喜欢读《论语》、《道德经》等哲学书籍，是兼通中外管理思想精髓的企业家。张瑞敏还特别注重技术创新，将之视为企业的核心竞争力，并积极实践，这从他多次获得的国家级、省部级科技进步奖项中得到证明。张瑞敏之所以这么成功，一个重要的原因就是他能站在传统文化的根基上，发挥自强不息，勤勉进取的精神，去最好的汇纳中西智慧。

2.2 敬业守职、宁俭勿奢的自律意识

以儒家为核心的传统文化一方面倡导勤勉进取的担当感，一方面倡导诚敬守职、“宁俭勿奢”的自律精神，这些都是构建现代工作伦理的最有益的资源。“敬”是严肃、谨慎，有所敬畏，是一种发自于敬畏天命从而对天命所赋予的己之生命负责的态度，并由之引出对自有职分负责任的精神。孔子“畏天命”（《季氏》），曾子“战战兢兢，如临深渊，如履薄冰”（《泰伯》），在此基础上，儒家主张通过“修己以敬”（《宪问》）、“居处恭，执事敬，与人忠”（《子路》）的主观努力从而做到“尽人事知天命”，产生了中国人的“天职”观念，与德国社会科学家马克思·韦伯在《新教伦理与资本主义精神》里面所提到的基于新教信仰的“天职”观念相辉映。在中国式敬天、畏天、承担天命、履行职分的精神下，产生了儒家“诚敬”的做人态度与工作态度。如孔子讲“修己以敬”，“执事敬，与人忠”，都是对这种负责任的诚敬态度的表达。

与这种负责、诚敬精神相联系，“克勤克俭”，也成为儒家的信条。而儒家的俭，并非仅经济意义上的节约，而主要讲一种自我约制的意识，一种“宁俭勿奢”的自律精神。正是在这种意义上，孔子讲“奢则不孙，俭则固，与其不孙也，宁固”（《述而》）。孔子的这种思想，到儒家的历史上不断发展，至宋明理学时期发展为“存天理，灭人欲”的观念，至此，与西方“新教伦理”里清教徒的伦理观念更为类似。

儒家的这种敬业精神与勤俭意识，与推动西方资本主义兴起时期的新教观念颇为类似，也应该成为当代企业家所倡导的精神。敬业是中国式的“天职”观念，而“存天理，灭人欲”式的节俭，与新教伦理所讲的“入世苦行”相比，可发展为中国式的禁欲主义。余英时先生就曾经指出，明代开始产生“士商互动”的现象，儒家的“诚敬”观念、担当意识与商人的“治生”敬业、勤俭积累意识直接互动交融在一起。于是，中国明清两代活跃的商人阶层，通过勤俭治生完成了无“原罪”的、中国式的资本积累。

同样，运用到现代市场经济当中，儒家的勤俭精神与自律意识，可直接促使企业主节制不必要的浪费，以保证更充足的资金投入到扩大再生产中。同时，这种勤俭自律也便于铸造社会大众的节约风气，提高整个社会的储蓄率，为企业的再生产提供多渠道的资金来源。这也足以说明，在上世纪末日本及亚洲四小龙能够迅速的经济起飞，得益于这几个国家较高的社会储蓄率。因为同为儒家文化圈的它们，其民众依然在心理的深层上保留着儒家伦理的潜在影响。当代社会的
企业经营之道，在正常的市场经济秩序的规约下，应当是健康有序的企业伦理或工作伦理的建设，包括诸如敬业守职精神、团队合作意识、勤勉严谨的态度、正主人翁的使命感与责任感等。

有人认为，儒家伦理强调维持系统整合的价值而不重视目标达成的价值，因而不利于竞争和效率，这种看法是有片面性的。站在文化比较的视角上，会发现东西方的现代化，因为其文化传统的不同会表现出不同的样式，表现在工作伦理上，以中国为主的儒家文化圈，与重视个人主义的西方文化不同，更注重团体的价值。因此，儒家文化熏陶下的员工，更容易培养出对团体的忠诚、归属感与奉献精神。这其实得益于儒家文化有一种“敬业乐群”、“和而不同”、“异业同道”的合作精神。

2.3 和而不同、异业同道的合作精神

西方文化重视个体，但同时在文明的早期就发展出了公民意识及协作精神。所以，西方文化是以“原子式”的“个人”直接去组成群体的。与西方文化不同，以儒家为核心的传统文化群体观念是以“家庭”为中介的。在这种群体观念之下，中国文化不仅“敬业”，而且“乐群”，这种重视群体、重视协作的精神，一方面来自于中国重视家庭、重视宗族从而重视家国天下的宗法制社会结构，另一方面来自于儒家自始至终所强调的和谐精神。《尚书·大禹谟》讲“正德，利用，厚生，惟和”，孔子讲“礼之用，和为贵”[2]（《学而》），《中庸》讲“致中和”，都是对和谐精神的表达。孔子的这种和谐，并非放弃原则的求同，而是“君子和而不同，小人同而不和”（《子路》），强调坚守原则基础上的和谐与正当的合作，反对小人以利益相勾结。

先秦儒家的这种思想被宋理理学家王阳明所继承，发展出了“四民异业而同道”的思想。王阳明生活的明王朝，商品经济更加发达，士与商的更加互动频繁，二者的思想也随之互相渗透，“四民异业而同道”的思想就是在这种情势下产生的。他说：“古者四民异业而同道，其尽心焉，一也。士以修治，农以具养，工以利器，商以通货，各就其资之所近，力之所及者而业焉，以求尽其心。其归要在于有益于生人之道，则一而已。士农以其尽心于修治具养者，而利器通货，犹其士与农也；工商以其尽心于利器通货者，而修治具养，犹其工与商也。故曰：四民异业而同道。”[3]（《节庵方公墓表》）古代的士农工商只是从事的职业不同，他们道是相同的，都是为了尽力为别人服务。士人的专业是治理国家，农民的专业是奉养天下人，工匠的专业是制造工具，商人的专业是货物流通。在“大道”的引领与统驭下，他们虽职业有别，但正好可以相互协作，形成一个每个个体都肩负神圣使命而共同奔赴大道的群体。

传统文化的上述思想对塑造现代市场经济条件下敬业乐群、合作共赢的工作精神，促进企业团队的和谐与凝聚力，从而提升企业的竞争力与经济效益，有着重要的价值。与西方文化重视个人主义、强调自由竞争的价值观不同，以儒家文化为主的中国传统伦理则把群体价值放在首位，个人对群体的责任感、归属感与担当精神得到重视，从而较好地实现了企业内部的凝聚力，这对企业的发展起着至关重要的作用。这种不同在进行东西方企业比较研究的学者那里也得到了证实。据一些研究者发现，日本的企业具有极高的效率，其重要原因可以归结为一条，他们的员工对自己所供职的企业有一种强烈的归属感与担当精神，这种情感上的强列认同使得员工与企业形民一个牢固的“命运共同体”。这样一来，所有的员工都会为企业尽心尽力，主动承担，从而促进了整体效益，加速了企业的发展。这正是儒家重视和谐、敬业乐群精神影响的结果。
3. 结论

综上所述，在中西文化比较的视域下，我们发现，中国人有着自己特定的文化传统，这种文化传统积淀为中国人的潜在的意识心理与行为习惯。所以，我们现代商业伦理的构建也必须考虑这种传承性和延续性，在中国这个以人情为纽带、重视人伦的社会中，吸纳儒家伦理思想的精髓，以构建新时代的工作伦理，是我国商业伦理构建的必由之路。对现代市场经济来说，儒家文化为其提供了可以利用的宝贵资源，是一个有益的文化源头和智慧宝藏。

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Research on the Development Strategy of Logistics Management Professional Teachers under the Background of New Retail

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Abstract
New retailing has opened up a new era of consumer market, which has also brought great changes to the logistics industry and put forward higher requirements for logistics talents. As a professional teacher who trains logistics talents, how to make great progress under the new retail background has become a hot topic of discussion. Through the analysis of the connotation of new retail and the impact of new retail on the logistics industry, this paper uses SWOT analysis method to reflect on the development of logistics management professional teachers under the new retail background, and puts forward corresponding countermeasures.

Keywords: New retail; Logistics management; Teacher development
新零售背景下物流管理专业教师发展对策研究

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摘要
新零售开辟了消费市场的新时代，也为物流业带来了巨大的变革，对物流人才提出了更高的要求。作为培养物流人才的职业教师，如何在新零售背景下获得长足发展，成为了当下讨论的热点。本文通过辨析新零售的内涵，剖析新零售对物流业的影响，采用SWOT分析法，对物流管理专业教师在新零售背景下发展进行思考，并提出相应对策。

关键词：新零售；物流管理；教师发展

1. 引言
新零售时代的到来改变了物流业的传统模式，对物流人才的要求也日益提高，作为人才培养的直接关系人——物流管理专业教师，他们在新零售下物流的变革时期如何更快更好发展，成为了当下值得思考的问题。

2. 新零售的概念及内涵
在2016年的云栖大会上，马云首次提出新零售、新制造、新金融、新技术和新能源的“五新理论”。他指出，线下与线上零售将深度结合，加上现代物流，服务商利用大数据、云计算等创新技术，线上线下和物流将结合在一起，构成未来新零售的概念，未来电子商务平台即将消失。线上是指云平台，线下是指销售门店或生产商，以物流消灭库存，减少囤货量。电子商务平台消失是指，现有的电商平台分散，每个人都有自己的电商平台，不再入驻淘宝、京东等大型电子商务平台。

阿里研究院对“新零售”概念给出了一个明确的定义：“以消费者体验为中心的数据驱动的泛零售形态”。因此，新零售瞄准着实时、高效、成本节约型资源配置，深度且精准的客户需求挖掘，基于直播、社交、反馈的客户体验等目标，贯穿生产、物流、销售等环节，涉及人工智能、机器人、VR等新兴技术。

传统实体行业在互联网的突然包围下经历了一次滑铁卢，电商使得许多传统实体行业不得不转换思路开始进军互联网领域。零售业首当其冲遭受了互联网模式运营的沉重打击，电商革命随之引发“关店潮”。但新零售时代的到来，让实体经济再次点燃希望，它将重新洗牌，引领中国乃至世界的消费市场新的变革。

3. 新零售对物流业发展的影响分析
物流是整个新零售、新业态的最重要基础设施，物流业的发展是新零售快速升级的关键所在，也将提升新零售的附加值服务。所以，物流是新零售的核心
新零售时代的物流将和云计算密切相关。物流企业不仅仅是要比谁做得更快，还要让库存管理得更好，云计算的运用，会对商品生产、流通与销售过程的升级改造，使得实体企业预先准备消费者需求货物变得高效易行，在降低物流成本的同时，提升消费者的体验。总之，新零售将会对物流业带来突破性的革新。

3.1 技术和信息化水平高速提升
新零售时代的到来，物流无疑在线下和线上的深度结合中发挥着日益重要的作用。物流未来的发展趋势之一是：云计算下的二是大量物流高科技设备将会被运用于货物分配中，减少人力输出。为了实现以上三个方面的成就，必须依靠高精尖的技术和智能通达的信息平台，技术是新零售背景下物流智能发展的硬件支撑，信息平台是物流业革新的中枢神经，二者的提升和发展是新零售对物流业提出的新要求。

3.2 物流基础设施加快建设
新零售需要线上线下全渠道的融合，并形成完整的供应链条，除了发达的数据信息平台作为连接渠道的重要保障以外，还需要建立在四通八达的物流网络的前提之下。物流基础设施的建设会进一步推进在新零售线下物流行业的进一步发展，物流空间网络的规划和布局会进一步改善新零售线下物流行业的生态圈系统。

3.3 物流运营模式有待创新转变
物流企业要整合资源，建设开放物流，实现共享物流，提高效率，降低成本；还要打通线上线下，有机融合天网+地网。为了达成新零售所倡导的使命和目标，物流运营模式要加快“物流先行”的建设步伐，准确预测消费需求、设置前置仓，让客户拥有更好、更便捷的消费体验。

3.4 物流专业人才素质亟需提高
新零售给物流带来的革新，最核心的是需要智力支持。对于创新意识强、综合素质高、专业技能熟、经验知识广、战略思维好的复合型物流人才，是社会需求、高校培养的重点目标。人才资源将是推动新零售线下物流业发展的永恒动力，更是新零售未来成功发展的核心源泉。

4. 新零售背景下物流管理专业教师发展的 SWOT 分析
在新零售背景下，从事物流管理教学的专业教师要即时对接社会的人才需求，从新零售、新物流的角度思考如何培养适应新环境、符合新要求的物流专业人才。作为社会和学校的引航员，物流管理专业教师有责任从自我开发开始，转变传统观念、树立新的思维、汲取创新知识、提升专业素质，从而才能更好的引导、教育学生，按照新的发展趋势进行人才培养，以保证人才资源数量与质量的供给与需求平衡。

4.1 优势分析
物流管理专业教师一方面由于长期从事物流教学工作，对学生引导、人才培养等工作具备丰富的经验；另一方面由于长期进行科学研究，在物流学术领域始终站在最前沿的位置上，具备强大的学习能力和包容态度。因此，在新零售背景下，专业教师将会自动接受物流业的革新变化，并将新的理念和思想向
学生传播。不仅能让学生快速转变和适应新的物流业发展，也为自身的专业知识储备提供了新的营养。

4.2 劣势分析

新零售背景下，对物流基于云计算、人工智能、机器人等高精尖的科学技术要求甚高，但是目前部分物流专业教师缺乏实践锻炼，特别是互联网企业的实际项目参与程度比较低，与以往传统的物流项目有很大区别。再加上高新技术发展尚未成熟，教师们无法快速且全面地掌握最新技术，因此，在对人才培养的实践教学部分缺乏一定的基础。这将影响物流专业教师的教学能力和教学效果，导致人才培养的质量不够理想。

4.3 机会分析

新零售开辟了物流业发展的新时代，也将物流发展的重要意义再次呈现在人们的视野中，这为国家和社会对物流业的重视、对物流人才培养的重视，以及对物流管理专业教师开发的重视，创造了良好的机遇。物流管理专业教师借助新零售的统筹谋划，一方面可以获得大量新颖的、尚待探索的科学研究课题，另一方面可以在一定程度上提升自己的专业地位、强化专业自信，这就为“政产学研”协同发展营造了和谐的环境。

4.4 威胁分析

新零售下的新物流，将重新定义实体产业、电子商务和物流的分工与协作，流程重造是必然的选择。这也就意味着，谁能最先发现高效、可行、互惠的运作模式，谁就是最大的赢家。各行各业都迫切想分这一杯羹，竞争的加剧随之而来，这种竞争也会延伸到高校教师，若不能快速响应社会对物流人才培养的需求，无法培养出符合用人单位标准的高质量专业人才，社会将直接质疑教师的教学水平，对自身职业素养将产生负面影响。

4.5 SWOT分析

通过对新零售背景下物流管理专业教师发展的优势、劣势、机会和威胁的详细分析，可得到以下SWOT分析表:

表格1 新零售背景下物流管理专业教师发展下SWOT分析表

<table>
<thead>
<tr>
<th>外部因素（opportunities）</th>
<th>内部能力</th>
<th>优势（strengths）</th>
<th>劣势（weaknesses）</th>
</tr>
</thead>
<tbody>
<tr>
<td>外部因素</td>
<td>内部能力</td>
<td>优势（strengths）</td>
<td>劣势（weaknesses）</td>
</tr>
<tr>
<td>1.对物流管理专业教师的开发提高了重视；2.新零售为教师科研课题带来大量资源；3.为“政产学研”协同发展营造了和谐的环境。</td>
<td>1.学习能力强，具有一定包容态度，能快速接受新事物、新思想；2.教学经验丰富，教学技能熟练，有完备的物流知识体系。</td>
<td>1.关于新零售涉及到的物流高新技术无法快速且全面的掌握；2.实践教学能力比较匮乏。</td>
<td></td>
</tr>
<tr>
<td>机会（opportunities）</td>
<td>SO</td>
<td>1.利用整个社会对物流管理专业教师的重视程度，为自身的学习和提高创造更多机会；2.充分把握新零售创造的资源和环境，利用自身的专业特长和认知系统实现自我超越。</td>
<td>1.充分利用课题资源，积极地进入到企业调研、学习、锻炼，以提升自己地实践教学能力；2.借助产学研平台，与企业保持紧密联系，争取更多地横向合作机会，以第一时间</td>
</tr>
</tbody>
</table>
了解并掌握最新的高新技术。

威胁（threats） | ST | WT
--- | --- | ---
1. 竞争加剧，随时会遭遇被淘汰的风险；
2. 社会对物流人才培养质量的要求急速提高。

1. 辩证看待竞争带来的风险，时刻保持着高涨的学习热情，紧跟时代步伐；
2. 灵活运用已有的物流知识体系，结合实际情况判断物流人才的需求标准，以应对高质量人才的不确定需求。

1. 多渠道加强锻炼实践能力，从而提升自身职业发展的竞争力；
2. 面对人才培养质量的新要求，梳理与物流管理专业教师发展相对应的职业新目标。

5. 新零售背景下物流管理专业教师发展对策

5.1 外部方面

（1）加强产学研平台建设

高校应该积极开展与政府、企业等单位的交流与合作，为物流管理专业教师与外部资源搭建互动的平台，营造良好的沟通环境和实践环境，从而为新零售背景下物流管理专业教师的职业素养、专业技能和格局视野的提升创造优越的条件。

（2）积极鼓励下厂锻炼

高校应出台合理的政策，以鼓励物流管理专业教师下厂锻炼，并建立健全教师下厂的考核制度，督促、监督教师与下厂单位开展实质性的合作，让教师沉下去，加入到下厂单位的实际项目和工作任务中，从而提高其实践能力。

（3）大力支持外出学习

对主动要求参与外部培训的教师提供经费支持，特别是学术水平较高的国际会议和一流学校组织的专业培训，通过外部的专业学习和培训，可以让教师快速获取前沿的物流信息，能够争取到与高水平物流高校的合作机会。

5.2 内部方面

（1）主动学习新思想、新概念、新技术

新零售是时代的弄潮儿，物流业更是推动它向前发展的源源动力。新物流带来的新技术和新模式值得物流从业人员的学习，物流管理专业教师更是应该拥抱这种变革，以开放的心态接受新理念，并运用所储备的知识创新物流业相关内容。

（2）积极提升跨学科的学习能力

新零售带来的是多产业的相互融合，这就要求物流专业教师能够了解跨学科的相关内容，除了物流层面的，还要掌握支撑、维系新零售运转的经济、金融、工业、社会等知识体系，把它当作一个有机系统进行学习和思考，为教学、科研工作建立完善的知识体系。

（3）不断积累生产生活经验

新零售将会创造多样化、个性化的新型消费模式，而每一种新模式的诞生都会出现在大众的视野里，物流管理专业教师应该细心观察生产生活实际情况，积极思考新模式伴随的物流问题，为个人专业素质的完善和提高获取第一
参考文献

Research on Development and Countermeasure of Time-sharing Leasing and Sharing Automobile Industry

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Abstract

Along with the boom of the "Internet + " sharing economy, the way of customers' travel has changed. At the same time, the state vigorously popularizes the good policy of developing new energy vehicles, especially pure electric vehicles. Shared automobiles emerge as the times require. As a new way of travel, sharing cars can help alleviate traffic pressure, reduce environmental pollution, reduce the cost of travelers and improve the efficiency of vehicles. Therefore, all cities in China are actively trying to rent new energy vehicles and share the mode of travel. However, while sharing the development of the automotive industry, there are also some problems in the operation, such as cost-benefit problem, difficulty in finding a car, deposit, less charging piles, difficulty in parking, poor internal environment and so on.

Based on the analysis of the problems in the development of shared automobile, this paper provides reasonable suggestions for the development of shared automobile from the perspectives of consumers, enterprises and government. For consumers, we should improve their own quality and actively support the development of shared cars; from the enterprise side, we should actively improve the problems in the current operation, find new development and profit space, so that consumers can get a good driving experience; for the government, we should adopt appropriate support policies, build
intelligent transportation with enterprises, and promote the stable development of shared cars.

**Key words:** time-sharing car rental; consumers; enterprises; government
分时租赁共享汽车行业发展及对策研究

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摘要

伴随着“互联网+”共享经济的热潮，消费者的出行方式发生了改变，同时国家大力普及发展新能源汽车尤其是纯电动汽车的利好政策，共享汽车应运而生。作为一种新兴的出行方式，共享汽车有助于缓解交通压力，减少环境的污染，降低出行者的成本和提高车辆的使用效率，因此我国各城市都在积极尝试新能源汽车分时租赁，共享出行的模式。但在共享汽车行业发展的同时，在运营中也出现了一些问题，如成本收益问题、找车难、交押金、充电桩少、停车难、车内环境差等。

本文在分析共享汽车发展中的问题的基础上，从消费者、企业、政府三个角度出发，对共享汽车的发展提供合理建议。对于消费者，应提高自身素质，积极支持共享汽车的发展；从企业方面，应积极改善目前运营中出现的问题，寻找新的发展与盈利空间，使消费者得到一个良好的驾驶体验；对于政府，应采用适当的支持政策，与企业共同构建智慧交通，促进共享汽车的稳定发展。

关键词：分时租赁共享汽车；消费者；企业；政府

1. 引言

共享汽车，泛指以新能源纯电动汽车为主的，被很多人使用，但是使用者没有所有权的汽车，其突出特点为分时复用，多任务执行。

目前市场上的共享汽车，基本上是通过分时租赁，按时间计费，让用户利用移动互联网平台，通过手机寻找附近车辆，然后下单，根据地图和定位自行前往停车地，用 App 开启车门，再上车驾驶，是一种自助式车辆预定、车辆取还、费用结算的汽车租赁服务。

国内各个一线城市基本都有共享汽车品牌。据不完全统计，当前能够提供共享汽车服务的互联网厂商的有北京的 GoFun、一度用车、TOGO 途歌、巴歌出行、神州 iCar，上海的 EVCARD，深圳的 PonyCar，重庆的盼达，天津的立刻出行等企业。因共享汽车的重资产属性及高成本、消费者观念的限制，共享汽车行业规模尚不壮大，行业集中度不高，市场份额较低。目前，国内注册运营分时租赁的企业数量有 370 家，实际有车队运营的公司数量超过 100 家，呈百家齐放之态。

共享汽车企业的目标受众主要是没有私家车又有自驾需求的年轻人，整个行业发展潜力巨大，目前仍是风口行业。但随着麻瓜出行共享汽车、友友用车、EZZY
共享汽车的倒闭，加之最近 car2go 宣布退出中国业务，整个行业也存在着一些痛点与风险。同时与汽车租赁业发达国家相比，我国共享汽车市场在车辆数量、市场集中度、网络化运营和服务能力等方面仍有较大差距。本文将通过消费者对共享汽车的认知，进行行业问题的分析。

2. 国内外共享汽车现状研究

2.1 国外共享汽车行业现状

共享汽车最早发源于欧洲，最早出现在瑞士。1990 年欧洲汽车共享协会的成立标志着共享汽车的诞生。之后在美国、德国、法国等国家迅速发展起来。最大的汽车共享运营商为 Zipcar。

（1）德国共享汽车现状

共享汽车在德国发展非常有前景。目前，有 150 个共享汽车服务供应商，覆盖了 600 个城镇，共享汽车用户高达 171.5 万人。共享汽车主要有两种共享模式，第一种模式是基站式分享模式，如“stadtobil（城市移动）”、“cambio”等公司。第二种模式是自由流动式共享模式，如戴姆勒旗下的“car2go”和宝马旗下的“DriveNow”。2017 年 9 月，德国制定了《共享汽车优惠法》，大力支持共享汽车行业的发展。

（2）美国共享汽车现状

在美国，共享汽车一般都是私人运营的，一些地方政府会对共享汽车特定客户进行一定的补助。美国共享汽车组织最早是 1997 年在波特兰成立，共享汽车的发展为美国市民的出行带来了很大的便利，受到了市民的好评。目前，共享汽车打算在低收入社区和洛杉矶以外城市进行推广，共享汽车在美国的发展可谓如日中天。

（3）日本共享汽车现状

日本大部分消费者倾向于拥有自己的车辆，由于观念以及经济方面，共享汽车在日本尚未形成规模。目前日本车企正在加速布局共享汽车市场。

综上所述，国外共享汽车起源较早，共享模式较为完善，得到的消费者的认同，在美、德取得了良好的成绩。

2.2 国内研究现状

在共享经济的带动下，共享汽车在 2010 年左右进入中国市场，国内一些学者对它们的研究也由浅入深。

王千，梁涵（2017）按照提出问题，分析问题，解决问题的行文思路，对城市汽车共享推广可行性分析，肯定了共享汽车在我国发展的基础条件，并进行前景展望；夏妍（2017）通过研究消费者对共享汽车的槽点和痛点，总结消费者在使用共享汽车过程中出现的问题；李小妹，贠晓哲，王海燕（2017）运用 SPSS 和 AMOS 软件，利用描述性统计分析方法，用效度分析和假设检验等多种分析方法对问卷进行分析，最后得出了消费者对共享单车的使用意愿有显著影响，并且存在多种纬度影响，其中认知影响最大。伏梅娟（2015）从消费者认知角度分析了消费者与共享汽车之间存在相互影响，提出个体的特质性调节定向与汽车共享
信息达成匹配影响消费者共享汽车的消费意愿，同时情景性调节间接影响消费者认知；王丽丽（2017）从互联网的角度分析汽车共享发展模式及解决方法；周杨、周昭熊（2018）构建政府补贴与企业行为动态博弈模型，为共享汽车市场健康发展提出建议。

综上所述，国内外专家学者从共享汽车的发展，消费者使用意愿及其影响因素、出行模式选择行为，共享汽车推广效益、运营、政策等方面进行了很多有意义的探索和研究。本文认为企业在制定自己共享汽车推广策略时必须同时考虑到营销目的和消费者可能的反应，需要从消费者认知的角度对共享汽车的推广进行系统地研究。政府的政策支持、企业的运营管理和消费者的认可，依靠三者合作，共享汽车市场才能健康的发展，共享汽车的硬件条件和软件条件要齐头并进，未来的发展不可估量。

3. 分时租赁共享汽车消费者认知分析

本次调研采用网络调查问卷的形式，共设计183份问卷，实际有效问卷182份，其中100问卷旨在调查消费者对共享汽车的使用情况，以及消费者体验后的感受和建议，83份问卷是潜在共享汽车用户的调查。以下就调查问卷进行分析。

3.1 共享汽车使用者分析

![图1 认为共享汽车可能存在的问题](image1)

图1 认为共享汽车可能存在的问题

![图2 影响消费者使用共享汽车的因素](image2)

图2 影响消费者使用共享汽车的因素
图3 共享汽车需要提高的方面

由上可以看出，消费者吐糟共享汽车存在的问题中，最严重的是车辆数量少，停车网点少，占总体的62.96%；其次是找车不方便占48.15%，车辆乱停放占45.18%；续航能力差和责任事故难以确定分别占33.3%和32.1%。在影响消费者使用共享汽车的图中，停车难的问题占61%，需要交押金占57%，认证手续复杂占55%。

在消费者认为共享汽车需要改进的方面中，大多数消费者建议增加车辆的停放网点，占66%，其次是增加车辆的投放量，占62%，解决押金问题占39%。这些数据说明当前共享汽车企业要增加车辆的投放量和停车网点，解决押金问题，才能提高用户的驾驶体验，让消费者放心的使用共享汽车。

据图1的数据显示，在共享汽车可能存在的调查中，有32.1%的消费者认为发生的事故责任难以认定，在图2的数据中，有55%的消费者表示认证手续太过复杂，这就涉及到法律问题了。

2017年8月，交通运输部、住建部联合发布了《关于促进小微型客车租赁健康发展的指导意见》（俗称“共享汽车”发展指导意见），提出鼓励免押金租车模式，鼓励人流密集区域的公共停车场为分时租赁车辆停放提供便利。但对于共享汽车引起的事故纠纷，没有明确的法律政策来监管。据调查，目前共享汽车存在的纠纷问题主要集中在汽车存在质量问题，尤其是启用和归还两个重要节点的车辆状况不明，造成车辆损坏责任难以认定。另外，当用户在驾驶过程中发生了事故，事故涉及到他人、共享汽车租赁人和实际驾驶人及租贸公司等多个主体，如何认定事故责任是一个复杂的问题，而且保险公司可能也会拒绝赔偿。并且共享汽车使用过程中出现的交通违章，也经常因为使用人不配合处理、会员转借他人而无法找到实际违章人等情况无法处理。

结合以上共享汽车使用者的反馈信息，笔者认为共享汽车做为变革交通出行方式的新兴事物，正在经历不断发展成熟的过程，这个过程伴随着行业的洗牌和人们观念的转变，必然要经历阵痛和失败，最总才会建立适应中国特色和地方特色的共享汽车发展模式。
3.2 共享汽车潜在使用者分析

图 4 共享汽车必要服务调查

图 5 共享汽车选择影响因素分析图

由上图总结出潜在用户对共享汽车未来的建议：

（1）认为共享汽车很有前途，对于一个城市完善便捷交通出行方式意义重大，共享汽车企业需要针对不同的人群加大宣传力度。

（2）安全方面需要加强，共享汽车企业要提供车况较的车，以保证行驶安全。同时重视信息安全管理，能够保护好客户的隐私。

（3）期待共享市场能够更加的规范化，完善取车用车系统，合理规划取还车网点，确定取还车秩序良性发展。

（4）简化取车还车程序，使得真的能够方便消费者。

（5）价格能够合理一点，不能太高，便宜一点。

（6）期待政府能够大力支持，企业完善共享汽车保险、救援等服务支持，提升消费者的体验价值与满意度。

4. 推广共享汽车建议

共享汽车的运营涉及政府部门、投资公司和运营管理企业，根据国内外的实
践经验，我国城市共享汽车要获得广泛的推广，需要消费者、企业、政府等主体共同作出努力。

4.1 消费者方面

（1）消费者加强个人自律

有保障的用户信用基础是共享类产品或服务在中国能盈利的关键特征，同时共享汽车事故责任认定一般由出租企业承担部分责任，承租人承担驾驶责任。因此，消费者更应提高对自身素质的要求，在出行过程中遵循共享汽车使用条例，遵守交通规则，不利用共享汽车做违反法律道德的事，加强道德自律、公德约束，文明安全用车，保护个人与公众权益。

（2）增强环保意识，转变观念

消费者是共享汽车服务的直接体验者，其态度和行为对共享汽车的发展产生直接影响。作为共享汽车的最终服务对象，应该增强环保意识，转变观念，进一步提高消费者对共享汽车的认可。当今世界资源严重短缺，生态问题突出，消费者要提高环保意识，积极支持并响应政府低碳交通的政策，接受共享汽车这种新的商业模式，转变原有的消费理念。另外我国作为人口大国，交通问题、环境问题日益显著，消费者们更应该形成绿色出行的观念，增强对共享经济和共享汽车的认可度。

（3）推广汽车共享项目，助企业实施汽车共享

近年来，共享汽车在国内广泛兴起，其发展离不开消费者的信任和支持。为了更好地促进汽车共享的发展，消费者还应经常参与政府或企业主导的共享汽车推广项目，尝试新的交通方式。同时，消费者应与企业之间保持良好的沟通，积极配合项目的实施并给予反馈和建议，帮助企业提高服务质量，使汽车共享服务能够得到更好的发展。

4.2 企业方面

企业在发展共享汽车中占有重要地位。所以，企业要积极响应政府的号召，与公共交通和出租车开展共享汽车方面的项目合作，以消费者为中心，为他们提供高质量的服务。

结合笔者的调查，消费者特别注重信息的安全和车辆使用的安全，为此企业应更加重视共享汽车安全管理制度的建设。企业运营方应加强会员注册和车辆使用监管，审核会员身份和驾驶资格信息，车辆加装汽车安全信息记录仪及车内监控记录车辆使用情况，并通过技术手段有效记录车辆启用和归还等重要节点的状况。

企业还需从多方面完善共享汽车的管理制度，具体做法包括：

（1）加大宣传力度。需要在宣传方面加大力度，宣传共享汽车优越性，方便快捷等，吸引消费者尝试体验。

（2）完善约车机制，简化取用手续。包括完善手机 APP 约车服务、完善网上约车流程，同时通过尝试一些技术手段，如刷脸认证，一键还车等方式使消费者能够简单快速的约车，满足消费者的即时出行需求。
（3）建立即时有效的投诉机制。让客户出了问题之后有投诉的地方，客服给予及时的答复，让客户心有所依，给予情感上安慰。

（4）丰富共享汽车车辆选择。企业要严格保障共享汽车产品服务质量，投放车况较好的共享汽车，丰富选择车型，既满足消费者实际需求，且符合消费者的心理诉求。

（5）提供优质服务，优化出行体验

企业可以建立起大数据平台，满足消费者的即时需求。通过平台消费者可以自主预订车辆。完善共享平台管理，对车辆进行登记，安全技术检验，对车辆进行投保，完善车辆的调度。强化对车辆的维修、救援、回收等流程。最后，企业还应该严格整顿行业规范，保障用户的人身安全，为用户提供一个良好的驾驶环境。

（6）设定合理的价格体系，完善计费系统

笔者调查发现，共享汽车消费者年龄基本上在21-29岁，这一年龄段的年轻人，经济状况一般，爱面子，年轻有朝气，喜欢新鲜事物。他们看重共享汽车成本的经济性，成本要低于其他出行工具，合理的价格，便捷的计费系统是用户体验使用的关键因素。通过设定合理的价格体系，如错峰出行价格差、分钟+公里计费、不收取停车费、充电费等方式，根据用车的时间和距离从客户的充值卡或信用卡上划账，快捷的结算服务和完善的计费方式实现消费者的利益与共享汽车企业利益的双赢。

（7）合理选择停车点

根据调查发现消费者使用共享汽车主要是用来代步，家庭使用，其次是旅游。共享汽车停车点的设定需要充分考虑使用者的便利度，另外需要考虑方便消费者换乘，最好是和公共交通相连接。

因此，共享汽车的停车点要尽量设置在居住区附近，靠近商业区等。其次停车点要容易找到，根据交通状况设置机动停车点，为使用者解决停车位这一难题。

4.3 政府方面

（1）制定相关政策鼓励共享汽车行业的发展

政府应该通过一系列政策支持、促进共享汽车行业的发展。如提供汽车购置、企业运营、车辆维护和保养等方面的资金补贴，降低企业的成本费用，当企业采用小型汽车和新能源汽车作为共享汽车时，政府应给予其相应的补贴优惠，帮助公司解决运营过程中出现的难题，帮助企业扩大充电桩的建设，保障汽车共享项目的顺利开展。

同时政府要做出相关的规定来规范企业和消费者的行为，进一步完善汽车方面的法律问题，如建议相关职能部门尽快出台共享汽车相关细则，推动成立共享汽车行业协会，通过行业指导规范共享汽车使用和维护流程，完善共享汽车软件功能，做到全程留痕，制定格式合同条款，明确法律责任。
（2）倡导共享理念，建立健全共享汽车生态圈

建议政府等相关职能部门加强共享汽车使用指导及法制宣传工作，提高用户的安全意识、证据意识，倡导信用、文明理念，并以大数据为支撑技术，通过个人信用体建设推动共享经济发展。

同时，交通部门应该广泛宣传生态交通的概念，强调汽车的使用权，弱化其所有权，促进消费者接受汽车共享的理念，转变消费态度。建议针对共享汽车与使用人的不固定性，将交通违章处理与车辆年检挂钩的模式转变为交通违章处罚针对使用人、年检针对车辆的剥离模式，避免因个人未处理交通违章而导致共享汽车停运。

（3）加强共享汽车停车位建设

高额的停车费用和紧张的停车位一直是私家车主头疼的问题，政府在这个问题上应该采取积极的应对措施。首先，要帮助企业建立共享汽车专用停车位。其次，要给予消费者停车优惠。这样能够在某种程度上缓解停车难的问题，并且降低消费者的用车成本，从而吸引消费者的关注，让其更加安心地使用共享汽车服务。

5. 总结

“互联网+”时代的来临，促生了中国共享经济的热潮，各类企业纷纷涉足共享领域，期待共同获得经济红利，共享汽车应运而生。共享汽车以其创新、绿色、开放、共享的特征，在降低社会交通出行成本，缓解个人出行经济压力，缓解交通堵塞，降低环境压力等方面具有私家车无可比拟的优越性。然而共享汽车在快速成长过程中也面临相关法律法规滞后、信用机制尚不健全、管理制度跟不上发展形势等问题。挑战与机遇共存，未来政府、企业等多方主体要继续通过完善平台管理、及时跟进监管工作、积极探索商业模式、重视并解决消费者需求等工作健全行业的发展，为消费者提供安心舒适便捷的共享汽车。相信在各方努力下，共享汽车时代来临已经为期不远了。

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“Internet Plus” Outpatient Experience Scale Development

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Abstract

The improvement of patient experience is an important part of hospital quality improvement. In the new era of the integration of the Internet and the medical field, there is no patient experience scale that takes into account the impact of online Internet technology on offline medical services. This study begins with a literature review of the online customer experience and patient experience scales and used in-depth interviews and questionnaires in order to develop the scale of “Internet Plus” outpatient experience in hospitals and tested the reliability and validity. The scale finally reserved 14 items, allocated into five dimensions: acquirement, attractiveness, receptivity, convenience and security. The scale exhibits internal consistency reliability and construct validity.

Keywords: Scale development; “Internet Plus” patient experience; Outpatients; Hospitals
医院门诊患者“互联网+”就诊体验量表开发

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摘要

患者体验的改善是医院质量改进的重要方面, 在互联网与医疗领域相互融合的新时代背景下, 尚未有患者体验量表考虑到线上互联网技术给线下医疗服务带来的影响。本研究首先对在线顾客体验和患者体验量表进行文献回顾, 根据文献研究结果采用深度访谈和问卷调查方法, 开发适用于门诊患者的“互联网+”就诊体验量表并进行信效度检验。量表最终保留了 14 个条目, 分为五个维度: 获得性、吸引性、接待性、便利性、安全性。该量表具有高水平的内部一致性和结构有效性。

关键词: 量表开发; “互联网+”就诊体验; 门诊患者; 医院

1. 引言

技术改变生活, 服务正在迁移[1]。在技术浪潮中, 医疗服务接触(service encounter)的诸多环节也转移至互联网中[2]。人们可以通过网页、微信、自助服务终端等多种方式完成门诊信息查询、预约就诊、自助缴费、报告查询、健康咨询等活动。这种基于技术界面的线上就医流程引导影响着人们的就诊感受, 形成了医疗机构的“互联网+”就诊体验。

医院门诊患者“互联网+”就诊体验是门诊患者在与医疗机构信息系统交互过程中建立起来的一种主观感受, 是患者内在状态、系统特征与实际就诊环境相互作用的产物, 是整体就诊体验的重要组成部分。“互联网+”就诊体验的概念强调互联网技术对医疗服务流程改进, 体现了线下服务能力与在线患者体验的结合。尽管医疗服务领域从没有停止过对患者体验的探讨, 但关于“互联网+”就诊体验的研究还处于起步阶段。以往研究中, 学者们一方面关注了传统医疗服务情景下患者体验的测量及其对临床服务效果的影响[3-5], 另一方面探讨了患者整合各种互联网资源进行自我健康管理与健康监测的“数字化患者体验”(digital patient experience)[6-7], 尚未有研究关注互联网技术对现有就诊体验的改善。

前人研究为探索医疗服务如何向“互联网+”延伸提供了有价值的参考, 但对于医疗机构来说, 关键的问题是在走向“互联网+”的过程中, 投入了大量的人力、物力进行信息化建设, 但并不清楚就诊患者对“互联网+”这种服务形式的感受究竟如何, 对于如何改进“互联网+”就诊体验也尚未有科学的管理工具可以参考。由于国内“互联网+”医疗服务体系的建设仍处于起步阶段, “互联网+”医疗服务在一级医院和二级医院中并不常见, 而三级医院中“互联网+”医疗服务又主要面向门诊患者。因此, 本研究选取北京市三级医院门诊患者为
深度访谈和问卷调查对象。本研究基于在线顾客体验和患者体验理论，通过规范的量表开发流程，形成医院门诊患者“互联网+”就诊体验量表，为医院“互联网+”医疗服务质量改进提供科学的测评工具。

2. 理论渊源

“互联网+”就诊体验是一个多学科交叉的研究话题。与这一话题相关的概念包括消费行为（CB: Consumer Behaviour）领域的顾客体验（customer experience）以及医疗服务（Healthcare）领域的患者体验（patient experience）。其中，顾客体验中又以在线顾客体验（online customer experience）为重点，与“互联网+”就诊体验关联密切，而患者体验则是顾客体验在医疗背景下的延伸。

2.1 “互联网+”医疗

“互联网+”医疗来源于我国“互联网+”战略的提出。2015年中华人民共和国国务院总理李克强在政府工作报告中首次提出了我国要积极发展“互联网+”战略，推动“互联网+”行动计划服务于中国经济社会发展。同年7月，国务院印发了《关于积极推进“互联网+”行动的指导意见》，《意见》指出要将“互联网+”上升为国家发展新形态。医疗服务事关人民健康，是国家社会民生发展中极为重要的领域，世界主要国家都十分重视医疗民生发展，积极推动医疗领域的改革。在国家大力推进“互联网+”战略的背景下，医疗服务领域同样需要与“互联网+”服务相融合，利用互联网技术推动医疗服务领域的改革和发展。

根据相关学者对“互联网+”医疗的定义，“互联网+”医疗是借助互联网为载体，利用诸如移动通信技术、物联网、云计算、大数据等相关信息技术手段，将互联网技术与传统的医疗健康服务深度融合所形成的在互联网时代下的医疗服务业态的总称[8]。我国与互联网医疗相关的研究和应用可以追溯到上个世纪九十年代，我国早期的互联网医疗发展较为缓慢。近年来，随着国家政策的完善出台及互联网相关技术的不断革新，我国的互联网医疗取得了较快发展。通过文献整理，现有对“互联网+”医疗服务的研究主要集中在两个方面，一是从宏观层面研究我国“互联网+”医疗的概念、发展趋势、服务模式、问题与对策等方面进行研究[9-11]；二是基于应用视角下探索“互联网+”医疗技术设计层面的研究[12-13]，三是采用实证的方法对“互联网+”医疗服务展开调查研究[14-16]，但鲜有科学的量表作为指导。但由于互联网技术对服务流程的改造，传统的患者体验量表在“互联网+”医疗服务中已不适用，亟待开发新的适合“互联网+”医疗服务的患者体验量表用于相关实证调查研究。

2.2 顾客体验

顾客体验（customer experience）作为消费行为领域的重要概念一直广受学者关注[17-18]。顾客体验是指“顾客在购买企业提供的产品或服务过程对企业提供物所形成包含认知、情感、行为、感官、社会反映多维度的感受”[19-20]。这一概念具有情景依赖的内在特质（context-context dependent nature），不同的服务情景下顾客体验有不同的维度[21]，因此对于这一领域的研究，学者们主张针对具体情景展开特定研究，以丰富我们对顾客体验这一概念的理解[2]。医疗服务具有区别于其他服务行业的显著特征[22]（如是人们需要但不是想要的服务，服务过程中需要暴露隐私，来接受服务时身体不舒服等），并
正在经历数字化转型（digital transformation），因此有必要将“互联网+”就诊体验作为独立选题研究。

2.3 在线顾客体验

与线下的顾客体验不同，消费者在线评估产品不是通过现实中的交互，而是通过网页上的文字和视觉刺激来实现的。传统的线下体验包含多个维度，如认知、情感、感官、社交、身体，而对于在线顾客体验研究则相对简单。在线顾客体验指顾客对产品在线展示的主观的、多维的心理反应，包括四个维度：信息、娱乐、社会临场感、感官吸引力。信息维度被定义为“一个网站为顾客提供资源和有效信息的程度”，是在线顾客体验的主要认知维度。信息维度会影响顾客作出购买决策，包括考虑、有意识的心理加工、问题解决；娱乐维度指顾客与在线产品交互时唤起的情感反应，这种情感反应可能仅是在享受网上购物的乐趣而不考虑功能方面的因素，该维度可以激发顾客的兴奋并促进购买行为；社会临场感维度指一个网站页面所提供的温暖的、社交的、人际接触的感觉。现有研究表明，网站的社会临场感可以增加感知的有形性和对产品的好感和购买意愿；感官吸引力维度指在网络情境下“由其形式特征和定义的中介环境的表征丰富性”，也就是网页刺激感官的方式。虽然网络情境限制了感官体验的范围，但感觉仍可以通过图像、视频被唤醒从而影响顾客对在线产品的感知。“互联网+”就诊体验与在线顾客体验具有一定的联系而不相同。“互联网+”就诊体验不仅包括线上体验，而且强调线下医疗服务能力对其线上体验的支持作用。

2.4 患者体验

患者体验是患者在接受护理和治疗过程中，对所有直接、间接和独立交互的感知和评价。通过对国内外患者体验量表的文献整理，患者体验量表多出现沟通（医患沟通、护患沟通）、情感支持、信息、响应性、患者参与、医院环境、疼痛管理、隐私安全、出院指导等维度。其中，门诊“互联网+”医疗服务较少涉及患者参与、疼痛管理维度，不涉及出院指导维度，服务的场景不一定在医院中所以也不考虑环境维度，而上述其他维度则需要被考虑到“互联网+”就诊体验量表开发过程中。如沟通是患者体验中最重要的组成部分之一，并且几乎包含在所有患者体验量表之中。但随着互联网技术的介入，患者不仅可以通过传统方式与医生、护士以及其他患者进行沟通交流，而且可以通过网站、移动设备中的应用程序和自助终端来完成沟通，因此传统的患者体验量表的沟通维度在“互联网+”医疗服务情境下也需要作出改变。

3. 量表开发过程

3.1 生成项目池

根据在线顾客体验和患者体验量表的相关维度设计访谈提纲，本研究采用半结构式访谈的方法生成初步的测量条目。本研究选取北京市开展“互联网+”医疗服务较好的医院进行调研，访谈近三个月内有使用医院“互联网+”医疗服务经历的患者。访谈人员三人均为硕士学位，自身对访谈内容和背景有一定的了解并在访谈前接受了标准化的培训指导。本研究共访谈了17位有医院“互联网+”就诊经历的门诊患者，其中13位患者来自北京市三级医院，包括北京协和医院、中日友好医院、首都医科大学附属北京中医医院、北京中医药大学附属北京中医院、北京中医药大学附属北京中医医院、北京中医药大学附属北京中医医院、北京中医药大学附属北京中医医院、北京中医药大学附属北京中医医院、北京中医药大学附属北京中医医院、北京中医药大学附属北京中医医院、北京中医药大学附属北京中医医院、北京中医药大学附属北京中医医院、北京中医药大学附属北京中医医院、北京中医药大学附属北京中医医院、北京中医药大学附属北京中医医院、北京中医药大学附属北京中医医院、北京中医药大学附属北京中医医院、北京中医药大学附属北京中医医院、北京中医药大学附属北京中医医院。
<table>
<thead>
<tr>
<th>国内外量表</th>
<th>量表名称</th>
<th>相关维度</th>
</tr>
</thead>
<tbody>
<tr>
<td>国外量表</td>
<td>HCAHPS[36]</td>
<td>医患沟通，护患沟通，医务人员的响应，疼痛管理，药物沟通，出院信息，护理过渡，环境的清洁和安静</td>
</tr>
<tr>
<td></td>
<td>PPE[5]</td>
<td>信息与教育，护理的协调与整合，身体舒适，情感支持，对患者偏好的尊重，家人和朋友的参与，护理过渡，整体印象</td>
</tr>
<tr>
<td></td>
<td>PEQ[39]</td>
<td>信息投诉，护理服务，沟通，信息检查，亲友的交往，医生服务，医院及设备，药物，组织和总体满意度</td>
</tr>
<tr>
<td></td>
<td>FIPEQ[40]</td>
<td>医生工作质量，医疗信息，住院环境，护理质量，出院管理，协调性，院内就诊</td>
</tr>
<tr>
<td>国内量表</td>
<td>PKU-VPSM[41]</td>
<td>可及入院，一般病人信息，治疗信息，投诉管理，物理环境，出院随访</td>
</tr>
<tr>
<td></td>
<td>HKIEQ[42]</td>
<td>可及与选择协调性，信息沟通，患者隐私安全，参与决策，舒适性及疼痛管理，设施环境，患者家属参与，自我支持，对医务人员反馈的满意</td>
</tr>
<tr>
<td></td>
<td>CHPESM[43]</td>
<td>入院可及性，一般住院服务，治疗性服务，投诉管理，环境后勤服务，出院指导</td>
</tr>
<tr>
<td></td>
<td>IPEQ[44]</td>
<td>技术质量，服务态度，情感支持，价值感知，环境后勤，可及便利，疾病交流</td>
</tr>
<tr>
<td></td>
<td>PEES-50[45]</td>
<td>有形性，可靠性，反应性，保证性，关怀性，连续性</td>
</tr>
</tbody>
</table>

属东直门医院、北京大学第三医院、5家医院涵盖了综合医院和中医医院，且医院“互联网+”医疗服务开展水平较高，具有代表性，另外4名访谈对象为北京中医药大学的学生，他们均在近三个月内有使用过医院“互联网+”医疗服务的经历。17位患者中，男性7人，女性10人；21-30岁4人，31-40岁4人，41-50岁2人，51-60岁2人，60岁以上5人，访谈采用现场面对面的形式，每次访谈时间约为20-30分钟。

在标准化的访谈指导语后，访谈人员首先要求访谈对象回忆最近一次使用“互联网+”医疗服务的就诊全过程，患者可以从就诊信息查询、预约挂号、分诊候诊、就诊检查、取检验报告、缴费、取药等门诊就诊流程进行回忆和描述。随后访谈人员会再对细节进行补充提问，以获得更完整的访谈对象对服务的主观感受的描述。最后，访谈人员再对使用“互联网+”医疗服务时的信息获取、在线沟通、响应性、界面设计等与在线顾客体验和患者体验相关的维度进行针对性的补充提问。访谈过程中访谈人员尽量不打断患者的叙述，不进行诱
导性的提问，保证患者真实感受的表达。如果患者在交流过程中明显偏离主题，则由访谈人员适时引导。经访谈对象的同意，本研究在访谈过程中进行了相关的录音工作，这样有利于访谈记录的完整性，访谈结束后把访谈的录音整理成文字材料并对其进行分析，文字材料约 11.6 万字。

通过前期文献整理和深度访谈结果，项目池初始设置 25 个条目并进行了初步的问卷编制。在 25 条目的量表编制完成后，35 位患者对其进行了填答，并收集他们对该量表的建议。同时邀请 5 位行业内专家对条目的科学性进行初步评价，确保量表的内容效度。经过 35 位患者的初步调查和 5 位专家的评价，量表删除 3 个条目，保留 22 个条目。

3.2 项目池净化

采用李克特 5 级评分方式将 22 条目编制成量表，1 表示非常不同意，5 点表示非常同意。本轮问卷调查采用现场自填法，选取 3 家北京市三级医院的门诊患者展开调查，包括北京协和医院、中国中医科学院广安门医院、卫生部中日友好医院，涵盖综合医院和中医医院。3 家医院日门诊量较大，医院“互联网+”服务开展水平较好：三家医院皆有官方应用程序、微信公众号，开通了 114 挂号平台服务。

本轮调查共收回 315 份有效问卷。利用 SPSS22 对数据进行处理和分析，315 份问卷中，北京本地患者占 65.00%，外地患者占 35.00%，男性患者占 31.75%，21-30 岁患者居多，占 36.83%，20 岁及以下占 4.13%，31-40 岁占 32.38%，41-50 岁占 17.46%，50 岁以上占 9.21%。大部分患者接受过高等教育，占 91.11%。使用“互联网+”医疗服务的患者就诊科室主要集中在妇科和皮肤科，分别占 15.87% 和 10.16%。家庭月收入高于 8000 元的患者占比最高，占 60.95%。

对 315 分问卷进行统计分析，首先对 22 个问项与患者“互联网+”总体就诊体验的相关分析，结果显示第 8、14、15、16、17、18、19 七个题目与“互联网+”总体就诊体验的相关性不显著，因此删除这 7 个问题，保留的 15 个问项，进行探索性因子分析。

利用 SPSS22 软件对 315 份样本做探索性因子分析，采用正交极大旋法，选取特征值大于 1 的因子，因子载荷需要大于 0.5。对 15 个问项进行探索性因子分析，整体的 α 系数为 0.842，KMO 值为 0.792，巴特利特检验显著，说明可以进一步做探索性因子分析。从总方差解释的结果来看，5 个因子累计解释 15 个问项的 76.87%，说明这 5 个因子可以解释全体问项的大部分方差。根据旋转后的成分矩阵（见表 2），问项“我每次在医院的微信、App 等互联网服务平台进行操作时页面反应速度很快”没有归类到五个因子中，因此我们把这一项删除，保留 14 个问项，再一次进行探索性因子分析。

对 14 个问项再次进行探索性因子分析，KMO 值为 0.770，巴特利特检验显著，说明可以做探索性因子分析。从总方差解释的结果来看，5 个因子累计解释 15 个问项的 79.46%，说明这 5 个因子可以解释全体问项的大部分方差。14 个问项被分成了 5 个因子。因子载荷均高于 0.5。量表的整体 α 系数分别为 0.818、0.773、0.878、0.841、0.913。
表 2. 旋转后的成分矩阵

<table>
<thead>
<tr>
<th>问项</th>
<th>成分</th>
</tr>
</thead>
<tbody>
<tr>
<td>用医院“互联网+”服务时我觉得个人经济财产是安全的</td>
<td>0.926</td>
</tr>
<tr>
<td>我认为医院“互联网+”服务对使用者的财产安全是有保障的</td>
<td>0.906</td>
</tr>
<tr>
<td>当我使用医院“互联网+”服务时不用担心会造成经济损失</td>
<td>0.878</td>
</tr>
<tr>
<td>当我想通过互联网咨询问题时会有人为我及时解答</td>
<td>0.902</td>
</tr>
<tr>
<td>当我想通过互联网找到这家医院的人工服务时我可以找到</td>
<td>0.868</td>
</tr>
<tr>
<td>当我想通过在线留言咨询问题时我可以找到</td>
<td>0.826</td>
</tr>
<tr>
<td>我可以轻松的操作医院提供的互联网服务平台界面</td>
<td>0.855</td>
</tr>
<tr>
<td>使用医院提供的互联网服务平台让我觉得很方便</td>
<td>0.826</td>
</tr>
<tr>
<td>在使用医院互联网服务时我可以轻松找到我需要的功能</td>
<td>0.802</td>
</tr>
<tr>
<td>通过互联网挂号到我想要就诊的医生的号对我来说是比较容易</td>
<td>0.896</td>
</tr>
<tr>
<td>我想要选择的就诊医生的号源在网络上并没有那么紧缺</td>
<td>0.835</td>
</tr>
<tr>
<td>通过医院互联网服务我可以挂到想要就诊的医生的号</td>
<td>0.782</td>
</tr>
<tr>
<td>当我想通过互联网找到医生出诊信息时我可以找到</td>
<td>0.885</td>
</tr>
<tr>
<td>当我想通过互联网找到医生个人情况介绍时我可以找到</td>
<td>0.854</td>
</tr>
</tbody>
</table>

3.3 信效度检验

在得到5个因子后，本研究进行第二轮问卷调查，主要用于量表的验证性因子分析。第二轮问卷调查选取了北京市8家三级医院，包括中国中医科学院广安门医院、北京市回民医院、首都医科大学附属北京友谊医院、北京大学人民医院、北京大学第一医院、北京市二龙路医院（北京市肛肠医院）、首都医科大学
大学附属复兴医院、首都医科大学附属宣武医院。8家医院在互联网医
疗信息建设与运用上皆有代表性，8家医院皆开通了114挂号平台的预约挂号服
务，都建设了医院微信公众平台，其中3家医院有官方应用程序，3家医院可
用支付宝进行在线缴费。

第二轮问卷调查共收回有效问卷370份。其中男性患者占32.16%，21-30
岁患者居多，占41.89%。94.32%患者具有大专及以上学历。从职业分布来看，
职业为公司职员的患者最多，占38.65%，其次是从事党政机关、事业单位工作
的患者，占18.65%。家庭月收入4001-8000元的患者占比最高，占32.43%。

通过验证性因子分析，CMIN/DF为2.03小于3，表明模型对数据的拟合效
果较好。RMSEA值为0.05，小于0.08，表明有良好的适配。NFI值为0.96，
TFI值为0.98，CFI值为0.98，TLI值为0.97。以上数值达到了合理标准。5
个因子的AVE值都大于了0.5，说明收敛效度较好，各因子的AVE的算术平方
根大于其他因子的相关系数，说明本量表的区别效度较好。验证性因子分析结
果见图1和表3。

图1.医院门诊患者“互联网+”就诊体验测量模型验证性因子分析结果

注：hd=获得性；xy=吸引性；jd=接待性；bl=便利性；aq=安全性
表3. 医院门诊患者“互联网+”就诊体验量表区别效度检验结果

<table>
<thead>
<tr>
<th></th>
<th>获得性</th>
<th>吸引性</th>
<th>接待性</th>
<th>便利性</th>
<th>安全性</th>
</tr>
</thead>
<tbody>
<tr>
<td>获得性</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>吸引性</td>
<td>.54</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>接待性</td>
<td>.40</td>
<td>.39</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>便利性</td>
<td>.56</td>
<td>.38</td>
<td>.58</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>安全性</td>
<td>.58</td>
<td>.55</td>
<td>.54</td>
<td>.38</td>
<td>1</td>
</tr>
<tr>
<td>组合信度</td>
<td>.84</td>
<td>.80</td>
<td>.91</td>
<td>.87</td>
<td>.93</td>
</tr>
<tr>
<td>AVE</td>
<td>.64</td>
<td>.60</td>
<td>.77</td>
<td>.69</td>
<td>.81</td>
</tr>
<tr>
<td>AVE算术平方根</td>
<td>.80</td>
<td>.78</td>
<td>.88</td>
<td>.83</td>
<td>.90</td>
</tr>
</tbody>
</table>

3.4 量表的效用评价

除了科学性之外，患者体验测评工具的实用性评价也应纳入评价标准范围之内。如果无法顺利地在实践中发挥作用的话，即便使用经过验证的有效可靠的工具也是徒劳无功的。患者体验测评工具的实用性评价包括3个维度：成本效率（“为达到测评工具目的所要求的可靠性水平所需的观察次数是多少”“评估需要多长时间才能完成”“完成评估需要的行政费是多少”“每个可靠样本的成本是多少”，可接受性（“是否有证据表明受试者对测评工具的理解”“未完成多少次评估”“测评工具是否在合适的背景下进行了测试”）和实际影响（“测评工具的预期目的是否是实现的”“评分系统是否易于翻译或以易于使用的方式提供”“反馈结果能否在必要时用于实践”）。

为了对量表进行效用评价，本研究在量表条目后增设了3个条目，同样采用李克特5级评分方式：“您觉得刚刚填写本问卷所用时间不算太长？”“您觉得刚刚填写的问卷的所有问题的表述您都能阅读明白？”“您觉得刚刚填写的问卷涵盖了互联网+就诊体验的重要方面？”

结果显示，68.56%的患者认为所填问卷时间不算太长，说明量表长度较为合理。83.74%的患者认为该量表可阅读明白，说明量表的条目表述较为合理，填写顺畅。75.61%患者认为该量表内容涵盖“互联网+”就诊体验的重要方面。粗略而言，量表的效用评价说明了量表成本效率和可接受性良好。

4. 讨论

4.1 理论贡献

本研究首先对“互联网+”医疗、在线顾客体验、患者体验的相关研究进行了文献回顾，根据在线顾客体验的四个维度（信息、娱乐、社会临场感、感官吸引力）和患者体验量表的多维度（沟通、情感支持、信息、响应性、隐私安全等）设计半结构式访谈。结合前期文献研究、实地调研和深度访谈结果生成医院门诊患者“互联网+”就诊体验量表的测量项目池。经过两轮问卷调查的数
据收集，并对数据进行探索性因子分析和验证性因子分析，保留了 14 个条目，包括五个维度：获得性、吸引性、接待性、便利性、安全性。

获得性指患者在使用医院“互联网+”服务时对号源的获取、预约就诊时的体验。包括“我想要选择的就诊医生的号源在网络上并没有那么紧缺”“通过互联网挂号我想要就诊的医生的号对我来说是比较容易”“通过医院互联网服务我可以挂到想要就诊的医生的号”三个问题。与传统的医疗服务可及性不同，获得性反映了线下医疗服务在线上互联网平台上的可及性，同时患者的深度访谈也反映了患者对该维度的关注，访谈中许多如下的内容“专家号还是比较困难，要抢”“挂不上号，太难挂，现在好像是普通号好挂专家号难挂”“网上挂号还是比较容易一点”。

吸引性指患者在使用医院“互联网+”服务时对出诊信息、医生情况介绍等信息的利用需求，医院的信息服务能否对患者起到引导作用的就诊体验。包括“当我通过互联网找到医生个人情况介绍时我可以找到”“当我想通过互联网找到医生出诊信息时我可以找到”两个问题。在线顾客体验中的信息维度指“一个网站为顾客提供资源和有效信息的程度”[27]，在医疗服务场景中，吸引性强调患者能否被“互联网+”医疗服务平台上提供的有效信息所吸引，从而选择使用互联网平台并根据线上提供的资源和有效信息来该医院接受线下医疗服务，体现了线上平台和线下服务能力的结合。

接待性指患者在使用医院“互联网+”服务时对平台人工服务、留言咨询方面的接待程度的就诊体验。包括“当我想通过互联网找到这家医院的人工服务时我可以找到”“当我想通过互联网咨询问题时会有人为我及时解答”“当我想通过在线留言咨询问题时我可以找到”三个问题。接待性与患者体验中的沟通维度相似，同时与响应性相关，在线下医疗服务中，患者和医务人员的交流通过沟通维度来测量，而在线上场景，患者通过页面上的人工服务、留言咨询功能可以实现远程的交流沟通，患者会考虑平台上人工服务响应是否及时，沟通中的服务态度是否令人满意。同时，该维度与在线顾客体验的社会临床感维度相关，网站页面的社会临场感会增加顾客的购买意愿[28]，对于线上医疗服务场景而言，患者通过平台与医护人员的交互可能会使降低患者的感知风险，从而影响患者的就医选择。

便利性指患者在使用医院“互联网+”服务时对使用功能、操作界面是否友好的就诊体验。包括“使用医院提供的互联网服务平台让我觉得很方便”“我可以轻松的操作医院提供的互联网服务平台界面”“在使用医院互联网服务时我可以轻松找到我需要的功能”三个问题。由于互联网技术与医疗服务的深度融合，患者就诊时需要使用医院提供的信息系统，在该环节中患者体验可能存在适应新技术的困难。访谈中得知，患者对信息系统的便利性十分关注，体现在类似的访谈内容在访谈中出现频次较高：“挂号时有机器的话就一定会选择机器，因为队太长了”“用着方便是方便，就是岁数大了老怕出错”“有点用不习惯，还是有点复杂”。

安全性指患者在接受医院“互联网+”服务时对个人经济财产方面的使用安全的就诊体验。包括“我认为医院“互联网+”服务对使用者的财产安全是有保障的”“用医院“互联网+”服务时我觉得个人经济财产是安全的”“当我使用医院“互联网+”服务时不用担心会造成经济损失”三个问题。该维度根据患者访谈
得出，与在线顾客体验和患者体验现有维度皆有所不同，安全性强调患者使用“互联网+”医疗服务服务平台时对财产安全的担忧。患者在访谈中多次提及类似的内容：“我就是担心用这个会有安全隐患”“担心会不会有什么经济上的损失”。

本研究得出的五个维度与在线顾客体验和患者体验量表的相关维度有一定的联系又有所差异。对于在线顾客体验的四个维度（信息、娱乐、社会临场感、感官吸引力）而言，信息很好地体现在吸引性维度中。娱乐维度由于医疗服务的特殊性，如是人们需要但不想要的服务，而没有能反映在“互联网+”医疗服务场景中，患者并不是来享受医疗服务的。社会临场感的社交性很好地体现在量表的接待性维度中。感官吸引力维度在设计访谈时被考虑，并保留在初始项目池中：互联网服务界面的字体、图片等内容让我觉得舒适”，但在后续的问卷调查中被删去，在医疗服务场景中，患者没有像网上购物那样关注网页上的图片和视频元素。对于本研究考虑的患者体验量表相关的多个维度（沟通、情感支持、信息、响应性、隐私安全等）而言，沟通和响应性维度很好地体现出线上场景的接待性维度中，信息则体现在量表的吸引性中。情感支持不被纳入一方面可能是因为对患者而言，“互联网+”医疗服务平台的功能价值远大于情感价值，另一方面可能是因为“互联网+”医疗服务的发展尚处于起步阶段，对情感支持的相关内容尚不完善。隐私安全性被纳入在初始项目池中而在随后的问卷调查中被删除，而患者的财产安全性则被保留下来，患者对新技术存在安全性的担忧毋庸置疑，但相比于隐私安全，患者更关注医院对其财产安全的保证。

4.2 管理启示

医院门诊患者“互联网+”就诊体验量表可以帮助政府从患者角度评估医院的“互联网+”医疗服务提供水平，通过大样本持续性的研究以及结果的公开，可以有效激励医院“互联网+”医疗服务质量的提升和引导患者就医选择。另一方面，量表的五个维度（获得性、吸引性、接待性、便利性、安全性）反映了患者对现阶段“互联网+”医疗服务的最关注的方面。医院在开展“互联网+”医疗服务时，应重点关注到预约挂号时号源的可获得性，尤其是保障知名专家号源。由于新技术使用可能存在问题和服务补救的角度考虑，医院应加强系统平台的更新和维护工作，同时考虑在自助服务终端机旁设置人工指导，对于网页、微信公众号和应用程序上的界面和功能则要尽可能地设计的简单易懂，照顾到弱势人群如老年人等群体的使用。保障患者使用互联网就诊服务时的安全性，包括患者使用系统涉及到信息安全和财产安全等，使患者在使用时无顾虑，放心地接受“互联网+”医疗服务。

4.3 局限性与未来展望

首先，本研究对“互联网+”就诊体验的研究概念界定的范围可以有进一步的扩充。现有研究结合目前“互联网+”医疗服务开展的实际情况，考虑到“互联网+”医疗服务的主要提供主体是医院，尤其是大型医院的“互联网+”医疗服务开展的时间早，程度高，所以将样本界定在了三级医院。但是在目前的“互联网+”医疗服务实践中，第三方法医疗服务主体也是一个不可忽略，并且也是非常有代表性得一类服务提供方，因此在未来的互联网就诊体验的研究中，对服务的提供方进行概念的扩充将使“互联网+”患者体验的研究更为完整。其次，患者对“互联网+”医疗服务提供的内容有着更高的期待值，希望医院能够
借助互联网技术，为自己的就诊提供更多更好的切实利益，因此本研究生成的患者就诊体验量表需要进行动态研究动态调整，结合未来发展的实际进行有益补充。在深度访谈和实际现场调研的过程中我们发现，患者确实对互联网与医疗的融合有着更高的期待，包括对医院“互联网+”医疗服务平台上的医疗沟通、患患沟通的更多需求，而许多医院信息系统在功能上并不完善，有待于未来进一步改善。除此之外我们认为还有许多患者需求是潜在的，未被注意到的，如自助服务平台能否予患者情感支持。但鉴于互联网技术与医疗服务的融合尚处于起步阶段，信息系统的建设优先考虑满足患者的功能需求而可能忽视了患者的情感需求，未来有待于进一步的发展与研究。最后，关于本研究的统计学方面的局限性。未来研究可进一步检验改量表的准则效度（Nomological validity）。

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参考文献


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关于医院目前开展的“互联网+”医疗服务就诊体验调查问卷

尊敬的先生/女士：
您好！

这是一份学术研究调查问卷，旨在了解您对医院目前开展的“互联网+”医疗服务的就诊体验，恳请您在百忙之中协助我们完成这份问卷。请仔细阅读问卷各部分内容，并根据实际情况如实的勾选出您认为最合适的答案。对于您填写的信息我们会严格保密，且仅用于学术研究，不会对您的生活和工作造成不良影响。

您的参与对我们的研究非常重要，感谢您的支持，祝您身体健康，万事如意。

第一部分 您本次就诊的互联网服务体验
1. 您是北京本地患者还是外地患者来北京就医？
   - 北京本地
   - 外地患者

2. 您本次就诊预约的科室是 ________ 科

3. 您目前了解的就诊的预约方式有（可多选）
   - 现场自助机器
   - 114 北京电话预约挂号
   - 医院官网
   - 微信平台（医院的官方微信公众号、京医通、114 北京预约挂号平台、其他第三方挂号服务企业）
   - APP 平台（医院的官方 APP、其他第三方医疗服务类企业）

4. 您本次就诊的预约方式是
   - 现场自助机器
   - 114 北京电话预约挂号
   - 医院官网
   - 微信平台（医院的官方微信公众号、京医通、114 北京预约挂号平台、其他第三方挂号服务企业）
   - APP 平台（医院的官方 APP、其他第三方医疗服务类企业）

5. 您在使用医院的“互联网+”服务（微信公众平台、APP 等）时都有了解到和使用到哪些功能模块?（可多选）
   - 预约就诊
   - 医生信息查询
   - 检查报告查询
   - 在线交流服务
   - 在线缴费
   - 院内信息查询（如交通信息、院内地图）

6. 您本次来医院就诊对医院开展的与互联网相关的服务的满意度是？（假设总分为 5 分）
   - 非常不满意（1 分）
   - 不满意（2 分）
   - 一般（3 分）
   - 满意（4 分）
   - 非常满意（5 分）
第二部分 下列说法描述了您对医院开展“互联网+”服务的体验，请您结合自身的体验在符合您真实的想法的方格中划“√”

<table>
<thead>
<tr>
<th>题项编号</th>
<th>题项内容</th>
<th>非常不同意</th>
<th>不同意</th>
<th>一般</th>
<th>同意</th>
<th>非常同意</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>通过医院互联网服务我可以挂号到想要就诊的医生的号</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>通过互联网挂号到我想就诊的医生的号对我来说是比较容易</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>我想要选择的就诊医生的号源在网络上并没有那么紧缺</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>当我想通过互联网找到医生出诊信息时我可以找到</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>当我想通过互联网找到医生个人情况介绍时我可以找到</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>当我想通过在线留言咨询问题时我可以找到</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7</td>
<td>当我想通过互联网咨询问题时会有人为我及时解答</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8</td>
<td>当我想通过互联网找到这家医院的人工服务时我可以找到</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9</td>
<td>在使用医院互联网服务时我可以轻松找到我需要的功能</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10</td>
<td>我可以轻松的操作医院提供的互联网服务平台界面</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11</td>
<td>使用医院提供的互联网服务平台让我觉得很方便</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12</td>
<td>当我使用医院“互联网+”服务时担心会造成经济损失</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13</td>
<td>用医院“互联网+”服务时我觉得个人经济财产是安全的</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14</td>
<td>我认为医院“互联网+”服务对使用者的财产安全是有保障的</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

1. 您觉得刚刚填写本问卷所用时间过长？
   - □ 非常不同意（1分） □ 不同意（2分） □ 一般（3分）
   - □ 同意（4分） □ 非常同意（5分）

2. 您觉得刚刚填写的问卷的所有问题的表述您都能阅读明白？
   - □ 非常不同意（1分） □ 不同意（2分） □ 一般（3分）
   - □ 同意（4分） □ 非常同意（5分）

3. 您觉得刚刚填写的问卷的问题涵盖了互联网医疗服务的重要问题？
   - □ 非常不同意（1分） □ 不同意（2分） □ 一般（3分）
   - □ 同意（4分） □ 非常同意（5分）
第三部分 您的基本信息

1. 您的性别：□ 男；□ 女

2. 年龄： □ 20 岁及以下； □ 21—30 岁； □ 31—40 岁； □ 41—50 岁； □ 51—60 岁； □ 60 岁以上

3. 教育程度： □ 高中及以下； □ 大专； □ 本科； □ 硕士研究生及以上

4. 职业： □ 党政机关、事业单位工作者； □ 公司管理者； □ 公司职员； □ 个体经营者； □ 农民； □ 自由职业者； □ 离退休人员； □ 全日制学生； □ 无业人员； □ 其他

5. 您每月可支配的收入（如果是全日制学生，请依据每月的消费额填写）： □ 1000 元及以下； □ 1001 元—2000 元； □ 2001 元—4000 元； □ 4001 元—8000 元； □ 8001 元—12000 元； □ 12000 元以上

问卷到此结束，感谢您的参与和支持！
衷心祝愿您身体健康，生活幸福！
Study on the Application and Effect of Telemedicine in County Hospital

— Taking Chaotian District People's Hospital of Guangyuan City as an Example

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²Guangyuan Chaotian District People's Hospital

Abstract

In order to investigate the application of telemedicine in county-level hospitals in China, taking the Chaotian District People's Hospital of Guangyuan City as an example. In our investigation, 1753 cases of superior expert treatment cases, 1408 cases of total rounds of ward rounds and patient treatments, 1004 cases of consultations and ward rounds of diagnostic consistency and treatment consistency records were produced through cooperation with 39 Internet hospitals in 2017-2018 in order to survey the county hospital telemedicine applications. Finally, the conclusions of telemedicine application in Chaotian District People's Hospital of Guangyuan City are drawn: (1) the demand for higher-level diagnosis and treatment is reduced, and the function structure is changed; (2) the rate of consistency between diagnosis and treatment is improved, but the rate of extreme misjudgment needs to be controlled; (3) the days of hospitalization for patients is reduced, and the proportion of one-day hospitalization expenses and expenses is increased.

Keywords: Telemedicine; County hospital; Application survey
县级医院远程医疗应用及效果研究--以广元市朝天区人民医院为例

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摘要

为了调查我国县级医院远程医疗的应用情况，以广元市朝天区人民医院为例，通过2017-2018年与39互联网医院合作产生的1753例上级专家诊疗个案、1408例查房总病例及患者诊疗病例、1004例会诊及查房的诊断一致性和治疗一致性的记录等数据，调查县医院远程医疗应用情况。最后得出广元市朝天区人民医院远程医疗应用情况的结论：(1) 上级诊疗需求减少，业务功能转变；(2) 诊断一致率与治疗方案一致率提高，极端误判率需要控制；(3) 患者住院时长缩短，单日住院费用和费用自付比例增加。

关键词：远程医疗；县医院；应用情况研究

1. 引言

我国的医疗改革制度正在进入深水区，分级诊疗制度经过多年的发展和完善进入了攻坚阶段。2015年，国务院办公厅印发了《关于推进分级诊疗制度建设的指导意见》，明确指出到2017年分级诊疗县级层面应达到远程医疗覆盖率达到50%以上，县内就诊率达到90%左右。2019年4月12日，国家卫生健康委在浙江长兴县召开新闻发布会指出，到发布会为止，全国已有2388个县域医共体完成建设，今年全国将重点建设500个县域医共体。县级医院是农村三级医疗保障网络的龙头与枢纽，发挥着区域医疗中心的作用[1][2]，其综合改革是深化医药卫生体制改革、缓解群众“看病难、看病贵”问题的关键环节[3]，研究县级医院远程医疗的应用情况具有重要现实意义。

2. 研究对象与调查内容

2.1 研究对象

本次研究对象为广元市朝天区人民医院，是国家二级甲等综合医院。医院占地面积12168 m²，建筑面积28418 m²。编制床位300张，目前实际开放床位381张，全院有在职职工370人，其中卫生技术人员319人，行管后勤人员51人，其中正高职称4人，副高职称24人，中级职称78人，初级职称213人。目前服务面积1620平方公里，年门急诊量超过12万人次，年住院患者超过1万人次，年业务总额近一亿元，开设有20多个一级临床和医技科室，其中骨科和康复医学科为市重点学科。朝天区人民医院较早开始了与互联网医院的远程
医疗合作，2016年6月，与39互联网医院达成意向合作；2016年11月正式签约为39互联网成员医院；2017年8月与39互联网医院正式启动专科互建。

2.2 研究数据

研究数据主要来源于2017年到2018年39互联网医院数据统计表，原始数据均为广元市朝天区人民医院借力39互联网医院的远程病例。包括：（1）上级专家诊疗数据1753例；（2）查房总病例数据及患者诊疗数据1408例；（3）会诊、查房的诊断一致性和治疗一致性数据1004例。

2.3 调查内容

根据朝天区人民医院的数据统计表，本研究的调查内容主要包括：（1）远程医疗的业务分布情况；（2）远程会诊的临床学科特征；（3）远程会诊的首诊诊断一致率、治疗一致率情况；（4）患者住院时间及日均住院费用情况。

3. 调查结果

3.1 远程医疗业务分布

从2017年2月到2018年12月，共启起了1753例上级专家诊疗项目，其中有效数据1701例，有效率97.0%。2017年，上级专家诊疗1068例，2018年为633例，环比下降了40.7%。上级医院远程医疗的各项诊疗业务相对数中，远程查房和实地手术比例下降，分别减少2.2%和0.6%，远程门诊、远程会诊、其他项目比例上升，分别增加0.6%，0.6%和1.6%。比例下降的业务中，实地手术业务降幅最大，环比减少50%；比例上升的业务中，其他项目增幅最大，环比增加133.3%。原因是朝天区人民医院经过一年的远程会诊、远程查房以及自我专科建设后，医院自身的诊疗能力大幅增加，能够自主解决更多诊疗问题。随着基层医生能力的提升，基层医疗机构利用远程医疗的数量必然下降，从长远角度看，远程医疗使用数量的下降并不一定是坏事[4]。远程查房、实地手术等帮扶性项目比例缩减，而包括惠民工程和辉瑞项目的其他项目能够出现增长情况，表明经过远程医疗建设后，朝天区人民医院有能力向社会输出更多价值，协助解决民生健康问题。

表格1. 远程医疗业务分布

<table>
<thead>
<tr>
<th>诊疗业务</th>
<th>2017年</th>
<th>2018年</th>
<th>相对数增减（%）</th>
<th>环比增减（%）</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>例数</td>
<td>相对数（%）</td>
<td>例数</td>
<td>相对数（%）</td>
</tr>
<tr>
<td>远程查房</td>
<td>970</td>
<td>90.8%</td>
<td>561</td>
<td>88.6%</td>
</tr>
<tr>
<td>实地手术</td>
<td>44</td>
<td>4.1%</td>
<td>22</td>
<td>3.5%</td>
</tr>
<tr>
<td>远程会诊</td>
<td>34</td>
<td>3.2%</td>
<td>24</td>
<td>3.8%</td>
</tr>
<tr>
<td>远程会诊</td>
<td>14</td>
<td>1.3%</td>
<td>12</td>
<td>1.9%</td>
</tr>
<tr>
<td>其他项目</td>
<td>6</td>
<td>0.6%</td>
<td>14</td>
<td>2.2%</td>
</tr>
<tr>
<td>总计</td>
<td>1068</td>
<td>100.0%</td>
<td>633</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
3.2 远程会诊临床学科特征

在上级专家诊疗数据的 1701 份有效个案中，选择发起上级会诊个案数排名前 5 的首诊学科及剩余其他学科，调查 2017 年和 2018 年上级专家职称情况。2017 年，呼吸内科和心血管内科的上级专家职称绝大部分是主任医师（233 例和 151 例），儿科、普外科、妇产科的上级专家主要是副主任医师（166 例、134 例和 136 例），但是 2017 年总体的医师职称情况为平均分布，主任医师和副主任医师都有 534 例，各占 50%。2018 年，上级医师主要为主任医师的学科包括呼吸内科、心血管内科和妇产科（140 例、115 例和 56 例），儿科和普外科上级专家主要为副主任医师（69 例和 64 例），且在其他学科也有部分为主治医师和住院医师。相比于 2017 年，2018 年主任医师的比例大幅增加，总例数超过了副主任医师的两倍，为 416 例。原因在于，随着自身医疗能力的建设与提升，朝天区人民医院发出的上级医院诊疗项目，往往都是难度更大的疾病，因此需要更多高级职称医师的参与。

表格 2. 上级会诊上级专家职称分布

<table>
<thead>
<tr>
<th>首诊学科</th>
<th>总例数</th>
<th>2017年</th>
<th>2018年</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>副主任医师</td>
<td>主任医师</td>
<td>主治医师</td>
</tr>
<tr>
<td>呼吸内科</td>
<td>408</td>
<td>24</td>
<td>233</td>
</tr>
<tr>
<td>心血管内科</td>
<td>333</td>
<td>43</td>
<td>151</td>
</tr>
<tr>
<td>儿科</td>
<td>293</td>
<td>166</td>
<td>42</td>
</tr>
<tr>
<td>普外科</td>
<td>288</td>
<td>134</td>
<td>55</td>
</tr>
<tr>
<td>妇产科</td>
<td>237</td>
<td>136</td>
<td>28</td>
</tr>
<tr>
<td>其它</td>
<td>142</td>
<td>31</td>
<td>25</td>
</tr>
<tr>
<td>总计</td>
<td>1701</td>
<td>534</td>
<td>534</td>
</tr>
</tbody>
</table>

1408 例互联网医院远程诊疗病例中，2017 年 1 月到 2018 年 12 月入院的有效病例 1272 例，占比 90.3%。2017 年与 2018 年的远程诊疗病例中，内一科等排名前 5 的临床科室诊疗例数没有明显变化，排名较为稳定，且排名前 5 的临床科室病例占据了远程诊疗服务的主要份额，随后的其他科室服务数量急剧减少。

表格 3. 远程诊疗临床科室服务量排名

<table>
<thead>
<tr>
<th>排名</th>
<th>2017年</th>
<th>2018年</th>
</tr>
</thead>
<tbody>
<tr>
<td>临床科室</td>
<td>例数</td>
<td>临床科室</td>
</tr>
<tr>
<td>1</td>
<td>内一科</td>
<td>172</td>
</tr>
</tbody>
</table>
### 3.3 远程会诊诊疗一致率特征

诊断一致率和治疗一致率数据，是 39 互联网医院根据此前其他医院远程会诊的研究经验，然后向合作专家、县级医院医生、卫计委医政医管部门专家咨询后设定。一致程度的评判，是将患者入院诊断结果与相应受邀的专科专家诊断结果相对比，根据二者符合情况将诊断一致性和治疗一致性分为四个等级，并分别赋予 1 到 4 的分值，分值 1 表示一致性最高，分值 4 表示一致性最低：

1. 同意诊断，诊断一致（同意治疗方案，方案一致）
2. 同意诊断，完善诊断（同意治疗方案，完善方案）
3. 同意诊断，修正诊断（同意治疗方案，修正方案）
4. 不同意诊断，纠正诊断（不同意治疗方案，纠正方案）

1004 条个案数据中，除去未查房数据、报错数据，余下 2017 年至 2018 年的诊疗一致率有效数据共 943 条，数据有效率 93.9%。首先对比 2017 年、2018 年远程医疗入院诊断与专家诊断一致率与治疗方案一致率整体情况。

图片 1.2017、2018 年远程医疗诊断一致率与治疗方案一致率
与 2017 年相比，2018 年的诊断一致率和治疗方案一致率有显著提升，诊断一致率从 27.5% 上升到 47.0%，治疗方案一致率从 4.0% 上升到 13.7%，朝天区人民医院经过互联网医院的赋能，自身的疾病诊断水平和治疗水平都显著提高，医疗水平显著上升。但同时，诊断纠正率和方案纠正率也拥有显著提升，诊断纠正率从 1.6% 上升到 4.6%，方案纠正率从 2.1% 上升到 5.9%。

接着，由于业务量排名前 5 的诊断科室的有效数据共 936 条，占有效数据的 99.3%，因此选择业务量排名前 5 的科室，观察 2017 年与 2018 年的诊断一致性状况。2017 年，诊断一致率最高的科室为普外科（57.1%），最低的为呼吸内科（19.5%）；2018 年，诊断一致率最高的科室为普外科（72.7%），最低的为儿科（33.3%）。得分均值方面，2017 年均值表示一致率最高的临床科室为普外科（1.57 分）和妇产科（1.93 分）；2018 年整体均值表示一致率最高的临床科室为普外科（1.30 分）和妇产科（1.70 分），两年得分均值最高的临床科室均为业务量最小的科室，其原因可能在于业务量小的科室更容易控制诊疗质量，而业务量相对较大的科室，由于供小于求，因此在诊断一致率方面会存在一定劣势。所有科室的诊断一致率都有所提高，幅度最大的科室分别为心血管内科（+27.0%）、普外科（+15.6%）、呼吸内科（+14.8%）。

<table>
<thead>
<tr>
<th>临床科室</th>
<th>2017年</th>
<th>2018年</th>
<th>一致率变化</th>
</tr>
</thead>
<tbody>
<tr>
<td>诊断一致率</td>
<td>得分均值</td>
<td>方差</td>
<td>诊断一致率</td>
</tr>
<tr>
<td>呼吸内科</td>
<td>19.5%</td>
<td>2.12</td>
<td>0.739</td>
</tr>
<tr>
<td>心血管内科</td>
<td>21.2%</td>
<td>2.01</td>
<td>0.681</td>
</tr>
<tr>
<td>儿科</td>
<td>22.2%</td>
<td>2.06</td>
<td>0.731</td>
</tr>
<tr>
<td>普外科</td>
<td>57.1%</td>
<td>1.57</td>
<td>0.745</td>
</tr>
</tbody>
</table>
妇产科 | 30.4% | 1.93 | 0.761 | 45.0% | 1.70 | 0.733 | +14.6%

a. 诊断一致性评判中，得分为1的被认定为诊断一致，其它结果都认定为诊断不一致。
b. 由于1分表示诊断一致性最高，4分表示诊断一致性最低，因此得分均值越接近1代表该科室整体诊断一致性越高。

最后，选择业务量排名前5的科室，分别观察2017年与2018年治疗方案一致性状况。2017年，治疗方案一致性最高的为呼吸内科（6.5%），最低的为妇产科（2.0%），且2017年所有科室的治疗方案一致性都没有超过10%；2018年治疗方案一致性最高的科室为妇产科（25.0%），最低的为心血管内科（5.4%），且2018年只有心血管内科的方案一致性低于10%，2017-2018年朝天区人民医院的治疗方案制定能力显著提高。得分均值方面，2017年均值表示治疗方案一致性最高的科室为妇产科（2.02分）和普外科（2.20分），所有科室的得分均值都超过2分，2017年广元市朝天区人民医院的治疗方案整体一致性不太理想；2018年均值表示治疗方案一致性最高的科室为普外科（1.95分）和妇产科（2.05分），与诊断一致性类似，治疗方案一致性最高的科室均为业务量最小的科室，存在供求关系相对合理，医师相对可以有更多精力提出准确治疗方案。所有科室的治疗方案一致性均有提高，最显著的为妇产科（+23.0%），原因在于业务量基数较小，所以相对变化幅度会更大。

表格5. 2017、2018年各临床科室远程医疗治疗方案一致性

<table>
<thead>
<tr>
<th>临床科室</th>
<th>2017年</th>
<th>2018年</th>
<th>一致率变化</th>
</tr>
</thead>
<tbody>
<tr>
<td>呼吸内科</td>
<td>6.5%</td>
<td>12.9%</td>
<td>+6.4%</td>
</tr>
<tr>
<td>心血管内科</td>
<td>3.8%</td>
<td>5.4%</td>
<td>+1.6%</td>
</tr>
<tr>
<td>儿科</td>
<td>2.8%</td>
<td>20.8%</td>
<td>+18.0%</td>
</tr>
<tr>
<td>普外科</td>
<td>2.9%</td>
<td>13.6%</td>
<td>+10.7%</td>
</tr>
</tbody>
</table>
| 妇产科 | 2.0%   | 25.0%  | +23.0%      

3.4 远程诊疗患者住院情况

1408例诊疗数据中，2017、2018年入院患者的有效诊疗数据共1271条，数据有效率90.3%。由于业务量排名前5的科室共有数据1181条，占有效数据的92.9%，因此本研究中主要探讨朝天区人民医院排名前5科室的住院情况。

首先，患者住院天数调查。业务量排名前5的科室中，2017年平均住院时间最长的科室为外一科（17.27天），最短的为儿科一（6.95天）；2018年平
均住院时间最长的科室为外一科（15.43 天），最短的为儿科一（4.79 天）。
所有科室的平均住院时间均有所缩短，平均住院时间缩减最多的科室分别为妇产科一（-2.28 天）和外一科（-1.84 天）。

表格 6.2017、2018 年各临床科室住院时长

<table>
<thead>
<tr>
<th>临床科室</th>
<th>2017年</th>
<th></th>
<th></th>
<th>2018年</th>
<th></th>
<th></th>
<th>平均住院日变化（天）</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>平均住院日（天）</td>
<td>四分之三位数（天）</td>
<td>标准差</td>
<td>平均住院日（天）</td>
<td>四分之三位数（天）</td>
<td>标准差</td>
<td></td>
</tr>
<tr>
<td>内一科</td>
<td>13.48</td>
<td>16.75</td>
<td>9.93</td>
<td>11.88</td>
<td>15.00</td>
<td>6.26</td>
<td>-1.60</td>
</tr>
<tr>
<td>内二科</td>
<td>12.63</td>
<td>14.00</td>
<td>9.34</td>
<td>11.72</td>
<td>14.00</td>
<td>8.41</td>
<td>-0.91</td>
</tr>
<tr>
<td>儿科一</td>
<td>6.95</td>
<td>7.00</td>
<td>12.14</td>
<td>4.79</td>
<td>6.50</td>
<td>3.36</td>
<td>-0.45</td>
</tr>
<tr>
<td>外一科</td>
<td>17.27</td>
<td>21.00</td>
<td>14.33</td>
<td>15.43</td>
<td>22.50</td>
<td>15.10</td>
<td>-1.84</td>
</tr>
<tr>
<td>妇产科一</td>
<td>13.62</td>
<td>17.75</td>
<td>5.82</td>
<td>11.34</td>
<td>12.25</td>
<td>5.75</td>
<td>-2.28</td>
</tr>
</tbody>
</table>

其次，患者住院费用调查。与 2017 年相比，2018 年朝天区人民医院各科患者的人均日住院费用均有所增加，增长值最大的科室为儿科一（+277.9 元）、外一科（+225.8 元）。2017 年人均日住院费用最高的科室为内一科（841.7 元）、外一科（730.8 元）；2018 年为外一科（956.6 元）、内一科（922.7 元）。且 2017 年排名前 5 的科室，所有患者的医疗费用都免去了自付的部分，2018 年费用自付的患者比例都大幅增加。

表格 7.2017、2018 年各临床科室住院费用

<table>
<thead>
<tr>
<th>临床科室</th>
<th>2017年</th>
<th></th>
<th></th>
<th>2018年</th>
<th></th>
<th></th>
<th>日均住院费用均值变化（元）</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>人均日住院费用（元）</td>
<td>方差</td>
<td>患者费用自付占比</td>
<td>人均日住院费用（元）</td>
<td>方差</td>
<td>患者费用自付占比</td>
<td></td>
</tr>
<tr>
<td>内一科</td>
<td>841.7</td>
<td>442.9</td>
<td>0.0%</td>
<td>922.7</td>
<td>637.5</td>
<td>41.1%</td>
<td>+81.0</td>
</tr>
<tr>
<td>内二科</td>
<td>676.5</td>
<td>306.7</td>
<td>0.0%</td>
<td>844.1</td>
<td>461.6</td>
<td>61.9%</td>
<td>+167.0</td>
</tr>
<tr>
<td>儿科一</td>
<td>556.5</td>
<td>351.0</td>
<td>0.0%</td>
<td>834.4</td>
<td>728.0</td>
<td>43.7%</td>
<td>+277.9</td>
</tr>
<tr>
<td>外一科</td>
<td>730.8</td>
<td>449.8</td>
<td>0.0%</td>
<td>956.6</td>
<td>563.9</td>
<td>81.8%</td>
<td>+225.8</td>
</tr>
<tr>
<td>妇产科一</td>
<td>593.2</td>
<td>232.9</td>
<td>0.0%</td>
<td>725.0</td>
<td>329.0</td>
<td>31.7%</td>
<td>+131.8</td>
</tr>
</tbody>
</table>

4. 讨论

4.1 远程医疗上级诊疗需求减少，业务功能转变

研究结果表明，2017 年到 2018 年朝天区人民医院的远程医疗上级诊疗的业务量显著减少，从 1068 例减少到 633 例，环比减少 40.7%。远程查房、实地
手术等求助型远程医疗服务比例减少，减少幅度分别为 2.2% 和 0.6%；远程门诊、其他项目（惠民工程、辉瑞项目等）增加百姓就医便利性、改善民生就医条件等福利型远程医疗服务比例增加，增加幅度分别为 0.6% 和 1.6%。且远程诊疗的上级专家呈现职称整体升高、职称范围扩大的特点，表明朝天区人民医院开始向上级医院求助更加复杂和领域更广泛的医疗难题，开始突破自身的医疗服务边界。朝天区人民医院借助互联网远程医疗的强力工具，成功开始自身医疗服务功能转型，进一步发挥更显著的社会影响。通过远程医疗平台，实现远程查房、远程诊断、远程手术等，可以实现上级专家对基层医院病人的诊疗，从而准确把握病情、采取针对性治疗，促进优质医疗资源下沉。随着优质医疗资源下沉，县级医院作为农村三级医疗保障的龙头与枢纽，医疗能力的提升可以有效缓解我国基层医疗面临的压力，成为连接上级医院、下级医院的重要中转站，促使我国医疗资源合理分配，构建更加科学的医疗布局，提升我国整体医疗服务提供能力。

4.2 远程医疗诊断一致率与治疗方案一致率提高，极端误判率需要控制

本研究结果显示，2017 年到 2018 年朝天区人民医院远程诊断和治疗方案一致率显著提高，分别从 27.5% 提高到 47.0%、4.0% 提高到 13.7%；但极端误判率也存在比较明显的上升，分别从 1.6% 提高到 4.6%、2.1% 提高到 5.9%。普外科的诊断一致率最高，儿科、呼吸内科、心血管内科等诊疗难度较大的学科，一致率相对较低，这也是朝天区人民医院需要不断改进的地方。远程医疗可以显著加强县级医院各临床科室的建设，提高基础诊疗能力，也可以释放县级医院的部分资源，用于探索更高难度疾病的治疗方案，不断扩大患者“家门口看病”的病种范围。

4.3 远程医疗患者住院时长缩短，单日住院费用和费用自付比例增加

在应用远程医疗之后，2017 年到 2018 年之间，朝天区人民医院各主要科室患者的平均住院日均有所减少，减少量最大的科室为妇产科一，平均住院日减少 2.28 天。表明经过远程医疗的赋能，朝天区人民医院的主要科室医疗服务质量显著提高，床位利用率提升，也意味着单床位的年诊疗量提高，医院整体年服务量上限的突破。采用远程医疗扩大以县级医院为龙头的基层医院的服务能力，让基层医院承担起更主要的医疗服务是具有可行性和有效性的。但是另一方面，朝天区人民医院主要科室的人均日住院费用显著提高，费用自付人数比例显著增加。这是由于远程医疗服务的收费主要靠财政补助支持，一旦补助到期或财政支持减少，患者自付远程医疗服务的费用将会大幅提高，因此必须依赖医保的支持，才能保证远程医疗服务的可持续性。2015 年，我国仅有 18.75% 的省区将远程医疗纳入医保报销范畴，且远程医疗的收费是影响远程医疗服务质量和患者满意度的重要因素。因此如果要确保远程医疗的可持续性发展，需要政府的政策支持，建立完善的远程医疗保险制度，一方面，让患者愿意去县级医院、基层医院参与远程医疗；另一方面，让患者有能力支付远程医疗的费用。

基金项目：四川省社会科学研究“十三五”规划2018年度课题重点项目“新兴IT技术下医院管理效率提升研究”（SC18A008）
参考文献


Review of Research on the Privacy Paradox

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² Guangzhou Maritime University

Abstract

The privacy paradox is the contradiction between privacy attitude and privacy behavior. With the development of network technology, this phenomenon is widely found in e-commerce, e-government, online social network APP and government privacy laws and regulations. In this paper, the literature review method is used to summarize the related research on the privacy paradox from the aspects of conceptual connotation, theoretical explanation and empirical research. On this basis, future research topics in this field are prospected.

Keywords: Privacy paradox; Privacy attitude; Privacy behavior
网络隐私悖论研究述评与展望

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摘要

网络隐私悖论就是隐私态度与隐私行为之间的矛盾现象。随着网络技术的发展，该现象广泛出现在电子商务、电子政务、在线社交网络 APP 应用以及政府的隐私法规制定等各方面。本文采用文献回顾法，对网络隐私悖论的相关研究从概念内涵、现象的理论解释和实证研究多方面进行了概述总结，并在此基础上对领域未来的研究议题进行了思考与展望。

关键词：网络隐私悖论；隐私态度；隐私行为

1. 引言

2019 年 5 月 13 日，优衣库母公司日本迅销（Fast Retailing）发布公告称，4月 23 日至 5 月 10 日期间，其日本在线购物网站遭到黑客攻击，黑客在“未经授权”的情况下进行了 46.11 万次登录，意味着超过 46 万名顾客的信息可能遭到泄露。根据国外学者的调查研究发现，约 91% 的美国成年人认为消费者对其个人信息的收集和使用已经失去了控制（Park, 2015），57% 的欧洲消费者对其个人信息的安全表示担忧（Symantec, 2015）。

然而，另一方面，研究结果显示，仅有 1/4 的欧洲消费者在在线购买产品或服务时会认真看完相关的隐私保护条款，59% 的消费者仅仅是快速扫描这些条款，14% 的消费者从来不关注这些条款（Symantec, 2015）。更有甚者，有些消费者愿意提供其个人信息，仅仅是为了换取一点小利益。在一项针对西班牙消费者的调查中发现，消费者愿意以 7 欧元（一个巨无霸套餐的价格）来交易其网络浏览记录（Carrascal, Riederer, Erramilli, Cherubini & Oliveira, 2013）。


网络隐私悖论的研究对于电子商务、电子政务、在线社交网络 APP 的应用以及政府的隐私法规制定等各方面来说都具有重大意义（Kokolakis, 2017）。电子商务和在线社交网站收集了大量的个人信息，政府作为隐私法规的制定者，
能够从一定程度缓解个人信息表露带来的隐私顾虑。十多年来隐私问题的研究学者试图从各个不同的理论角度来解释这种网络隐私悖论现象，以及围绕隐私态度和隐私行为展开了一系列的实证研究（Spiekermann et al., 2001; Brown, 2001; Acquisti et al., 2005; Norberg et al., 2007; Smith et al., 2011; Gerber, N., Gerber, P., & Volkamer, 2018）。本文采用文献回溯检索的方法，对国内外学者开展的网络隐私悖论研究进行了系统的归纳整理。在 Web of Science 数据库以“Privacy Paradox”为关键词搜索，有 278 条相关研究发表；在中国知网以“隐私悖论”为关键词搜索，有 33 条有效记录。

2. 网络隐私悖论的概念内涵

2.1 隐私的概念

Rosenberg（1992）与 Holvast（1993）对隐私的理论概念进行了阐明，将隐私区分为三个层次：（1）领地隐私，指个人的物理边界；（2）个人隐私，指保护个人免受不正当的干扰（如个人的身体检查）；（3）信息隐私，指个人数据的收集、存储、加工和传播过程的控制。本文所研究的网络隐私涉及的是其中第三层次的隐私，即：信息隐私，并重点关注网络环境下的个人数据收集、存储、使用与传播过程中的控制（Kokolakis, 2017）。

2.2 网络隐私悖论的概念


还有部分学者把网络隐私悖论现象解释为：隐私态度和隐私表露意图之间的分歧。Norberg 等（2007）在一项研究中通过两个实验对此进行了验证。在以往的研究模型中，学者们普遍认为隐私态度（感知隐私风险和感知信任）会影响隐私表露意图，进而间接影响隐私表露行为。Norberg 在研究中却发现，感知隐私风险会负向作用于隐私表露意图，而感知信任对隐私表露行为的影响并没
有得到支持。所以，网络隐私悖论现象的实质是用户的在线隐私态度与其隐私表露意图之间的悖论，这一结论也得到大多数学者的肯定。

综上所述，学者们对网络隐私悖论的内涵在表述上有各自不同的侧重点，但这些定义都反映了同一消费者对于网络隐私信息在态度与行为（意图）两个层面的矛盾。尽管关于网络隐私悖论没有严格一致的界定，但是大部分研究学者都较为认同“网络隐私悖论就是隐私态度与隐私行为之间的矛盾现象”这一定义（Gerber et al., 2018）。

3. 网络隐私悖论的理论解释

3.1 隐私计算理论（Privacy Calculus Theory）

隐私计算理论是基于经济学的效用最大化理论、社会心理学的社会契约理论以及社会交换理论而形成的。该理论认为，用户表露个人隐私信息是基于对信息表露可能获得的收益和可能遭受的损失之间的权衡后实施的行为。当感知的收益超过感知的风险时，个人就会倾向于主动表露隐私信息（Dinev & Hart, 2006；Smith et al., 2011；Lee & Kwon, 2015）。个人表露信息获得的典型收益有：购物折扣（比如对持有会员卡的顾客实施会员价）、便利的个性化服务（比如在线保留个人信用卡信息）以及个人社交关系的增进（比如使用社交网络）等（Wang, Zhang, Liu & Jin, 2015）；带来的风险或负面影响包括：人身安全的侵犯、个人身份的盗用、隐私信息在不知情的情况下被第三方用于商业交易等（Warshaw, Matthews, Whittaker, Kau, Bernalid & Smith, 2015）。

3.2 解释水平理论（Construal Level Theory）

解释水平理论是近二十年发展出来的纯认知理论。该理论认为，人们对于事件的表征有不同的抽象水平，抽象程度高即高解释水平，抽象程度低即低解释水平（黄俊, 李晔, 张宏伟, 2015）。这种解释水平的差异源于个体的心理距离，即个体以自我为参照点，对所描述的事件或行为在时空上的远或近、发生概率的大或小的感知（Liberman, Trope, McCrea & Sherman, 2007）。根据解释水平理论，Hallam 等（2017）发现用户感知到的隐私风险和隐私收益处于不同的解释水平，即：隐私风险心理距离相对远，而隐私收益心理距离比较近，因此用户即使知道有隐私风险的存在，也仍然会为了隐私收益而选择表露个人隐私信息。李贺等（2018）从解释水平理论的视角把用户的信息表露意图区分为近期和远期两种，研究结果显示用户隐私顾虑通过远期表露意图间接负向影响表露行为，感知收益则通过远期表露意图间接正向影响表露行为，且近期表露意图对表露行为的影响更为显著，从而解释了现实中隐私顾虑与隐私信息表露行为相悖的现象。

3.3 决策偏差和有限理性理论（Decision Biases and Bounded Rationality Theory）

隐私计算理论以及解释水平理论都是建立在理性消费者的基础上，假定用户会对隐私信息表露的风险和收益进行合理的权衡分析。然而，许多关于消费者决策行为的研究表明，决策过程受到各种认知偏差和处理能力的影响（Acquisti et al., 2005；Knijnenburg, Kobsa & Jin, 2013）。一方面，消费者不可能也无能力做到详细了解个人信息表露所有可能的成本和收益，甚至可能不知道自己的信息被收集（Wakefield, 2013）。对信息了解的不完全可能导致消费
者对个人信息表露的风险低估收益高估，从而做出外人看来不合理但是对其人来说合理的行为（Flender & Müller, 2012）。另一方面，即使消费者能够获得所有于成本和收益的必要信息，其个人可能因为缺乏正确处理这些信息的能力从而无法做出正确的决策（Deuker, 2010），这种效应被称为有限理性（Knijnenburg et. al., 2013）。

3.4 量子理论（Quantum Theory）

Flender 等（2012）运用物理学的量子理论为网络隐私悖论提供了另一种解释。Flender 认为，人类的决策过程类似于量子实验的测量过程，即决策过程的结果是在做出决策时确定的，而不是做出决策之前确定的。因为在量子实验的测量过程中存在一定的不确定性，所以个人在决策过程中也可能会改变自己的偏好。在实际做出决策之前询问个人潜在的决策方案，个人的回答可能会与实际的决策行为不相符（Flender et. al., 2012）。这就可以解释为什么当个人被询问隐私表露可能面临一些风险时，会表现出强烈的风险感知（或风险顾虑）；而被问及具体隐私信息表露行为（或意图）时，又往往会做出有悖于前述隐私态度的选择。

3.5 控制错觉理论（Illusion of Control Theory）

Brandimarte 等（2013）通过三个实验研究发现，网络用户在处理其隐私数据时会受到“控制错觉”的困扰，即混淆两种不同的控制：个人对其表露信息的控制以及信息被第三方机构发布的控制。一方面，如果个人有明确的控制权，用户会愿意表露较多的信息，除了存在更高的可识别性风险也会如此；另一方面，如果第三方机构未经授权可以使用和发布个人数据，用户可能会感到失去控制，并表现出较高的隐私顾虑。在 Brandimarte 的实验 3 中，研究者增加了用户对其隐私信息和个人数据可访问性明确的控制权，从而减弱了用户的隐私顾虑，使得用户愿意表露更多的个人信息。

3.6 社会影响理论（Social Influence Theory）

社会影响理论认为，个人的隐私决策行为会受到其所处社会环境的影响，而隐私态度则取决于个人独立的想法，由此导致隐私态度和隐私行为不一致的悖论现象。Taddicken（2014）在一项针对德国网民的研究中发现：用户在朋友和熟人也使用相同的社交网站时往往会表露更多的个人敏感信息（如姓名、职业等）。Beldad 等（2015）以印度尼西亚 655 名学生为样本，研究了集体主义文化环境中社会影响对于 LSA（Location Sharing Application）软件使用的促进效果，究其原因是由于集体主义环境中个人拥有强烈的“我们”意识，表现出高水平的群体认同和顺从。这种影响在个人主义文化环境中也得到了验证，比如青少年会效仿其父母，在社交网络中主动表露个人数据（Van Gool, Van Ouytsel, Ponnet & Walrave, 2015）。如果生活中较重要的其他人倾向于在社交网络上表露信息，个人会感受到一种来自社会的互惠压力（如果他们表露信息，我不这样做是不公平的），也会选择在社交网络上表露信息（Flender et. al., 2012）。

3.7 沟通隐私管理理论（Communication Privacy Management Theory）

Petronio 等（2002）提出的沟通隐私管理（Communication Privacy Management）理论用边界来隐喻个人信息的公共领域和私人领域之间的界线，
将隐私边界看成是一个从完全开放到完全封闭的连续体。完全开放指个人愿意通过自我表露或授权访问的方式将隐私信息告知他人，完全封闭指信息完全私有化不对外开放，也即对隐私的隐藏和保护。两种边界之间的关系是辩证的，会随着内部及外部的情景而改变，并使用一种基于规则的隐私管理系统（Rule-based Privacy Management System）（Petronio & Altman, 2002）。根据沟通隐私管理理论，个人在信息表露过程中，会通过建立隐私边界来管理和保护自己的隐私，权衡信息表露的界限，进而决定是否表露个人隐私信息（梁晓丹, 李颖, 刘芳, 2018）。

3.8 调节定向理论（Regulatory Focus Theory）


4. 网络隐私悖论的实证研究

综上所述，国内外学者从经济学、心理学、社会学等多学科角度对网络隐私悖论的成因进行了探讨。同时，也有诸多学者用实证研究的方法对上述理论进行了验证。实证研究的内容聚焦于个人信息相关的隐私态度和隐私行为两方面，研究方法主要包括问卷调查和实验法，研究情境集中于电子商务和在线社交网络 APP，研究对象可以分为学生和非两大群体（刘婷, 邓胜利, 2018）。

4.1 与隐私相关的态度（Attitude towards Privacy）

态度的本义是“认知和情感体验的整体评估”，是一种包含了积极和消极的双极感觉（Courneya & Bobick, 2000）。学者们通常用“隐私顾虑（Privacy Concern）”或“感知的隐私风险（Perceived Privacy Risk）”来评估与隐私相关的态度（Gerber et. al., 2018）。

隐私顾虑描述的是一种消极、负面的现象，如个人数据被滥用或身份信息遭泄露等，与网络环境、隐私信息类型、研究对象的个体差异等因素密切相关。Koohang 等 (2018) 总结了社交网站用户产生隐私顾虑的六大因素：非法访问（他人未经授权访问、查看、获取用户数据）、第二用途（用户数据未经授权被用于其他用途）、知情权（用户未被告知网站针对信息隐私采取的一些措施）、收集（社交网站对用户数据的收集）、错误（由于社交网站对用户数据保护不足导致的用户数据错误）、控制（社交网站对用户数据的控制）。研究发现：前三个因素（非法访问、第二用途和知情权）与用户的信任信念显著负相关，后三个因素（收集、错误和控制）与用户的风险信念显著正相关。Dienlin 等 (2015) 以 Facebook 使用者为研究对象，验证了三种不同隐私类型（信息隐私、社会隐私以及心理私隐）中隐私顾虑对隐私意图和隐私行为影响效果是有区别的。Schwaig 等 (2013) 分析了消费者对于公司信息管理策略的隐私顾虑，源自消费者自身的消费者异化（consumer alienation）、低水平的自我评估（self-esteem）、对电脑使用的焦虑（computer anxiety）等。
风险的本义是“损失的可能性”(Yate & Stone, 1992)。Dinev 等 (2006) 给出网络隐私风险感知的定义是“对网络用户提交的个人信息采取的机会主义行为带来的风险”，这些行为包括不参与即时交易的其他机构出售或共享用户数据，以及滥用个人信息（如数据泄露或未经授权的数据访问）等。Gerber 等 (2018) 选取标准化路径系数β对感知隐私风险的各种预测变量进行了比较，发现隐私顾虑的预测效果最为显著 (β=0.34***)，其次是隐私侵犯经历 (β=0.20***)。反过来，感知隐私风险也会正向显著影响隐私顾虑 (β=0.33***) (Dinev & Hart, 2006)。Ariffin 等 (2018) 研究了顾客在线购买时感知的六种风险：金融风险、产品风险、安全风险、时间风险、社会风险以及心理风险，除社会风险外都会显著负向影响消费者网络购买意愿。

4.2 与隐私相关的行为（Privacy Related Behavior）

与隐私相关的行为主要包括隐私信息表露行为以及保护行为两大类别 (Gerber et.al., 2018)。Taddicken (2014) 通过一项在线调查研究了影响社交网络 APP 用户信息表露行为的一些因素，包括用户的隐私顾虑、表露的信息类型、社交网络的社会相关性以及信息表露意愿等。研究发现，相较于用户的隐私顾虑，隐私信息表露意愿对表露行为的影响最显著 (β=0.59***)。用户表露较多的为姓名、职业、照片等一些网站要求必须提供的信息，且表露信息的数量受网站的社会相关性影响显著，即在朋友或熟人也使用该社交网络 APP 时往往会公开表露更多的个人敏感信息。这种信息表露行为还可能受到个人社交网络的规模（如博客的账户等级）、性别、年龄等因素的影响 (Li, Lin & Wang, 2015)。

隐私信息的保护行为表现为主动阅读在线隐私政策、把个人信息从网站撤消、检查数据抓取软件或弹窗、安装防火墙防止病毒入侵或个人信息泄露，甚至包括拒绝在线交易等 (Milne, Rohm & Bahl, 2004)。大多数针对成年人的研究表明，隐私信息的保护行为会受到用户自身的网络使用年限、性别、年龄以及家庭收入的影响 (Park, 2015)，也受制约于个人对风险的感知、乐观主义以及网络使用经验等因素 (Baek, Kim & Bae, 2014)。Jia 等 (2015) 选取美国 12-17 岁青少年为研究对象，发现父母的直接干预以及自身的隐私顾虑水平对其个人的隐私保护行为会产生直接的影响。

5. 未来的研究展望

尽管学者们对于网络隐私悖论现象已经进行了大量的调查研究，但关于某些概念以及概念之间的关联和区别仍然存在一定的分歧和争议，比如：隐私悖论究竟是隐私态度和隐私行为的不一致还是隐私态度和隐私表露意图之间的不一致？隐私态度与隐私顾虑、感知隐私风险之间是否有明确的先后影响关系？隐私信息的表露意图和表露意愿是同一概念还是不同的概念？鉴于隐私本质的多维性、动态性以及情境化的特点，未来的研究有望结合中国特色的社会主义制度情境在理论解释方面进一步拓展。

实证研究方面，目前国内外学者的研究集中在社交网络 SNS（Social Networks Site），关于电子商务平台的隐私悖论研究较少；研究采用的主要是定量研究方法，定性分析的文献比较少；在发表的定量研究文献中，由于受限于发表偏差的影响，普遍倾向于公布积极或显著的结果，对于消极或不显著的结果分析较少；问卷调查大部分是学生样本，对研究结论的有效性
可能会产生影响。因此，未来的研究方法可以考虑采用定性分析、随机抽样、扩大样本的选择范围以及更多的聚焦于电商平台。

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Study on the Business Model Innovation Path of Automobile 4S Store in Internet Age

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Abstract
The new generation information technology represented by the Internet has a significant impact on auto consumption, which has prompted the auto 4S stores to carry out business model innovations to improve the profitability of 4S stores. On the basis of reviewing the relevant literature, this paper analyzes the evolution of the auto 4S store business model, builds a model of 4S store business model, and has an in-depth analysis about the motives of the 4S store business model innovation in the condition of the internet. From the value proposition, value creation and value acquisition, it puts forward three paths about 4S store business model innovation. This study can help 4S stores to meet the changing needs of consumers better in internet era, then improve the 4S store profitability and competitiveness.

Keywords: Internet era; Auto 4S store; Business model innovation; Path
互联网时代汽车4S店商业模式创新路径研究

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摘要
以互联网为代表的新一代信息技术对汽车消费产生重要影响，由此促使汽车4S店进行商业模式创新以提高4S店的盈利能力。本文在对已有相关文献进行梳理基础上，分析汽车4S店商业模式的演化过程，构建汽车4S店商业模式模型，深层次剖析互联网背景下汽车4S店商业模式创新的动因，从价值主张、价值创造和价值获取三个方面提出4S店商业模式创新路径，研究有助于4S店更好的满足互联网时代消费者需求的变化，提高4S店盈利水平和竞争力。

关键词：互联网时代，汽车4S店，商业模式创新，路径

1 引言
近二十年来，理论界和实践界对商业模式的研究较多，研究重点是商业模式的概念、要素、分类、演化、动因及商业模式创新路径等[1]，汽车产业链视角的相关研究，较多侧重于制造企业和新能源汽车企业或电动车企业商业模式的研究[2-7]，如TESLA电动汽车的成功源于其独特的商业模式，它以顾客价值创造和企业价值获取为中心，准确定位目标客户，通过轻资产运营、超常的资本运作等方式构建起电动汽车产业的系统性价值链，同时获得了产品市场和资本市场的认同。随着汽车市场变化，汽车售后服务企业有商业模式转型的必要性，相关研究围绕商业模式转型的目标和实施措施[8]，对汽车经销商商业模式的研究侧重于商业模式的现状、分类及存在的问题，相关学者从宏观创新和盈利能力创新两方面提出了汽车经销商商业模式创新的对策建议[9-10]。另有针对中国汽车市场环境下对汽车4S店商业模式的研究，但较多侧重于4S店盈利模式的研究[11]，结合当前经济新常态、互联网环境的研究还较少见，因此本文借鉴哈佛商学院教授克莱顿•克里斯滕森对商业模式的概念界定，即商业模式是创造和传递价值的系统[12]。因此本文基于该概念所提出的价值创造视角，结合当前中国4S店发展特点，研究在互联网时代汽车4S店商业模式创新的动因、路径和实施策略。

汽车4S店是中国当前汽车销售模式中最普遍的一种销售业态，其本质是汽车经销商的商业模式。汽车经销商的商业模式是随着其销售模式的变化而发展，而销售模式的变化又是随着社会经济、技术、产业等环境的变化不断变迁。销售模式的最早形态是计划经济时代国有汽车经营公司的“统配”模式，在改革开放后随着经济体制改革我国出现了物资贸易公司的“代理”模式，在工业化时代的大批量生产模式下逐渐形成中国汽车交易市场，并成为最重要的销售模式，随后逐步发展为厂家直营店或销售子公司、品牌专卖店等相关模式，4S店模式逐渐成为主流。随着信息技术的发展，汽车销售管理系统的实施，汽车销售中订单式模式不断发展，在互联网技术下，尤其是智能制造的发展，汽车定制营销成为可能。汽车营销模式的每一次变迁都体现出汽车制造商与汽车产业链下游的汽车经销商和顾客之间的博弈关系，长期以来汽车制造商处于渠道
控制权的主导和引领地位，但是在互联网高速发展背景下，消费者信息搜集方式的变化带来消费者购买决策过程发生重大变革，汽车4S店的网络化、规模化、区域化、专业化、多样化发展趋势明显，促使4S店进行商业模式创新。

2. 论文内容

2.1 汽车4S店商业模式的PCAA模型

基于价值创造视角，借鉴项国鹏、罗兴武等人的分析框架[13]，提出汽车4S店商业模式的PCAA模型。在此模型中，价值主张是总目标，是商业模式中最主要的内容，价值创造是实现价值主张的途径，价值获取是最终归宿。当企业所面对的市场环境发生变化时，企业根据环境变化调整其价值主张，自然的进入到下一轮的价值创造、价值获取活动，引发商业模式的二次创新，由此实现商业模式的持续创新。

图1：汽车4S店商业模式的PCAA模型

（1）价值主张是企业通过其产品和服务向消费者提供的价值[9]。汽车4S店的价值主张需要明确两个问题，即“4S店的顾客是谁？”和“4S店能为顾客提供的产品或者服务是什么？”。汽车4S店的顾客即目标消费者群体（Target Customer Segments），是4S店在区域市场上所能服务的、具有某些共性特征的消费者群体，汽车4S店目标消费群体的确定通常依据汽车制造商品牌的市场定位和区域市场特点，需要针对目标顾客的共性为其创造价值，这就必然要求4S店将有限的资源和条件投放到最有价值的目标顾客上。4S店通常销售的汽车制造商旗下的多种车型，并且每种车型有很多种配置，不同配置的车型价格、外观、性能和产品属性都不同，这些不同配置的车型共同构成4S店的产品组合。例如：东风标致十堰中威4S店销售标致307、308、301、408、508、2008、3008、4008等车型，根据上述车型的特点和优势，结合当地汽车消费市场特点，从性别、年龄、家庭生命周期阶段、家庭规模、受教育程度和社会阶层、收入水平和支出模式、职业特点和所处行业背景、生活方式、个性特征、社会习俗等方面来区分和界定，提炼出具有购买力的潜在目标客户的特征，一般如均价10万的308和均价20万的508，其目标顾客具有较大的消费差异性，更加准确的细分了该汽车品牌的区域目标市场。汽车4S店能为顾客提供的产品或者服务包括三类：一是汽车4S店通过向目标顾客销售合适的汽车产品、提供车辆维修和零配件供应等售后服务来满足客户的基本用车需求；二是4S店通过提供增值服务满
足客户情感需求；三是通过 4S 店在经营过程中特有的经营理念来体现满足消费者的心理诉求。

(2) 价值创造是企业以资源和条件为基础，建立在价值配置基础上的商业活动过程。4S 店的价值配置即对 4S 店的资源和活动的配置，其重点是 4S 店要针对每一款车型做好市场定位，明确购买者是谁，产品的优势是什么，如何将产品卖给消费者等等。4S 店价值配置的实现通常通过畅通的二级分销渠道、良好的合作伙伴网络、持续的客户关系来实现。核心能力是 4S 店执行其商业模式所需的，不易被其它企业模仿和超越的、具有持久性的能力和资格。分销渠道是 4S 店与客户接触的各种途径，具体指 4S 店如何开拓其所在的区域市场，如二级网点的分销策略等。合作伙伴网络主要是指 4S 店的商业联盟，4S 店往往通过与银行、汽车保险公司、咨询公司、物流公司等合作伙伴建立战略联盟，共享资金、客户数据资源和管理服务，提升自身的竞争能力。客户关系是企业同其消费者群体之间所建立的联系。借助于 CRM 软件，汽车 4S 店与客户建立良好的客户关系，有利于提高客户美誉度和忠诚度。

（3）价值获取是 4S 店商业模式的目标，通常体现为 4S 店的盈利模式，包括收入来源和成本结构。收入来源是 4S 店创造利润的途径；成本结构通常用各项费用在产品成本中所占的比例来测量，4S 店成本结构的变化反映其节约成本的途径和方法。通过对 4S 店多年财务数据中成本结构的纵向对比分析和与其他同类型品牌 4S 店的横向对比分析中，了解该 4S 店成本结构的变化趋势，与竞争对手的比较优势如何，是否可以继续降低成本等。

### 2.3 汽车 4S 店商业模式创新的动因

中国近年来人口经济环境变化、汽车市场环境的变化、互联网技术发展等成为汽车 4S 店商业模式创新的主要动因。如下图所示，新时代各环境要素及子要素的变化推动了 4S 店商业模式创新。

图 2：汽车 4S 店商业模式创新的驱动因素

#### 2.3.1 汽车后市场的良好发展前景为商业模式创新提供机遇

汽车服务业的产业链逐步完善。随着汽车保有量的增加，汽车后市场发展迅速，汽车价值链也将逐步完善并朝后端转移，随着汽车美容、汽车养护、汽车改装等业务的发展，汽车 4S 店将发掘更多的汽车产业利润点。

4S 店销售服务业态逐渐多元化。随着汽车市场的成熟以及汽车市场竞争的加剧,
使得未来将呈现 1S 店、2S 店、3S 店等小而美业态及 5S 店、汽车连锁超市、汽车交易市场、汽车快修服务企业等混合业态模式，与 4S 店共同存在的格局。同时小规模和盈利能力较差的 4S 店将不断被汽车经销商市场淘汰，汽车分销兼并重组趋势明显，汽车分销渠道整合成为必然，随着新销售管理办法的实施，大型汽车经销集团增多，一批区域性或全国性的大型经销商集团将迅速发展为平台商。

乡村振兴战略的实施促进三、四线城市汽车消费。随着一、二线城市市场的逐步饱和，未来汽车制造商和汽车分销商都会将分销渠道网络布局的重心从一、二线城市转移到三、四线城市，尤其是十九大提出乡村振兴战略以后，农村市场将会成为汽车销售的重要市场。因此汽车制造商也会帮助汽车 4S 店致力于开拓和服务三、四级市场，为 4S 店的渠道下移提供条件。

2.3.2 汽车经销商生存现状艰难和激烈的竞争压力迫使其进行商业模式创新

投资大、运营成本高、库存压力大、营销同质化、投资回报率低等是 4S 店模式的先天“短板”，近年来更加凸显，这些都增加了 4S 店的销售压力。据调查，有以下三类经销商还能够保持盈利：一种是依靠强势的汽车品牌，比如保时捷等，其销售网络合理而且价格体系管理十分严格，这也就确保了经销商都能够获得相应的利润；第二种是市场占有率高，维修利润丰厚，可以弥补销售的亏损。最后一种则是单店经营，短期内仍然有市场垄断优势。除了这些以外的 4S 店经销商，能够勉强维持下去的已是不易，一旦市场发生变化，就会很快从勉强维持滑向亏本经营。以上出现的情况的原因主要是：4S 店单一品牌经营中过度依赖汽车制造商为追求利润降低服务水平；4S 店本身的企业形象不够显著，难以体现差异化经营；资金管理存在风险；汽车售后服务标准不清晰，法律法规仍不健全等，这些都需要 4S 店在内容和路径上进行商业模式创新。

2.3.3 互联网时代特点要求汽车制造商、4S 店和顾客共同创造价值

工业经济时代分销渠道曾经是商业模式的重要组成元素之一，“渠道为王”是这一时期商业模式的主要特征，借助他人的渠道或者分销商体系进行销售，厂商在价值链内部通过一系列的活动来完成价值创造的，盈利模式是其核心，收入和成本是两个最关键要素。汽车 4S 店的商业模式是怎样创造收入或者降低成本。但在互联网时代出现“脱媒”以后，分销渠道作为商业模式的重要元素，无法起到创造价值和协调资源的作用，因此在互联网时代，4S 店需要商业模式创新以维持其盈利能力。为此欧美日等国家的汽车后市场企业，积极探索未来的商业模式，在汽车智能互联时代，通过无人驾驶的同时，关注汽车保险、车辆维修、配件购买以及服务方式，主机厂、配件供应商、经销商进行生态模式转变来增加和保持未来的客户和盈利。从已有文献可以看出，国外汽车 4S 店有技术、服务、品牌、资本和人员优势，而我国最主要的优势是电子商务迅速发展的优势，尽管 4S 店的盈利状况堪忧，但汽车制造商的技术创新因素和 4S 店所具有的区域市场优势，仍然是汽车营销中其商业模式成功的关键，在互联网+背景下，由于汽车厂商的价值创造来源于顾客的体验和感知，为了抓住新技术带来的商机，4S 店的商业模式创新将更加注重价值创造，注重与顾客建立密切的关系。因此在互联网+时代，价值是由厂商与顾客共同创造的。近年来，O2O 的模式深受汽车消费者欢迎，而线下的体验正体现出汽车 4S 店的优势所在。因此 4S 店若能按照互联网思维进行商业模式创新，在互联网+时代不仅不会被消亡，反而会有更好的盈利和发展。因此汽车 4S 店亟待商业模式创新。
2.3.4 互联网背景下汽车消费者购买行为的变化要求 4S 店实施商业模式创新

一是技术环境的变化，互联网+成为时代特征，由最初的 PC 互联转向万物互联、移动互联、高速互联，并且互联网正加速对传统的 4S 店进行渗透和融合，从而对价值创造和价值获取产生变革。二是互联网发展带来电子商务和网络营销，由此产生的汽车网络渠道对传统实体渠道产生巨大冲击。三是社会环境的变化，中国已进入移动互联时代，信息技术已渗透到消费者购买行为的各个阶段，将对 4S 店的商业模式产生机遇和挑战，如下表 1.1 所示。四是经济环境变化。最大特点是购买力提升、消费升级，尤其是随着汽车市场的发展，90 后的车主与 70 后 80 后车主在消费理念、购买行为方面有很大的不同。五是反垄断法和新的汽车销售管理办法，对 4S 店产生重要的挑战。

表 1 消费者购买决策过程比较

<table>
<thead>
<tr>
<th></th>
<th>传统经济时代</th>
<th>互联网时代</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>问题认知</td>
<td>消费者基于自身的实际需求或身边朋友的刺激产生购买。消费者比较容易受到企业的影响而产生购买，这主要体现在消费者一旦通过智能终端以某种方式对企业进行了关注以后，就会在一段之后被该企业潜移默化的影响，进而产生购买心理。</td>
</tr>
<tr>
<td>2.</td>
<td>信息搜集</td>
<td>消费者主要通过到汽车市场、4S 店或车企网站集中时间进行相关信息的查询。由于移动智能终端的可携带性，使得信息搜集过程更加方便和及时。此外，消费者的信信息搜集时间呈现出“碎片化”的特点，这就要求企业在合适的时间推送合适的信息，实施精准营销。</td>
</tr>
<tr>
<td>3.</td>
<td>品牌选择</td>
<td>消费者倾向于对比、选择大众的品牌。由于移动智能终端上此类 APP 的使用，消费者会接受到各种各样的推送广告，消费者可选择的品牌种类各种各样。</td>
</tr>
<tr>
<td>4.</td>
<td>购买过程</td>
<td>在消费者做出评价与选择以后，合适的时间和地点是影响购买的重要因素。消费者的购买行为随时随地都会发生，并且消费者对服务有更高的要求。</td>
</tr>
<tr>
<td>5.</td>
<td>购后行为</td>
<td>消费者发表购后体验的渠道比较少，意识也不强。消费者对每一次的购买都偏向于通过社交媒体进行分享，而且不论消费者处于何时何地，都可以发表自己的购买和使用心得，并且可以配以图片、视频等。</td>
</tr>
</tbody>
</table>

2.4 汽车 4S 店商业模式创新的路径

商业模式各要素的变化都会导致商业模式创新，在此基于价值视角，汽车 4S 店可以从三条路径实现商业模式创新。

（1）价值创造方式的变化。以前 4S 店的价值创造是通过增加产品的功能配置来增强产品的使用价值，现在要通过强调顾客体验强化对产品使用价值的感知，提供从销售产品到提供服务的整合解决方案。

（2）价值传递过程的变化。从以前的宣传和促销，变为为客户提供各种信息和服务，从以前的信息单项传递变为双向流通。最重要的是基于移动手机终端的 4S 店
APP 的开发和使用，APP 需要达到相应的功能以满足客户对服务的需求。

（3）价值获取方式的变化。在收入来源上，从以前赚客户钱，转变为帮客户赚钱，如下表所示：汽车 4S 店也可通过成本结构降低和资产结构轻型化来降低成本。在收入来源上，利用互联网思维的“免费”特点可以为汽车消费者创造更多的“免费方式”，根据汽车的档次和不同客户细分群体的需求差异来灵活采用免费和付费的策略，比如线上免费线下收费，从而更自如的在吸引客户和盈利之间取得平衡。通常情况下，企业可以将汽车维修领域的基础服务免费，但对高级或者定制的改装类等服务溢价收费或者从其他的客户细分群体愿意付费进行交叉补贴，从而使多元化的收入来源更能促进 4S 店的稳健性和盈利能力的提高。

表 2 汽车 4S 店帮助客户提升价值

<table>
<thead>
<tr>
<th>序号</th>
<th>功能</th>
<th>功能说明</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>保养提醒</td>
<td>4S 店对车主发送保养提醒</td>
</tr>
<tr>
<td>2</td>
<td>在线预约</td>
<td>为车主提供在线预约保养的功能</td>
</tr>
</tbody>
</table>
| 3    | 一键导航    | (1) 车主通过手机客户端的“一键呼叫”按钮，接通客服人员，并告知目的地  
                        (2) 客服人员将查询到的目的地地址通过移动网络下载到手机客户端  
                        (3) 手机终端根据目的地地址实现自动导航，避免车主的手工操作 |
| 4    | 道路救援    | 车主通过热线电话连接到呼叫中心求救，客服专员可以对各种紧急情况做出响应，
                        并联系当地的紧急救援协助机构，如警方，医疗，消防等，以便救援队伍迅速到达车主所处的确切位置 |
| 5    | 违章查询    | 根据车牌号自动快捷地查询车辆违章情况，提醒车主避免再次违章。          |
| 6    | 停车位共享  | 为车友提供一个停车位共享平台                                          |
| 7    | 轨迹分享    | 车友之间分享功能。（例：车友可以通过轨迹查询功能，把自己的在某个时间某个地去的行车轨迹分享给好友。） |
| 8    | 兴趣点查询  | 车主通过热线电话连接到呼叫中心客服人员，查询兴趣点位置及相关信息（如酒店，维修，加油站等） |
| 9    | 产品展示    | 4S 店向车主手机客户端推送新车型，新优惠活动等信息                      |
| 10   | 二手车交易 | 为车友提供一个二手车交易的平台                                          |
| 11   | 车友社区    | 为车友建立一个 SNS 社区，满足交友，资讯共享等需求                      |
| 12   | 商家联盟    | 商家联盟（洗车，美容，维修，保养，代驾，保险，年审，体检等）            |

2.5 结论

通过商业模式的创新，可以提高 4S 店的盈利能力，实现 4S 店的转型发展。随着 4S 店在产业链上的话语权逐步提高，在互联网+和新《汽车销售管理办法》的双重影响下，大型经销商集团出现，其商业模式的创新和盈利能力的提高必将使大型经销商集团发展成为平台商，平台商通过整合全球资源来完成自己的目标，架构汽车商业模式生态系统，进而又反过来促进其商业模式的创新和盈利能力的提高。创新无止境，汽车 4S 店需要不断的进行商业模式创新，才能持续提高其盈利能力，提升和维持其竞争力。

3. 致谢

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Red Top Confucian Businessmen Hu Xueyan's Business Success Pathways

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Abstract

Hu Xueyan was a famous red top Confucian businessman in the late Qing Dynasty and was hailed by the world as "Asian Commercial saints." He actively advocated honesty, honesty, and harmony, paid attention to networking, good people, and people's lives. He strived to win, and insisted on hard work and learning, constantly improving his own quality, and eventually achieved ideal business performance. Earned huge commercial profits. Some of its successful experiences in business management still have a certain theoretical reference value and practical guidance significance, and it is worth our systematic summary and serious study.

Keywords: Confucian Businessmen; Hu Xueyan; Commercial operations; Success Pathways
红顶儒商胡雪岩的商业成功之道

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摘要

胡雪岩是晚清时期一位著名的红顶儒商，被世人誉为“亚商圣”。他积极倡导重诚守信、以和为贵，注重拓展人脉、知人善任、经世济民，力求出奇制胜，并坚持勤奋好学，不断提高自身素质，最终取得了理想的经营绩效，赚取了巨额的商业利润。其在商业经营方面的一些成功经验至今仍具有一定的理论借鉴价值和实践指导意义，值得我们加以系统总结和认真学习。

关键词：儒商；胡雪岩；商业经营；成功之道

胡雪岩，原名胡光墉，幼名顺官，祖籍安徽宣城绩溪湖里村，晚清时期著名商人。生逢乱世的胡雪岩游走在商场与官场之间，通过经商赚取了巨额财产，其鼎盛时期总资产相当于当时清政府年度财政收入的一半，“富可敌国，资产半天下”，从一个普通的店铺员工成功跻身于富商大贾的行列，赢得了“胡财神”的称号。他将儒家所倡导的“仁义”、“诚信”等思想运用于商业经营之中，力求经世济民、多行善举，经常慷慨解囊资助贫困百姓，建立了良好的商业声誉，并由此被清政府赐封为布政使官衔，赏给二品红顶戴和黄袍马褂，特别准许在紫禁城骑马，成为富甲天下、闻名遐迩的“红顶商人”，拥有了显赫一时的社会地位和权势。1他商业经营方面的一些成功经验至今仍具有一定的理论借鉴价值和实践指导意义，值得我们加以系统总结和认真学习。纵览胡雪岩的经商历程，其商业经营的成功之道主要有以下几个方面：

1. 重诚守信

商业活动中交易双方之间所存在的交换关系，只有在讲求信用的基础上才能够得以长期的持续，唯有如此也才有可能保障商品交易活动的顺利开展，从而实现经商事业的长盛不衰。正如俗语所说：“信义通商”、“诚招天下客”。诚信是进行经商活动的一个根本前提条件，商人必须注意凭借诚实信用的金字招牌来招揽和吸引顾客，从而成功创业和发展。否则，如果不能够坚守诺言，以至于失去信用，那么就会使自己丢掉生意场上合作伙伴和顾客，进而丧失更加广大的市场空

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间。胡雪岩认识到，诚信对于经商活动来说是至关重要的，所以他主张将重诚守信作为经商必备的一项基本道德品质和经营理念，把诚信作为进行商业经营活动的根本原则和思想基础。胡雪岩在钱庄开始营业的初期，就遇到了一位十分特殊的客户——绿营军的军官罗尚德。这位军官考虑到将要战场而生死难以预料，自己保管存折既麻烦又不安全，于是就基于胡雪岩的良好信誉，把一万两银子存入了阜康钱庄，然而却不要利息和存折。了解到罗尚德的实际困难之后，胡雪岩马上做出决定：将罗尚德所存一万两银子依据三年定期存款的利息率计算利息，如果这批存款在三年期限之后前来提取，那么就连同本息总计支付一万五千两银子，并且给罗尚德办理了一个存折，暂时委托给钱庄的掌柜代为保管。后来罗尚德在作战中身负重伤，在即将离世之际，他交代自己的两位同乡去阜康钱庄提取所存储的银两，并带回老家转交给亲戚。在没有任何存款凭证的情况下，胡雪岩非但没有故意托辞为难罗尚德两位前来取款的同乡，更没有矢口否认和意图赖账，而是在证实前来阜康钱庄取钱者的身份无误之后，就即刻依照当初的约定为他们办理了相关手续，不仅一万两银子的存款本金全部交付，而且如数支给了先前所允诺的利息。正是由于胡雪岩良好的信誉，许多清军将士纷纷把钱财悉数存放到了胡雪岩的阜康钱庄。胡雪岩将这些钱财作为进行商业经营的资本，进一步扩展经营范围和规模，在各地广泛设立店铺商号，赚取了十分丰厚的商业利润。

胡雪岩的重诚守信还体现在：始终将消费者的利益放在第一位，对商品的质量严格把关和孜孜以求。他认识到，质量是的商业信誉的生命和灵魂，只有具有高质量的商品才能够赢得民众的信赖，在市场竞争中长盛不衰。所以，胡雪岩在经营胡庆余堂的过程中，严厉杜绝“说真方、卖假药”的行为，力求通过药品的质量真正建立起自己的商业信誉，为胡庆余堂打造一个享有良好口碑的“金字招牌”。为此，他重金聘请名医，广泛收集传统良方，不断总结经验，精心选配调制出庆余丸、散、膏、丹及胶露油酒验方400余方。他坚持“戒欺”、“是乃仁术”和“真不二价”的经营宗旨，亲自拟定了胡庆余堂的办店规则，即“戒欺”牌匾：“凡百贸易均著不得欺字，药业关系性命，尤为万不可欺。余存心济世，势不以劣品取厚利，惟愿诸君心余之心，采办务真，修制务精，不至欺予以欺世人。是则造福冥冥，谓诸君之善为余谋也可，谓诸君之善自为谋也亦可。”胡雪岩不但要求药店所有人员应当勤谨能干和心诚意善，能够时时替病人考虑，而且要求必须切实保证所调制的药品配方科学可靠，所采购选择的原材料品质上乘、所加工制造的产品货真价实、所销售出卖的成品药功效显著。作为中成药主要原料的天然动物、植物和矿物品种多、分布广、属性复杂，仅典籍所载就有3000多种，而中药特点是多味配方，每味药材的真伪优劣直接关系到药品的质量，如果有一味药材掺假，那么整体疗效就会大受影响，甚至有时会适得其反。有鉴于此，对药品原材料的来源，胡雪岩采取了严格的控制措施。在药材产地方面，他规定当归、黄芪必须采自甘肃、陕西，麝香、贝母、川芎必须来自云南、贵州、四川，虎骨、人参必须从关外采购，即使像陈皮、冰糖之类的一般药材也要绝对保证质量，必须是福建、广东所产才允许入药。在药材采购渠道方面，他改变从药材行获取原材料的传统做法，而是从药材原产地的生产者药农手中直接购买。胡雪岩通过隔年贷款给药材产区的药农，使他们资金周转灵活，愿意献出质量上好的药材产品，并专门派遣熟悉药材产地、生长季节、质量优劣的人员深入到全国各地。
的药材原产区，现场收购地道的药材，比如在山东濮县、河北新集等处采购驴皮，
去甘肃、陕西等省购买当归、当参、黄芪，到江西樟树收购银耳等。为了使得人们
能够打消心中疑虑，真正相信胡庆余堂所销售药品的货真价实，他甚至要求在
药店中摆放药材的样本，讲明其具体来源，让顾客清楚地知道药店选料的真实情
况，并且在每次炮制一种特殊的药品之时，主动张贴告示请人前来观看。

生意上的信用，其实来自生意人的品德。胡雪岩心地纯正，按照诚实守信的
“诚信”原则来经营商业，建立起了自己生意场上的“金字招牌”，所以也就能够
生意兴隆。

2. 以和为贵

胡雪岩认识到，人世复杂，而商场更加变幻莫测，人们只有相互帮助、共同
努力，才能成就一番事业，正如其所谓：“花花轿儿人抬人”。所以，在商业活动
中，尽管各种不同观点分歧、利益对立以及由此导致的矛盾纷争是难以避免的，
但他历来都十分重视并一贯坚持“以和为贵”的经营原则，处事讲求和气，尽可
能地求同存异、消除对抗，实现彼此之间和睦共处、团结协作，最终达到合作共赢、和气生财。

胡雪岩认为，只有内部和谐才能众志成城，在商业经营中立于不败之地，所
以他十分注重自己店铺内部的和谐，制订了员工的日常行为规范，倡导一种容让
宽恕的为人之道。胡雪岩时刻教育员工在处理与他人之间的各种关系时，应当首
先设身处地为对方考虑，避免内部员工相互之间的争斗。胡雪岩反对以严厉高压
措施进行管理，而对职工采取了宽厚仁慈的怀柔手段，在情动人基础上又以利
诱人，出台了一系列能给员工带来实际利益的店规，力求使自己的员工普遍满
意，产生一种与老板休戚与共的意识。胡雪岩店铺内部的和谐，最大程度地降低
了自身的内耗，调动了员工群策群力工作积极性，促进了经济效益的大幅提升。

毋庸置疑，顾客的态度直接影响商品的市场占有率，从而成为决定商业经营
成败与否及其绩效的一个重要因素。所以，作为一位商人，胡雪岩一直致力于营
造与顾客之间融洽和谐的双边关系。他将顾客作为了养活自身生意的衣食源泉，
反复强调：“顾客乃商家的养命之源”。正因为此，在经商过程中，胡雪岩奉行客
至上的经营理念，从来没有欺行霸市、哄抬物价和坑蒙拐骗等不良行为，而
是将顾客的利益放在首位，积极倡导公平买卖、货真价实。他严厉禁绝各种对顾
客不加理睬、恶语相向等怠慢举动，明确要求新进员工必须首先认真学习接客、
待客之道，对顾客应当用热情的态度以礼相待，向他们提供全面周到的上乘服务，
让顾客有一种宾至如归的感觉。这种力求与顾客融洽和谐相处的理念，极大地增
强了顾客的忠诚度和信任度，给胡雪岩的商业经营提供了有效的市场保障。

俗话说：两虎相争，必有一伤。作为一个真正掌握商业经营之道的精明商人，
胡雪岩深深懂得，如果竞争对手之间一味地进行争斗，那么对于任何一方都不会
有好处，然而，如果彼此能够团结协作，就能够获得双赢。同时，他也认识到，
经商过程不可能全部一帆风顺，总会遇到需要别人施以援手的困难时刻。有鉴于
此，胡雪岩将“和”作为处理商业活动中各种交际关系的基本准则，特别强调“得
饶人处且饶人”，为竞争对手留一条退路和活路。他经常说：“将来总有见面的日
子，要留下余地，为人不可太绝，给人以活路，给己以财路”。他反对在生意场上为了追求自身利益最大化而与竞争者针锋相对，更反对试图独占所有利润而不惜损害对方利益，而是主张采取“合作共赢”的竞争策略，讲求“有钱大家赚”，时时与人为善、为他人着想和打算，处处考虑与对手分享利益，力求实现互利共赢。即使在面对咄咄逼人的同行竞争者之时，胡雪岩也能毫不计较个人的恩怨得失，总是想方设法手下留情，却让对手知难而退并存感激，从而最终化敌为友。

胡雪岩指出：“铜钱银子用得完，得罪一个人要想补救不大容易”、“天下的饭，一个人是吃不完的，只有联络同行，要他们跟着自己走，才能行得通。”所以，他始终坚持“宁可抛却银子，绝不得罪同行”的原则，从来不抢同行的饭碗，并时刻关注商场态势的微妙变化，一旦发现自身行为有违及到别人利益，总是能够舍弃眼前的利益而主动退让，想方设法以和和来解决的问题，巧妙地化敌为友，克服同行对自己的忌妒和怨恨。一次，胡雪岩向一位外商购买了一批军火，而实际上，这位外商早已将该批军火按照低于胡雪岩所出的价格卖给了另一位军火商，只是还没有支付货款。起初胡雪岩对此并不知情，当被听朋友告知实情后才意识到自己截买了同行的货物，于是他放弃了直接向外商购买军火，转而向那位同行以较高价格购买该批军火，最终那位同行不需要出钱，更不用承担任何风险，就轻松地赚取了理想的差价和盈利。这样就使得原本可能激化的敌对矛盾轻松化解，不仅显示出胡雪岩同行之间侠义相助、为人宽仁的一面，还显示了他为人处事的智慧和人格魅力。

在长期的从商生涯中，胸襟豁达宽阔的胡雪岩一贯坚持和为上策、和气生财的经营理念，即使在你死我活的激烈竞争之际，也能够采取灵活通达的手腕，尽可能地将生意场上势不两立的敌人转化成为协作互助的朋友，这是一般人难以做到的。以和为贵的经营理念，形成了浓郁的融洽和谐氛围，特别是使得胡雪岩博得了同行衷心的好感，赢得了大量的人气，为开展商业经营活动创造了一个稳定良好的客观环境，产生了积极的经营绩效。凭借在行业内的良好声誉，胡雪岩在每桩买卖中几乎都有协作默契的生意伙伴，甚至能够得到敌对方的支持，而较少受到同行的排挤与妒忌，从而可以顺利地把生意做大做强，使生意越来越如日中天般地红火兴隆，也造就了他辉煌的人生。可以说，以和为贵的经营理念体现了胡雪岩的商业经营智慧和远见，确实为一种能够保证长久地获取最大利益，实现合作共赢的策略和法宝，是其在商界纵横驰骋，经商成功制胜的一个秘诀和资本。

3. 注重人脉

俗话说：“一个篱笆三个桩，一个好汉三个帮”。胡雪岩认识到，个人力量毕竟是十分有限的，只有巧妙地处理好各种人际关系，充分地借助于外界力量的扶助，才有可能在商业活动中得心应手，全面实现预期的经营目标，在自己的经商事业方面获得较大的成功。为此，他十分注重拓展人脉，编织人际关系网。

在立足于自身能力的基础上，胡雪岩广泛地和社会上各色人物打交道，积极地寻找各种可加以利用的适宜靠山，尽力得到“贵人”的大力支持和帮助。这样，胡雪岩就尽可能地依靠众人力量保障了商业经营的顺利进行，为事业的成功奠定坚实的基础，即所谓“广交天下朋友，助己成就一番事业。”胡雪岩从一个普通的钱庄职员成长为资财丰厚的大富豪，固然有诸多方面的原因，而其注重构
建广泛的人脉关系网络，能够在身处困境之际得到朋友的大力援助和提携，实在是一个十分重要的因素。例如，胡雪岩在被老板按照规矩赶出了钱庄之后，在好朋友谭则仁、柳成祥等人的帮助下，开办了一家专门买卖粮食的商行，才能够养活家人，勉强地度过了人生的困境，并且为日后在商场上的成功经营进行了一次大胆的实践尝试。

胡雪岩认为，在构建人脉关系的过程中，必须具有一定的长远眼光和大局意识，坚信只要自己正确地选择了所意欲交际的对象，即使暂时可能会付出一些代价和牺牲，但终究会获得受惠者更加多倍的回馈报答。所以，他能够在别人处于困境之际及时地施以援手，从而通过慷慨地接济帮扶穷困者渡过难关，结交到了许多真正的知心朋友，其中颇值一提的当属王有龄。有一次，胡雪岩在一家茶楼遇到了正处于贫困潦倒、落魄失意的穷书生——王有龄。此时王有龄使用家中全部资产捐了官职，已经没有多余钱财到京城入职授官。胡雪岩凭借善于识人的敏锐眼力，看到王有龄具有与众不同的才能，坚信日后必定能够飞黄腾达，成为主政一方的权势人物。他决定竭尽自己的一切力量来帮助王有龄，于是冒着极大的风险，将钱庄五百两白银借给了王有龄，资助其前往京城去实授官职。虽然胡雪岩因为擅自出借白银而被老板辞职，但是患难方见真情，赢得了王有龄的真心感激，由此两人结为终身终生的生死之交。结果，王有龄在胡雪岩的帮助下去后最终成功谋取了一个具有实权的官职。在返回杭州之后，知恩图报的王有龄就立即四处打探和寻找胡雪岩。在王有龄的全力支持，胡雪岩代理了公库业务，把自己的钱庄轰轰烈烈地开办起来了，成为其进一步发展的起始点，由此生意开始兴盛红火起来。刘体仁在《异辞录》中曾记述，王有龄一度专门向各县下达命令："凡解粮饷者必由胡某汇兑，否则不纳。"随着王有龄的不断高升，在浙江官场的势力不断加强，胡雪岩的生意也水涨船高，越发越大。除了钱庄之外，胡雪岩还开办了其他许多店铺，并得到了"办粮械"、"综理槽运"等良机，由此掌控了浙江将近一半以上的战时财经大权，为其日后进一步增强商业实力和拓展经营范围奠定了雄厚的基础。

作为一代富商大贾，胡雪岩精通人际关系之道和钱权变化之理，深谙"大树底下好乘凉"的深刻意蕴。为了自己的长远利益，他在整个商业经营过程中，将官场作为他"公关"的重要目标，想方设法去结识官场中炙手可热的实权派人物。在商业经营过程中，胡雪岩所特别注重结识，且所受影响最大的一位政府大员，当属左宗棠。在太平天国起义之时，左宗棠受命率领清兵平定动乱。由于粮食和军饷的极度短缺，加之战斗的惨烈残酷，清军饿死和战死的士兵不计其数，由此直接导致了军心涣散，军队战斗力严重削弱。此时，作为主帅的左宗棠可以说是忧心忡忡、无比苦恼。胡雪岩了解到了左宗棠所处的困境，于是果断地决定为左宗棠部率领的清军运送军火、粮草，以解除其燃眉之急。在战乱纷扰的情况下，他仅仅使用了三天的时间就筹集了粮食十万石之多。胡雪岩顺利完成了在当时几乎不可能的任务，由此得到了左宗棠的高度赞赏。胡雪岩成为了左宗棠的得力助手，被左宗棠委以重任，经营办理转运粮食和军需物资，在洋务运动期间，左宗棠在胡雪岩的协助之下积极引进西洋新式机器，创办了甘肃织呢总局、福州船政局等一些民用和军工企业。在取得了左宗棠的赏识和庇护之后，胡雪岩得到了其他商人难以企及的社会荣誉、地位和机会。

胡雪岩注重恰当地处理和巧妙地利用人脉关系的商业经营理念，取得了最令
人满意的结果，顺利地达到了预期的理想目标，堪称一位公关“高手”。由此，胡雪岩得以在生意场上更好地顺风扬帆，其生意进入了一个全新的快速发展期。

4. 知人善任

胡雪岩认识到，开办店铺进行商业经营是一件十分纷繁复杂、费力劳心的活动，一个人是难以完全胜任和应付的。所以，他十分重视商业人才，将“人”作为其“五字商训”中一个必不可少的重要方面，提出：“人者，仁也”，“仁人爱人，爱人者得人，得人者方能得天下也”。胡雪岩认为，商业组织的领导者在做生意的过程中应当广泛招纳和网罗各方面的相关人才，注意扶植和栽培自己的员工，精心帮助他们成长，使其有朝一日成为能够独当一面的良才，从而组建起一支精明强干、尽职高效的员工队伍。

胡雪岩反对事必躬亲的做法，认为商业组织的领导者最主要的工作应当是把握商业经营的战略性方向，有效地引导员工朝正确的方向前进。由此，胡雪岩主张在一些具体的经营业务上适当地下放权力给下属员工，根据他们各自不同的能力和才干来托付各项商业经营事务，合理地实行分工，授予下属与其才干相称的事情，让下属去一些做点才能及的工作，从尽可能地做到用人之所长，将每一个人放在最适宜的岗位上，并在此基础上鼓励下属大胆地进行独自决策，充分发挥各位员工的内在潜能和独特优势。

在选择和任用员工方面，胡雪岩从来不受世俗的偏见所左右，而是坚持不拘一格、唯才是用的原则，从不同方面进行多角度的全面考察，特别是更加强调应当具有一些特殊的能力。他总是能够独具慧眼，发现别人的长处。一些在常人眼中不堪大用的“庸才”，甚至“败家子”，只要具有可取之处，都会被胡雪岩网罗到自己手下，并委以重任，结果最终起到了他人所难以替代的积极效果。例如，从小就是一个纨绔子弟的刘不才，一直嗜好赌博，对于花花公子的玩经可谓无所不精。胡雪岩却能够力排众议，将刘不才收纳为自己属下，让他充当一名特殊的“清客”角色，专门与达官贵诗词交往。又如，有一个外号“小和尚”的陈世龙，原来是社会无业游民，整天在湖州赌场街头浪荡闲逛，玩赌吃喝方面可以说无所不精。胡雪岩却能够力排众议，将陈世龙招纳为自己的员工，将其培养成为了一个泡官场、跑江湖的得力助手。他们都没有辜负胡雪岩的托付和厚望，充分发挥自己独特的禀赋能力，巧妙地运用独到的应酬交际手段和技巧，在各个行业和领域结交了许许多多朋友，为胡雪岩商业经营活动的顺利开展提供了广泛的社会关系保障。

俗话说：重赏之下必有勇夫。为了延揽和激励人才，胡雪岩注重利益诱导和驱动，通过奖赏来调动员工工作的积极性。他进行利益诱导和驱动的主要方式有两种：一是红利均沾，二是入股合伙。在企业中根据技能和水平，将雇员分为三个等级：头等称先生，职位是经理、协理、总帐房，重金聘请，待遇很高；二等称师傅，是各工序的负责人，待遇从优；三等呼帮工，从事简单劳动，计件付筹。再根据雇员对企业的贡献，最优者可发给功劳股，享用终生。还设“阳奉”与“阴奉”，解决职工晚年和眷属的生活问题，类似今天的退休金和抚恤金，也可称其为 19 世纪杭州，最早出现的“劳保制度”。

有了更多的金钱收入，员工就会觉得倍受重视，工作起来自然也就更加努力，进而大大调动了员工的劳动积极性。
胡雪岩拥有一套与众不同的用人绝招，能够从不同角度去审视每个人的优缺点，“用人之长，容人之短，不求完人，但求能人”，做到了长短兼顾、扬长避短，真正体现出其独到的用人眼光。这一点正是胡雪岩的高明之处，使其手下精英荟萃，获得了许多难得的优秀商业经营管理人才。在这些人才的辅助之下，胡雪岩打造出了一个规模庞大、资财雄厚的商业帝国，创造了令世人艳羡的辉煌商业业绩。陈云笙在《慎节斋文存·胡光墉》中指出：“胡又喜贾，列肆数十，知人善任。所用号友，皆少年明干精于会计者。每得一人，必询其家食指若干需用几何，先以一岁度支界之，俾无内顾忧。以是，人莫不为之尽力，而阜康字号几遍各行省焉。”

5. 经世济民

常言道：在商言商。这就是说，做生意求利是天经地义的常理。商人进行商业经营活动的根本目的就是要发财致富，尽可能地实现商业利润最大化。胡雪岩当然也难以超凡脱俗，完全摆脱经商求利的传统观念。然而，他又与一些见利忘义、坑蒙拐骗的奸诈商人有着根本不同。胡雪岩并没有唯利是图，将利润最大化作为商业经营的唯一目的，而是乐善好施，力求能够义利双收，做到为富行仁、经世济民。

胡雪岩极其热心于慈善事业，在经商富裕之后大行义举，慷慨大方地捐赠钱财，接济救助贫困百姓和鳏寡孤独，广泛地布施行善，做出了许多仁义的举动，得到了人们的普遍赞誉，荣获了“胡大善人”的美名。例如，为了便利杭州上八府与下三府之间的通行，胡雪岩捐银十万两开设了钱塘江的“义渡”，为过往的百姓提供各种方便；向陕西、直隶、山西、河南等灾害地区多次捐献棉衣、白米、银两赈济，先后捐献的钱财款项总共约有白银二十万之多，并且亲自开设多处善堂、粥厂、义塾等，极尽匡世济民的社会责任。刘体仁的《异辞录》就此进行了记载：“(胡雪岩)主持善后诸事，始则设粥厂，设难民局，设‘义烈’遗阡，继而设善堂，设义塾，设医局，修复名胜寺院，凡养生送死赈财恤穷之政，无不备举。”左宗棠在《左文襄公奏稿》中指出：“江西补用道胡光墉，自臣入浙，委办诸务，悉臻妥协。杭州克复后，在籍筹办善后，极为得力，其急公好义，实心实力，迥非寻常办理赈抚劳绩可比。”左宗棠在其奏稿中还连篇累牍记述了胡雪岩对直隶、甘肃、陕西、山东、山西、河南等全国各地省份水旱灾害，都慷慨解囊、捐款救济。

在胡雪岩的所有义行善举之中，胡庆余堂雪记国药号的创办尤其值得称道。当时瘟疫、战乱等因素导致了人口的大量死亡和急剧减少，有鉴于此，胡雪岩便下定主意开办一家药店，以期能够救死扶伤，尽最大可能地医治和减少百姓的各种疾病伤痛。他遍寻各地行之有效的医药良方，高薪聘请著名医生炮制了八宝红灵丹、诸葛行军散等药品，无偿赠送给贫困百姓和军队将士们使用。在胡庆余堂发展的鼎盛时期，胡雪岩推出了十四大类的成品药，并将济世救人范围扩展到所有民众，面向全社会免费发放辟瘟丹、痧药等家中日常使用的必备药。当时的《申报》对此进行了专门的大幅报道，由此胡庆余堂立即名噪一时，赢得了人们的广泛认可。在短短的六年时间里，其利润实现了快速增长，资本数量从初始投资额的三十万两白银扩充到了二百八十万两白银，增殖将近九倍之多。
胡雪岩在经商过程中非但没有大发国难财，而是“位卑未敢忘忧国”，具有一腔爱国之情、报国之志。1866年，新疆政局动荡，意图擅自建立独立政权。清政府任命左宗棠为陕甘总督，带领军队西征讨伐，以期收复新疆国土，平定反动分裂势力的叛乱。当时西征大军粮食和军费十分短缺，而负责筹集任务的各个省份却相互推诿，经常拖欠粮食和军费。在此关键时刻，胡雪岩主动请缨、勇挑重担，通过向西征军捐赠药材等财物的方式积极资助左宗棠西征新疆的军事行动，并对粮食等物资运送进行合理高效的调度，力求保证所需要各类军需品能够及时地供应。他经过深思熟虑和精心部署，与外国银行在利息、借款期限、偿还方式等方面反复商谈，总共筹集款项白银一千八百七十万两，及时地解决了西征军粮食和军费的短缺问题。胡雪岩挺身而出，千方百计地向外国银行借贷资金，大力协助清军西征。在成功地收复和保住新疆，维护国家的领土完整方面，可说发挥举足轻重的积极作用。左宗棠在其奏稿《胡光墉请破格奖叙片》中指出：“关陇新疆速定，虽曰兵精，亦由器利。则胡光墉之功，实有不可没者。”左宗棠在光绪四年的奏摺中对胡雪岩大加赞誉：“臣军饷项，全赖各省关协款接济，而催领频仍，转运艰险，多系胡光墉一手经理。遇有缺乏，胡光墉必先事筹维借凑，预解洋款，迟到则筹借华商巨款补之。臣军依赖尤深，人所共见。此次新疆底定，援其功绩，实与前敌将领无殊。”

此外，针对西方洋商实际操纵蚕丝市场行情，任意压价收购中国蚕丝的卑劣行径，胡雪岩表现出了极度的愤慨，为此他大幅度地提高蚕丝价格，收购了大部分蚕丝而囤积起来，试图通过垄断蚕丝市场而逼迫外国商人抬高收购价格，从而最终切实保障广大养蚕百姓的基本利益和生计。所有这些，都鲜明地表现了胡雪岩强烈的爱国热忱。

胡雪岩为富行仁、乐善好施，做出了一系列的仁义之举，以图经世济民，由此其声名远播，极大地提高了社会认可度，被百姓誉为“胡大善人”，被朝廷授予一品顶戴和黄袍马褂。与此同时，他的商业信誉更加深入人心，受到更多民众的认可，其财源也就滚滚来，获得了丰厚的利润，赚取了更多的财富。

6. 出奇制胜

胡雪岩认为，经商需要一种新颖别致的奇思妙想，只有想别人所未想、做别人所未做，才能强化自己的竞争优势，最终取得成功，达到预期的理想目标。所以，在整个商业活动中，他特别强调出奇制胜，力求制定与众不同、神秘莫测的经营战略。可以说，胡雪岩具有一整套自己独特的出奇制胜的经商手法。

有一次，由于丝绢市场价格下跌，胡雪岩数千轴的丝绢都只能积存在货栈中。为了能够尽快将丝绢以理想的价格销售出去，他绞尽脑汁，终于想出来一条巧妙计策：胡雪岩拜访了几个在当地颇有声望和影响力的政府要员、富商绅士朋友，赠送给每个人一件精心制作的丝绢单衣，且请他们一定要在外出之时穿在身上。当地的其他一些官员、豪绅等看到之后，也都纷纷仿效，结果丝绢单衣成为了风靡一时的流行服装，由此丝绢的需求量不断增加，其市场价格随之大幅上涨。胡雪岩及时地抓住了商机，很快就将库存的丝绢销售一空，而每轴丝绢竟然卖出了一两黄金的高价。[3]胡雪岩巧妙地利用名人效应，将一度滞销的丝绢变为畅销品，从频临亏损到获取丰厚盈利，无不说明了其经商手段的出神入化。
在经商过程中，胡雪岩出奇制胜的手段可谓层出不穷、五花八门。其中连环计策，是他特别擅于使用的一个致胜良策。他指出：“用连环计，要计计相连，环环相扣，滴水不漏，方能有效。”在做粮食生意的时候，胡雪岩就曾经巧妙使用这种连环计，最终掌握了贸易的主导权而转败为胜。有一年，中国南部地区的江浙一带由于风调雨顺，稻米获得了大丰收而价格暴跌，不过北部地区却遇到了大旱的灾害年景，庄稼大量干枯而严重歉收，粮食极度短缺而市场价格大涨，急切需要大量粮食来救济灾荒。为了占得买卖先机而赚取丰厚利润，胡雪岩当机立断，即刻着手收购和囤积了许多大米。他探听到山东米商潘家祥恰好来上海购买大米，便找到潘家祥商谈大米生意，最后二者就大米交易价格、数量等问题签订了买卖合约。然而，上海隆昌米行的负责人谭柏年为了和胡雪岩抢生意，对胡雪岩百般诋毁，费尽心机和口舌说服潘家祥撕毁了合约。胡雪岩尽管得到了一定的违约金作为赔偿，但交易的失败导致了更多经济损失。尤其是，由于潘家祥在商界具有举足轻重的地位，所以他对受到流言的误导而怀疑胡雪岩的信用，主动放弃了和胡雪岩的生意合作，显然就会对胡雪岩的声誉造成不良影响，今后难以在生意场上取信于人。为了保障自己的利益和维护自己的信誉，胡雪岩设计了一整套步步为营的连环计策：他首先抓住谭柏年从隆昌米行获取不义之财的把柄，通过威逼利诱将谭柏年彻底制服，使其死心塌地地为己效力，并乘机以入股方式掌控了隆昌米行。胡雪岩一方面要求谭柏年向潘家祥保守其中的秘密，另一方面开始对潘家祥设下圈套，以使其能够乖乖就范。潘家祥和谭柏年签订完大米买卖合约，就匆忙返回了山东，在看到北部地区旱情的严重、官仓的空虚、粮食的紧缺之后，心中特别欢喜，打算将自己在上海所购大米高价抛售。正当潘家祥四处寻找愿意高价收购大米的买主之时，胡雪岩暗中托付一位担任直隶粮道的朋友去高价购买潘家祥的大米。潘家祥只是一心想着尽量提高大米的价格，还浑然不知内情，于是在听到这位直隶粮道愿意以每石 17 两银子的高价购买两万石大米的时候，便爽快地签订合约，并承诺一定信守合约。为了按时把大米运到指定地点，潘家祥立刻赶回到上海，雇佣了二十多只快船，等着谭柏年按照约定日期，然后即刻运往北方。然而，双方约定的交米日期已经过去数天，谭柏年仍没有前来交米。潘家祥焦急地找到向谭柏年，询问未能按时交米的原因，在得知隆昌米行被胡雪岩控制之后，才明白自己中了胡雪岩的圈套。尽管潘家祥十分不情愿，但他和直隶粮道约定的交米日期已经迫近，如果再另行采购两万石大米必定会延误交米日期，其后果将不堪设想。潘家祥在无奈之下只得服输，按照胡雪岩所要求的以每石 20 两银子的高价购买了大米。由此，胡雪岩巧妙布局和连环计策，不但反败为胜，赚取了 10 万两银子，而且打开了北方粮食市场，进一步扩大了商业经营的范围，充分展现了其过人的经商智慧。

7. **勤奋好学**

胡雪岩商业经营的成功，在较大程度上取决于其平时的勤奋好学，能够在努力学习的过程中不断地提升自身各方面的素质。

胡雪岩深知，机遇常常青睐于做好充分准备的人，只有勤勤恳恳、兢兢业业，努力地学习各种文化知识，特别是注意掌握经商经验和技能，才能够更好地发现、把握机遇，在商场上游刃有余，在职场上出人头地。正是在这种思想指导下，胡雪岩在杂粮行和金华火腿做店员时都十分勤奋好学，不但努力做好份内的本职工作，粗活和细活都自己包揽下来，而且十分注意留心学习和钻研商业经营的门道，
尽力地掌握经商活动所需要的技巧和能力，并时刻留心时局的新变化，积极接纳各种新思想和新知识。由于勤奋努力、认真负责，胡雪岩得到了老板的赏识，并被委以重任。

胡雪岩在接触到了银票之后，对信贷汇兑业务产生了浓厚的兴趣，打算去钱庄工作。而钱庄业务的特殊性决定了并非任何人都可胜任，其从业人员必须具备算盘娴熟、算账迅速、写字漂亮等基本素质。为了能够顺利地进入钱庄，胡雪岩每天都勤奋谦虚地学习所需要的一切知识，暗自认真刻苦地练习书法、算盘、心算等技能。“功夫不负有心人”，他终于得到一家钱庄老板的赏识，如愿以偿地被聘请为钱庄学徒，成功地获得了自己梦寐以求的理想工作。在做学徒期间，胡雪岩严格遵守钱庄规矩和要求，整个白天都在金库之中练习包银元、串铜钱、算银票等业务技能，晚上也绝不出门，仍住宿在钱庄店铺内，从而圆满地经受住了一个月的严苛“坐功”考察，并练就了扎实的业务基本功底。正是从钱庄的经营开始，胡雪岩的经商事业展开了新的一页。

相较于普通商人而言，胡雪岩的一个特出之处就是，无论何时何地都坚持学习各种知识和技能。即使在当失意在家时，胡雪岩仍然毫不间断地练习算盘，努力掌握心算和珠算等相关的基本商业技能，坚信总有一天自己会用到。尤其是，作为一名出色的商人，胡雪岩知道，商机对于商业经营来说是至关重要的，而只有具备了能够深遂洞察、准确判断未来市场发展趋势的敏锐眼光，才有可能及时地发现、精准地把握市场商机。显然，这种敏锐的眼光并非从来就有的的天生禀赋，而是建立在丰富的经商实践经验、先进的商业经营理念、高超的市场分析判断能力等基础之上。有鉴于此，在长期的商业经营过程中，胡雪岩一直十分注重总结、积累自己和他人的经商实践经验，不断地提高观察分析、精确判断市场运行趋势和规律的能力素质，并时刻密切关注社会经济形势的发展变化，善于学习相关的先进商业知识技能，勇于在商业经营理念方面推陈出新。正因如此，他才具有了一双较为敏锐的眼光，能够及时准确地发现和把握住各种商机，使得商业投资领域越来越广，生意规模和范围愈来愈大。

胡雪岩的勤奋好学使得其聪明才智有了更进一步的提升和强化，并得以在商业经营过程中进行充分的发挥和展现，最终取得了辉煌的功业，成为一位为世人所称誉的“红顶商人”。

综上所述，胡雪岩在人心叵测、复杂多变的商场上叱咤风云，将“仁义”、“诚信”作为经营的主导理念，建立了良好的商业信誉，并凭借在谈判方面丰富的经验、高超的智慧，能够随机应变而善抓商机，使其生意获得了意想不到的成功，积累了巨额财富。与此同时，他还力求经世济民、多行善举，多次慷慨解囊，为国家和民众奉献了自己的一份力量，被世人高度称颂和广泛赞誉。刘体仁《异辞录》曾指出：“光墉籍官款周转，开设阜康银肆，其子店遍于南北，富名震乎内外，金以为陶朱猗顿之流。官商寄顿资财，动辄巨万，尤足壮声势。江浙丝茧为出口大宗，夷商把持，无能与竞，光墉以一人之力，垄断居奇，市价涨落，外人不能操纵，农民咸利赖之。国库支绌，有时常通有无，颇恃为缓急之计。”当权高位重的左宗棠也多次盛赞胡雪岩，例如，他在《道员胡光墉请破格奖叙片》中说：“其好义之诚、用情之挚如此”；在同治十一年答复杨石泉的信中又说：“胡
雪岩，商贾中奇男子也。

总之，商界奇才胡雪岩创下了一个颇富传奇性的财富神话，打造了一个极具扩张性的商业帝国，走出了一段精彩纷呈的经商历程，且有功于国、有益于民，是当之无愧的民族商人的典范。胡雪岩堪称是晚清时期第一大富商，完全能够与中国古代“商圣”陶朱公范蠡相媲美，被世人赞誉为“亚商圣”。时至今日，“古有先秦陶朱公，近有晚清胡雪岩”、“做官要学曾国藩，经商要学胡雪岩”的谚语仍然在民间广为流传。

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参考文献
The Operation Mode of Apparel Supply Chain
Compatible with Whole Marketing Channels

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Abstract

The high backlog, slow response to the market, low profit and so on are the main problems of the supply chain operation in the clothing industry. In the new retail era, considering the consumer centric and online-offline multi scenes, the paper analyze clothing supply chain operation status and apparel supply chain needs under the whole marketing channels, then form a flexible, modular, collaborative and dynamic optimization strategy to integrate supply chain resources and allocate inventory, so as to achieve apparel supply chain cooperative operation under the full compatible marketing channels. At the same time, taking the Kardex as the case, the empirical results show that, through the planning and design of Kardex intelligent production and logistics system, based on the analysis of logistics capability in whole marketing channel and construction of flow capability in whole process of production and logistics, Kardex achieve the production and logistics intelligent routing and real-time return, and form the clothing production and logistics intelligent and cooperative operation, which improve the overall efficiency of the supply chain.
全营销渠道兼容下的服装供应链运营模式研究

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摘要
新零售时代, 库存积压高、市场反应速度慢、利润低迷等问题仍是服装业供应链运营的主要困扰。通过对新零售时代服装供应链运营现状分析, 考虑以消费者为中心、线上与线下多场景的情形, 剖析全营销渠道下服装供应链运营需求, 形成灵活、柔性、模块化协同策略、拣选和存储（库存）协同策略和动态优化、随需而变协同策略以整合供应链资源, 灵活调配库存, 实现全营销渠道兼容下的服装供应链协同运营。同时, 以 Kardex 的客户案例为背景, 实证表明, 通过规划和设计 Kardex 智能生产与物流系统, 进行了全营销渠道物流能力分析, 和生产与物流全流程及全营销渠道流量能力构建, 实现了生产与物流智能路由分工和实时退货, 形成服装生产与物流的智能化和协同化运营, 提升了供应链的整体运营效率。

关键词：新零售；全营销渠道；服装供应链；协同运营

1. 引言
在新一轮的变革里, 服装行业将面临全面数字化、消费者中心化以及信息传递加速等行业升级, 这也意味着新零售时代的到来。尽管服装作为互联网零售的第一大品类, 在当前新零售变革中处于领头羊的位置, 但库存积压高、市场反应速度慢、利润低迷等问题仍困扰着服装供应链运营。

策略的研究，但主要是从营销渠道结构、渠道成员的关系、渠道管理制度等方面进行分析，而从多营销渠道间协同进行供应链运营领域的研究较少涉及。基于此，本文从新零售时代服装供应链运营中存在的突出问题出发，考虑线上线下多营销渠道和多场景兼容的情形下，通过分析服装生产、物流、分销等的一体化运营，研究全营销渠道协同下的服装供应链运营模式。

2. 新零售时代服装供应链运营现状分析

作为服装生产制造及销售大国，目前我国的服装企业还没有一家销售额超过千亿。面对新零售时代的来临，国内服装企业的业绩也乏善可陈。根据A股服装行业20家上市公司营收及利润公告（如下表格1所示），2016年20家百亿元市值的上市公司近半年利润不到5亿元，部分公司利润相比去年同期大幅下降。而同一时期，2016年财报显示，ZARA的母公司——全球最大的服装零售商InditexSA全年销售额达到233欧元，销售额同比增长12%，净利润为32亿欧元，门店销售额同比增长了10%，增幅为过去14年最高。

表格1. A股服装行业20家上市公司营收及利润一览表

<table>
<thead>
<tr>
<th>排名</th>
<th>企业名称</th>
<th>主营业务</th>
<th>2016年总营收（亿）</th>
<th>同比</th>
<th>2016年净利润（亿）</th>
<th>同比</th>
<th>总市值</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>申洲国际</td>
<td>体育鞋服</td>
<td>150.99</td>
<td>19.50%</td>
<td>29.47</td>
<td>25.20%</td>
<td>717.69</td>
</tr>
<tr>
<td>2</td>
<td>安踏体育</td>
<td>体育鞋服</td>
<td>133.46</td>
<td>20.00%</td>
<td>23.86</td>
<td>16.90%</td>
<td>597.09</td>
</tr>
<tr>
<td>3</td>
<td>百丽国际</td>
<td>女鞋</td>
<td>417.07</td>
<td>2.20%</td>
<td>24.03</td>
<td>-18.10%</td>
<td>524.49</td>
</tr>
<tr>
<td>4</td>
<td>裕元集团</td>
<td>体育鞋服</td>
<td>584.10</td>
<td>0.54%</td>
<td>39.67</td>
<td>37.86%</td>
<td>513.64</td>
</tr>
<tr>
<td>5</td>
<td>海澜之家</td>
<td>男装</td>
<td>170.00</td>
<td>7.39%</td>
<td>31.23</td>
<td>5.75%</td>
<td>454.70</td>
</tr>
<tr>
<td>6</td>
<td>际华集团</td>
<td>军事鞋服</td>
<td>271.55</td>
<td>21.02%</td>
<td>12.23</td>
<td>6.10%</td>
<td>367.60</td>
</tr>
<tr>
<td>7</td>
<td>雅戈尔</td>
<td>男装/地产</td>
<td>148.95</td>
<td>2.53%</td>
<td>36.73</td>
<td>-15.79%</td>
<td>354.10</td>
</tr>
<tr>
<td>8</td>
<td>森马服饰</td>
<td>休闲/童装</td>
<td>106.67</td>
<td>12.83%</td>
<td>14.02</td>
<td>5.76%</td>
<td>245.20</td>
</tr>
<tr>
<td>9</td>
<td>跨境通</td>
<td>服饰/家居</td>
<td>85.37</td>
<td>115.54%</td>
<td>3.94</td>
<td>133.99%</td>
<td>242.40</td>
</tr>
<tr>
<td>10</td>
<td>搜于特</td>
<td>休闲鞋服</td>
<td>63.24</td>
<td>218.74%</td>
<td>3.62</td>
<td>86.62%</td>
<td>224.90</td>
</tr>
<tr>
<td>11</td>
<td>杭州股份</td>
<td>新能源</td>
<td>54.75</td>
<td>11.10%</td>
<td>3.30</td>
<td>-52.56%</td>
<td>189.40</td>
</tr>
<tr>
<td>12</td>
<td>南极电商</td>
<td>综合服务</td>
<td>5.21</td>
<td>33.85%</td>
<td>3.01</td>
<td>75.27%</td>
<td>182.60</td>
</tr>
</tbody>
</table>
传统服装业时代，在人口红利的爆发当中，依靠“明星代言+大量广告宣传”的单一营销模式开始了爆发式增长，但其中也隐含着产品设计能力缺乏、供应链运营处理能力不足、库存管理及成本管理跟不上市场需求等问题。到进入新零售时代后，随着消费者对个性化时尚化的要求越来越高、营销方式创新及营销渠道建设越来越急切，国内服装业普遍存在的供应链问题集中爆发——居高不下的库存积压直接对利润侵占，对服装企业的经营业绩产生巨大影响。典型的，如，李宁从 2010 年到 2015 年一直处于供应链去库存状态；美邦则自 2008 上市以来一直受困于供应链上的高库存，存货周转天数节节攀高，存货占比一度接近 30%，至 2017 年上半年亏损 4000 多万元。而对比 ZARA 的供应链管理（如下表格 2 所示），ZARA 为了保证其供应链体系的高效运作，投入巨资建立了自己的纺织和服装加工场，在主要的销售地区建立了物流运输企业，通过专属的营销渠道进行销售，从供应链的全局进行质量控制和时间控制。

### 表格 2. 国内服装企业与 ZARA 的供应链运营对比

<table>
<thead>
<tr>
<th>对比内容</th>
<th>ZARA</th>
<th>国内服装企业</th>
</tr>
</thead>
<tbody>
<tr>
<td>前置时间</td>
<td>10-14 天</td>
<td>90 天</td>
</tr>
<tr>
<td>季前生产比例</td>
<td>10-15%</td>
<td>85-100%</td>
</tr>
<tr>
<td>每年投放款式</td>
<td>12000 个</td>
<td>4000 个</td>
</tr>
<tr>
<td>每年库存周转次数</td>
<td>11 次</td>
<td>3 次</td>
</tr>
</tbody>
</table>

面对这一窘境，国内服装企业开始反击。如，海澜之家与天猫签订了深度战略合作，借助于天猫的营销渠道，依托于大数据通过反向定制进行柔性化供应链运营；青岛酷特根据线上线下不同营销渠道的特点，从产品定制、交易、支付、

设计、制作工艺、生产流程、后处理到物流配送、售后服务的全供应链进行过程数据化驱动跟踪和网络化运作，以期提高供应链运营效率。但无论采取何种供应链运营模式，考虑当前线上线下全营销渠道协同，是服装企业在生产、物流、销售等环节一体化过程中不缺少的考虑要件。

3. 全营销渠道下的服装供应链运营需求

3.1 全营销渠道的特点

在服装业传统营销下，主要采用单一的线下营销渠道，消费者从实体店挑选、试穿和购买服饰；电子商务时代，线上线下多营销渠道并行，各个渠道的运营基本独立进行，渠道间的价格、促销、经销商利益冲突频繁；新零售时代，线上线下全营销渠道进行协同，以消费者为中心整合供应链资源，库存灵活调配，最优化全渠道库存水平。全营销渠道发展过程如下图所示。

与此同时，服装行业从以前的由企业自身为中心，由企业决定模式和信息技术的传统的零售链式价值链，正逐渐过渡为以消费者为中心的新零售环式价值链。服装营销渠道逐步由私人小店到达批发市场、百货商店、购物中心、电商平台、移动购物，直至向新零售转变。同时，服装供应链也逐步由服装批发商主导，到由服装零售商及服装品牌商主导，形成全新网状供应链网络（如下图所示）。

在这一过程中，服装营销全渠道融合，以消费者为中心打造全渠道闭环，加速渠道间供应链整合以实现无缝式的跨渠道体验。这一整合则需要通过实时完整的数据流提升供应链效率，缩短供应链周期，减轻库存压力，同时更迅速地响应市场。
3.2 服装供应链运营需求

在这一背景下，服装品流通渠道已经不仅仅是单一的从工厂总仓到门店，而是电商、零售、APP客户端等全渠道、多场景模式。具体而言，全营销渠道下，服装供应链运营需要考虑到如下需求：

（1）电商渠道与门店渠道的兼容。服装企业一般兼有电商和门店两个渠道，服装品可以放在不同仓库，但需要配置两套人马和两个管理体系，因而会产生一些资金上的冗余，对服装生产、销售和物流的效率产生影响。

（2）正向物流与逆向物流的兼容。服装品不仅需要很快配送到门店，还需要很快推到客户端，一旦有退货或过季返还，需要门店处理过季品。针对集中退货，需要在短时间内处理海量的服装SKU。

（3）铺货补货与拆零业务的兼容。在服装品仓库，既要整箱拣选，还要做拆零，但整箱作业一定和拆零是有所差别的，如何兼容是一个难点。

（4）新品与过季品的跨季管理。服装品仓库如何兼容新品和过季品，实现退货品的二次整理再发货，怎么样既做仓储又做拣选，这又是一个新难题。

（5）季节变化和库存整理及库位释放。一旦季节变化，仓库里存放的服装品类也需要实施更换，需要尽快把库存商品释放出来，怎么样实现快速的整理形成新的货位，为新季节的商品服务，这就产生了一个快速理货释放黄金货位的需求。

4. 全营销渠道下的服装供应链协同运营策略

全营销渠道下，供应链流程的复杂度不断提高，高效的设计、生产及仓储，以及快速、完整、可靠的分拣和分配成为供应链运营的关键因素。越来越复杂的服务、更快的交货时间是服装供应链运营面临的巨大挑战。因此，对服装供应链中的生产系统和物流系统加以优化，以降低成本、提高生产率、增加灵活性为目标对服装供应链上生产与物流的协同部署是全营销渠道下的服装供应链高效运营的重要策略，具体包括：

（1）灵活、柔性、模块化运营
服装品的生产与物流需结合全营销渠道随需而变，尤其是面对如“双十一”等集中性、爆发式、大规模的订单。因此需要订单处理系统智能化以及产与物流
运营模块化，二者之间灵活衔接、柔性协作实现服装全供应链协同运营。

（2）拣选和存储（库存）协同
服装企业既要考虑新品的大量库存备货，又要考虑过季品的再存储，故存储（入库）和拣选（出库）要结合全营销渠道考虑。同时，根据服装门店出货渠道与电商出货渠道的大数据，服装品的出入库之间形成智能联动，实现服装全供应链协同运营。

（3）运营动态优化与随需而变
服装品的生产与物流模式需要实时根据全营销渠道下客户需求进行调整和适应，其业务形态需要智能切换流程模块。同时服装品的生产与物流设备需具有弹性，能够适配业务的发展。通过随需而变的动态调整实现服装全供应链协同运营。

5. Kardex 的客户案例分析
5.1 整体方案及特点
Kardex 集团是全球自动化立体仓储系统提供商，其产品已在生产及物流领域的诸多企业中被广泛应用。其服务的客户中，有一家典型的服装企业，全国门店有 3000 家左右，有 RDC、DC 和 Store 三级网络配送体系。客户希望把电商和门店作业整合在一起，同时客户希望配送中心里面不仅要做仓储和拣货，还要做退货调拨处理及订单合单工作。客户要求要节省面积，以前仓库可以存四十万件，现在需要存八十万件。

为此 Kardex 为该客户企业定制设计了一套高性能、灵活、高效的智能生产与物流系统，用于客户现有的 RDC 中。它只需要很小的占地面积，但因其高度上的优势，所以仓储量大，通过灵活的配置选项可实现高度密集的货物仓储，并将多个楼层连接在一起。此外，它可集成于现有的仓储系统。通过自动化，其复杂流程得以简化。在任何时候，它都能为货物的平稳供应起到缓冲作用。Kardex 的这套跨楼层智能生产与物流系统基于标准的 Shuttle XP 垂直升降式仓储系统和 Power Pick Global 仓储管理软件的使用。
变协同策略，将生产与物流进行了很好的协同，形成柔性化的整体解决方案。该系统的存储货架各层板可以调整，冬天可以把货架拉高存放羽绒服，夏天可以缩短存放 T 恤。如果一个门店需要一百件或者 105 件，一个整箱是一百件，过来一个整箱托盘再加五个零散的进行配置。电商在这个区域里面进行操作，人员根据工位进行柔性切换，如早上上架作业，中午拣货，下午盘点，实现一个人多工种作业。同时，还可以实现业务适配。门店的工位和电商工位可以切换，如果电商的量很大，可以全部去做电商，峰值过去以后再切换成门店，整个工位的柔性在这里有所体现。

5.2 解决方案的关键点

（1）多场景物流能力分析。根据服装品季节波动性、物流配送时效性及多场景兼容性分析，从春季、秋季、大规模电商高峰，门店铺货、门店补货，以及不同时间段如春季周末等，把所有的数据叠加在一起评估方案，分析各个供应商的流量需求，决定整个配置和方案设计。同时根据订单特性，包括门店特性、电商特性、补货订单的特性，把订单特性整合在一起，来定义整个策略和流程，通过多场景物流能力分析，就可以保证服装大规模定制与物流的协同，来适配整个业务发展需求和变化。

（2）全流程及全营销渠道流量能力构建。Kardex 智能生产与物流系统实现智能入库上架、整箱拣选/拆零拣选以及 QC 质检，把这些流程放在一起，建立一个流程流量图，基于数据分析和流程图构建出整个解决方案。

（3）生产与物流路由分工。客户希望快速调拨，快速出货，并做交叉理货的功能。Kardex 仓储系统通过云计算进行实时路径规划与设计，将货物进行重组整理，卡车一旦到达可以实现快速发货，动态理货不需要人工介入，保证效率的提升。

（4）实时退货。Kardex 智能生产与物流系统实现全年无忧的实时退货，无论什么时间或季节，只要想退货就可以退。通过快速入库按规则理货，什么时间什么门店的退货都可以处理，处理完以后用不同颜色代表不同的品牌，根据需要到相应货位进行整理，按照品牌、按照门店拆分业务，实现和货架的关联。

5.3 方案的特色

Kardex 为客户企业定制的这套智能生产与物流系统，通过后台复杂的逻辑设计，从布局来看采用模块化和单元化的布置，实现多个流程和业务场景，具有如下特色：
①按规则合单/路由分配；
②制定规则重组货架系列；
③忙时作业，闲时优化；
④多季节商品共同管理；
⑤计划作业，优先调整；
⑥存储区整箱补货至拣选区；
⑦实时优化货位，消除尾箱；
⑧跨季节配发，释放黄金货位。

6. 结束语

新零售时代背景下，考虑全营销渠道兼容的服装供应链运营，通过线上线下
进行协同，以消费者为中心整合全供应链资源，优化全渠道库存水平。而越来越
复杂的服务、更快的交货时间要求，使得服装供应链上生产与物流的协同部署成
为关键，需要采用灵活、柔性、模块化协同策略、拣选和存储（库存）协同策略
和动态优化、随需而变协同策略，以实现全营销渠道下的服装供应链协同运营。
以 Kardex 为客户提供的解决方案为例，实证表明，通过规划和设计服装生产与
物流配送中心，进行多场景物流能力分析，对其生产与物流全流程及全营销渠道
流量能力构建，实现了生产与物流智能路由分工和实时退货，形成了全营销渠道
下多个流程和业务场景的服装供应链协同化运营，提升了供应链的整体运营效率。

7. 致谢

本文得到如下项目或课题的资助：2017 年湖北省科技计划项目技术创新专
项（软科学研究类）（2017ADC103），湖北省普通高等学校人文社会科学重点研
究基地-企业决策支持研究中心 2017 年度第四批项目立项（DSS20170302），武
汉纺织大学大学生创新创业训练计划项目。

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Research on Evolution of “China Quality Manufacturing” of Taobao Website: Based on the Perspective of Ecological Quality Governance

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Abstract

The online shopping platform has gradually evolved from a single control method to an ecological governance and management system with force integration of push and pull. China Quality Manufacturing (q.taobao.com) project is one of the important means of ecological management and control of Taobao, aiming to improve the quality of goods on the platform at the source. The current study compares the stores ratings of Taobao's “China Quality Manufacturing” (q.taobao.com) platform from 2015 to 2017, and explores that the ecological quality management methods also follow the evolution process of birth, growth, turbulence, and maturity and stability.

Keywords: Quality culture; Ecological governance; China Quality; Quality improvement; Taobao
淘宝网中国“质”造演进研究
——基于生态化质量治理的视角

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摘要
网络购物平台从单一的管控手段逐渐演进到综合使用推动和拉动两种力量的生态化治理及管控体系，中国“质”造项目作为淘宝网生态化治理及管控的重要手段之一，致力于从源头上提高平台上流通的商品质量。本研究通过比较2015-2017年三年度入驻淘宝网“中国质造”平台的店铺评分，探讨该生态化质量治理手段同样遵循产生、成长、动荡、到逐渐成熟稳定的演进过程。

关键词：质量文化；生态化治理；中国质造；质量提升；淘宝网

1. 引言
李波（2014）构建了平台式网络购物的商品质量三级管控体系，认为政府监管机构、网络购物平台和卖方应共同担负起缓解商品质量不确定性的责任。在该体系中，网络购物平台是核心管控主体。在网络购物市场发展和进化的过程中，网络购物平台的商品质量管控措施也不断发展和完善，大致经历了四个阶段：第一阶段网络购物平台的商品质量管控措施主要是在线信誉反馈系统；第二阶段网络购物平台的商品质量管控的主要手段是在线信誉反馈系统、第三方担保支付手段、商品质量信息的即时沟通（淘宝旺旺）、以及在线商盟；第三阶段，网络购物平台的商品质量管控又加强了“消费者保障计划”等质量保证及承诺、调高卖方准入门槛、第三方商品质量检验，此外，还对已有的管控措施进行了适当的改进；第四阶段，网络购物平台持续对已有管控措施加以改进，并引进实施创新型管控措施，实施生态化质量治理。

网络购物平台从单一的管控手段逐渐演进到综合使用推动和拉动两种力量的生
态化治理及管控体系，无论哪一种管控机制，都经历了产生、成长、动荡、到逐渐成熟稳定的过程，比如广受诟病的“刷钻”、“刷评论”等行为，就是在在线信誉反馈系统在成长过程中必经的动荡。同样，诞生于2015年的淘宝网中国“质”造项目也是，中国“质”造项目作为淘宝网生态化治理及管控的重要手段之一，运用了“引”和“导”的方式，致力于从源头上提高平台上流通的商品质量。本研究通过比较2015-2017年三年度入驻淘宝网“中国质造”平台的店铺评分，探讨该生态化质量治理手段同样遵循产生、成长、动荡、到逐渐成熟稳定的演进过程。

2. 文献综述及相关背景

2.1 文献综述

Pavlou (2007) 认为在电子市场中，平台监管制度可以有效地约束卖家行为，交易网站可以从信任、网站信息量、产品诊断和社会存在四个维度缓解电子市场中的质量不确定性。李波（2014）从上述四个维度概括了我国网络购物平台的商品质量管控举措：第一是信任维度。互联网世界的匿名性与高复杂性使得交易双方的行为更难预测，因此互联网信任比传统信任更为复杂，建立起来更为困难。但信任利益却是网络购物中消费者最为看重和感知到的关系利益类型。网络购物网站使用在线信誉反馈系统，将有过购买行为的买方所反馈的质量信息作为外部线索并据此形成买方对于商品的感知；鼓励卖家组建在线商业联盟，以其形成的集体声誉作为抵押向买方发出“商品高质量”的承诺；引入独立的第三方支付充当信用担保，以第三方支付的安全性和稳定性替代我国网络购物环境下商业信用的风险和不稳定；提升网站及其实机构声誉，将声誉作为高质量产品的传递信号。第二，网站信息量维度。网络购物平台可以使用先进的技术工具实现对质量信息更为有效的沟通，如使用3D展示、生物感知等技术等能从一定程度上弥补网络购物消费者缺乏的触觉信息，从而影响买方对产品性能不确定性的感知；根据不同的商品品类规范商品信息填写格式，确保卖方和商品的信息在网站上得到全面、充分地展示；为买卖双方搭建多渠道的在线沟通方式（如在线论坛、即时通讯工具等）促进用户之间的生态化联系；并探索搜索技术如何能够帮助买方更加快速、便捷地找到高质量商品。第三，产品诊断维度。产品针对指的是买方感知到网站有效传递卖方是真实的社会存在的能力。网络购物平台自愿或引入第三方质量检验机构对卖家商品进行专业性鉴定，使买方通过质检报告或抽检公示等了解真实的商品质量；鼓励卖家提供产品试用，帮助买方通过试用体验获得对产品的认知。第四，社会存在维度。社会存在指的是买方感知到网站有效传递卖方是真实的社会存在的能力。网络购物平台对卖家在商品质量方面的违规和欺诈行为进行诸如商品下架、支付违约金、冻结或查封账户等惩戒；通过要求卖家实名认证、提供相关资质清单、缴纳保证金等方式确认卖家的实体身份，买方借此感知到卖方是社会上公正守法的自然人或正常经营的企业组织，同时这些准入规定也在一定程度上过滤了不良用户；设计商品质量保证和承诺机制使买方感知到卖家的实体属性。如商品退换货保证和承诺，退换货保证可以成为传递产品质量信息的有效信号；通过选择信誉良好的物流配送合作伙伴、对物流配送合作伙伴进行契约约束或自建物流平台等方式保障物流过程中的商品安全和
马道明（2011）和王如松（2012）认为，人类社会是一类以人的行为为主导、自然环境为依托、资源流动为命脉、社会文化为经络的社会-经济-自然复合生态系统。复合生态系统的演替受多种生态因子所影响，其中主要有两类因子在起作用，一类是利导因子，一类是限制因子。当利导因子起主要作用时，各物种竞相占用有利生态位，系统近乎指数式增长；但随着生态位的迅速被占用，一些短缺性生态因子逐渐成为限制因子。优势种的发展受到抑制，系统趋于平稳，呈 S 型增长，但生态系统有其能动的适应环境、改造环境、突破限制因子束缚的潜力。通过改变优势种、调整内部结构或改善环境条件等措施拓展生态位，系统旧的利导因子和限制因子逐渐让给新的利导因子和限制因子，出现新一轮的 S 型增长。复合生态系统就是在这种组合 S 型的交替增长中不断演替进化，不断打破旧的平衡，出现新的平衡（如图 1）。

如果把网络购物生态系统看做是一个社会-经济-自然复合生态系统，网络购物平台的商品质量管控机制和措施是利导因子，不诚信种群寻找管控机制漏洞钻空子则是限制因子，两种力量共同、交替地发挥作用，其演化路径类似图 1 所示，呈现可持续地、螺旋式的发展态势。淘宝网的商品质量管控实践就是例证，所谓“道高一尺魔高一丈，魔高一尺道再高一丈”——在线信誉管理系统遇到“刷钻”、“刷评论”——平台推出质量管控措施，不诚信种群寻找漏洞钻空子，平台再升级管控措施或采取新的管控机制……经过一轮一轮的大浪淘沙，平台中的商品质量实现了螺旋式上升。

通过上述管控实践，网络购物平台逐渐认识到：对平台上现有商家和商品的质量管控固然重要，但更为根本和可持续性的机制和措施是对更高质量商品及其商家
推介，从系统层面提升整个商业生态系统，实现生态化的质量治理。比如在淘宝网的发展历史上，由原来的 C2C 平台延伸至 B2C 平台，产生了天猫平台，杨丽在 2018 年的研究认为：通过这次分化，淘宝网 C2C 集市与天猫两个子平台在商品质量方面自然分层，并分别承担了不同的功能，高质量子平台天猫得到了更多的认可，获取了更高的收益。同样的，本文所关注的中国 “质” 造也是淘宝网生态化质量治理的举措。

2.2 中国 “质” 造项目简介

2015 年，为提升平台中商家及商品的质量，淘宝网推出中国 “质” 造频道。中国 “质” 造将我国各地区优势产业覆盖的中小厂商引入到淘宝网上，一方面利用淘宝网的广泛辐射力，为外贸中小企业的内销转型提供电子商务这样一个途径，通过网络购物渠道促进中小厂商自有品牌建立，增强他们的自主品牌意识，提升区域特色产业的质量效益；另一方面，通过生态化引导，提升淘宝网购物平台上的产品质量水平，满足人们日益增长的对美好生活的需要，从而为网络购物行业的健康、可持续发展助力。

在 “中国质造” 项目中，淘宝网实行严格的准入制度与品牌制造商签订品质保证书，联动地方质检、工商、公安等政府部门，对产品的生产、销售全链条合监督，一旦买家对质量问题投诉，阿里旗下零售平台将联动卖家对买家实行先行赔付。以淘宝网的平台为卖家做信誉 “背书”。淘宝网还在莆田启动了全国首个电商 “实地认证” 试点，所有参加 “中国质造” 的店铺，必须接受身份真实性居住信息、联系方式核实；对销售商品的生产厂名、厂址、供应链信息、仓库位置、发货方式等作登记确认，前述信息将同时上传至阿里巴巴和当地工商、公安部门，由三方对卖家进行联合监管。

所有参加 “中国质造” 的店铺除了遵循平台要求的准入条件，列示工商登记、执照等信息外，还要接受 SGS 检验认证集团、中国检验认证集团、莱茵、法国必维等国内外知名检测机构等正规第三方机构的验厂。

淘宝网推出中国 “质” 造相当于图片 1 中的利导因子，网络购物系统中的不诚信卖家种群寻找漏洞钻空子，生态系统历来如此——阴阳有分，有善必有恶，有道必有魔，跟刷钻产业链一样，很多中介机构又嗅到了商机，做起了为加入中国质造的厂商提供验厂、入驻的一条龙服务。2016 年开始，网上出现了大量谋利的中介结构，做起了 “中国质造” 入驻的生意，如在百度 “中国质造” 贴吧里面充斥着 “入驻中国质造！为自己的店铺树立品质工厂的招牌”、“百分百入驻成功”这样的广告。这些逐利的中介机构专门钻政策的空子，违背淘宝网 “引导外贸工厂转型升级，提升网购生态” 的初衷，以快速取得验厂和入驻为目的，而不去考虑商家及其产品的实际品质，因而导致 2016 年中国质造频道店铺评分大幅下降。而后，淘宝网加强管控，如定期对入驻商家实地验厂认证，接受淘宝网的日常质量抽检并对不合格者清退，此外，还修订了《淘宝网中国质造市场管理规范》和淘宝规则。通过整顿规制，2017 年的情况有所改观。
3. 实证研究

3.1 研究设计及描述性统计

本研究于2016年初在淘宝网上采集鞋类商品数据，分析了“中国质造”店铺和“非中国质造”店铺在店铺评分上的差异，发现二者在“宝贝与描述相符程度”这一标识质量的重要指标上，“中国质造”店铺显著高于“非中国质造”店铺，说明淘宝网“中国质造”在提高商品质量方面取得了成果。因为该研究与本文所要讨论的主题关系不大，其具体研究步骤不再赘述。

其后，据观察，自2016年起，“中国质造”开始出现鱼龙混杂的局面。因此，于2017年初，同样选择鞋类商品及其商家，分别选取“中国质造”和“非中国质造”各100家展开研究。结果发现，在“宝贝与描述相符程度”这个指标上，“中国质造”店铺与“非中国制造”店铺之间的显著性差异已经消失了。这说明，不诚信中介与不诚信卖方的行为改变了“中国质造”所代表的高质量信号，使得进入中国质造频道的卖方“泯然众人”矣。


表格1. 不同年度入驻店铺的评分指标均值

<table>
<thead>
<tr>
<th>指标</th>
<th>2015年评分均值</th>
<th>2016年评分均值</th>
<th>2017年评分均值</th>
</tr>
</thead>
<tbody>
<tr>
<td>描述与宝贝相符指标</td>
<td>4.705</td>
<td>4.681</td>
<td>4.712</td>
</tr>
<tr>
<td>服务态度指标</td>
<td>4.700</td>
<td>4.707</td>
<td>4.695</td>
</tr>
<tr>
<td>物流服务指标</td>
<td>4.708</td>
<td>4.693</td>
<td>4.716</td>
</tr>
</tbody>
</table>

3.2 独立样本 T 检验


<table>
<thead>
<tr>
<th>分组</th>
<th>Kolmogorov-Smirnov Statistic</th>
<th>df</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>宝贝与描述相符</td>
<td>2015 年</td>
<td>0.328</td>
<td>200</td>
</tr>
<tr>
<td></td>
<td>2016 年</td>
<td>0.278</td>
<td>200</td>
</tr>
<tr>
<td></td>
<td>2017 年</td>
<td>0.357</td>
<td>200</td>
</tr>
</tbody>
</table>

如表格 3 所示，2015 年入驻淘宝网“中国质造”的店铺和 2016 年入驻淘宝网“中国质造”的店铺在宝贝与描述相符程度指标的比较上，P=0.001<0.01，具有显著性差异，说明 2015 年“中国质造”店铺内商品的描述相符程度较 2016 年的“中国质造”店铺更高，质量更能让消费者满意；同样的，将 2017 年入驻淘宝网“中国质造”的店铺和 2016 年入驻淘宝网“中国质造”的店铺在宝贝与描述相符程度指标上进行比较，P=0.000<0.01，也具有显著性差异，说明 2017 年“中国质造”店铺内的商品描述相符程度更高，质量比 2016 年也有了很大的提高；将 2017 年入驻淘宝网“中国质造”的店铺和 2015 年入驻淘宝网“中国质造”的店铺在宝贝与描述相符程度指标上进行比较，P=0.310>0.05，没有显著性差异，因此，2015 年度和 2017 年度在商品质量方面大致相当。

<table>
<thead>
<tr>
<th>宝贝与描述相符程度</th>
<th>服务态度</th>
<th>物流服务</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015 年: 2016 年</td>
<td>T=3.241</td>
<td>T=1.533</td>
</tr>
<tr>
<td>P=0.001</td>
<td>P=0.127</td>
<td>P=0.023</td>
</tr>
<tr>
<td>2017 年: 2016 年</td>
<td>T=4.331</td>
<td>T=1.802</td>
</tr>
<tr>
<td>P=0.000</td>
<td>P=0.072</td>
<td>P=0.001</td>
</tr>
<tr>
<td>2017 年: 2015 年</td>
<td>T=1.017</td>
<td>T=1.032</td>
</tr>
<tr>
<td>P=0.310</td>
<td>P=0.304</td>
<td>P=0.248</td>
</tr>
</tbody>
</table>

4. 研究结论

“问渠哪得清如许，为有源头活水来”，淘宝网生态化治理的初衷和逻辑正是
基于此：综合利用推动和拉动两种力量，引入更高质量的卖家群体，打造成长性强、健康可持续的网络购物生态系统。

淘宝网“中国质造”频道的引入正是这样一种拉动的力量，从上述研究可以看
出，2015 年度的横向对比数据表明，“中国质造”确实从整体上提高了的卖方的商品和服务质量。但生态系统中的阴阳、善恶一直是此消彼长，不断博弈的，因钻空
子可以在短期内获得巨大收益，所以总有不法商家搅浑市场，所以 2016 年“中国质造”的店铺评分显著下降，意味着卖方的商品和服务质量下降了。而淘宝网在网
络购物商品质量管控和治理中也在不断成长，此次并未让混乱持续太长时间，及时针对“中国质造”的准入以及后期管理出台更严格的“淘宝规则”，因此，2017 年
“中国质造”入驻店铺的评分重回 2015 年的水平。

生态化质量治理、“引入活水”作为一种政策杠杆，也逐渐培育出了一批自主创新、具有自主品牌的商家，为很多代工企业的转型升级开拓出了发展方向。比如
莆田第一期加入中国质造的 4 家鞋企中，目前，“玩觅 ONEMIX”、“沃特 VOIT”在
天猫上开设旗舰店，他们在天猫上的店铺评分均高于同行业平均水平，玩觅 ONEMIX 在自主设计和自主品牌打造方面做了很多尝试；另外两家“思威琪 SIWEIQI”、“洛驰 CLORTS”在淘宝集市 C2C 平台上开店，“洛驰 CLORTS”的销量和
店铺评分也都高于行业平均水平。因此，从目前的数据结果来看，淘宝网的“中国质造”项目应该达到了预期目标，大浪淘沙之后总有闪闪发光的金子沉淀下来，这些“金子”就是行业、产业、甚至国家转型升级的希望所在。

孔子曰：“道之以政，齐之以刑，民免而无耻；道之以德，齐之以礼，有耻且
格。”在他看来，用道德教化感动人心，要比一味地采用惩罚的管理手段会收到更
好的效果。在社会和系统治理中同样如此，制度、管制属“阳”，具有强制、刚性
的一面，需要自发自省、柔性的属“阴”的文化氛围来互补。综合利用推动和拉动
两种力量，共同促进网络购物系统中商品质量的提升。

因此，网络购物平台不仅要改进和创新网络购物商品质量管控机制和措施，还要培育和传播诚信、品质的文化观，让企业内部员工、卖方、买方、合作方等各相
关方充分意识到商品质量是平台利润的重要贡献者，对于平台的运营具有至关重要的
作用。

5. 致谢

本研究受到国家自然科学基金面上项目“网络购物平台商品质量管控作用机理
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参考文献


Research on Construction of Automotive E-commerce
Credit System for Auto Parts Network

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Abstract
In the process of automotive e-commerce development, credit has gradually become one of the key factors that restrict the development of e-commerce in automobiles. How to solve the problem of automotive e-commerce credit has become an urgent problem to be solved in the development of automotive e-commerce.

This article takes the automobile e-commerce enterprise—Auto Parts Network as the research object. Based on the research of the concept of e-commerce credit system and the content of e-commerce credit system construction, it analyzes the auto parts network in credit system construction and credit evaluation. Problems in the system construction, credit website construction, etc., and a complete e-commerce credit system for the Automated Personnel Network were constructed from the three aspects of credit system construction, credit evaluation system based on analytic hierarchy process and construction of credit web pages.

As the leading automobile e-commerce company in Shiyan City, Auto Parts Network research on the construction of the auto parts network's credit system will help promote the construction of the city's automobile e-commerce industry credit system, promote the healthy development of auto e-commerce, and also the credit system of other industries. Construction has reference value.

Key word: Auto Parts Network ; Automobile; E-commerce; Credit
摘要

在汽车电子商务发展的过程中，信用逐步成为制约汽车电子商务发展的关键因素之一。如何解决汽车电子商务信用问题，成为汽车电子商务发展中亟待解决的问题。

本文以汽车电子商务企业——汽配人网为研究对象，在研究了电子商务信用体系的概念、电子商务信用体系建设的内容等理论的基础上，分析了汽配人网在信用制度建设、信用评估体系建设、信用网页建设等方面存在的问题，并从信用制度建设、基于层次分析法的信用评估体系建设和信用网页建设三个层面为汽配人网构建了一套完整的电子商务信用体系。

汽配人网作为十堰市汽车电子商务的龙头企业，研究汽配人网的信用体系建设，将有助于促进我市汽车电子商务行业信用体系建设，推动汽车电子商务良性发展，也对其他行业信用体系建设具有借鉴意义。

关键词：汽配人网 汽车 电子商务 信用
1. 电子商务信用体系的概念

随着电子商务的不断发展，电子商务信用体系的建设也越来越受到重视。大量专家学者、企业界人士开始研究电子商务信用体系。关于电子商务信用体系的概念，目前还没有一个统一的认识，专家学者和企业界人士从不同的角度分析，对电子商务信用体系的概念做出了解释。

从宏观角度分析，电子商务信用体系是由国家信用、财政信用、银行信用、企业信用和个人信用等构成的相互关联的信用系统，是社会信用体系的一部分。

从微观角度分析，电子商务信用体系是指在电子商务活动中，对交易过程及参与者的信用信息进行收集、整理、验证，包括国家、地区或行业管理部门建立监督、管理与维护相关成员信用活动和规范发展的一系列机制与行为规范。

从信用制度层面讲，电子商务信用体系可视为信用调查制度、信用评估制度、信息披露制度、公平授信制度、信用风险防范制度以及失信惩罚制度等相关信用体系的总和。

从信用主体层面讲，电子商务信用体系是由企业信用体系与个人信用体系两大部分类组成，甚至在某种程度上还包括政府信用体系。具体主要涉及到电子商务企业和（网站）的信用、电子商务交易双方的信用、电子商务中介机构的信用、政府信用、司法信用等。

作者认为电子商务信用体系是集信用制度体系、信用评估体系、信用应用为一体的综合系统。通过电子商务信用体系，减少买家、卖家、电子商务平台对信用的担心，推动电子商务发展。

2. 电子商务信用体系建设的基本内容

电子商务信用体系建设是一个系统工程，其建设内容比较多，通常包括信用制度、信用评估体系、信用网页等四个方面。

2.1 信用制度

信用制度建设是电子商务信用体系建设的基础，信用制度的建立，为买卖双方诚信交易提供了制度保障。在市场经济中，信用不仅仅是一种道德规范和一般意义上的行为准则，更是市场经济的一项基本规则，是电子商务活动得以开展的保证。电子商务交易中的信用，不仅要靠道德约束，更需要靠制度制约，因此，必须制定一套电子商务活动遵守的信用制度，约束和强制所有市场主体的行为。

2.2 信用评估体系

信用评估体系是电子商务信用体系的核心。只有建立一套科学的信用评估体系，才能将纷繁复杂的信用指标信息转化为具有现实意义的信用等级数据，为电子商务平台上的交易双方提供可靠的参考依据。信用评估体系包含的内容有：信用指标的选取、信用指标得分计算、指标权重确定、综合信用得分计算、信用等级划分。
2.3 信用网页

信用网页是信用体系建设的重要一环，所有的信用信息都需要通过信用网页得到展示，让信用信息公开化、透明化，只有这样，信用信息才能发挥它应有的效果。

3. 汽配人网汽车电子商务信用体系建设存在的问题

随着信用对电子商务的影响越来越大，很多电子商务企业开始高度重视信用体系建设，而汽配人网在信用体系建设方面却严重滞后，汽配人网在信用体系建设上存在的问题也较多，主要有以下几个方面。

3.1 无信用管理制度

电子商务信用体系建设是一个系统工程，需要大量的规章制度为信用体系的实施提供制度保障和理论依据。目前，汽配人网已经制定了一些规章制度，在会员企业管理方面制定了《汽配人网用户注册协议》、《汽配人网法律声明》等制度，在产品管理方面制定了《汽配人网产品排序规则》、《产品信息发布规则》、《产品信息发布违规处理规则》等制度，在平台信息发布方面制定了《库存促销信息发布及审核规则》《重复信息处罚规则》《公司介绍发布规则》等制度，汽配人网还在知识产权和品牌侵权方面制定了《知识产权和品牌侵权处理规则》。

以上制度都是汽配人网在运营过程中为规范商家行为而制定的，没有从信用角度制定相应的规章制度。

3.2 缺少信用评估体系

汽配人网平台对企业的信用信息缺乏有效的管理和利用，没有利用已有的信用信息建立一套信用评估体系。在企业和产品排序时，简单的将会员等级、入驻年限、保证金额度等指标的得分相加，根据得分排序。

在实际的交易中，买家更关注卖家提供的产品的质量，其他买家的评价等信息，这些信息才能反映卖家自身的品质以及产品的质量。现有的产品排序规则，完全以企业的会员等级、入驻年限、保证金等静态的初始信息为依据，不能全面的反映企业和产品的现实状况。因此，在评判企业和产品的优劣时，不仅要考虑以上静态初始信息，还需要综合考虑产品质量、交易评价等信息，制定科学合理的信用评估体系。

3.3 无信用信息展示模块

在汽配人网为会员企业建立的网站中，设置的有公司简介、公司档案、公司荣誉、品牌授权等模块，用来展示公司的一些基本信息，这些信息分别从不同的方面说明了企业的状况。

在汽配人网交易平台和企业自身的网站上，都没有专门的信用展示模块，导致汽配人网已有的信用信息分散在网站的不同模块，不方便买家快捷的查看卖家的信用状态。
4. 汽配人网汽车电子商务信用体系构建

电子商务信用体系建设包括制度体系建设、信用评估体系建设、信用网页建设等，将三者有机的结合在一起才能成为一套完整的电子商务信用体系。本文研究的汽配人网信用体系的结构图如下：

4.1 汽配人网汽车电子商务信用管理制度建设

电子商务信用体系建设是一项系统工程，不仅需要设计一套科学的信用评估模型，还需要制定配套的规章制度。在汽配人网信用体系建设中，需要从入驻企业、产品、信用信息三个层面制定信用管理制度。

4.2 汽配人网汽车电子商务信用评估体系的构建

4.2.1 信用评估指标的选取

根据汽配人网经营现状，并参考天猫、京东等信用体系建设较完善的电子商务平台所选取的信用指标，本文为汽配人网选取了企业信息、产品品质、交易情况和买家认可度等四个一级指标和资质认证、企业荣誉、注册资本、交易保证金、企业入驻年限、实地验厂、品牌授权、产品质量认证、交易数量、交易金额、产品真实度、物流配送、服务态度、投诉率、退款率、买家回头率等十六个二级指标。

4.2.2 信用评估指标评分

由于汽配人网的信用指标有定性指标和定量指标两类，我们需要运用不同的方法对各项指标评分，常见的指标评分方法有以下几种：

(1) 横向分析法，是指将某项指标实际达到水平与该项指标满分要求达到的水平做对比，该满分水平要综合考虑同类企业的情况。例如企业资质、实地验厂等指标得分的计算就采用横向分析法。

(2) 均值对比法，是指将某项指标数值与平台上该项指标的均值做对比，根据比值情况计算该指标得分。在汽配人网信用指标中，注册资本、企业入驻年限等指标得分的计算将采用均值对比法。

(3) 结构分析法，是将部分与全体对比，计算出某个组成部分在全体结构中所占的比重，以衡量这部分在该项指标中的位置，进而判断这项指标的合理程度。其计算公式为：

结构比重=(某部分数值/全体数值)*100%

在汽配人网信用指标中，品牌授权、产品质量认证、产品真实度等指标得分的计算将采用结构分析法。

4.2.3 利用层次分析法（AHP）确定各级指标的权重

（1）建立信用评估指标体系递阶层次结构

将选取的信用评估指标划分为目标层、一级指标、二级指标三个等级，信用指标的递阶层次结构如表 1 所示。
表 1 汽配人网企业信用评估指标层次结构

<table>
<thead>
<tr>
<th>目标层</th>
<th>一级指标</th>
<th>二级指标</th>
</tr>
</thead>
<tbody>
<tr>
<td>企业信用 A</td>
<td>企业信息 B1</td>
<td>资质认证 C1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>企业荣誉 C2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>注册资本 C3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>交易保证金 C4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>企业入驻年限 C5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>实地验厂 C6</td>
</tr>
<tr>
<td></td>
<td>产品品质 B2</td>
<td>品牌授权 C7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>产品质量认证 C8</td>
</tr>
<tr>
<td></td>
<td>交易情况 B3</td>
<td>交易数量 C9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>交易金额 C10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>产品真实度 C11</td>
</tr>
<tr>
<td></td>
<td></td>
<td>物流配送 C12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>服务态度 C13</td>
</tr>
<tr>
<td></td>
<td></td>
<td>投诉率 C14</td>
</tr>
<tr>
<td></td>
<td></td>
<td>退款率 C15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>买家回头率 C16</td>
</tr>
<tr>
<td></td>
<td>买家认可度 B4</td>
<td></td>
</tr>
</tbody>
</table>

(2) 构造判断矩阵

判断矩阵表示相对于上一层次的某一指标, 本层次有关指标间相对重要性的比较。例如对于目标层的企业信用 A 来说，企业信用 B1、产品品质 B2、交易情况 B3、买家认可度 B4 等四项指标两两之间对于企业信用 A 的重要性就构成了目标层的判断矩阵。

在构造判断矩阵前，作者邀请了 5 位专家对同一层次的指标进行两两比较，并依据萨蒂提出的 9 个重要性等级为同层次指标间的重要程度赋值，得到了 5 份略有不同的判断矩阵。由于 5 位专家在电子商务领域的学术水平不相上下，他们给出的判断矩阵难分主次，因此对他们给出的判断矩阵做算术平均处理，最终得到目标层和一级指标的判断矩阵。

(3) 运用 AHP 法确定企业信用评估指标权重

根据 5 位专家给定的 5 组判断矩阵，通过算术平均法得到目标层的判断矩阵（见表 2）。

表 2 目标层判断矩阵

<table>
<thead>
<tr>
<th>企业信用 A</th>
<th>企业信息 B1</th>
<th>产品品质 B2</th>
<th>交易情况 B3</th>
<th>买家认可度 B4</th>
</tr>
</thead>
<tbody>
<tr>
<td>企业信息 B1</td>
<td>1</td>
<td>1/7</td>
<td>1/5</td>
<td>1/6</td>
</tr>
<tr>
<td>产品品质 B2</td>
<td>7</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>交易情况 B3</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>1/2</td>
</tr>
<tr>
<td>买家认可度 B4</td>
<td>6</td>
<td>1/3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

运用方根法求解一级指标对目标层的权重，求解过程如下：

① 计算判断矩阵每一行元素的乘积 Mi 和每一列元素的乘积 Mj

② 计算 Mi 的 4 次方根 $\sqrt[4]{M_i}$ 和 Mj 的 4 次方根 $\sqrt[4]{M_j}$

③ 计算特征向量 $W_i$
W1=0.2627/(3.8068+0.3303+1.1247+0.7071)=0.0440,
W2=3.0274/(3.8068+0.3303+1.1247+0.7071)=0.5072,
W3=0.8891/(3.8068+0.3303+1.1247+0.7071)=0.1490,
W4=1.4142/(3.8068+0.3303+1.1247+0.7071)=0.2369,

在层次分析法中，特征向量 W 即为同一层次中相应元素对于上一层次中某个因素相对重要性的排序权重，因此，W1、W2、W3、W4 分别为一级指标 B1、B2、B3、B4 对目标层重要性的权重。

4.判断矩阵的一致性检验

计算计算判断矩阵的最大特征根λ max，计算可得 λ max=4.1533
计算一致性指标 CI, CI=(λ max-n)/(n-1), CI=(4.1533-4)/(4-1)=0.0511
计算一致性比率 CR, CR=CI/RI, 查表 5-2 可知，当 n=4 时，RI=0.89，因此 CR=0.0511/0.89=0.0574。

由于 CR=0.0574<0.1，认为判断矩阵的一致性是可接受的，指标权重结果有效。

运用同样的方法，可求解各二级指标对一级指标的权重，通过综合权重=一级指标权重*二级指标权重，求出二级指标对目标层的综合权重，计算结果如表 3 所示。

4.2.4 构建综合信用评估模型

(1) 求解企业综合信用分值

根据 5.2.2 信用评估指标评分介绍的评分办法，对某企业 i 的 16 项信用指标分别评分，评分结果记为 P1 i 、P2 i 、P3 i 、P4 i 、P5 i 、P6 i 、P7 i 、P8 i 、P9 i 、P10 i 、P11 i 、P12 i 、P13 i 、P14 i 、P15 i 、P16 i 、，再结合 5.2.3 求得的各项指标的权重，求解出企业 i 的综合信用得分 Q i 。

Q i =0.0035P1 i +0.0122P2 i +0.0026P3 i +0.0180P4 i +0.0019P5 i +0.0070P6 i +0.338
2P7,+0.1690P8,+0.0118P9,+0.0373P10,+0.0182P11,+0.0122P12,+0.0122P13,+0.1000P14,+0.0639P15,+0.0381P16。

根据上述计算方法，求出汽配人网中所有会员企业的综合信用得分，作为确定企业信用等级的依据。

（2）判定企业信用等级

为了便于管理，本文将汽配人网的信用等级分为五级，综合信用得分越高，其信用等级越高。为了提高广大企业改善企业信用的积极性，在企业信用等级划分时采用排位法，即根据企业综合信用得分在所有企业的综合信用得分序列中所处的位置，确定企业信用等级。企业信用等级划分办法如表 4 所示。

<table>
<thead>
<tr>
<th>综合信用得分区间</th>
<th>信用等级</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qi∈(0,20]</td>
<td>一级</td>
</tr>
<tr>
<td>Qi∈(20,40]</td>
<td>二级</td>
</tr>
<tr>
<td>Qi∈(40,60]</td>
<td>三级</td>
</tr>
<tr>
<td>Qi∈(60,80]</td>
<td>四级</td>
</tr>
<tr>
<td>Qi∈(80,100]</td>
<td>五级</td>
</tr>
</tbody>
</table>

4.3 汽配人网汽车电子商务信用网页设计

4.3.1 设置信用档案专区

在汽配人旺铺中，可以将公司介绍和公司档案两大模块合并为信用档案；在汽配商城网页的模块中，可以将公司介绍、生产车间、授权品牌、厂房仓库、公司荣誉、注册品牌等模块合并为信用档案，不管是旺铺还是商城，都在企业网站首页设置信用档案专区。

将企业的信用信息全部记录在信用档案中，通过信用档案直观展示企业的信用等级以及各项信用指标对应的信用信息。

4.3.2 设置信用曝光台

为了更好的奖励信用度高的企业，惩戒信用度低的企业，在汽配人网平台首页设置信用曝光台，曝光台分为两部分，一部分为守信企业展示区，滚动展示综合信用得分前 5%的企业信息，另一部分为失信企业曝光区，滚动展示综合信用得分最低的 5%的企业信息。

通过信用曝光台，让守信企业增加曝光度，提升企业宣传力度，也让失信企业暴露出来，减少失信交易的发生，失信企业也能借机查找自身信用存在的不足，积极改善企业的信用状况。

5. 结语

在电子商务快速发展的今天，信用体系建设将推动电子商务更加健康快速发展。本文从信用制度、信用评估模型、信用网页三个方面为汽配人网构建了一套完整的汽车电子商务信用体系。本文的研究对电子商务信用体系建设具有一定的借鉴意义。
参考文献


Entrepreneurial Agglomeration Analysis of Small and Micro Logistics Enterprises Based on Path Dependence

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Abstract
Small and micro logistics enterprises are very important for regional economic development, so how to break the plight of small and micro logistics enterprises business process faced becomes a serious problem. The perspective of this article focused on the small and micro logistics enterprises entrepreneurial agglomeration of Jinan northern logistics park, based on path dependence theory, summed up the reasons and path dependence characteristics of entrepreneurial agglomeration, then depicted the path dependence feature diagram of entrepreneurial agglomeration. Then, it analyses several common mechanisms of path breakthrough and some countermeasures to overcome enterprise path dependence.

Keywords: Small and Micro Logistics Enterprises; Path Dependence; Entrepreneurial Agglomeration; Path Breakthrough
基于路径依赖的小微物流企业创业集聚分析

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摘要

小微物流企业对于区域经济发展具有重要意义，如何突破小微物流企业创业过程中面临的困境成为亟待解决的问题。本文的视角集中于济南北部物流园区小微物流企业创业集聚，以路径依赖理论为基础，归纳出该地区小微物流企业创业集聚产生的原因以及创业集聚的路径依赖特征，并描绘出创业集聚路径依赖特征图。分析了路径突破的几种常见机制以及克服企业路径依赖的一些对策。

关键词：小微物流企业；路径依赖；创业集聚；路径突破

早在 2015 年济南即提出了要打造“四个中心”，即全国区域经济中心、科技创新中心、金融中心与物流中心的宏伟战略目标，希望以此建设与山东经济文化大省相匹配的省会城市。然而要把济南建设为具有区域性特色的物流中心，并借此进一步加速济南的区域经济发展显非易事。

济南的物流布局及产业服务水平必须从目前的诸多困境、瓶颈中突围。近期数据显示，目前济南的物流业中小微物流业的比重很大，占注册企业的 92.7%，其中大部分集中于济南北部的物流产业集聚区。该类企业服务种类相对单一，且服务同质化严重。若这些数量上极具规模、但服务水平及服务能力却相对落后的小微物流企业得不到发展，济南提出的创建“区域物流中心”的目标就很难实现。

1. 路径依赖

路径依赖，英文 Path Dependence，即路径依赖性，通常指社会发展中的制度变迁或技术演进存在与物理学中惯性现象相似的现象，其表现为一旦驶入某种路径，该路径不管是好还是坏，一般均会对该路径产生不同程度的依赖特性。一旦做出了某种选择，就像走上了不归之路，强大的惯性使得该选择不断地自我强化，导致无
法轻易跳出。

最早提出和使用“路径依赖”的是生物学领域的学者。美国的经济史学家 David 首先把该概念引入社会科学的领域，用它研究技术变迁的问题。例如，在解释 QWERTY 键盘是如何演变为广泛使用的标准键盘时指出，并非最好的 QWERTY 键盘之所以现如今能占支配地位是因为它出现的最早，当时几无对手。这种现象即为技术变迁的“路径依赖”。路径依赖分析较为常用的应用领域是社会学、政治学研究。后来，道格拉斯·诺思用该理论成功阐释了经济制度演进的问题，并于 1993 年因此研究获得了诺贝尔经济学奖，从而使“路径依赖”的理论声名远播。近年来，不少学者们认识到路径依赖是一种普遍的社会认知现象，在经济学、管理学领域也有广泛的应用前途，该理论对解释企业转型、产业升级困境也有极大的帮助。

2. 济南北部物流园区小微物流企业集聚的成因分析

目前济南北部物流园区在地域上涉及“盖世”物流中心、“盖世济北物流园”、“零点物流园区”、“黄台物流园区”以及沿二环北路的众多小型物流企业聚集体。

2.1 历史因素

小清河河面宽阔、水流平稳，自古以来即为济南重要的水上商道，承担着济南的水陆联运、海河联运、农田灌溉、商贸运输等诸多功能，历史上为济南的经济发展贡献颇大。有历史记载，繁忙的河面上商船昼夜不停地来往行驶。沿河各码头船舶云集、码头上各种运输车辆忙碌地搬运货物。济南生产的工业品经由小清河运输到各地。济南所需的粮食、煤炭、油、盐、菜蔬等日用品，则由长清、高苑、桓台、寿光等地经内河运输源源不断地运来。

2.2 区域优势形成的集聚基础

作为山东省会城市的济南是华北地区重要的区域中心城市，同时也是我国 21 个重要物流节点城市之一，开展现代物流优势明显，拥有广阔的发展前景、潜力巨大。

济南发展现代物流的基础条件得天独厚。济南承启东西、贯通南北，具有极高的战略地位；交通四通八达，功能齐全、优势互补的综合交通运输体系业已形成。济南是区域铁路、公路、航空等多种运输方式枢纽：京沪、京沪等多条铁路干线交汇于此。济南国际机场作为国际性空港，直达通航城市已有超过 60 个，航空货运方面也已开通至多个国家或地区的货运专线。据统计，截止 18 年济南公路通车里程已达近两万公里，覆盖密度超 200 公里每百平方公里。高速公路近 600 公里，“一环八射”的高速公路网络业已形成。辐射全省、连接全国的高速公路网络的建成及不断发展，加速了省内中心、全国区域性枢纽格局的形成。
济南北部物流园区近年来发展尤为迅速。盖世物流济阳物流中心超10万平米仓库存招商顺利完成，大批中小物流企业已顺利入驻；零点物流片区的二期改造工程、佳怡物流的济阳、商河物流新建与改扩建项目、瑞康医药物流项目、泉利重汽配件物流中心等也已投入使用。力诺集团的邢村物流中心、捷瑞物流、神州数码科捷物流等众多项目已规划完成。临港地区的空港物流园区已有中邮集团等多家大中型物流企业入驻营业。总投资超亿元，占地面积160亩的济南市邮政速递综合邮件处理中心已开工建设，届时将成为我国最为先进的速递业务处理中心之一。

2.3 基础优势

济南物流基础扎实雄厚、相关产业支撑优势明显，商业经济发展迅速；与此同时物流市场较之周边城市比较优势明显，业务量增长十分迅猛，展现出了巨大的物流发展潜力；加之济南高校云集，物流人才与科研优势明显，这些都为济南物流业的发展创造了条件。

2.4 相关政策支持

早在09年国务院发布《物流业调整和振兴规划》时即将济南规划为华北地区重要的区域物流节点城市以及全国性物流节点城市。省内来看山东现代物流的“十二五”、“十三五”规划均提到要把济南建设成省内外货物集结与交换的物流中心节点。

2.5 信息优势

物流信息化基础水平对现代物流发展的重要性不言而喻。作为国家科技部所确定的首批九个智能交通系统应用示范试点之一，济南市交通局主持建设的道路枢纽信息化平台已开始运行。该网络目前已覆盖大部分客、货运站场。该系统具有客、货站场日常管理、智能交通协调调度、综合信息的查询、智能仓储管理、GPS定位监控以及智能辅助决策支持等众多功能。未来，依托该系统可进一步建设济南综合公共物流信息平台。

另外，济南市已规划完成“一平台多系统，多系统多应用”的城市交通物流信息化体系，全市政务网络信息化平台业已基本建成，75个部门已接入该平台，并通过该平台接入互联网。这实现了企业基础信息的共享与应用。

3. 济南北部物流园区创业集聚的路径依赖特征分析

济南北部小微物流业务集聚形成之前，物流创业历史即比较悠久。该区域较之中心城区经济方面相对落后，商业资源也相对匮乏，致使就业机会尤其是高收入就业机会就相对较少，就业层次也比较低。不少居民便利用该地区便利的交通条件、较为便宜的地价来开展物流业务。早期他们选择了门槛低的配货业务，逐步形成了针对周边各批发市场接送货，返程空驶车辆配货等简单物流业务。经过多年探索该
地区逐步形成了比较完整的物流运作体系，也为后续物流业务的规模化经营积累了一定经验。更为重要的是，早期物流业务的开展增加了当地物流从业者的收入，增强了从业者对物流业的亲切感，进而对物流业也逐步趋于认同。一定程度上对济南北部小微物流产业的形成起到了加速作用。

3.1 创业锁定效应

从济南北部物流产业的形成历史来看，当地资源的相对匮乏，经济较之主城区的相对落后，使从业者主动搜寻新生计的来源，这为物流创业环境的形成打下了一定基础。初期的物流从业者发掘出了适合当地实情的创业机会并取得了较为丰厚的回报，这种良好的示范性效应使大家认识到了物流创业的可行性。为了以较低的资本投入及门槛谋求发展，人们也基本认同早期以分销、配送业务为代表的物流业务。该类业务虽然简单，却能有效提升居民收入，加速了居民对物流业认同感及归属感的形成。物流创业文化的培养外加对创业行为的逐步认同，使得该地区物流创业文化得以逐步确立起来。此外，长时间里未有其它规模化创业文化的竞争，也使得物流创业文化得到了进一步稳固，也对新进入从业者产生了极强的创业锁定效应。

3.2 创业选择反馈机制

创业项目的选择是创业最基础的环节，需要创业者花费精力搜寻、甄别市场机会。而对济南北部物流园区的创业者来讲，创业项目的选择却相对简单。多数创业者欠缺经验、商机捕捉能力也比较欠缺。为了降低创业的不确定性风险，创业者常常选择回避项目的深入论证，而把该区域已有创业选择的分布情况作为主要依据。由于该地区靠近水路、路路交通枢纽，以运输集散为代表的简单物流业务便较快地发展起来，早期的物流业开拓者为后续创业者提供了现实参考。随着物流从业者的不断加入，该地区物流的创业风险也在不断降低。跟进者只需参考区域内已有物流从业者的数量及业务种类、规模进行业务决策即可避免风险。该区域较早的物流创业项目是以仓储、配货为代表的低端物流业务。该类业务短期内创新性也不强，这种从趋性的决策极大地降低了决策成本以及创业风险，已有物流创业的选择也就对新创业的选择产生了积极的正反馈。

3.3 规模报酬递增

物流产业必须达到足够的业务规模才易被市场认可。因此，在物流服务水平相对有限的情况下，为最大限度提高收益、提升市场影响力，区域内物流企业只有提供大量同质性较高的服务才能获得区域竞争的优势。因此，为提升市场知名度，济南北部物流园区的小微物流企业自发集聚、整合，集聚各自的物流服务能力以便提高整个区域的服务水平以求进一步扩展市场份额。在这一过程中，小微物流企业又顺便利用创业集聚产生的知识溢出效应、逐步改善了园区的基础设施，这样该区域小微物流企业的进入与物流创业集聚实现了共赢。

3.4 技术自我强化
随着该区域物流创业规模的不断提升，物流服务产品的创新也得以逐步实现。如上所述，该区域小微物流企业的自身实力相对较弱，个体基本无力实现大规模物流服务的创新，为降低创业风险也基本沿用该区域内成熟的服务模式；加之区域内企业流动相对频繁，知识产权意识相对淡薄，物流服务知识产权保护措施几乎没有，多数物流企业的创新积极性有待提高。此外，低端物流服务技术含量低，市场对其要求也不高，使得该地区高水平物流服务的提供基本只能依靠极少数物流企业来承担。多数企业更多是依靠市场的推动进行被动式的创新，服务创新范围也基本从较为简单的成本消减开展。在此背景下，该集聚区域内的小微物流企业便习惯性的通过物流实践对已有物流服务进行了不断强化。

根据上述分析可以清楚的看到，济南北部物流园区内物流企业的创业集聚在路径依赖的四个典型方面均有表现明显。图1清晰的反映出具体的实现机制：创业历史及创业实践的凝炼形成了该地区物流创业文化。首先是该地区具有了一定数量有创业素质且认同物流业务的潜在创业者，同时特定的物流创业文化导致物流服务产品基本锁定在相对具体的服务领域；物流创业文化的锁定也让创业的选择过程变得相对简单，起到了创业产品的延续作用；在创业选择完成后，由于受既有物流服务模式的影响，多数小微物流企业所开展的物流服务创新也只是强化了既有的物流服务模式，基本以竭力提升服务效率与降低成本为主；同时，由于既有物流服务产品的强化作用，服务规模也得到了逐步扩大，物流业务集聚影响也得到了加强，也进一步吸引了更多的创业者加入。从上述循环可以到，每个环节均以前序环节为依赖，前序路径直接影响到后续环节的开展，进而使整个循环呈现出了典型的路径依赖特征。

图1. 济南北部物流园区创业集聚路径依赖特征图
4. 物流服务转型升级的路径突破机制

常见的路径突破机制有三种，分别是:

4.1 外部冲击

外部环境的不可预期、不易控制以及难以逃避的特点意味着路径的突破必须适当带有强制性。不在竞争中新生就在竞争中灭亡，面对外部环境的变化，固守可能就会意味着灭亡。小微物流企业必须突破惯性思维，对既有物流业务进行彻底变革，甚至实施激进式的业务创新，以完成物流企业的转型。

4.2 内部变异

企业内部的创新能力积累产生的激进式创新也可以实现路径的突破，哪怕是量变产生的质变。企业在实践中产生的质变主要是企业在学习中不断积累而实现的一种跨越式的变迁，甚至“意外”创新也会导致路径的突破。

4.3 企业并购

通过并购的方式可获得该企业的核心业务，把后者所拥有的核心业务吸收转化，可实现路径突破。并购在不影响目标企业核心能力价值的前提下跨越了后者在核心能力培育上的漫长积累阶段，使它可以迅速完成新型核心业务的构建。

5. 小微物流企业突破路径依赖的策略

5.1 实施现代企业制度

现代企业制度有其特定的哲学、文化基础以及社会经济基础。它有科学的领导与组织管理制度。建立现代企业制度主要包含以下内容：一是建立现代产权制度，产权制度是前提；二是建立高效率的现代企业组织制度，组织制度是保证；三是建立科学的管理制度，管理制度是基础。三者，紧密联系、不可分割，共同构成了现代企业制度发展的方向。

5.2 对外开放

这里的对外开放主要有以下含义。一是更新管理者的选拔机制，引进高级管理人才，为企业注入新鲜血液。二是员工的招聘应适当突破地域的限制，从优秀企业引入业务骨干和管理人员。三是开放股权，积极引进投资，借以完善公司的治理结构和股票期权制度。
5.3 完善人力资源机制，建立顺畅的沟通渠道

员工若不支持、理解，变革则难以实施。为了降低路径依赖对变革的阻力，就要建立顺畅的沟通渠道，此外还需对员工进行一定培训，使其掌握必需的知识与技能，既可降低员工的转换成本，又能提高对改革的认同。在此基础上建立科学的人力激励机制，让制度服务于价值观。

5.4 建立战略导向的组织机构

改革会受到权力机构的阻力，为此要迅速调整关键管理的人选，确保新理念的执行，使变革得到权力的保证；其次，要以企业战略为导向，充分分析研究各变革方案及其潜在收益和成本，在此基础上对企业进行改革，尽力消除原机构既得利益者的阻力；再次，要尽力确保企业得到科学化、规范化的运转，处理好集权与分权的关系，建立畅通、及时的信息机制，重新审视企业的现有资源及发展战略，抛弃对企业长远发展无意的沉淀成本，避免不必要的资源浪费。

5.5 重视正式与非正式企业文化

文化涵盖社会长期形成的价值观、信仰、思维模式、习俗等内容。这些社会文化渗透到观念、行为和思维模式中，构成了行为的非正式规则，进而影响了人们的行为取向。诺思指出，在路径依赖中，非正式文化在各类制度的演化中起重要的作用。因此，在企业的发展中，正式与非正式文化都要受到重视，企业应以开放的姿态，培育既符合当前特色又可满足企业需求的经营理念，不断提升企业整体素质和竞争力。

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On the Value of Taoist Ethics in Modern Business Ethics

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Abstract

As a religious ethic that has influenced Chinese Society for thousands of years, Taoist ethics and modern business ethics have a interconnected bridge. Taoist ethics warns people to remove evil and do good, to be honesty and no fraud, to accumulate merits, and to pay attention to good relations with the environment. This has the following reference value for the development of modern business ethics and morals: the idea of righteousness and benefit and the idea of honesty and credit in Taoist discipline thought will promoting the utilitarian tendency of business ethics; The concept of "supporting the poor and help in emergencies" in Taoist ethical thought of admonishing goodness is beneficial for enterprises to take an active part in social responsibility and establishing a positive corporate image; Taoist ecological ethics to promote enterprises to recognize the importance of the responsibility and obligation to protect natural resources, and effectively use public natural resources to achieve a good situation of win-win situation.

\textit{Keywords}: Taoist ethics; Business ethics; Charity; Ecology
试论道教伦理思想在现代商业伦理道德中的价值

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摘要

作为一种在中国社会影响上千年的宗教伦理，道教伦理与现代商业伦理之间的有着共通的桥梁。道教伦理思想告诫人们要为善去恶，诚信不欺，积累功德，以及注重与环境之间的良好关系。这对于现代商业伦理道德的发展有如下几个方面的参考价值：道教戒律思想中的义利观念和诚信思想，促使商业伦理道德有去功利化倾向；道教劝善伦理思想中的“周穷救急”慈善观念，有利于企业积极参与社会责任的担当，建立正面企业形象；道教生态伦理思想，促使企业认识到保护自然资源的责任与义务的重要性，有效利用公共自然资源，达到多赢的良好局面。

关键词：道教伦理；商业伦理；慈善；生态

1. 引言

良好的商业伦理道德既是社会主义市场经济有序运行的内在动力，也是企业获得长久发展的重要基础，更是构建和谐有序的经济环境关键因素。有学者提出西方学界商业伦理道德的三个原则，“企业如何全面理解和承担社会责任？企业如何避免经营功利主义？企业如何利用好道德会话与民众达成共识”。可见，企业既是单纯的利润创造者和获得者，也是社会责任的承担。特别是在利用和开发公共自然资源过程中，企业必须考虑到对自然环境、伦理与法律应该尽到的责任。同时，企业经营应该尽量避免功利主义，企业的整体发展规划、产品与服务的设计、销售的整体过程，都需要充分考虑到利润、消费者需求以及整个国家与社会的长期利益相一致。虽然功利主义是将对多数人产生最大利益的行为定义为道德正确，然而在为了大多数人利益而牺牲少部分人利益的原则下，会造成地区性的环境污染、生态退化以及更多的矛盾冲突和社会问题。此外，在企业与企业之间、企业与民众之间，应该在理性和诚实的基础之上创建良好的沟通对话机制，以消除误解与疑虑，达成发展共识，有效利用公共自然资源，达到多赢的良好局面。

道教是中国的本土宗教，有着深厚的信仰基础和广泛的社会影响。道教文
化与中国传统道家文化一脉相承，其中有许多思想精髓，如“去恶为善”、“积
累功德，慈心于物”以及“道法自然”等伦理道德观念，蕴含着古人思考人与
自然之间、人与人之间相互和谐关系构建的伦理道德规范。这些道德规范与儒
家纲常伦理思想以及佛教的宗教伦理思想相互结合，对传统社会的国家与社会
秩序的良性运行提供了公共尺度与价值判断标准。在现代社会，这些思想精华
对于商业道德规范的构建与运行，依然有着可供借鉴和实用的重要价值。本文
立足于对道教思想中的戒律思想、慈善观念、生态伦理思想的内涵与价值分
析，并放置于现代商业行为之中，探讨道教伦理思想对于现代商业伦理道德中
的积极影响，有不妥之处，还请方家批评指正。

2. 道教戒律思想中的义利与诚信观念

道教有着严格的戒律思想，要求信徒在思想和行为上，均要严格遵守并能
自律。《虚皇天尊初真十戒文》要求信徒忠孝仁义，不能阴谋害人、杀生、邪
淫，特别是在钱财方面，不能贪得无厌，其中第八条指出如果不是属于自
己的财物就不能妄取，而不义之财，更不能据为己有了。《三洞众戒文》也有
类似的戒律规定：“第五戒者，手无犯恶，不窃人物，贪利入己，祸不自觉。”
道教修行要求人们少思寡欲，清静无为，在财富的获得上，要顺其自然，不
能有贪心，否则必将导致身败名裂，到那个时候，钱财再多也没有用处。《正一
法文天师教戒科经》指出，人们贪财图利，买贱卖贵，欺骗百姓，赚了钱就开
心，亏损了财物怨恨，结果机关算尽招致灾祸，甚至是身名不存，惶惶终日，
到那个时候，即使有万贯家财，也没有机会享用了，所以文中告诫人们：“不
得贪利财货”。此外，如《三洞法服科戒文》、《太清天师说二十四门戒经》
等道教戒律经书均有对财物取舍有度的类似戒律规定。

当然，财富的积累是现代社会物质文明高度发达的标志，也是人们提高自
身经济生活水平不可或缺的重要因素，如果单纯按照以“视金钱如粪土”的观
点的话，又与现代国家追求经济发展与社会进步，实现人民生活水平提高的物
质需求相悖。然而道教戒律所强调的重点并不是完全否认金钱的必要性，而是
人们对于金钱的正确态度。道教认为，财富的获得应该在遵循“道法自然”的
基础上，对财物不能贪得无厌，明白知足的道理，固守道德底线，自然就可以
实现经济上正当需求。“故戒知止足，令人于世间裁自如，便思施惠散财除殃，
不敢多求，奉道戒者可常处吉不凶，不能止足，相返不虚也。”“戒知止足”，才
能“不失其所”，商人需要固守经营的道德底线，一方面懂得知足的道理，另一
方面能做到施惠散财，拿到现代来说，就是企业在包括法律法规和社会环境等
诸多条件的约束之下，不能强行进行违规生产与经营以满足获取利润的目的，
否则便是“失其所”，终将受到法律制裁。

道教的戒律之中还包括有诚信的基本准则，人与人之间的诚信守诺是教徒
必须遵循的行为准则之一。《道德经》多处提到诚信为立世之本，如第四十九章
“信者，吾信之；不信者，吾亦信之，德信”，二十三章“信不足，有不信”，
第八章“言善信”，饶宗颐在《老子想尔注校笺》注:“言善信，人当常相教为
善，有诚信。”道教用“承负报应”来说明商业买卖行为中见利忘义、欺诈和不
诚信将要遭受的惩罚。如《太上清箍灾延寿宝忏》中弟子某人忏悔自己曾为
商贾时，为逐财力，缺斤少两，欺瞒诈取，结果堕入地狱之中以及成为恶鬼，受到无尽的报应，“以前业故，尚受余殃”，这其中的内在规律就是道教的承负说。当然，按照同样的说法，行善之人，诚信之人，则定有善报：“人人尽为恶行，我独为善，必获善报。人不加功于我，我独乐加功于人，必获善报。人不食饮于我，我独食饮于人，必获善报。人尽习虚伪之行，以欺于我，我则以诚信待人，必获善报。”这和佛教的因果报应说有相似之处，也为震慑那些唯利是图，欺诈求财的人起到一定作用。在历史上有很多商人都是道教俗家弟子，如近代商人郑观应（1841-1922）、张弼士（1841-1916）、庞元济（1864-1949）、王一亭（1867-1938），其中庞元济的师父是全真龙门派云巢宗坛第十三代宗师，王一亭是全真龙门派上海觉云坛第十五代弟子。

道教的诚信观念也间接影响了世俗社会中人们的经济思想和交易行为。现代商业社会中，诚信是一个非常重要的品质和要求，企业如果遵循诚信经营的原则，就能在激烈的商业竞争中，打造优秀的企业文化，树立起良好的企业形象，不断增强自身竞争力。相反，如果企业缺乏诚信，从企业自身来看，不仅造成企业声誉低下，企业形象受损，而且阻碍了企业的持续发展；从社会经济秩序来看，企业缺乏诚信，也扰乱了正常的社会经济秩序，对整个社会的信用体系构成形成冲击。所以，道教戒律中的诚信观念无疑对于建立现代国家的信用体系，肃清社会经济行为之中的造假贩假、欺诈等不良行为，有着道德与伦理上的价值依据。

3. 道教劝善伦理思想中的善慈观念

道教从天地人三才之关系来阐述为善行善的来源与依据。在道教世界观来看，天地阴阳二气相合而生人与万物。“天，太阳也；地，太阴也；人居中央，万物亦然。”天之气下流，地之气上合，两气交于中央，产生万物。万物禀受此二气获得身体，如果没有天地二气，万物都无法产生。因为天地之气交感，所以人的所作所为自然能够为天所知晓，人们行善为恶上天都是知道的，天地有趋善离恶之倾向，具有道德上的价值判断能力，所以人们作恶就会招到天的惩罚。进一步来说，天地的赏罚机制不仅适用于行为人当世，也会影响到子孙后辈的福报。“天地生凡物，无德而复之，天下云乱，家贫不足，老弱饥寒，县官无收，仓库更空。此过乃本在地伤物，而人反承负之。”社会物质生产衰败，世道混乱，家境贫落，究其本来根源不过是人们肆意妄为伤害了自然而遭受的报应而已。所以，如果人们能够深省自己所作所为，弃恶从善，善待天地万物，广行布施，也会得到好的回报。“得道之者，莫不由施散布德，作诸善功，功满德足，以致善报，轮转不绝……此时皆知施功不失，欢乐自然，世世无量，所施盖微，福庆无极。”

道教运用“承负说”的善恶报应论，加上“以其无私，故能成其私”的辩证思想，劝人为善，以“天下皆善”作为理想的社会。对于善恶，道教经典《太平经》认为，为善就是做事情合天心，不违背人意，这样的善天地都是称赞和喜爱的，当热世间的帝王也需要这样的人来辅佐，“仕人君所当与同心并力也”；而为恶则是做事违背天心，伤害人意，反天道，不顾及四时规律，所以人神所共憎，常常是“最天下绝凋凶败之名也”。因为道教认为“行善得善，行恶
得恶。譬如种谷生谷，种麻生麻”，所以要“积累功德，慈心于物”。积累功德也被称为积阴功，做好事不求别人知晓，与此相应，也要节制自己的行为，不去做有损于福德之事。因为神明会监察善恶，所以人们的言行与起心动念都会受到神明的监督。

富裕之人不能为富不仁，而应该“周穷救急”，“故令有财之家，假贷周贫，与陈归新，使得生成，传乎子孙，神灵佑助，是非大恩布行耶？”《太平经》卷六十七说：“财物乃地天中和所有，以共养人也……少内之钱财，本非独以给一人也”。道教认为世界上的财物是全民共有的，富裕之人虽然暂时拥有财富，也只不过是将属于大众的财富暂时集聚其一处，有需要的人就应该给予救助，如果富人妄想永远独占财富，积累亿万财富，但是却不肯救济穷人，而令无数穷人饥寒而死，那么这个富人不仅会被认为是天地之间不仁义的人，而且也会受到上天惩罚。

在现代社会中，有许多商人在获得事业成功，积累了巨额财富之后，并未忘记回馈社会，他们热衷于慈善事业，或以私人名义进行捐赠，或以企业名义成立慈善基金会，兴办教育、医疗机构，甚至临终将大部分或者所有财富均捐赠给慈善机构，这也正是与道教的“周穷救济”思想不谋而合。阿里巴巴创始人马云一直热衷于慈善事业，2019 年他与副手蔡崇信减持股票约人民币 370 亿人民币投入公益慈善规划，主要涉及环保、医疗、教育以及公益生态等领域。据不完全统计，马云从 2014~2016 三年间，他向社会的捐款达到了近 300 亿人民币。万达集团董事长王健林也是一个热衷慈善的企业家，2015 年中国捐赠百杰榜上他排名第五，捐赠金额共计 3.6 亿人民币。事实上，对于企业的发展来说，企业慈善事业的开展是一个良性循环过程，它有利于树立正面企业形象，形成良好的企业文化，获得大众的认可，提高品牌的曝光率，产生巨大的广告效应，达到多赢的良好局面。

4. 道教生态伦理思想中的责任观念

道教认为自然界与人相生相伴，人是自然界的一部分，人的活动唯有效法天地，遵循自然规律，才可以达到“长生久视”，直至“得道成仙”，即《道德经》所讲：“人法地，地法天，天法道，道法自然”。道教通过构建因果承负、神灵赏罚的宗教神学系统，将“天人合一”、“道法自然”的生态伦理理念贯穿于传道施教发展过程中，并在道教经典和宗教实践过程中充分反映出来。

首先，从道教理论基础来看，天地万物与人是同根同源的，即都由“道”产生。“道”是万物产生的根源，也是存在的依据，更是万物运化的内在动力。“天地自然，万物生于天地。自然者无外，故天地名焉。天地者有内，故万物生焉。”在这一生态宇宙观的基础之上，《太平经》更充实了这一思想，将人伦道德秩序纳入自然生态观念，将天地看作是“父母”，把世俗社会中的孝道观念融入其中，提出：“父母为天地，天地为父母；父母为父母……天地之大，故名父母。天地者，父母之自然，故称父母。”所以人也要秉承天地之德，并以敬孝之心对待自然和爱护自然，如果不以孝道之心对待自然，就会对自然产生伤害，而这种伤害最终还是会回到人类自身，“此
父母貧極，則其子日貧矣。”《太平经》之中的“天父地母”观念将人与自然万物的和谐关系赋予了伦理道德属性，更贴近人的情感需求，更容易引起人们的情感共鸣，使得人们在开发自然资源的时候，不得不慎重对待自己的行为，否则，“竭泽而渔”的开发方式不仅来自于社会的压力，更重的是自己内心良心的谴责。从这个意义上来说，道教对于人与自然和谐共处的理念，以及其内在的伦理道德的教化与约束，对于现代企业生产经营亦有着不可忽视的积极意义。

其次，道教的道德规范在遵循万物发展规律的基础上，提出了“护生戒杀”的重要观念。传统道家思想中将万物置于同等地位，并无高低贵贱之分，正如庄子所说：“天地与我并生，而万物与我为一”，排除了物我之别，则对待万物就如对待自己一般，一视同仁。唯有以此为基础，才能摆脱人类中心主义的错误认识，尊重生命，爱惜生命。《太平经》认为，首先人不能有恶念，“一念杀者一物死，十念杀者十物死，百念杀者百物死，自此至万念”。一旦人有了杀生的恶念，便会实施杀生的行为，恶念越多，被杀的生物就越多，这种行为必然会遭到不好的报应。如《无上秘藏经》认为，“杀生淫祀者，死入沸山狱；烧野山林游猎者，死入分形狱”，这样一种因果报应的说法，显然对于信仰道教的人有着深刻的威慑力。

当然道教并不否认人有基本的生存需求，即便如此，也应该酌量取用，不可贪心。特别是对于自然生长的植物，取其种子果实饮食出售，但不能烧山破石，伤枝毁根，而如果有危害人类的动物，也不能将幼子杀死为食，断其生机，否则都会受到天地父母的惩罚。道教经典《太平经》提出不能随意杀害正在使用的动物，比如为人们劳动的牛马，看家护院的狗等，也不能杀害年幼的动物和怀有胞胎的动物，因为这就断了它们的生机，否则：“是者亦不得逢吉，鬼神憎之，司候在前，何有脱时？”如果任意妄为，杀害这类动物，不仅丧失福报，而且会受到神灵惩罚，殃及后人。我国传统也有“劝君不食三月鱼，千万鱼子在腹中。劝君莫打三春鸟，子在巢中待母归”的传统，这也是动物保护的基本原则。当前世界上的许多珍贵动物濒临灭绝，自然界生物多样性的生态链受到严重破坏，为人类敲响了警钟。道教的保护动物的思想，仍然值得提倡。

由此可见，道教的“护生戒杀”观念，是将人放置于万物同等的地位，而不是凌驾于万物之上。这种伦理道德规范，约束人们的生产和生活行为，不去肆意伤害其他生物。这种约束力一方面需要人类自我的内在道德准则，另一方面则来自于外在神秘力量，即“天地父母”和“天命”对恶念恶行的判断与惩罚。通过内外两方面的约束与控制，来实现道教对生命尊重的伦理道德规范。

最后，道教提出了对自然资源进行保护的可持续发展思想。人类对自然资源的合理利用，是基于生存和发展的客观需要，也是促进人社会文明进步的必然结果。但是在这个过程中，人类必须意识到保护自然资源的责任与义务的重要性，要以生态伦理观念为指导合理开发利用与有效保护自然资源。中国传统文化中历来就有对自然环境利用与保护的环境保护思想：“不涸泽而渔，不焚林而猎……草木未落，斤斧不得入山林；昆虫未蛰，不得以火烧田……”。古人的“不涸泽而渔，不焚林而猎”延续千年，是凡事必留一线的智慧，也是对生命
的充分尊重，更是对于环境的有效利用和充分保护，最终是为了人自身能够更好的生存与发展。

因此，对于有限的自然资源，现代社会的生产与生活应该树立起有效利用和保护的思想，这与当前我国政府所提倡的可持续发展理念是相一致的。在我国进行现代化建设过程中，因为地方政府监管不到位以及企业自身环保意识不强等各方面原因，致使整个自然生态受到严重破坏，环境污染日趋严重。值得庆幸的是，近年来国家下大力气进行环境污染治理，关闭了大量重污染企业，加大对企业生产的监管力度，严格管控企业对环境的破坏和不良影响。国家已经深刻认识到经济发展过程必须兼顾自然资源的可持续利用，而广大企业也应重新审视自身发展与环境保护之间的关系，在资源的合理利用与环境保护之间，在经济发展与生态平衡之间寻找更有效的契合点。

5. 结语

从企业生产经营的目的来看，获取最大限度的商业利润是其根本目的。然而在现代社会，企业要获得持续发展和增强竞争实力，不得不正视企业自身形象与社会责任的担当。在现实经济利益与企业社会责任二者的相互关系上，企业必须有所取舍并达到辩证的平衡。从国家社会的精神文明进步来看，一个在社会生活中具有重大影响力的企业，不仅仅是生产产品和提供服务的庞大机器，更是社会道德价值导向的承担者和宣传者；从企业自身发展来看，如果实行以功利主义为指导思想的发展模式，为了最大限度获取利益，罔顾法律与社会公共利益，不仅与社会主义整体价值观相违背，也违反了商业伦理道德，终究将损害企业的声誉，也为企业发展埋下了隐患。道教伦理思想中的劝善思想、重义轻利的金钱观念以及尊重自然的生态观念，在现代企业的经营与发展过程中，赋予特定价值参考与道德意义。道教戒律思想中的义利观念和诚信思想，促使商业伦理道德有去功利化倾向；道教劝善伦理思想中的“周穷救急”善慈观念，有利于企业积极参与社会责任的担当，建立正面企业形象；道教生态伦理思想，促使企业认识到保护自然资源的责任与义务的重要性，有效利用公共资源，达到多赢的良好局面。

参考文献


Research on the Impact of External Clues on the Perceived Quality of Fresh E-commerce Consumer

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Abstract

With the continuous development of the Internet economy and the continuous improvement of living standards of residents, consumers' pursuit of convenient life stimulates the vigorous development of e-commerce industry. As a new field of e-commerce industry, fresh e-commerce has shown strong vitality in recent years. Based on the clue theory, this article measures the factors influencing the perceived quality of fresh e-commerce consumers from the perspective of external clue information of fresh e-commerce. Combining external clues, customer perceived quality and fresh product characteristics, four variables regarding the logistics service quality, word of mouth, brand image of origin and communication service quality, are selected to test the hypothesis related to perceived quality. In the end, we concluded that logistics service quality, word of mouth, brand image of origin and communication service quality are positively correlated with perceived quality, which laid the important basis of perceived quality of consumers related to fresh e-commerce consumption. The research on consumers who have not purchased fresh products online also proves that logistics service quality, word of mouth, brand image of origin and customer communication
service quality have an impact on fresh e-commerce consumers. According to the conclusions of the study, this paper puts forward targeted suggestions for fresh e-commerce enterprises, which possess certain practical guiding significance for fresh e-commerce enterprises to take actions.

**Keywords**: External clues; Perceived quality; Fresh e-commerce; Fresh e-commerce consumers
外部线索对生鲜电商消费者感知质量的影响研究

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摘要

随着互联网经济的不断发展，居民生活水平不断提高，消费者对于便捷生活的追求刺激着电商行业的蓬勃发展。作为电商行业新兴领域的生鲜电商在近年来展现出强大的生命力。研究以线索理论为理论基础，从生鲜电商外部线索信息的视角来衡量生鲜电商消费者的感知质量影响因素。综合外部线索、顾客感知质量以及生鲜产品的特征选择了物流服务质量、口碑、产地品牌形象和沟通服务质量四个变量进行与感知质量的相关假设检验，最终得出结论：物流服务质量、口碑、产地品牌形象和沟通服务质量皆与感知质量呈正向相关，是生鲜电商消费者感知质量的重要依据；对未网上购买过生鲜产品的消费者研究调查中，证明了物流服务质量、口碑、产地品牌形象以及客户沟通服务质量对生鲜电商消费者存在影响。根据研究所得结论对生鲜电商企业提出有针对性建议，这对生鲜电商企业具有一定的现实指导意义。

关键词：外部线索；感知质量；生鲜电商；生鲜电商消费者

1 引言

我国的生鲜电商从2005年开始得到发展，但真正的兴起是从2013年开始，越来越多消费者的购买行为从传统菜场转移到线上。越来越多的生鲜开始涉足线上销售，建立自营生鲜电商平台。同时，腾讯、阿里巴巴等大型企业纷纷投入大量资金扶持各类生鲜电商平台，资本带来的大量现金流和资源越发加剧了生鲜电商领域的竞争。生鲜电商的发展为生鲜产品经营者带来了巨大商机，也为研究电商行业发展的研究人员提供了新的研究方向。

生鲜产品的网上消费者在网络购物情境中面临着复杂的信息线索环境，对于生鲜电商消费者来说如何在复杂的信息线索中筛选出自己满意的信息是一种考验。而外部线索信息往往是生鲜电商经营者和消费者可利用的最直接、便利的信息渠道，因此，研究在网络购物环境中的外部线索信息如何影响生鲜电商消费者的感知质量，影响程度如何显得尤为重要。通过研究结论的反馈对生鲜电商经营者优化原有经营方式、经营策略提供支持，也为生鲜电商经营者未来的经营战略指引方向，对促进生鲜电商市场的发展具有重要的现实意义。

2 研究模型及假设
2.1 变量选择

产品的外部线索区别于内部线索最大的特征在于它附属产品但又具有独立性，可以随着需要做出相应的改变，比如价格、包装、产地或者是品牌等等。传统观点认为，消费者更可能依赖产品内部线索而不是外部线索来判断产品质量。然而，由于消费者与产品之间的时空隔离，往往依赖于产品的外部线索。通过大量的文献阅读，笔者总结了网络购物背景下一些较为重要的外部线索：品牌形象、口碑、价格、物流服务、广告、店铺形象和服务承诺。

在上述关于顾客感知质量研究中可以看出，影响顾客感知质量的影响因素主要包括营销沟通、销售、形象、口碑、公共关系和顾客需求六个方面，其中营销沟通在网络购物情境中主要以客服沟通、营业推广、商家广告等形式来影响消费者感知质量。

生鲜产品由于它本身具有的自然属性，相较于其他一般性产品而言保质期短、易损耗、对物流技术和保鲜技术要求极高。如何有效地、全面地向消费者提供新鲜产品是生鲜供应商的一项重大考验。大多数的生鲜产品是不具备自己的品牌效应的，由于生鲜产品的品质、口味取决于它们所处的地理环境，水土气候因素，消费者更倾向于关注生鲜产品的产地品牌，比如山东烟台苹果、阳信鸭梨、台湾凤梨等等；生鲜产品是体验类产品，在网络购物情境下无法体验生鲜产品实际质量时，购后评价就显得格外重要，消费者会从大量的购后评价中筛选出对自己有利的信息，店铺口碑的好坏也影响着消费者对该网店的感知质量从而影响消费者购买决策。除了以上三点，影响消费者网上购买生鲜产品的因素还包括食品安全、价格、口味、平台服务质量等等。

本文研究的是外部线索对生鲜电商消费者感知质量的影响研究，综合三方因素考虑，选取物流服务质量、口碑、产地品牌形象、沟通服务质量四个因素作为自变量，构建本文的研究模型并提出相应假设。

2.2 研究理论模型

在阅读整理相关文献中发现，消费者在购买前感知质量的影响因素主要包括营销沟通、形象、口碑、公共关系及客户需求等。在网络购物情境中，消费者利用内部线索评价产品质量的能力有限，更多是利用外部线索来评价产品质量是否满足其需求，从而做出购买决策。本文研究的主体为生鲜电商消费者，由于生鲜产品的自然属性需结合外部线索和感知质量的影响因素综合考虑，本文选取物流服务质量、口碑、产地品牌形象、沟通服务质量作为自变量，把感知质量作为因变量，提出本文的研究模型如下：
2.3. 研究假设

2.3.1 物流服务质量的相关假设

物流一直是网络购物中火热的研究话题，自生鲜电商行业发展以来，生鲜产品的物流技术更是人们关注重点。最早对农产品物流进行研究的是美国学者Growell（1901），首次论述了影响农产品配送成本的各种因素。随着物流技术的发展和消费者需求的变化，农产品冷链物流成为近年来学者们研究的新方向。生鲜电商提供的物流服务在很大程度上影响消费者的感知质量。在网络购物情境中，物流一直是影响消费者感知质量和满意度重要因素，速度、服务态度以及信息反馈等都是消费者衡量该物流是否满足需求的指标。就生鲜产品而言，物流不仅代表的是速度，更代表着产品是否新鲜安全。物流服务已经成为生鲜电商消费者是否做出购买决策的重要衡量标准。

综上所述，本文对物流服务质量与感知质量的关系提出以下假设：

H1：物流服务质量与生鲜电商消费者感知质量正相关。

2.3.2 口碑的相关假设

消费者在购买产品后会进行相应的评价，不论是在线下或者线上，这些购后评价会产生一个庞大的信息流通系统，在这些信息流通过程中消费者会对产品质量达成一个共识从而形成口碑。较早对口碑展开研究的学者Amdt（1987）认为口碑是一种私人的、口头的信息交流过程。国内学者许利华（2008）、郭会斌（2005）将口碑理解为顾客推荐，顾客在购买到心仪且好用的产品就会有意识的向身边也在使用或希望拥有该类型产品的顾客或潜在顾客推荐这款产品，而对于不好用的产品也会向身边的人抱怨，造成负面评价。口碑来自他人已消费后的感知评价，随着互联网技术的不断革新，信息传播更加通畅，口碑在网络购物情境中起到了至关重要的作用。对生鲜产品而言，消费者在无法感知其实际质量时，购后评价形成的口碑影响着消费者决策。笔者认为：口碑影响着顾客对产品的感知质量从而影响消费者购买决策。

综上所述，本文对口碑与感知质量的关系提出以下假设：

...
2.3.3 产地品牌形象的相关假设

品牌形象是消费者对品牌的总体感知，影响消费者对品牌产品的购买行为（范秀成，陈杰，2002）。Biel（1993）认为品牌形象是消费者心中与品牌相联系的属性集合，是消费者对品牌的主观感觉。诸多研究证明，品牌对感知质量有明显的影响，Milgrom & Roberts（1986）的研究认为当消费者不熟悉产品时，通常会通过品牌名称和品牌形象来推测产品质量。品牌形象是消费者判断产品质量的重要线索，就生鲜电商行业而言，生鲜农产品受地理因素影响，质量和口味有所差异，消费者更加关注的是生鲜产品的产地品牌形象。

综上所述，本文对产地品牌形象与感知质量的关系提出以下假设：

H3：产地品牌形象与生鲜电商消费者感知产品质量正相关。

2.3.4 沟通服务质量的相关假设

线上购物如何做好营销沟通是商家保留现有客户发展潜在客户的重要过程。营销沟通就是在某种商品和服务信息传递中企业和顾客的认同程度交涉，以促进某种商品和服务交流的所有的构成因素（胡丹，2015）。营销沟通的主要途径有广告、人员推销、营业推广、公共关系等。在网络购物情景中，商家的营销沟通手段有以下三种：

广告——通过视频、图片、购后评价截图以及在微博等社交平台名人推荐等方式介绍产品的质量、特性等。

客服——以双向交流的方式对消费者所提出的问题进行解释说明，及时获取顾客信息，与顾客建立联系。

商业促销——是指赠送样品、赠券、以旧换新、降价、打折、奖品等方法。

做好营销沟通是与消费者建立良好的信任关系，保持联系的重要手段之一。在笔者看来，商家沟通服务质量也是消费者对产品感知质量的重要影响因素。

综上所述，本文对沟通服务质量与感知质量的关系提出以下假设：

H4：沟通服务质量与生鲜电商消费者感知产品质量正相关。

综合以上假设，本文所有研究假设汇总如下：

表格 1. 假设汇总表

<table>
<thead>
<tr>
<th></th>
<th>假设汇总表</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>物流服务质量与生鲜电商消费者感知质量正相关。</td>
</tr>
<tr>
<td>H2</td>
<td>口碑与生鲜电商消费者感知产品质量正相关。</td>
</tr>
<tr>
<td>H3</td>
<td>产地品牌形象与生鲜电商消费者感知产品质量正相关。</td>
</tr>
<tr>
<td>H4</td>
<td>沟通服务质量与生鲜电商消费者感知产品质量正相关。</td>
</tr>
</tbody>
</table>
3 研究设计

3.1 研究对象的选择

本文的研究对象是电商行业，选择其中新兴的生鲜电商平台领域原因有以下几点:

（1）2005年开始，生鲜电商开始在我国电商行业崭露头角并不断发展。自2010年开始，国内生鲜电商市场不断增长，到2017年中国生鲜电商市场交易规模约为1391.3亿元。本文对生鲜电商研究的结论对日后生鲜产品的相关问题研究有着一定意义。

（2）随着网络购物的普及，越来越多的消费者愿意在网上购买生活中所需要的必需品。生鲜电商作为新兴的电商领域，发展趋势良好，不仅只是生鲜企业，还有许多线下大型超市为满足顾客需求，保持客流纷纷选择涉足生鲜电商领域。外部线索信息是生鲜电商经营者和消费者可利用的最直接、便利的信息渠道，外部线索信息如何影响生鲜电商消费者，影响程度如何，经营者便可以从这些信息反馈中对经营方式、经营策略等加以改善和调整。本文通过研究外部线索，可为生鲜电商经营者如何制定经营策略指引方向，有利于推动该产业的研究与发展，填补研究空白。

（3）随着我国电商行业的不断发展，人们对便捷生活的不断追求，其相应的竞争也逐渐加剧，生鲜电商作为新兴产业，表现的尤为突出。对生鲜电商的研究有助于促进生鲜电商在市场上的良性的竞争。

3.2 研究样本

本文选取生鲜电商消费者作为研究样本，考虑到生鲜产品涉及果蔬、水产、肉制品以及鲜花等多个品类，几乎涉及到每一个年龄层次，但因为生鲜产品特殊的自然属性，有些消费者不会选择网上购买，所以本文的研究样本将分为在网络购物平台购买过和未购买过生鲜产品的消费者。

3.3 量表设计

开发量表的主要目的在于对所构建的模型中的变量进行结构化与测量，使其可操作。本文中涉及物流技术、口碑、产地品牌形象和沟通服务质量四个变量的量表，针对不同的变量和不同的研究样本，具体的量表和题项内容如下。

3.3.1 物流服务质量测量量表

Mentzer（1999）等人开发了有关物流服务质量测量的LSQ量表，包含了信息质量、订货过程、货品质量、时间、货品精确率、订单释放数量、误差处理质量、人员沟通质量以及货品完好程度九个维度的测量指标。本文主要参考了Mentzer等人的LSQ量表，结合生鲜产品的特征得出以下测量题项

QA1.我觉得配送速度快
QA2.我觉得收到货后产品保鲜程度较好
QA3.收货时包裹完整
QA4.人员服务态度好
QA5. 物流信息反馈及时且准确

3.3.2 口碑测量量表

本文主要参考了蔡继辉(2009)所使用的量表，结合生鲜产品的实际特征得出以下测量题项：

QB1. 购买前，我会搜集他人关于产品的评价口碑信息
QB2. 我相信他人的评价信息是正确的
QB3. 我会率先考虑评价较好的店铺
QB4. 我认为大多数评价是出于帮助他人的意图

3.3.3 产地品牌形象测量量表

一直以来的研究显示品牌形象对感知质量有显著影响，关于品牌形象的测量量表很多，而本文的对象是生鲜产品，更关注产品的产地品牌形象，因此本文修改董大海(25)的量表并参考了 Main & Eroglu（1993）、冯明宇（2012）所使用的量表，结合生鲜产品产地的实际特征，得到以下测量题项：

QC1. 该产品的原产地给我的总体印象好
QC2. 该产地品牌是值得信赖的
QC3. 我认为该产地的产品比其他产地的质量好
QC4. 我会优先选择购买有产地品牌的产品

3.3.4 沟通服务质量测量量表

关于服务质量的测量，本文参考了由美国教授 Parasuraman& Zeithaml & Berry（1985）三人开发出的 SERVQUAL 的多向量表，测量的是服务质量的五大要素：可靠性、响应性、保证性、移情性、有形性[28]。得到以下测量题项：

QD1. 和客服交流过程中他所提供的相关信息是可靠的
QD2. 向客服询问产品信息能及时得到回应
QD3.沟通过程中客服态度良好
QD4.优惠承诺和赔偿承诺真实且可兑现

3.3.5 感知质量的测量量表

对于感知质量的测量有很多成熟的量表可以参考，本文在翻阅相关文献后选择了 Dodds 等人（1991）开发的量表为基础并做一定修改，得到以下测量题项：

QE1. 我认为网上购买生鲜产品是可靠的
QE2. 我认为网上购买的生鲜产品总体质量好
QE3. 我认为网上购买生鲜产品给我的感知体验良好

3.3.6 未在网上购买过生鲜产品的消费者测量题项
QF1. 您是否有意愿在网上购买生鲜产品
QF2. 如果在网上购买生鲜产品，您会考虑哪些因素
QF3. 什么会吸引您去网上购买生鲜产品
QF4. 您不在网上购买过生鲜产品的原因

4 数据分析

4.1 样本分析

本文问卷调查以网络调研的方式进行，分别在微信、腾讯 QQ、知乎网、微博四个社交平台进行问卷发放，共回收 222 份有效问卷。本文的消费者特征信息包括年龄和性别，具体分布如下表：

表格 2. 调研样本描述统计表

<table>
<thead>
<tr>
<th>样本统计特征</th>
<th>分类</th>
<th>样本数</th>
<th>百分比(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>您的性别</td>
<td>男</td>
<td>90</td>
<td>40.5</td>
</tr>
<tr>
<td></td>
<td>女</td>
<td>132</td>
<td>59.5</td>
</tr>
<tr>
<td>您的年龄</td>
<td>20 岁以下</td>
<td>30</td>
<td>13.5</td>
</tr>
<tr>
<td></td>
<td>20~30 岁</td>
<td>110</td>
<td>49.5</td>
</tr>
<tr>
<td></td>
<td>30~50 岁</td>
<td>76</td>
<td>34.2</td>
</tr>
<tr>
<td></td>
<td>50 岁以上</td>
<td>6</td>
<td>2.7</td>
</tr>
<tr>
<td>是否购买过</td>
<td>是</td>
<td>120</td>
<td>54.1</td>
</tr>
<tr>
<td></td>
<td>否</td>
<td>102</td>
<td>45.9</td>
</tr>
<tr>
<td>合计</td>
<td></td>
<td>222</td>
<td>100</td>
</tr>
</tbody>
</table>

在研究样本中对于是否在网上购买过生鲜产品的调查，购买与未购买过的相差不大，分别为 54.1% 和 45.9%。从研究的样本统计特征中可以看出，样本在性别方面分布较为均衡，在年龄方面，除 50 岁以上的调查样本其它样本数量相差不大，在网上购买过与未购买过生鲜产品的样本数量接近一致，样本的分布较为广且均匀，因此研究具有普遍意义。

4.2 信度分析

信度分析即可靠性分析，常用于同一对象的一致性分析，是数据分析的一部
学术界较为认可 Cronbach 的 α 值，它决定了测量问题的可靠性。当 α 值大于 0.7 时，测量问题更可靠。当 α 值小于 0.7 时，可靠性一般或不可靠。本文依次对物流服务质量、口碑、产地品牌形象、沟通服务质量以及感知质量的问项进行了信度分析，列表如下。根据信度分析结果可知，物流服务质量、口碑、产地品牌形象、沟通服务质量以及感知质量的信度系数 Cronbach'sα 值依次为 0.890、0.784、0.888、0.886、0.929，皆大于 0.7，在置信区间内，内部一致性良好，不需要删除不一致问项。这表明该量表可靠性达到了标准，可靠性较高，可用于后续的研究和分析。

### 表格 3. 物流服务质量信度分析

<table>
<thead>
<tr>
<th>变量</th>
<th>问项</th>
<th>删除项后的克隆巴赫 Alpha</th>
<th>Cronbach'sα</th>
</tr>
</thead>
<tbody>
<tr>
<td>物流服务质量</td>
<td>我觉得配送速度快</td>
<td>0.884</td>
<td></td>
</tr>
<tr>
<td></td>
<td>我觉得收到货后产品保鲜程度较好</td>
<td>0.875</td>
<td></td>
</tr>
<tr>
<td></td>
<td>收货时包裹完整</td>
<td>0.859</td>
<td>0.890</td>
</tr>
<tr>
<td></td>
<td>人员服务态度好</td>
<td>0.864</td>
<td></td>
</tr>
<tr>
<td></td>
<td>物流信息反馈及时且准确</td>
<td>0.849</td>
<td></td>
</tr>
</tbody>
</table>

### 表格 4. 口碑信度分析

<table>
<thead>
<tr>
<th>变量</th>
<th>问项</th>
<th>删除项后的克隆巴赫 Alpha</th>
<th>Cronbach'sα</th>
</tr>
</thead>
<tbody>
<tr>
<td>口碑</td>
<td>购买前，我会搜集他人关于产品的评价口碑信息</td>
<td>0.708</td>
<td></td>
</tr>
<tr>
<td></td>
<td>我相信他人的评价信息是正确的</td>
<td>0.740</td>
<td>0.784</td>
</tr>
<tr>
<td></td>
<td>我会率先考虑评价较好的店铺</td>
<td>0.681</td>
<td></td>
</tr>
<tr>
<td></td>
<td>我认为大多数评价是出于帮助他人的意图</td>
<td>0.800</td>
<td></td>
</tr>
</tbody>
</table>
### 表格 5. 产地品牌形象信度分析

<table>
<thead>
<tr>
<th>变量</th>
<th>问项</th>
<th>删除项后的克隆巴赫 Alpha</th>
<th>Cronbach'sα</th>
</tr>
</thead>
<tbody>
<tr>
<td>产地品牌形象</td>
<td>该产品的原产地给我的总体印象好</td>
<td>0.856</td>
<td></td>
</tr>
<tr>
<td></td>
<td>该产地品牌是值得信赖的</td>
<td>0.829</td>
<td>0.888</td>
</tr>
<tr>
<td></td>
<td>我认为该产地的产品比其他产地的质量好</td>
<td>0.848</td>
<td></td>
</tr>
<tr>
<td></td>
<td>我会优先选择购买有产地品牌的产品</td>
<td>0.887</td>
<td></td>
</tr>
</tbody>
</table>

### 表格 6. 客户沟通服务质量信度分析

<table>
<thead>
<tr>
<th>变量</th>
<th>问项</th>
<th>删除项后的克隆巴赫 Alpha</th>
<th>Cronbach'sα</th>
</tr>
</thead>
<tbody>
<tr>
<td>沟通服务质量</td>
<td>和客服交流过程中他所提供的相关信息是可靠的</td>
<td>0.855</td>
<td></td>
</tr>
<tr>
<td></td>
<td>向客服询问产品信息能及时得到回应</td>
<td>0.852</td>
<td>0.886</td>
</tr>
<tr>
<td></td>
<td>沟通过程中商家服务态度良好</td>
<td>0.853</td>
<td></td>
</tr>
<tr>
<td></td>
<td>优惠承诺和赔偿承诺真实且可及时兑现</td>
<td>0.853</td>
<td></td>
</tr>
</tbody>
</table>

### 表格 7. 感知质量信度分析

<table>
<thead>
<tr>
<th>变量</th>
<th>问项</th>
<th>删除项后的克隆巴赫 Alpha</th>
<th>Cronbach'sα</th>
</tr>
</thead>
<tbody>
<tr>
<td>感知质量</td>
<td>我认为网上购买生鲜产品是可靠的</td>
<td>0.911</td>
<td></td>
</tr>
<tr>
<td></td>
<td>我认为网上购买的生鲜产品总体质量好</td>
<td>0.871</td>
<td>0.929</td>
</tr>
<tr>
<td></td>
<td>我认为网上购买生鲜产品给我的感知体验良好</td>
<td>0.908</td>
<td></td>
</tr>
</tbody>
</table>
### 4.3 外部线索与生鲜电商消费者感知质量的相关性假设检验

二元变量的相关分析是指通过测量变量间的相关系数来分析变量之间的两两相关程度。皮尔逊简单相关系数是比较常用的相关分析系数法，相关系数的强度大小如表 5.7 所示：

<table>
<thead>
<tr>
<th>相关系数范围（绝对值）</th>
<th>变量间关联程度</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>完全相关</td>
</tr>
<tr>
<td>0.70 至 0.99</td>
<td>高度相关</td>
</tr>
<tr>
<td>0.40 至 0.69</td>
<td>中度相关</td>
</tr>
<tr>
<td>0.10 至 0.39</td>
<td>低度相关</td>
</tr>
<tr>
<td>0.10 以下</td>
<td>微弱或无关</td>
</tr>
</tbody>
</table>

### 4.3.1 物流服务质量与感知质量的相关分析

本小节分析自变量物流服务质量与因变量感知质量间的相关关系，分析结果如下表所示：

<table>
<thead>
<tr>
<th>感知质量</th>
<th>感知质量</th>
<th>物流</th>
</tr>
</thead>
<tbody>
<tr>
<td>皮尔逊相关性</td>
<td>1</td>
<td>.518**</td>
</tr>
<tr>
<td>显著性（双尾）</td>
<td>0.000</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>物流</th>
<th>感知质量</th>
<th>物流</th>
</tr>
</thead>
<tbody>
<tr>
<td>皮尔逊相关性</td>
<td>.518**</td>
<td>1</td>
</tr>
<tr>
<td>显著性（双尾）</td>
<td>0.000</td>
<td></td>
</tr>
</tbody>
</table>

**. 在 0.01 级别（双尾），相关性显著。

由上述分析可知，物流服务质量与感知质量间的皮尔逊相关系数为 0.518**，p=0.000，也就是说在 0.01 的显著水平上物流服务质量与感知质量间呈正向中度相关，假设 H1 成立。

可见，物流服务质量可以作为影响消费者网上购买生鲜产品感知质量的指示器。物流作为电商行业不可或缺、日渐发展的一个版块，会随着互联网时代的发展不断扩大规模，不断进行技术革新以顺应消费者不断变化的消费需求。生鲜农
产品对温度空气的要求十分严苛，这就要求生鲜电商在选择合作物流商时需考虑他的速度、冷藏技术等，随着冷链物流技术的发展，为生鲜电商提供了极大的便利性。然而国内的冷链物流技术发展仍在起步阶段，使用成本高，对生鲜电商来说也是一个负担。而对于消费者而言，当从下单到收货的过程简单快到超出预期且所购买的生鲜产品新鲜程度较好时，会产生一种心理暗示，他所感知到的服务质量提高了他的满意度从而会产生再光顾该店的潜在心理。

4.3.2 口碑与感知质量的相关分析

本章节分析自变量口碑与因变量感知质量间的相关关系，分析结果如表所示：

表格 10. 口碑与感知质量间的相关分析

<table>
<thead>
<tr>
<th>感知质量</th>
<th>口碑</th>
<th>皮尔逊相关性</th>
<th>显著性（双尾）</th>
</tr>
</thead>
<tbody>
<tr>
<td>感知质量</td>
<td>皮尔逊相关性</td>
<td>1</td>
<td>.552**</td>
</tr>
<tr>
<td></td>
<td>显著性（双尾）</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>口碑</td>
<td>皮尔逊相关性</td>
<td>.552**</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>显著性（双尾）</td>
<td>0.000</td>
<td></td>
</tr>
</tbody>
</table>

**. 在 0.01 级别（双尾），相关性显著。

由上述分析可知，口碑与感知质量间的皮尔逊相关系数为 0.552**，p=0.000，也就是说在 0.01 的显著水平上两者呈正向中度相关，即假设 H2 成立。

可见，口碑是影响消费者网上购买生鲜产品感知质量的重要线索。消费者在购买产品过程中和使用产品后都会对该产品做出主观评价，这些评价信息在沟通中会形成或好或坏的口碑效应。对于生鲜电商消费者而言，网上购买生鲜产品没有办法直接感受产品的实际质量，他人的评价就成了十分重要的线索。通过他人对生鲜产品的质量、新鲜度和对生鲜网店沟通服务、物流服务等多方面的评论，消费者从中提取对自己有利的信息，形成对该网店及产品或好或坏的感知，从而影响他们的购买决策。

4.3.3 产地品牌形象与感知质量的相关分析

本章节分析自变量产地品牌形象与因变量感知质量间的相关关系，分析结果如表 5.10 所示：
### 表格 11. 产地品牌形象与感知质量的相关分析

<table>
<thead>
<tr>
<th>感知质量</th>
<th>产地品牌形象</th>
<th>皮尔逊相关性</th>
<th>显著性（双尾）</th>
</tr>
</thead>
<tbody>
<tr>
<td>感知质量</td>
<td></td>
<td>0.657**</td>
<td>0.000</td>
</tr>
<tr>
<td>产地品牌形象</td>
<td></td>
<td>0.657**</td>
<td>1</td>
</tr>
</tbody>
</table>

**. 在 0.01 级别（双尾），相关性显著。

由上述分析可知，产地品牌形象与感知质量间的皮尔逊相关系数为 0.657**, p=0.000，也就是说在 0.01 的显著水平上产地品牌形象与感知质量间呈正向中度相关，即假设 H3 成立。

可见，产地品牌形象也是影响消费者网上购买生鲜产品感知质量的重要线索。生鲜产品不像其他产品拥有自己的品牌，大多都以产地形象来代表产品形象比如来自武汉洪山原产地的菜薹、山东烟台苹果、奉节脐橙以及日本神户牛肉等等。这些生鲜产品的原产地本身在消费者脑海里留有深刻的印象，使消费者形成了一种惯性思维：某产品还是某产地的最好，某产地的产品有什么样的特点等等。陆卫平(2008)认为这是一种光环效应，即是一种“地区声誉”，而“地区声誉”则是产品的一个值得信赖的外在线索。

### 4.3.4 沟通服务质量与感知质量的相关分析

本小节分析沟通服务质量与感知质量间的相关关系，分析结果如表 5.11 所示。数据显示，沟通服务质量与感知质量间的皮尔逊相关系数为 0.775**, p=0.000，也就是说在 0.01 的显著水平上沟通服务质量与感知质量间呈正向高度相关，即假设 H4 成立。

可见，沟通服务质量对消费者网上购买生鲜产品感知质量有很大的影响。随着时代的发展，各行各业对服务质量的要求不断提高，消费者能够通过感知企业提供的服务质量和客户之间的关系，对企业的服务质量和产品的主观印象，从而形成对这个企业的服务质量和产品的主观印象，在服务社会中，拿海底捞举例，因为它的高质量服务给消费者带来了极高的感知价值，即使在价格高，菜品没有十分突出，竞争对手极多的情况下，依然有很多消费者趋之若鹜。生鲜产品也不例外。商家的在线服务不仅仅局限于客服沟通，还包括了购后回访、广告投放、优惠提醒以及消费者需求满足等等。当然，感知到的沟通服务质量高并不代表消费者会因此做出购买决策，但在生鲜产品的质量没有过多差异的情况下，生鲜产品消费者会首先考虑服务质量较高的商家。
### 表格 12. 沟通服务质量与感知质量的相关分析

<table>
<thead>
<tr>
<th>感知质量</th>
<th>沟通服务质量</th>
</tr>
</thead>
<tbody>
<tr>
<td>皮尔逊相关性</td>
<td>1</td>
</tr>
<tr>
<td>显著性（双尾）</td>
<td></td>
</tr>
<tr>
<td>沟通服务质量</td>
<td>.775**</td>
</tr>
<tr>
<td>显著性（双尾）</td>
<td></td>
</tr>
</tbody>
</table>

**. 在 0.01 级别（双尾），相关性显著。**

#### 4.3.5 对不再选择网上购买生鲜产品的消费者样本分析

通过对回收问卷的分析, 120 个网上购买过生鲜产品的有效样本中包含了 13 个不会再次购买的样本。对于不会重购的原因进行分析, 除了对内部线索产品本身质量不满意外, 外部线索中，物流、便捷性因素极大影响着消费者的购买决策，还有其他原因，因本文问卷设计不全面，无法提供参考。而服务质量和平台体验对该部分样本影响较小, 原因有可能是两个方面: 一是平台服务和商家服务较好，二是该部分的样本不关注平台服务和商家服务，作者较偏向于前者。具体分析见下图:

**图片 2. 不再购买原因分析**

#### 4.3.6 未在网上购买过生鲜产品消费者样本分析

如表格 13 所示，在 102 份样本中，有 62 份样本表示没有网上购买生鲜产品的意愿，占比 60.8%。在对该部分样本的意愿分析中，没有购买意愿的原因如图 5.2 所示。对于有意愿在网上购买生鲜产品的样本，哪些因素会吸引他们网上购
买生鲜产品笔者也做了相应的调查，具体如图3所示。

### 表格13. 是否有网上购买生鲜产品意愿

<table>
<thead>
<tr>
<th></th>
<th>频率</th>
<th>百分比</th>
<th>有效百分比</th>
</tr>
</thead>
<tbody>
<tr>
<td>有效</td>
<td>是</td>
<td>40</td>
<td>18.0</td>
</tr>
<tr>
<td></td>
<td>否</td>
<td>62</td>
<td>27.9</td>
</tr>
<tr>
<td>总计</td>
<td></td>
<td>102</td>
<td>45.9</td>
</tr>
</tbody>
</table>

图片3. 没有购买意愿原因分析图

图片4. 影响购买因素分析
考虑因素

图片 3 分析可知，在有没有购买意愿中，仍是内部线索中的产品实际质量对该部分样本的影响最大。除去内部线索信息，外部线索中的物流、便捷性、广告、评价以及其它线索信息占比不大，其中购后评价信任度低占比仅有 19.4%，可见，该部分样本对于他人的购后评价信息是较为信任的；便捷性占比最高，超过 50%，而这里的便捷性一定意义上包含了物流速度和产品质量因素。

在图 5 中，口碑占比最高，67.5%的样本人群表示愿意在亲朋的推荐下选择购买生鲜产品，物流、优惠以及产地品类占比均超过 60%，而广告吸引所占比例较少，仅有 35%。

图 4 显示的是对未网上购买过生鲜产品但有可能会购买的样本考虑因素的调查分析，由图可知，物流服务、口碑、价格所占比例在 60%以上，原产地和商家沟通服务质量占比接近 50%，广告的影响最小，只占 8.8%。

4.4 小结
4.4.1 假设验证

本章基于问卷调查中的数据将样本分为四类：网上购买过生鲜产品中愿意重购和不愿重购样本，未网上购买过生鲜产品中有意愿购买和无意购买样本。首先对网上购买过生鲜产品的分析验证物流服务质量、口碑、产地品牌形象、沟通服务质量与感知质量间的相关性，得到以下结果，如表 14 所示。

<table>
<thead>
<tr>
<th>相关变量</th>
<th>系数值</th>
<th>关联程度</th>
<th>假设</th>
</tr>
</thead>
<tbody>
<tr>
<td>物流服务质量与感知质量</td>
<td>0.518</td>
<td>中度相关</td>
<td>H1 成立</td>
</tr>
</tbody>
</table>

表格 14. 实证分析结论
### 4.4.2 分析总结

对于不愿重购的样本分析，除了对内部线索产品本身质量不满意外，外部线索中，物流、便捷性因素极大影响着消费者的购买决策，侧面验证假设 H1；而服务质量与平台体验对该部分样本影响较小，原因有可能是两个方面：一是平台服务和商家服务较好，二是该部分的样本不关注平台服务和商家服务，假设 H4 无法验证。

未网上购买过生鲜产品中有意愿购买和无意愿购买样本分析中，62 份样本数据显示无意愿在网上购买生鲜产品，在没有购买意愿原因分析中，仍是内部线索产品实际质量对该部分样本的影响最大，除去内部线索信息，外部线索中的物流、便捷性、广告、评价以及其它线索信息占比不大，其中购后评价信任度低占比仅有 19.4%，可见，该部分样本对于他人的购后评价信息是比较信任的；便捷性占比最高，超过 50%，而这里的便捷性一定意义上包含了物流速度和产品质量因素。40 份有意购买样本数据显示，口碑占比最高，67.5% 的样本人群表示愿意在亲朋的推荐下选择购买生鲜产品；物流、优惠以及产地品类占比皆超过 60%，而广告吸引所占比例较少，仅有 35%。这项分析结果侧面论证了物流服务质量、口碑、服务质量以及产地品牌形象对消费者感知质量具有影响。

最后对未网上购买过生鲜产品的样本在有机会购买时会考虑的因素分析中，物流服务、口碑、价格所占比例在 60% 以上，原产地和商家沟通服务质量占比接近 50%，客户沟通服务质量中，广告的影响最小，只占 8.8%。

以上的分析结果均验证了物流服务质量、口碑、产地品牌形象以及沟通服务质量均对消费者感知质量存在影响，结果符合假设。

### 5 研究结论与展望

#### 5.1 研究结论

国内对生鲜电商的研究尚在起步阶段，多以发展前景、电商模式为主。本文基于外部线索理论研究了物流服务质量、口碑、产地品牌形象、沟通服务质量、感知质量的关系得出以下结论：

首先，对在网上购买过生鲜产品的消费者研究分析，物流服务质量、口碑、沟通服务质量、产地品牌形象等外部线索是影响生鲜电商消费者感知质量的重要因素。本文的研究结果显示，对于在线购买生鲜产品而言，物流服务质量、口碑、产地品牌形象与感知质量呈中度正相关，客户沟通服务质量与感知质量呈高度正相关。

其次，对未网上购买过生鲜产品的消费者研究调查中，皆证明了物流服务质量、口碑、产地品牌形象以及客户沟通服务质量对生鲜电商消费者存在影响。
中物流服务质量和口碑的影响最大。

再者，除了笔者所提取的四点外部测量线索，价格、包装、品类、购买程序等等也对消费者感知质量存在一定的影响，但这些变量对生鲜电商消费者感知质量的影响程度如何还需要进一步研究。

物流服务质量、口碑、产地品牌形象、沟通服务质量与感知质量呈正相关。本文未对物流服务质量、口碑、产地品牌形象、客户沟通服务质量等外部线索如何通过感知质量影响消费者购买意愿进行研究，这将在下一个阶段做进一步研究。

5.2 管理启示

物流是电商行业不可缺少的重要环节。在网络购物情境中，消费者总会考虑选择的物流是否快，服务是否全面，物流过程中商品是否完好等等；口碑信息是消费者在购买前感知产品质量的重要线索；原产地品牌形象是生鲜产品的身份标识，出于惯性思维的影响，消费者对某特定类别产品会产生只有某产地的正宗、品质好等主观印象；当代社会是一个服务型社会，各行各业的客户沟通服务质量很大程度上影响着消费者主观评价。

根据本文研究结果，特提出以下建议：

(1) 加强员工培训，完善信息反馈机制，提高物流服务质量

物流工作人员的态度在一定程度上传达着整个物流企业的服务质量信息，消费者通过观察工作人员服务质量线索来评价该物流企业整体的服务质量。对物流企业内部人员进行服务意识培训，端正服务人员工作态度，加强服务意识，提高工作人员的服务质量，避免出现快递员内部偷盗、擅自拆件、拒绝送货上门等不良现象。笔者认为可在每个中转站设置实名签到制度，将每个拣货员和派件员所负责的快件进行实名制审核，责任做到个人，如有丢失、擅自拆件等事件发生能够快速、明确地找到责任人并作出及时的补救措施，减少消费者的不满。送货上门对各物流企业来说都是必须提供的服务，但由于各物流企业在区域设置了许多快递服务站，一般性的快件都是短信通知自取而非送货上门，即使消费者要求派件员大多也会直接送到快递收发点。对于这点笔者建议在购物平台的评价系统内增设专门的物流评价入口，方便商家在之后的经营中选择合适的物流企业。

建立完善的信息反馈机制，实时更新物流信息，杜绝虚假物流信息现象。现今很多物流企业信息更新不及时，发货信息延后、签收信息提前的现象屡见不鲜，在很大程度上给消费者带来不好的影响。

(2) 加强评论机制监管，杜绝刷评现象

他人的购后评价作为消费者购买决策前重要的外部影响线索，是否准确可靠是消费者十分关心的。在淘宝、天猫等第三方购物网站上，有很多商家存在刷评现象，除了雇人刷好评之外，商家还通过与买家协商以返现、赠品等形式要求卖家删除差评，这在很大程度上影响了其它消费者对评价信息的处理判断，容易误导消费者，易造成感知与实际不符，降低感知质量。第三方购物平台须建立购后评价监管机制，对于违规操作的商家进行罚款、关店等相应的惩罚，从根源杜绝刷评恶行。

(3) 加强网站内容建设，建立有效的监管机制
外部线索在广义上讲包含了产品的价格、包装、广告等等一切非产品本身的性质，网站的内容就几乎涵盖了大部分的外部线索。网站内容建设包括产品的价格、广告、优惠信息以及产品其它相关信息，通过有效的监管机制审核商家是否存在虚报价格、发布虚假广告和优惠信息等违规违法行为，并对商家进行罚款、关闭店铺等惩罚措施。

（4）加强沟通渠道建设，提高沟通质量

沟通是获得消费者信任的有效手段，消费者通过与商家沟通了解产品的信息线索，接收处理后作出相应的购买决策，商家通过与消费者沟通了解客户需求。在网络购物情境中最普遍、最方便的获取线索的沟通方式就是客服沟通，然而如果该网店客服质量差，沟通不到位就会导致潜在消费者的流失。对于沟通渠道的建设笔者认为无需增加其他渠道，只需要在客服的基础上增加一个投诉机制，第三方购物平台对每个入驻的网店设置形象积分，限定时间内客服人员没有对消费者的提问进行回答，系统会自动进行相应分值的扣除和自行投诉，当扣除一定分值时，第三方购物平台会对该店铺进行相应的惩罚机制。

6. 致谢

本文得到湖北省高等学校人文社会科学重点研究基地产业政策与管理研究中心资助，系该中心2018-2019年度开放式基金《供给侧结构性改革视角下湖北现代农业产业体系优化策略研究》（项目编号：19CYY01）研究成果，特此感谢。

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附录 A

外部线索对生鲜电商消费者感知质量的影响研究

尊敬的先生/女士:

您好! 感谢您百忙之中抽空填写本次问卷!

本次问卷主要调查外部线索中物流、口碑、产地品牌形象以及沟通服务质量四个因素对生鲜电商消费者感知质量的研究，生鲜产品包括蔬果、鲜花、水产、肉类等，请根据您的实际体验或看法如实填写。本次问卷均为匿名填写，不涉及个人信息，仅供学术研究，绝不外泄!

感谢您的参与支持!

1. 您的性别 [单选题] *
   ○男  ○女

2. 您的年龄 [单选题] *
   ○20岁以下  ○20~30岁  ○30~50岁  ○50岁以上

3. 您是否在网络购物平台购买过生鲜产品（果蔬、鲜花、水产、肉类等） [单选题] *
   ○是 (请跳至第 4 题)  ○否 (请跳至第 11 题)

4. 您一般在哪些购物平台购买生鲜产品 [多选题] *
   □天猫  □淘宝  □京东  □美团  □各商超 APP  □其它

5. 您会继续选择网上购买生鲜产品吗 [单选题] *
   ○会  ○不会

6. 您不再选择网上购买生鲜产品的原因 [多选题] *
   □物流配送速度慢  □产品质量差  □不如去超市和农贸市场便捷
   □服务质量差  □购买平台体验差  □其它

7. 物流服务相关提问[矩阵量表题] *
<table>
<thead>
<tr>
<th></th>
<th>非常不赞同</th>
<th>不赞同</th>
<th>一般</th>
<th>赞同</th>
<th>非常赞同</th>
</tr>
</thead>
<tbody>
<tr>
<td>我觉得配送速度快</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>我觉得收到货后产品保鲜程度较</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>好</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>收货时包裹完整</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>人员服务态度好</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>物流信息反馈及时且准确</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. 口碑相关提问 [矩阵量表题] *

<table>
<thead>
<tr>
<th></th>
<th>非常不赞同</th>
<th>不赞同</th>
<th>一般</th>
<th>赞同</th>
<th>非常赞同</th>
</tr>
</thead>
<tbody>
<tr>
<td>购买前，我会搜集他人关于产品</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>的评价口碑信息</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>我相信他人的评价信息是正确的</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>我会率先考虑评价较好的店铺</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>我认为大多数评价是出于帮助他人的意图</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9. 产地品牌形象相关提问 [矩阵量表题] *

<table>
<thead>
<tr>
<th></th>
<th>非常不赞同</th>
<th>不赞同</th>
<th>一般</th>
<th>赞同</th>
<th>非常赞同</th>
</tr>
</thead>
<tbody>
<tr>
<td>该产品的原产地给我的总体印象好</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>该产地品牌是值得信赖的</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
我认为该产地的产品比其他产地的质量好

我会优先选择购买有产地品牌的产品

10. 沟通服务质量相关提问[矩阵量表题] *

<table>
<thead>
<tr>
<th>非常不赞同</th>
<th>不同</th>
<th>赞同</th>
<th>一般</th>
<th>赞同</th>
<th>非常赞同</th>
</tr>
</thead>
<tbody>
<tr>
<td>和客服交流过程中他所提供的相关信息是可靠的</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>向客服询问产品信息能及时得到回应</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>沟通过程中商家服务态度良好</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>优惠承诺和赔偿承诺真实且可及时兑现</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

11. 感知质量的相关提问[矩阵量表题] *

<table>
<thead>
<tr>
<th>非常不赞同</th>
<th>不同</th>
<th>赞同</th>
<th>一般</th>
<th>赞同</th>
<th>非常赞同</th>
</tr>
</thead>
<tbody>
<tr>
<td>我认为网上购买生鲜产品是可靠的</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>我认为网上购买生鲜产品总体质量好</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>我认为网上购买生鲜产品给我的感知体验良好</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

12. 您是否有意愿在网上购买生鲜产品 [单选题] *
13. 您知道哪些购物平台能够购买生鲜产品 [多选题] *

- 天猫
- 淘宝
- 京东
- 各商超APP
- 美团
- 其它

14. 您不愿在网上购买生鲜产品的原因 [多选题] *

- 物流配送速度慢
- 产品质量无法保证
- 不如去超市货农贸市场便捷
- 退换程序麻烦
- 虚假广告（产地、品类）
- 购后评价信任度低
- 其它

15. 哪些因素会吸引你在网络购物平台购买生鲜产品 [多选题] *

- 广告吸引
- 身边亲朋推荐
- 优惠力度
- 物流方便快捷
- 不同产地，品类丰富
- 其它

16. 如果要在网上购买生鲜产品您会考虑哪些因素 [多选题] *

- 物流服务
- 口碑
- 价格
- 包装
- 广告
- 优惠
- 原产地
- 商家沟通服务
- 其它

17. 您对生鲜电商有何看法或建议 [填空题]

______________________________
Research on Innovation Performance of Overseas M&As from Chinese Manufacturing industry —the Perspective of International Digital Gap

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¹School of Economics and Management, Beijing University of Posts and Telecommunications

Abstract

Based on the overseas M&As samples of Chinese manufacturing listed companies from 2003 to 2016, this paper explores the impact of different dimensions of the digital gap on the innovation performance of Chinese manufacturing companies’ overseas M&As, and draws conclusions through multiple regression and event research methods. International digital quality gap has a negative impact on the innovation performance of Chinese manufacturing companies’ overseas M&As. The regional digital level is positively regulating the above relationship; compared with the M&As of overseas service companies, when Chinese manufacturing companies acquire overseas manufacturing companies, the role of the international digital quality gap and regional digital level is significant; compared with the acquisition of low-complexity overseas knowledge, when Chinese manufacturing enterprises acquire high-complexity overseas knowledge, narrowing the international digital quality gap and improving the regional digital level are effective in
helping companies improve their innovation advantage. This paper explaining how manufacturing companies can grasp the digital opportunities, take advantage of the national, regional, industrial and intellectual effects of the digital economy, in order to achieve the innovative advantages through overseas M&As, is of great value to accelerate the transfer of Chinese consumer digitalization to industrial Internet resource allocation and help Chinese manufacturing enterprises to move toward the world innovation center.

**Keywords:** Overseas M&As; Innovation Performance; International Digital Scale Gap; Chinese Manufacturing

中国制造业海外并购创新绩效研究——基于国际间数字鸿沟的视角

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1 北京邮电大学经济管理学院

**摘要**

本文基于2003年至2016年的中国制造业上市公司海外并购样本，探索不同维度的数字鸿沟对中国制造业企业海外并购创新绩效的影响机制，通过多元回归与事件研究法得出结论，国际间数字质量鸿沟对中国制造业企业海外并购后创新绩效产生消极影响，区域数字化水平正向调节上述关系；相比于并购海外服务业的企业，中国制造业企业并购海外制造企业时，国际间数字质量鸿沟和区域数字化水平的作用显著；相比于获取低复杂度
的海外知识，中国制造业企业在获取高复杂度海外知识时，缩小国际间数字质量鸿沟和提高区域数字化水平对帮助企业提升创新优势的作用显著。本文阐释了制造业企业如何把握数字化机遇，利用数字经济下的国家效应、区域效应、产业效应与知识效应，通过海外并购兑现创新优势，对于加速中国消费端数字化向工业互联网资源配置的转移，助力中国制造业企业走向世界创新中心具有重要价值。

关键词：海外并购；创新绩效；国际间数字质量鸿沟；国际间数字规模鸿沟；中国制造业

1. 引言


中国信通院发布的《中国数字经济发展与就业白皮书（2019 年）》表明，中国数字化发展较快，2018 年，我国数字经济规模达到 31.3 万亿元，占 GDP 比重为 34.8%。《2018 全球数字经济发展指数》报告也说明了中国在数字消费者分指数表现最为突出，排名全球第一，中国的数字消费者，不仅数量庞大，而且异常活跃。截至 2017 年 12 月，中国网民规模达 7.72 亿，中国从劳动力红利转向数字消费者红利。不可编码的、复杂性高、不可转移性强和难以模仿的隐性知识是企业创新的源泉，能够不断为企业带来竞争优势。在数字经济时代，数字化本质上能够提升隐性知识的标准化、简化、公开化和可转移性程度（Annabi & McGann，2013）[3]，所以，世界各国都在通过加大 ICT 基础设施的投资与使用，加速数字化转型，推动经济增长。但是，从我国国内来看，虽然中国数字化发展迅速，但是数字化与制造业融合不够；从国际看，发展中国家与发达国家并没有同步前进，两者间的差距显现并有不断扩大的趋势，持续投入和部署数字基础设施的领跑者所获得的收益远远高于缺乏数字基础设施的国家，全球数字经济的发展呈现连续“马太效应”。

数字技术应用的非平等扩散带来了“数字鸿沟”，广义上，“数字鸿沟”
指给定社会中不同社会群体对互联网在可及（have or not have）和使用（use or not use）上的差异（闫慧和孙立立，2012）[4]。上海社科院发布的《全球数字经济竞争力发展报告（2018）》显示，中国与发达国家的数字鸿沟很大，虽然中国全球数字经济竞争力发展报告位居第二，但总分与美国相差21.19分，而且中国的数字创新竞争力只排在21位，在技术研发、人才支撑、创新转化上，都与发达国家有一定差距。数字鸿沟会加剧国家间的不平等，信息的弱势群体会越来越贫穷，最终不利于企业的创新发展。尽管已有研究提出越过接入鸿沟可以促进互联网红利的实现（邱泽奇等人，2016）[5]，数字红利被看作是数字投资带来的增长、就业和服务收益，但尚未有研究关注制造业企业海外并购后的创新绩效如何受益于数字鸿沟的缩小。已有研究也缺乏从东道国与母国数字鸿沟角度，探索东道国与母国数字区位优势的差异性和匹配性如何影响企业海外并购后创新绩效。另一方面，由于中国地域辽阔，区域数字经济发展水平差异明显，制造业在各区域之间的数字化优势大相径庭，亟需从区域效应视角探索其调节国际间数字鸿沟对并购创新绩效的影响机制。从现实意义来看，探索企业如何利用数字平台利用海外并购，国家与政府如何提高基础设施规模和利用效率，推动数字经济发展，对于加速中国消费端数字化向工业互联网资源配置的转移、推动制造业数字化和智能化发展以及制造业转型升级、助力工业中高端化和中国企业走向世界创新中心具有重要价值。

本文的主要贡献在于：第一，在数字化背景下对传统发达国家跨国企业所有权优势和区位优势理论进行拓展，东道国提供数字化区位优势的潜力以及母国发挥数字化优势的影响力存在不同，本文从东道国与母国数字鸿沟角度，探索东道国与母国数字区位优势的差异性和匹配性对制造业企业海外并购创新绩效的影响机制；第二，本文将国际间数字鸿沟拓展为规模和质量两个视角，对数字鸿沟影响制造业企业创新的竞争力提升机制与生成条件进行实证检验；第三，围绕区域效应的影响，探究区域数字化水平对国际间数字鸿沟与企业海外并购后创新绩效的关系的调节机制，讨论区域效应和国家效应的交互机制；政策层面上，本文依据目标企业性质差异和并购获取海外知识复杂度差异分类，并且通过将国内与国际创新进行对比，讨论区域效应和国家效应的交互作用对全球创新优势的影响机制，对于帮助制造业企业海外并购后服务端倾斜，寻求复杂性高的隐性知识以及培养国内和国际创新冠军提供分类政策引导思路。

2. 理论分析与研究假设

在数字经济的背景下，传统的区位优势（L）概念需要重构，除了运输成本、人力成本和技术要素，企业海外并购，还要考虑数字化给企业带来的便利性和竞争优势（Eden，2016）[6]。数字化使知识简单化、标准化、服务化和共享所有权，嵌入物理资产的复杂知识发生改变，企业特定优势（FSA）变成了嵌入数字平台的更加成熟的知识。数字经济中，信息和知识通过互联网和移动网络的全球连接快速传输（Rai等人，2012）[7]，在时间和距离的影响下，知识可转移性的提高为制造业企业海外并购后技术创新提供了有利条件。可见，信息和知识的可获得性和利用程度是数字时代制造业企业海外并购后创新的关键。
然而，在全球信息革命和知识时代，“数字鸿沟”日益显现，世界发展的不平衡性日益反映出全球信息资源和知识资源分布的严重不平等，构成了信息时代新的全球贫富差距，即“数字鸿沟”（胡鞍钢和周绍杰，2002）。目前，发达国家、发展中国家和欠发达国家之间，信息化技术和互联网的应用都存在较大的差距，数字鸿沟客观地存在并有进一步扩大的趋势。越来越大的数字鸿沟必然导致经济、社会的落后与贫困，进而影响企业的创新发展。弥补和消除国际间数字鸿沟，才能推动企业受益于数字红利从而加快技术创新。

规模是一个数量上的概念，而质量则是内涵丰富的综合性概念（张春梅等人，2013）。本文将国际间数字鸿沟分为规模和质量两个维度。许竹青等人（2013）认为从信息经济学的角度来看，“数字鸿沟”并不仅仅是“有没有”的问题。有学者将信息的可接入性称为“一级数字鸿沟”，将信息的利用和鉴别能力称为“二级数字鸿沟”（Martin, 2003; Ho and Tseng, 2006）。借鉴以上学者观点，本文给出国际间数字规模鸿沟的概念为国与国之间数字基础设施可接入性的差距，国际间数字质量鸿沟的概念为国与国之间信息的利用和鉴别能力的差距。从规模维度来看，数字基础设施的完善可以缩小数字鸿沟，有学者使用非洲国家以及印度等国的相关数据，证明手机信号的覆盖对提高农产品市场效率，改善中间商和农民的信息不对称有着显著的积极作用（Aker, 2010; Andrianarison, 2010）。缩小国际间数字规模鸿沟，有利于制造业企业提高数字基础设施的可接入性，改善海外并购技术创新的信息不对称，提高与合作方的沟通效率，加速创新过程中的知识交换。从质量维度来看，薛伟贤和刘骏（2011）认为信息技术使用技能的差距也是“数字鸿沟”形成的直接原因，从“信息使用”方面发挥作用。缩小国际间数字质量鸿沟，有利于制造业企业提高信息的利用能力，进而将知识嵌入到产品和服务中去，进行技术创新。因此本文提出以下假设：

假设1：国际间数字规模鸿沟中国企业海外并购后创新绩效负相关；
假设2：国际间数字质量鸿沟与中国企业海外并购后创新绩效负相关。

我国目前仍处于发展中阶段，区域经济尤其是数字经济发展很不平衡。中国不仅面临着其他国家尤其是发达国家的数字鸿沟，而且国内各地区之间的数字化水平差距也很大（任贵生和李一军，2006），东部地区的省份和城市在互联网普及率、电话普及率、人均电信业务指数和人均报纸订阅指数等具体指标方面，都明显高于东北、中部和西部地区的省份和城市。薛伟贤和王江泉（2011）实证检验了我国31个省份的数字化水平存在差异，“数字化”生产要素投入数量的差异和生产效率的差异导致了区域数字鸿沟。区域的数字化水平差距势必会导致不同区域受国际间数字鸿沟的影响程度差异。

数字全球化时代，信息流站在了最重要的位置（Brouthers, Geisser, 和 Rothlauf, 2016; Pezderka 和 Sincovics, 2011; Manyika 等，2016）。信息跨越了物理空间障碍，直接通过互联网传播（Yoo 等，2010），极大地加速了制造业企业海外并购创新流程中获取创新资源的速度；数字化将传统的物理空间转变为数字信息流空间（Kobrin, 2017），传统资本流被取代，信息流与物理产品流分离（El Savy 和 Pereira，2013），通过快速流动快速有效地配置资源，进行合理知识组合，推动产品更新换
代，促进制造业企业海外并购技术创新；信息流的快速传输还能降低并购方企业维护和管理创新活动以及协调创新过程中合作伙伴的成本。所以，区域数字化水平越高，区域内制造业企业则更具有数字化优势，海外并购后创新越受益；国际间数字鸿沟与中国企业海外并购后创新绩效的负相关关系将会越弱。因此提出以下假设：

假设 3：区域数字化水平对国际间数字规模鸿沟与中国企业海外并购后创新绩效的关系具有正向的调节作用。

假设 4：区域数字化水平对国际间数字质量鸿沟与中国企业海外并购后创新绩效的关系具有正向的调节作用。

3. 实证方法与测度

3.1 样本选择

本文的研究样本为 2003 年 1 月 1 日至 2016 年 12 月 31 日期间并购完成的中国企业海外并购事件。样本选择的标准如下：并购方为上市的中国制造业行业企业；目标方为境外企业（包含中国香港和台湾）；剔除目标方为并购方子公司的样本，剔除重复样本。最终得到 146 个样本观测值用以检验假设。本文的跨国并购数据来自于 Bvd-Zephyr 全球权威并购数据库。

3.2 变量测量

3.2.1 因变量

本文因变量分别为企业海外并购后创新绩效。本文观察和借鉴张杰和郑文平（2018）[25]使用的专利知识宽度法衡量企业跨国并购后创新绩效。借助企业海外并购完成日起两年内在中国国家知识产权局申请的发明专利和实用新型专利 IPC 专利分类号的信息，本文采取大组层面的赫芬达尔—赫希曼指数（HH）的原理，将企业专利知识宽度具体计算为：

\[ patent\_knowledge_{nt.\_type} = 1 - \sum \alpha^2, \]

其中，\( \alpha \) 表示专利分类号中各大组分类所占比重。可以看出，\( patent\_knowledge_{nt.\_type} \) 越大，各个大组层面的专利分类号之间的差异
越大，即表明企业创造专利所运用的知识宽度越大，其专利质量可能就表现为越高，其海外并购后的创新绩效就越高。

3.2.2 自变量

本文的自变量为国家间数字规模鸿沟和国际间数字质量鸿沟。国家间数字规模鸿沟用衡量国家层面数字化水平高低的母国互联网普及率和东道国互联网普及率之差的绝对值表示，值越小，国家间数字规模鸿沟越小，母国互联网普及率和东道国互联网普及率分别为并购前一年并购方国家互联网用户占总人口的比例和并购前一年目标方国家互联网用户占总人口的比例；沿用 CJ Chung (2011) [26]国际超链接中心度数据，本文国际间数字质量鸿沟用并购方国家国际超链接中心度和目标方国家国际超链接中心度的欧氏距离衡量，距离越小，国际间数字质量鸿沟越小，国际超链接中心度反映了一个国家在网络中的位置。

3.2.3 调节变量

本文的调节变量为并购方区域数字化水平，用腾讯研究院公布2017年各城市“互联网+”总指数衡量。

3.2.4 控制变量

本文企业层面的控制变量有交易金额、管理费用和企业规模，其中交易金额为每个并购完成事件的交易金额；管理费用为企业并购前三年管理费用的均值；企业规模为企业并购前三年总资产的均值。本文区域层面的控制变量为省级数字化水平，使用财新智库公布的2018年3月份各省份数字经济指数衡量。本文国家层面的控制变量有母国 GDP 增长率、东道国 GDP 增长率和文化距离，其中母国 GDP 增长率为并购前三年并购方国家 GDP 增长率（2010年不变价美元）的均值；东道国 GDP 增长率为并购前三年目标方国家 GDP 增长率（2010年不变价美元）的均值；文化距离则采取使用广泛的Hofstede 文化维度（6维）对中国与各目标方国家的文化距离进行测度。

每个变量的类别、名称、符号和定义及数据来源详见表1。变量的描述性统计和相关性详见表2。

<table>
<thead>
<tr>
<th>表1 变量及数据来源</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>变量类别</strong></td>
</tr>
<tr>
<td>被解释变量</td>
</tr>
<tr>
<td>解释变量</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>调节变量</td>
</tr>
<tr>
<td>控制变量</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

表2 变量描述性统计与相关系数矩阵
为检验假设，本文构建如下模型，模型（1）首先加入自变量 SDG 和 QDG，以及控制变量，\( \beta_0 \)为截距项，\( \varepsilon \)为随机扰动项；模型（2）加入调节变量 RDL，回归系数为 \( \beta_3 \)；模型（3）和模型（4）分别加入调节变量与两个自变量的交互项，回归系数为 \( \beta_5 \)：模型（5）—模型（8）对比制造业海外并购后国内创新绩效和国际创新绩效；模型（9）—模型（12）按照并购目标方企业是服务端企业还是制造端企业划分样本，对假设进行分组检验。

\[
IP = \beta_0 + \beta_1 SDG + \beta_2 QDG + \beta_3 RDL + \sum controls + \varepsilon
\]  

(1)

\[
IP = \beta_0 + \beta_1 SDG + \beta_2 QDG + \beta_3 RDL + \sum controls + \varepsilon
\]  

(2)

\[
IP = \beta_0 + \beta_1 SDG + \beta_2 QDG + \beta_3 RDL + \beta_4 RDL \times SDG + \sum controls + \varepsilon
\]  

(3)

\[
IP = \beta_0 + \beta_1 SDG + \beta_2 QDG + \beta_3 RDL + \beta_4 QDG + \sum controls + \varepsilon
\]  

(4)

由于海外并购后创新绩效是一个连续变量，本文采用普通最小二乘法进行回归。

### 4.2 实证结果

表 3 汇报了国际间数字规模与质量鸿沟视角下海外并购创新绩效的实证结果。可以看出，国际间数字规模鸿沟与中国企业海外并购后创新绩效无显著关系，假设 1 不成立；国际间数字质量鸿沟与中国企业海外并购
后创新绩效显著负相关 ($\beta = -0.002$, $p < 0.1$)，假设 2 成立。原因在于：对于制造业企业来说，国际间数字规模鸿沟的缩小只是提高了数字基础设施的可接入性，消除了制造业企业获得技术创新所需信息和知识的门槛，但是缩小国际间质量鸿沟，制造业企业才能提高鉴别和利用信息和知识的能力。如果数字化基础设施的投入没有被制造业企业有效利用和转化，则企业难以提高生产效率和创新能力。所以缩小国际间质量鸿沟才是提高制造业企业海外并购后的创新绩效的关键。

区域数字化水平对国际间数字规模鸿沟与中国企业海外并购后创新绩效无显著的调节作用，假设 3 不成立；但是区域数字化水平对国际间数字质量鸿沟与中国企业海外并购后创新绩效有显著的正向调节作用 ($\beta = 0.0002$, $p < 0.1$)，假设 4 成立。可以看出，区域数字化水平的提高可以削弱国际间数字质量鸿沟对企业海外并购国内和国际创新的负向影响，利于孵化创新中心。

表 3 海外并购创新绩效的实证结果

<table>
<thead>
<tr>
<th>自变量</th>
<th>模型 (1)</th>
<th>模型 (2)</th>
<th>模型 (3)</th>
<th>模型 (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDG</td>
<td>0.0001</td>
<td>0.0004</td>
<td>-0.003</td>
<td>9.64E-06</td>
</tr>
<tr>
<td>QDG</td>
<td>-0.002*</td>
<td>-0.002*</td>
<td>-0.002</td>
<td>-0.004**</td>
</tr>
<tr>
<td>调节变量</td>
<td>-0.005</td>
<td>-0.025*</td>
<td>-0.021*</td>
<td>(1.593)</td>
</tr>
<tr>
<td>RDL</td>
<td>(1.765)</td>
<td>(1.768)</td>
<td>(1.638)</td>
<td>(2.419)</td>
</tr>
<tr>
<td>SDG*RDL</td>
<td>0.001</td>
<td>0.002</td>
<td></td>
<td></td>
</tr>
<tr>
<td>QDG*RDL</td>
<td>(1.593)</td>
<td>(1.700)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>控制变量</td>
<td>-4.1E-10</td>
<td>-5.91E-10</td>
<td>-4.64E-10</td>
<td>-5.87E-10</td>
</tr>
<tr>
<td>DV</td>
<td>(-0.447)</td>
<td>(-0.545)</td>
<td>(-0.429)</td>
<td>(-0.545)</td>
</tr>
<tr>
<td>MF</td>
<td>3.05E-10*</td>
<td>3.10E-10**</td>
<td>2.94E-10*</td>
<td>2.98E-10*</td>
</tr>
<tr>
<td>AS</td>
<td>(-0.041)</td>
<td>(-0.024)</td>
<td>(0.106)</td>
<td>(0.109)</td>
</tr>
<tr>
<td>PD</td>
<td>7.80E-05</td>
<td>0.0001</td>
<td>0.0001</td>
<td>0.0001</td>
</tr>
<tr>
<td>DGDPR</td>
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<td>(-0.223)</td>
<td>(-0.327)</td>
<td>(-0.440)</td>
</tr>
<tr>
<td>FGDPR</td>
<td>(-0.06)</td>
<td>(-0.03)</td>
<td>-0.006</td>
<td>-0.007</td>
</tr>
<tr>
<td>CD6</td>
<td>0.007</td>
<td>0.007</td>
<td>0.018</td>
<td>0.016</td>
</tr>
<tr>
<td></td>
<td>(0.256)</td>
<td>(0.358)</td>
<td>(0.687)</td>
<td>(0.603)</td>
</tr>
</tbody>
</table>
常数项  0.760***  0.720***  0.857***  0.850***
          (3.199)   (2.979)   (3.360)   (3.377)
观测值  129       129      129       129
R-squared  0.132    0.139    0.157     0.159
F-statistic  2.019    1.898    1.979     2.016

注:*为在10%水平下显著,**为在5%水平下显著,***为1%水平下显著;括号内为t值。

5. 进一步分析

5.1 分样本实证结果

（1）参考Murray & Kotabe（1999）[27]，按照并购目标方企业的主营业务是属于服务端还是制造端划分样本进行实证检验（结果见表4）。结果发现当并购制造端目标方时，国际间数字质量鸿沟对制造业企业海外并购后创新绩效产生显著的负向影响（β = −0.004, p < 0.05），且区域数字化水平对国际间数字质量鸿沟与制造业企业海外并购后创新绩效的关系起显著的正向调节作用（β = 0.0004, p < 0.05），显著性均比全样本下有所提高。原因在于：数字化程度高，服务端变得轻资产化，和制造端会高度分离，从依附、替代、渗透和协同四个效应看，此时服务会替代制造（Cusumano MA 等，2015）[28]。国际间数字质量鸿沟大，即中国与目标国数字化利用和鉴别能力的差距大，我国制造业去并购海外服务业企业时，很难与其对接来创造协同价值。而并购海外制造业时，我国制造业企业与海外制造业的协同更容易实现，能够利用庞大的制造业基础实现整合，而且区域数字化水平越高，企业越可以利用简化和标准化的知识进行创新，进而削弱国际间数字质量鸿沟的负向影响。

表4 目标方企业主营业务类型的分组实证结果

<table>
<thead>
<tr>
<th>自变量</th>
<th>目标方为服务端企业</th>
<th>目标方为制造端企业</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>模型（9）</td>
<td>模型（10）</td>
</tr>
<tr>
<td>SDG</td>
<td>0.008</td>
<td>-0.001</td>
</tr>
<tr>
<td></td>
<td>(0.342)</td>
<td>(-0.103)</td>
</tr>
<tr>
<td>QDG</td>
<td>-0.007</td>
<td>-0.007</td>
</tr>
<tr>
<td></td>
<td>(-1.629)</td>
<td>(-1.285)</td>
</tr>
<tr>
<td>调节变量</td>
<td>RDL</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.011</td>
<td>-0.015</td>
</tr>
<tr>
<td></td>
<td>(0.170)</td>
<td>(-0.667)</td>
</tr>
<tr>
<td>调节效应</td>
<td>SDG*RDL</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-0.0008</td>
<td>0.0005</td>
</tr>
<tr>
<td></td>
<td>(-0.424)</td>
<td>(1.353)</td>
</tr>
<tr>
<td></td>
<td>QDG*RDL</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-1.15E-05</td>
<td>0.0004**</td>
</tr>
<tr>
<td></td>
<td>(-0.040)</td>
<td>(2.049)</td>
</tr>
<tr>
<td>控制变量</td>
<td>DV</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-4.24E-06*</td>
<td>-4.08E-06*</td>
</tr>
<tr>
<td></td>
<td>(-2.052)</td>
<td>(-1.993)</td>
</tr>
</tbody>
</table>
(2) 参考 Patel 等人（2014）^{29} 对创新知识复杂度的分类，对样本按照并购获取海外知识复杂性的高低进行编码，然后划分样本进行实证检验（结果见表 5）。分组实证结果发现，当海外知识复杂性较高时，国际间数字质量鸿沟和制造业企业海外并购后创新绩效显著负相关，区域数字化水平对国际间数字质量鸿沟与制造业企业海外并购后创新绩效的关系都产生正向调节作用；当海外知识复杂性较低时，国际间数字质量鸿沟和区域数字化水平都不再具有显著影响。原因在于由于隐性知识的复杂程度高且难以转移，隐性知识构成了企业的核心竞争优势，亦正是中国制造业企业所欠缺和难以获得的。制造业企业通过海外并购易于获取易于编码、标准化和规模化的低复杂性知识，但获取高复杂度的知识，则需要提高辨别和利用知识的能力，并具备数字化优势。

### 表 5 知识复杂度高低的分组实证结果

<table>
<thead>
<tr>
<th>自变量</th>
<th>知识复杂度较高</th>
<th>知识复杂度较低</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>模型（13）</td>
<td>模型（14）</td>
</tr>
<tr>
<td>SDG</td>
<td>0.0027</td>
<td>0.006*</td>
</tr>
<tr>
<td></td>
<td>(0.659)</td>
<td>(1.968)</td>
</tr>
<tr>
<td>QDG</td>
<td>-0.006***</td>
<td>-0.007***</td>
</tr>
<tr>
<td></td>
<td>(-2.991)</td>
<td>-3.209</td>
</tr>
<tr>
<td>调节变量</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RDL</td>
<td>-0.027</td>
<td>-0.020</td>
</tr>
<tr>
<td></td>
<td>(-1.548)</td>
<td>(-1.408)</td>
</tr>
<tr>
<td>调节效应</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SDG*RDL</td>
<td>0.001*</td>
<td>0.0004</td>
</tr>
</tbody>
</table>

注：*为在 10%水平下显著，**为在 5%水平下显著，***为 1%水平下显著；括号内为 t 值。
5.2 国内与国际创新绩效对比

由于前文的制造业企业海外并购后创新绩效只考虑了国内创新绩效，表 6 的因变量增加了国际创新绩效，并汇总了国际间数字鸿沟视角下海外并购国内与国际创新绩效的实证结果对比。国外创新绩效同样借鉴张杰和郑文平（2018）[25]使用的专利知识宽度法衡量，数据来源为企业海外并购完成日起两年内 WIPO 申请的发明专利和实用新型专利 IPC 专利分类号的信息。

可以看出，国际间数字规模鸿沟与中国企业海外并购后国内创新绩效和国际创新绩效均无显著关系；国际间数字质量鸿沟与中国企业海外并购后国内创新绩效显著负相关，而国际间数字质量鸿沟与中国企业海外并购后国际创新绩效无显著关系。原因可能在于，制造业企业海外并购后国内创新更容易获得缩小国际间数字质量鸿沟带来的创新优势，而遥远国家的目标方的创新资源的利用程度并不取决于国际间数字质量鸿沟的大小。

区域数字化水平对国际间数字规模鸿沟与中国企业海外并购后国内创新绩效和国际创新绩效均有显著的调节作用，但区域数字化水平对国际间数字质量鸿沟与中国企业海外并购后国内和国际创新绩效均有显著的正向调节作用（β = 0.0002, p < 0.1）。可以看出，区域数字化水平的提高利于培养国内创新冠军和孵化国际创新中心。
### 表 6 海外并购国内与国际创新绩效对比的实证结果

<table>
<thead>
<tr>
<th></th>
<th>模型 (5)</th>
<th>模型 (6)</th>
<th>模型 (7)</th>
<th>模型 (8)</th>
<th>模型 (9)</th>
<th>模型 (10)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>国内</td>
<td>国外</td>
<td>国内</td>
<td>国外</td>
<td>国内</td>
<td>国外</td>
</tr>
<tr>
<td><strong>自变量</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SDG</td>
<td>0.0001</td>
<td>-0.001</td>
<td>0.0004</td>
<td>-0.001</td>
<td>0.003</td>
<td>-0.002</td>
</tr>
<tr>
<td>QDG</td>
<td>-0.002*</td>
<td>-2.41E-05</td>
<td>0.002*</td>
<td>-2.04E-05</td>
<td>0.002</td>
<td>1.29E-05</td>
</tr>
<tr>
<td>RDL</td>
<td>-0.005</td>
<td>0.004</td>
<td>-0.025*</td>
<td>-0.0002</td>
<td>-0.021*</td>
<td>-0.009</td>
</tr>
<tr>
<td><strong>调节变量</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SDG*RDL</td>
<td>0.001</td>
<td>0.0001</td>
<td></td>
<td></td>
<td>(1.593)</td>
<td>(0.393)</td>
</tr>
<tr>
<td>QDG*RDL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.0002*</td>
<td>0.0002*</td>
</tr>
<tr>
<td><strong>控制变量</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DV</td>
<td>-4.6E-10</td>
<td>-1.78E-10</td>
<td>-5.91E-10</td>
<td>-9.07E-11</td>
<td>-4.64E-10</td>
<td>-5.30E-11</td>
</tr>
<tr>
<td>MF</td>
<td>3.08E-10*</td>
<td>2.04E-10</td>
<td>3.10E-10**</td>
<td>2.34E-11</td>
<td>2.94E-10*</td>
<td>2.16E-11</td>
</tr>
<tr>
<td>AS</td>
<td>-8.71E-14</td>
<td>3.67E-12**</td>
<td>-5.13E-14</td>
<td>3.65E-12**</td>
<td>2.28E-13</td>
<td>3.70E-12**</td>
</tr>
<tr>
<td>PD</td>
<td>7.80E-05</td>
<td>2.34E-05</td>
<td>0.0001</td>
<td>2.51E-05</td>
<td>0.0001</td>
<td>2.18E-05</td>
</tr>
<tr>
<td>DGDPR</td>
<td>-0.004</td>
<td>-0.014</td>
<td>-0.004</td>
<td>-0.014</td>
<td>-0.006</td>
<td>-0.014</td>
</tr>
<tr>
<td>FGDPR</td>
<td>-0.006</td>
<td>-0.001</td>
<td>-0.003</td>
<td>-0.003</td>
<td>-0.006</td>
<td>-0.004</td>
</tr>
<tr>
<td>CD6</td>
<td>0.007</td>
<td>-0.004</td>
<td>0.009</td>
<td>-0.006</td>
<td>0.018</td>
<td>-0.005</td>
</tr>
<tr>
<td>常数项</td>
<td>0.760***</td>
<td>0.189</td>
<td>0.720***</td>
<td>0.221</td>
<td>0.857***</td>
<td>0.248</td>
</tr>
<tr>
<td>观测值</td>
<td>129</td>
<td>129</td>
<td>129</td>
<td>129</td>
<td>129</td>
<td>129</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.132</td>
<td>0.117</td>
<td>0.139</td>
<td>0.123</td>
<td>0.157</td>
<td>0.124</td>
</tr>
<tr>
<td>F-statistic</td>
<td>2.019</td>
<td>1.746</td>
<td>1.898</td>
<td>1.649</td>
<td>1.979</td>
<td>1.502</td>
</tr>
</tbody>
</table>

注：*为在 10%水平下显著，**为在 5%水平下显著，***为 1%水平下显著；括号内为 t 值。

6. 稳健性检验

为检验 4.2 实证结果的稳健性，本文更换计量模型进行检验：首先，采用 GLM 模型进行稳健性检验。广义线性模型（Generalized Linear Model，GLM）是简单最小二乘回归（OLS）的扩展，其中，被解释变量不再受正态分布和连续数值数据假设的限制。本文指定分布类型为...
Binomial Squared Quasi-likelihood，链结函数由 Eviews 自动选择为 Logit。

其次，采用分位数回归（Quantile Regression）模型进行稳健性检验。分位数回归采用加权残差绝对值和的方法估计参数，整个回归模型具有很强的稳健性；对所有分位数进行回归对于数据中出现的异常点具有耐抗性。本文采取分位数回归的中位数回归（Median），用对称权重解决残差最小化问题。

这两种替换计量模型的检验结果均显示，除个别变量显著性有所差异，主要解释变量的回归结果与 4.2 保持一致。

7. 结论与政策建议

本文基于 2003 年至 2016 年的中国制造业上市公司的 146 起海外并购事件，实证检验国家间数字质量和规模鸿沟对中国制造业企业海外并购创新绩效的关系，探索数字经济中新市场跨国企业构建全球创新优势的机制。本文得出以下结论：(1) 国际间数字质量鸿沟对中国制造业企业海外并购后创新绩效产生消极影响，数字化质量的提升比数字化规模的扩大更为重要；(2) 区域数字化水平的提高可以削弱国际间数字质量鸿沟对中国企业海外并购后创新绩效的负向作用；(3) 按照并购目标方企业的主营业务是属于服务端还是制造端分组检验发现，并购制造端企业时，国际间数字质量鸿沟对制造业企业创新绩效产生消极影响，区域数字化水平对二者关系起正向调节作用；(4) 按照并购获取海外知识复杂性的高低分组检验发现，缩小国际间质量鸿沟和提高区域数字化水平可以帮助企业获取高复杂度隐性知识，建立创新优势，走向世界创新中心；(5) 将制造业企业海外并购后国内与国际创新绩效进行对比发现，缩小国际间质量鸿沟仅利于企业国内创新，区域数字化水平的提高则既利于培养国内创新冠军又利于孵化国际创新中心。

基于此，本文提出以下政策建议：第一，培养国内创新冠军需要缩小国际间数字质量鸿沟，政府在提高互联网普及率同时应着重推进数字基础设施利用效率提高数字生产要素的生产效率的提高，推进我国的数字网络与国际接轨，并在全球互联网中占据重要位置；第二，推动制造业企业走向国内与国际创新中心需要提高区域数字化水平，政府应加快建立城市数据中心和服务中心，推进云计算、物联网、大数据、安全等相关技术的应用实践，以及鼓励先进城市帮扶落后城市，缩小地区间数字化水平发展差距；第三，促进我国制造业服务化升级才能将数字化优势扩展到制造业对海外服务业企业的并购，政府应培育产业融合发展观念，推动构建一体化产业政策体系，提升数字技术的支持能力；第四，政府应加强政策间的合作，为制造业企业海外并购创造良好的政策环境，促进国家间在高端行业的深入合作，深化海外并购的投资领域，以便制造业企业通过海外并购获取高复杂度的隐性知识，提高海外并购后创新绩效。
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Government Intervention and Cross-border Mergers and Acquisitions

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Abstract

Cross-border mergers and acquisitions (CBM&As) are being used increasingly as a foreign market entry strategy by emerging market firms. Drawing on transaction cost economics (TCE), this study examines two channels through which the governments intervene in CBM&As’ ownership choice: direct intervention via government ownership and indirect intervention via policy support. The findings based on 1000 CBM&As undertaken by Chinese listed firms shows that firms with direct intervention tend to pursue full M&As while those under indirect intervention are more likely to take partial M&As. Further, these effects are both weakened when firms enter culturally distant countries. This study identifies the different roles of government in firms’ international strategies and provides further understanding of government-firm relationship.

Keywords: Government Direct Intervention; Government Indirect Intervention; Full Mergers and Acquisitions; Partial Mergers and Acquisitions; Cultural Distance
政府干预如何影响企业的海外并购战略？

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摘 要

海外并购作为中国企业广泛采用的国际化战略，引起了中国政府的高度重视。本文从交易成本的视角，探究不同类型的政府干预是否能够对企业海外并购模式产生差异化影响，以及文化距离对政府与企业之间关系的调节效应。结合我国上市公司在2001年1月至2016年12月之间所进行的1000起海外并购案例，研究发现，政府的直接干预会促使企业进行全资并购，而间接干预则会推动企业选择合资，这种差异化影响有助于海外并购的顺利完成；在文化距离较大时，直接与间接的政府干预都会降低其对企业海外并购决策的作用强度。本文结论拓展了政府与企业之间的关系研究，为政府如何指导企业跨国并购实践提供了有益启示。

关键词：政府直接干预；政府间接干预；全资并购；合资并购；文化距离

1. 引言

改革开放以来，中国企业也越来越多地参与到国际市场的激烈竞争，逐渐成为国际市场的重要力量。海外并购作为中国企业广泛采用的国际化战略，不仅能够使企业快速获取海外市场中大量有价值的互补性资源，创造企业价值（Datta, 2015; Ahammad et al., 2017），还有利于中国国际地位提升、经济结构调整与国际收支平衡（周茂等，2015）。在海外并购过程中我国企业面临的最重要的问题就是进入模式的选择（Zhao et al., 2004; Chari & Chang, 2009）。我国政府为了降低企业海外并购的不确定性和信息不对称（Basuil & Datta, 2015），提高企业海外并购的成功率，在企业跨国并购的过程中采取一系列的干预措施（Meyer & Peng, 2005; Wang et al., 2012）。不同的政府干预措施，能够对企业行为产生直接或间接作用，进而影响到企业在海外市场中所面临的风险与不确定性（Shao et al., 2014）。但是政府干预如何影响企业的并购模式这一问题依然存在以下研究不足。

首先，现有研究大多关注政府在企业层面的直接干预，少有研究关注政府宏观政策层面的措施是如何影响企业海外并购的。在我国，作为推动和鼓励企业对外直接投资的重要力量，政府在一定程度上代替了市场进行资源配置，通过持有股份（Hong et al., 2015; Cui & He, 2017）、加强与企业联系（Wang et al., 2012; Liang et al., 2015）等方式，作用于企业的国际化程度（Liang et al., 2015）与海外区位选择（Wang et al., 2012; Cui & He, 2017）。但是政府通过宏观政策的干预同样能够促进企业寻求海外战略性资产与市场，从而间接影响企业的国际化战略（Lu et al., 2011）。尤其是近年来“引进来”与“走出去”政策的大力推动与“一带一路”战略构想的提出，更使得我国企业加快海外并购的步伐。但是现有研究却缺
乏对政府间接与直接干预影响企业并购模式的不同关注。

第二，在跨国并购过程中，政府与企业之间的关系常常会受到外部环境的影响（Cui & He, 2017）。其中文化距离作为海外并购过程中不确定性的重要来源（Ahammad et al., 2017），能够影响到政府干预对企业战略选择的作用强度。文化距离是指不同国家之间的文化价值差异（Beugelsdijk et al., 2017），往往会导致并购失败率的升高（Larsson & Finkelstein, 1999），同时也会帮助企业获取有价值的关键性资源与实践（Geppert, et al., 2013），从而影响并购的过程与结果，使得海外并购更加复杂（Basuil & Datta, 2015）。

基于此，本文从交易成本的视角，探究不同类型的政府干预是否能够对企业海外并购模式产生差异化影响，以及文化距离对政府与企业之间关系的调节效应。本文引入文化距离作为情境变量，能够更加深入地探究政府干预对企业国际化战略选择的有效性。结合我国2001年1月至2016年12月之间所进行的1000起海外并购案例，对模型假设进行了实证检验。本文研究结论扩展了交易成本理论在政府与企业国际化关系研究中的应用，有助于从企业层面与宏观政策层面分析政府作用进行明确的区分与深入的比较研究，对指导企业进行跨国并购实践有一定的借鉴意义。

2. 理论与假设

2.1 交易成本理论与企业的海外并购战略

交易成本理论的核心观点是有限理性和机会主义行为，其中决策者的有限理性来源于外部环境的不确定性，而交易双方的机会主义行为取决于行为的不确定性（Tsang, 2000; Yiu & Makino, 2002）。企业在进行海外并购时，会面临多种不确定性因素，因此，需要选择合适的进入模式，以最小化交易成本（Datta et al., 2009）。

海外并购可以分为全资模式与合资模式。全资模式是指购买东道国的现有企业，将目标企业的所有权和控制权进行完全转移，从而对海外子公司进行直接控制，实现对资源利用的有效监督（Ahammad et al., 2017）。与此同时，全资模式也会为企业带来更多的财务与政治风险，增加企业的退出成本以及在海外运作的不确定性，由此更有可能出现海外企业决策者的有限理性行为（Geppert et al., 2013）。

合资则是一种基于双方共同选择的投资模式，在与伙伴企业建立新的企业后，共享所有权、控制权与所获得的利润（Datta et al., 2009）。通过合资模式进入海外市场的企业能够在最小化投资规模的同时，及时获取对方的相关信息，不仅减少了交易过程中的不确定性，也降低了伙伴关系解除的成本（Wang et al., 2017）。但合资模式也会使得拥有控制权的企业之间由于经营目标的不同而增加伙伴关系松弛的可能性，从而使得交易成本增加（Puck et al., 2016）。

2.2 政府干预

在新兴经济体中，政府常常在市场失灵时替代市场功能进行资源配置，同时对国家经济政策进行制定与实施，由此在企业层面和宏观政策层面直接和间接地影响企业的行为决策，包括国际化战略的选择（Hong et al., 2015; Jochmann, 2015; 黄缘缘等, 2017）。

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政府的直接干预是指政府通过权力的使用在一定程度上决定企业的战略选择。政府可以通过股权投入的方式对企业进行直接干预（Cui & He, 2017）。政府直接干预的目的是为了实现多种政治与社会目标，包括国内产业升级，提升民族尊严，维持社会稳定等（Wang et al., 2017）。因此，作为国家利益的代表，受到政府直接干预的企业，进行国际化的首要任务是为了实现政治目的，并非获取利润（Du & Boateng, 2015）。其次，在新兴经济体中，政府对大量战略资源具有直接的控制权（Wang et al., 2017），能够直接对企业进行资源的优先配置（Du & Boateng, 2015），同时包括税收减免、外汇援助、财政支持等，因此，受到政府直接干预的企业很少受到财务资源的限制（Du & Boateng, 2015）。

政府的间接干预则是政府通过一系列措施引导企业的战略决策。一方面，政府是企业经营环境的规则制定者（Luo et al., 2010; Jochmann, 2015），能够通过提供稳定与支持性的制度环境以促进企业的国际化发展（Hong et al., 2015），由此对企业的战略决策产生间接干预。另一方面，政府常常制定相应政策来保护与激励企业的对外投资，如制定贸易协定、提供财政补贴等（Buckley et al., 2010; Lu et al., 2011），由此能够在企业进入海外市场时在一定程度上弥补其竞争劣势，提高其风险应对能力（Luo & Tung, 2007; Lu et al., 2014），帮助企业成长。由于我国地区发展不平衡，不同地区的海外投资政策有所不同（Chan et al., 2010），因此，获得政府政策倾斜的企业可以获得更好的发展。

2.3 政府的直接干预与完全并购

我们认为政府直接干预使得企业更倾向于选择全资模式进行海外并购。第一，全资模式中，控制权的高度集中更有利于实现政府干预的目标。政府的直接干预通常会具有一定的政治与社会目的（Lin & Wong, 2013; 钟海燕等，2010）。这会造成企业决策目标的多元化，使其在追求自身利益的同时，也会将政治目标作为战略目标。在海外并购的过程中，合资模式无法实现企业对海外子公司的全面控制（Chari & Chang, 2009）。在面临自我利益与母国政治诉求之间的冲突时，海外子公司更可能会首先选择追求利益（Cui & Jiang, 2012），由此引发伙伴机会主义行为。因此，与合资相比，受到政府直接干预的企业，更倾向于建立全资子公司，将目标企业的所有权和控制权进行全面转移（Ahammad et al., 2017），从而有效实现母国政府与企业的多元目标。也就是说全资的海外子公司更有助于企业实现母国政府意图提升本国企业竞争力的目标（Hong et al., 2015）。而当企业通过合资模式进入海外市场时，会面临隐性知识难以充分转移的风险（Chari & Chang, 2009），由此增加企业海外运作的复杂性和监督成本（Ahammad et al., 2017）。

第二，政府直接干预可以有效缓解企业并购所面临的资源压力。与合资企业相比，企业进入海外市场时面临更为严重的外来者劣势（Chari & Chang, 2009）。全资子公司所消耗的海外经营成本远远超过合资企业。在我国，政府能够直接干预企业资源的获取和利用，并影响其国际化战略与行为（Wang et al., 2012）。例如，政府能够为企业提供诸多资源，包括财务资源，如低利率贷款及国有银行贷款，以及难以通过市场竞争而获得的稀缺资源等（黄缘缘等，2017）。尽管选择全资并购比合资要消耗企业更多的资源，政府为企业提供的资源能够有效的提高企业的风险承受能力，从而有利于其通过海外投资获取更多的海外资源与知识能力（Xie et al., 2017）。因此，受到政府直接干预的企业更倾向于通过全资并购的模式进入海外市场。
H1: 受到政府直接干预的企业，在进行海外并购时更有可能选择全资模式。

2.4 企业的间接干预与部分并购

政府作为经营环境的规则制定者，能够制定相应政策对企业的国际化提供便利与限制（Joehmann, 2015）。尽管政府的政策引导造成了区域间巨大的经济差异，但是不可否认政府的支持政策也创造了更多的经济发展机会（陈飞翔等，2007）。例如，在我国改革开放政策逐步推进的过程中，东部地区首先获得了更多的资源配置与政策倾斜，经济发展也更为迅速。第一，政府的干预易产生“羊群效应”，即大量企业涌入政府间接干预所导向的行业，导致了激烈的竞争。因此，当政府通过政策引导间接干预时，企业为了能够及时抓住可能出现的新的成长机会并应对激烈的竞争更倾向于保留一定的冗余资源（Shao et al., 2014）。与此同时，对海外企业的估值是并购过程中的一大难题，信息不对称导致估值的困难程度大大提高，进而引发极大地估值过高的风险（Reuer & Koza, 2000; Datta et al., 2009）。如果企业采取全资并购的方式，会面临巨大的机会成本。而合资模式较低的投入水平对企业之后的市场扩张与退出提供了一个便利的平台和较低的成本（Ahmammad et al., 2017），对企业的成长更为合适。采用合资模式企业可以有充足的资源应对间接干预的影响。

第二，政府间接干预促进了企业国际化经验的积累。在企业国际化过程中，中央政府制定了相应的政策框架进行引导之后，各地政府不仅负责中央政策的具体贯彻实施，同时将制定一系列配套措施（Chan et al., 2010）。政府间接干预强的区域，政策支持更加完善，更多的企业进行国际化（陈飞翔等，2007）。因此，强力的间接干预促使企业积累了更多与外商竞争及合作运营的经验，更善于进行战略整合（Luo & Wang, 2012）。这些积累了丰富与外商合作经验的企业能够很好地解决采用合资模式中的文化冲突、管理摩擦等问题。另一方面合资企业能够有机会利用当地伙伴与当地供应商、分销商以及政府的关系，获取当地市场的知识与实践运作的经验，从而降低环境中的不确定性，使其更快地适应当地的环境，并获得成长机会（Kogut, 1991; Arslan & Larimo, 2012）。因此，对于更多受到政府间接干预的企业来说，进行合资是更为合适的选择。

H2: 受到政府间接干预的企业，在进行海外并购时更有可能选择合资模式。

2.5 文化距离的调节作用

文化作为环境中的非正式制度，能够在很大程度上影响企业行为（Quer et al., 2012），使不同国家的企业在管理与战略决策、冲突解决方式、人力资源管理实践和道德标准等方面具有很大差异（Slangen, 2006），并引起并购双方企业之间的不信任（Basuil & Datta, 2015）。

我们认为，随着文化距离的增加，政府直接干预的作用减弱。第一，文化距离越大，全资模式在东道国获得合法性的可能性降低。受到政府直接干预的企业，不仅是经济活动的参与者，也是母国制度环境的一部分，具有一定的制度象征（Cui & Jiang, 2012; Duanmu, 2014），并且在某种程度上可以认为是在海外市场中执行国家意志（周茂等，2015）。这些企业在东道国受到更多关注的同时，也极易引起东道国对其投资目的的怀疑（黄缘缘等，2017）。因此，文化差异越大，海外企业对于被全资并购的接受程度降低（Basuil & Datta, 2015）。而合资模式能够为这些企业提供机会，使其与东道国政府的利益保持一致，从而获得东道国政府
的认可与帮助（Meyer, 2002; Morschett et al., 2010）。

第二，并购双方之间文化距离的增加会使得企业在海外运作中具有较高的不确定性与复杂性（Puck et al., 2016; Beugelsdijk et al., 2017）。受到高水平直接干预的企业往往在母国市场中具有重要的战略地位（Luo et al., 2010），而与此同时，这些企业的整合能力通常难以应对海外市场中的诸多难题（Wu & Zhao, 2015），因此，企业需要更加谨慎应对文化距离增加所带来的风险与困难。文化距离较高时，以全资的方式进入东道国，更有可能引起当地员工的不满与敌对，由此降低对并购方企业的忠诚度（Slangen, 2006）。在这种情况下，企业难以对海外企业进行准确的价值估计，也难以在海外运作过程中获取当地所特有的知识与能力（Quer et al., 2012），而且使得企业处于并购交易中的不利地位。此时，企业选择全资模式的可能性随之降低。

H3：文化距离会负向调节政府直接干预的结果，即文化距离越大，受到政府直接干预的企业，选择全资并购模式的可能性降低。

文化距离越大，海外子公司所拥有的能力更加的多样化，也更具有东道国所特有的价值与特征（Reus & Lamont, 2009），有助于实现企业的海外学习与成长（Beugelsdijk et al., 2017）。在新兴市场中，政府的间接干预被认为是企业国际化发展过程中的附加投入与外部资源，对其国际化战略的实施有重大影响（Lu et al., 2011）。受到政策支持的企业，往往具有强烈的动机寻求海外的战略性资产（Lu et al., 2011），而文化差异使得海外市场具有更高的潜在价值，促使企业加强对海外子公司的控制程度以充分获取当地独特的知识资产与工作实践（Arslan, & Larimo, 2012）。因此，为了获取东道国与母国之间文化距离所带来的好处，受到高水平政府间接干预的企业，控制海外子公司的意愿增强。

与此同时，母国与东道国之间的文化不匹配也会给企业带来严重的挑战，使其必须面对海外市场中众多异于母国实践的社会规范（Ahammad et al., 2017），引起跨国企业与海外子公司间信息不对称的增加（Basuil & Datta, 2015），使得企业更有可能面临高度的外部风险与海外子公司的行为不确定性。政府的间接干预为企业提供了相应的政策支持与指导，能够在一定程度上代替企业的海外市场经验（Lu et al., 2014），帮助其应对复杂的市场运作环境（Beugelsdijk et al., 2017）。但随着文化距离增加，东道国与母国中企业实践的差异增大（Slangen, 2006），使得这种间接干预的有效性降低。在这种情况下，企业更倾向于对海外子公司加强控制与管理，避免合资模式中由于文化的不一致而使得海外子公司出现经营行为的不明确与机会主义行为（Morschett et al., 2010; Puck et al., 2016）。

H4：文化距离会负向调节政府间接干预的结果，即文化距离越大，受到政府间接干预的企业，选择合资模式进入海外市场的可能性降低。

3. 研究设计

3.1 样本和数据收集

本文选取2001年1月至2016年12月之间由中国上市公司发起的并购案例。其中，并购交易层面的数据来源于BvD数据库，而并购方企业层面的相关数据来源于国泰安数据库。为了保证样本的规范性，我们对样本进行了如下处理：（1）选择目标企业位于国外的案例样本（剔除香港、台湾以及澳门）；（2）由于金
3.2 变量度量

3.2.1 自变量

政府直接干预：我们沿用现有研究（Hong et al., 2015; Cui & He, 2017），将国有股权比例作为政府直接干预的测量方式，由此衡量政府干预在企业层面的影响程度。

政府间接干预：根据 Shao 等（2015）对于政府间接干预的测量方式，以及《中国统计年鉴》中的地域划分标准，分别对我国东部、中部、西部地区进行不同程度的赋值。其中，东部地区的间接干预强度为 3，中部地区为 2，西部地区为 1。

3.2.2 调节变量

文化距离：本文对文化距离的测量基于 Hofestede’s（1980）的文化距离概念（http://www.geert-hofstede.com）以及 Kogut 和 Singh（1988）的文化距离指数。首先，获得样本中所涉及国家的文化各个维度的得分，包括不确定性规避维度、权利距离维度、个人主义—集体主义维度以及男性气质—女性气质维度，之后计算得到各国与中国间的文化距离。具体计算公式如下：

\[
CD_j = \frac{\sum_{i=1}^{4} \left( {I_{ij} - I_{IN}} \right)^2 / V_i}{4}
\]

其中 \(CD_j\) 是国家 \(j\) 与中国之间的文化距离， \(I_{ij}\) 是国家 \(j\) 在第 \(i\) 个文化维度的得分， \(I_{IN}\) 是中国在该维度的得分， \(V_i\) 代表该维度得分的方差。

3.2.3 因变量

海外并购模式：根据现有研究，当企业进入海外市场时，合资代表收购股份在 5% 与 95% 之间，而全资代表收购股份不少于 95%（Chen, 2008）。本文将海外进入模式进行二分法编码：其中 1 表示企业通过独资模式进入海外市场，0 则表示合资模式。

并购完成状况：本文中的并购完成是指从发起并购到交易完成这一过程，其中并购完成为 1，并购失败为 0。

3.2.4 控制变量

基于现有文献研究成果，选择企业规模、企业年龄、并购双方的行业相关性等作为控制变量。

并购方企业规模：是在企业宣布并购之时，对其当年的员工数目取对数得到；

并购方企业年龄：通过控制并购方企业的年龄来控制企业经验对研究结果产生的影响（Hong et al., 2015）。具体测量方式是由并购方企业宣布并购的当年年份减去其成立年份；

行业相关性：海外投资组织方式的选择与行业特征相关（洪联英等, 2015）。
行业不同，技术、需求水平、行业发展阶段以及行业周期都有所不同（王进猛和沈志渔，2010）。因此，本文中对收购方与被收购方企业之间的行业是否相关进行控制。具体来说，对收购方与被收购方企业的行业代码（UK, 2007）进行比较，当双方处于相同行业时，记为 1，否则为 0。

### 3.3 描述性统计

各变量间的均值、标准差和相关系数见表 1。所有变量间具有一定的相关性但相关系数值并不太高；同时变量的方差膨胀因子（VIF）均小于 2，远低于警戒值 10，说明各变量间多重共线性问题不严重。国有股权比例与海外并购模式之间的相关系数是正向且显著的，而政策扶持强度与海外并购模式间的相关系数为负向且显著，初步支持了本文所提的部分研究假设。与此同时，国有股权比例、政策扶持强度及海外并购模式与并购完成情况之间的相关系数均为显著正相关，因此，可以初步认为，政府干预对于企业海外并购模式的影响，可能会对并购能否顺利完成具有一定作用。

<table>
<thead>
<tr>
<th>表 1 均值，标准差，Pearson 相关系数检验（N=1000）</th>
<th>均值</th>
<th>标准差</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>企业规模</td>
<td>7.180</td>
<td>1.320</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>企业年龄</td>
<td>15.010</td>
<td>5.950</td>
<td>-0.085**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>行业相关性</td>
<td>0.470</td>
<td>0.500</td>
<td>0.0420</td>
<td>-0.005</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>国有股权比例</td>
<td>0.070</td>
<td>0.170</td>
<td>0.273**</td>
<td>-0.315***</td>
<td>0.046</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>政策扶持强度</td>
<td>2.740</td>
<td>0.590</td>
<td>-0.052+</td>
<td>0.049+</td>
<td>0.004</td>
<td>-0.009</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>文化距离</td>
<td>1.760</td>
<td>1.350</td>
<td>0.080*</td>
<td>-0.00400</td>
<td>0.071**</td>
<td>0.019</td>
<td>-0.076**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>海外并购模式</td>
<td>0.320</td>
<td>0.470</td>
<td>0.022</td>
<td>-0.065*</td>
<td>0.044+</td>
<td>0.109**</td>
<td>-0.032+</td>
<td>0.159**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>收购完成状况</td>
<td>0.270</td>
<td>0.440</td>
<td>0.008</td>
<td>-0.100**</td>
<td>0.094**</td>
<td>0.095**</td>
<td>0.055*</td>
<td>0.226**</td>
<td>0.109**</td>
<td>1</td>
</tr>
</tbody>
</table>

注：** p<0.01；* p<0.05；+ p<0.1

### 3.4 假设检验

#### 3.4.1 主效应的检验

在验证过程中，我们主要采用 Logit 回归的方法，对政府干预影响企业国际化战略决策的结果进行检验。表 2 －3 为验证结果。

模型 M1 中仅包括控制变量，从结果中可以看出，并购方企业年龄越大，越有可能进行合资，结果表现显著；而当并购方企业规模越大，以及并购方与被并购方处于相同行业时，企业越有可能进行并购，但是作用结果不显著。

模型 M2 显示国有股权比例的回归系数为正且显著（β=0.997，p<0.05），表明国有股权比例越高，通过全资模式进行海外并购的可能性越大。假设 1 得到支持。

模型 M4 显示政府政策扶持对海外进入模式的回归系数为 0.089，表现为显著（p<0.1），表明政策扶持的水平越高，企业更有可能选择合资的海外并购模式。假设 2 成立。
为了进一步研究政府干预对于企业战略决策的作用，本文继续对并购完成情况进行了检验，结果见表3。

模型M7显示，与合资模式相比，企业通过全资模式进入海外市场，更有可能顺利完成交易。模型M8与M10中的结果表示，政府干预能够提高企业完成海外并购的可能性，其中国有股权比例和政府政策扶持的系数分别为0.724（p<0.1）和0.171（p<0.1）。而在模型M9中，同时将国有股权比例与海外并购模式放入回归方程，海外并购模式对并购完成有显著正向影响（β=0.538，p<0.01），而国有股权比例的作用为不显著（β=0.610，p>0.1），满足Baron和Kenny（1986）提出的中介作用成立条件。因此，国有股权比例能够通过对企业海外并购模式选择的影响，提高海外并购完成的可能性。

同样的，在模型M11中，政府政策支持与海外并购模式同时作用于并购完成状况时，海外并购模式对完成海外并购有显著正向影响（β=0.553，p<0.01），同时政策支持的作用不显著（β=0.184，p>0.1），层次回归的结果满足Baron和
Kenny (1986) 提出的中介作用成立条件。因此，政府政策支持同样能够通过作用于企业海外并购模式选择，而提高并购完成的可能性。

### 表格 3 回归检验结果二

<table>
<thead>
<tr>
<th>并购完成状况</th>
<th>M6</th>
<th>M7</th>
<th>M8</th>
<th>M9</th>
<th>M10</th>
<th>M11</th>
</tr>
</thead>
<tbody>
<tr>
<td>（完成=1，未完成=0）</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>企业规模</td>
<td>-0.008</td>
<td>-0.011</td>
<td>-0.034</td>
<td>-0.033</td>
<td>-0.005</td>
<td>-0.007</td>
</tr>
<tr>
<td></td>
<td>(0.054)</td>
<td>(0.054)</td>
<td>(0.056)</td>
<td>(0.056)</td>
<td>(0.054)</td>
<td>(0.054)</td>
</tr>
<tr>
<td>企业年龄</td>
<td>-0.039**</td>
<td>-0.036**</td>
<td>-0.030*</td>
<td>-0.028*</td>
<td>-0.040**</td>
<td>-0.037**</td>
</tr>
<tr>
<td></td>
<td>(0.014)</td>
<td>(0.014)</td>
<td>(0.014)</td>
<td>(0.014)</td>
<td>(0.014)</td>
<td>(0.014)</td>
</tr>
<tr>
<td>行业相关性</td>
<td>0.484**</td>
<td>0.461**</td>
<td>0.473**</td>
<td>0.451**</td>
<td>0.487**</td>
<td>0.463**</td>
</tr>
<tr>
<td></td>
<td>(0.144)</td>
<td>(0.145)</td>
<td>(0.145)</td>
<td>(0.146)</td>
<td>(0.144)</td>
<td>(0.145)</td>
</tr>
<tr>
<td>国有股权比例</td>
<td>0.724+</td>
<td>0.610</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.44)</td>
<td>(0.444)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>政府政策扶持</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.171+</td>
<td>0.184</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.133)</td>
<td>(0.134)</td>
</tr>
<tr>
<td>进入模式</td>
<td>0.547**</td>
<td>0.538**</td>
<td>0.553**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.152)</td>
<td>(0.153)</td>
<td>(0.152)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>常数项</td>
<td>-0.607</td>
<td>-0.805+</td>
<td>-0.595</td>
<td>-0.800+</td>
<td>-1.092+</td>
<td>-1.330*</td>
</tr>
<tr>
<td></td>
<td>(0.457)</td>
<td>(0.465)</td>
<td>(0.457)</td>
<td>(0.465)</td>
<td>(0.592)</td>
<td>(0.602)</td>
</tr>
<tr>
<td>N</td>
<td>1000</td>
<td>1000</td>
<td>999</td>
<td>999</td>
<td>1000</td>
<td>1000</td>
</tr>
<tr>
<td>R²</td>
<td>0.169</td>
<td>0.279</td>
<td>0.183</td>
<td>0.288</td>
<td>0.184</td>
<td>0.295</td>
</tr>
<tr>
<td>ΔR²</td>
<td>0.169</td>
<td>0.110</td>
<td>0.014</td>
<td>0.105</td>
<td>0.105</td>
<td>0.111</td>
</tr>
<tr>
<td>似然值</td>
<td>-</td>
<td>-566.04</td>
<td>-570.289</td>
<td>-564.189</td>
<td>-571.535</td>
<td>-565.061</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>卡方值</td>
<td>572.39883</td>
<td>32.444**</td>
<td>21.317**</td>
<td>33.516**</td>
<td>21.454**</td>
<td>34.402**</td>
</tr>
</tbody>
</table>

注: **p<0.01；*p<0.05；+p<0.1. 均为双尾检验；表中报告的为系数值，括号内数字为标准误。

### 3.4.2 文化距离的调节作用

在控制了直接干预的主效应后，表 2 中 M3 的结果显示，直接干预与文化距离的交互项对并购模式的选择有显著影响（β=-0.396, p<0.1），表明文化距离对直接干预与并购模式的关系有调节作用，假设 3 成立。为了明确调节作用的方向和趋势，根据 Aiken 和 West (1991) 的建议作出文化距离在高于和低于平均值 1 个标准差的水平上直接干预与并购模式的回归图，结果见图 1。图 1 表明，当文化距离较大时，国有股权比例对并购模式的干预作用减弱。为进一步考察调节作用，进行简单斜率分析。结果表明，当文化距离水平低于 1 个标准差时，国有股权比例与并购模式的回归斜率为 1.535 (p<0.01); 当文化距离水平高于 1 个标准差时，回归斜率为 0.465 (p>0.1)。因此，假设 3 得到支持，文化距离越大，受到政府直接干预的企业，选择全资并购模式的可能性降低。
同样，在控制了政府政策扶持的主效应后，M5 中结果显示，政策扶持与文化距离的交互项对并购模式的选择有显著的影响 (β=0.239, p<0.05)，表明文化距离对政府间接干预与并购模式的关系同样具有调节作用。因此，作出文化距离在高于和低于平均值 1 个标准差的水平上间接干预与并购模式的回归图，结果见图 2，当文化距离较高时，间接干预对并购模式的作用方向改变。进一步的斜率分析表明，当文化距离水平低于 1 个标准差时，回归斜率为 -0.433 (p<0.05)，表明受到间接干预的企业更倾向于选择合资模式；而当文化距离水平高于 1 个标准差时，政府政策支持和并购模式的回归斜率为 0.213 (p>0.05)，表明企业选择全资模式的可能性更大。因此，假设 4 得到支持，文化距离越大，受到政府间接干预的企业，选择合资模式进行海外并购的可能性降低。
本文的理论贡献体现在以下方面。首先，本文基于交易成本的研究视角，检验了我国政府与企业决策之间的作用关系。现有研究主要集中于政府干预在企业层面对企业战略选择的影响，包括政府持股（Hong et al., 2015; Cui & He, 2017）、企业政治关联（Liang, Ren, & Sun, 2015）等，而在宏观层面的研究常常集中在制度与经济发展因素（Wang et al., 2017; Luo, Xue, & Han, 2010）。本文整合了政府在企业国际化过程中扮演的不同角色，对政府在企业层面的直接干预与宏观层面间接干预进行了比较与区分，从而丰富了交易成本理论在政府与企业关系层面的应用。

其次，海外并购作为重要的海外进入模式，能够获取目标企业中有价值的、互补的资源和能力（Ahammad, Leone, & Tarba, 2017）。本文将海外并购模式进一步区分为全资与合资两种模式，并对政府干预的差异化作用进行了检验，结果表明不同类型政府干预对企业的海外并购模式选择产生不同影响。而后，通过检验政府干预对并购完成状况的作用，认为政府的直接干预会促使企业进行全资并购，从而提高并购完成的可能性，而政府的间接干预则会推动跨国企业选择合资模式，但同样有助于并购的顺利完成。本文的研究结论更为全面和准确地反映了政府干预对企业国际化的影响。

最后，本文引入了情境因素，对政府干预在何种情况下、以何种程度对企业海外并购模式产生影响进行了探讨。研究结果表明，在文化距离较大时，作用于不同层面的政府干预都会降低其对企业海外并购决策的作用强度，由此更加深入地探究政府干预对企业国际化战略选择的有效性。

### 4.2 研究的管理实践意义

对企业和政府来说，本研究构建的理论框架和研究具有以下指导意义。首先，从长期发展的角度，企业管理者应该充分认识到政府干预的重要性，并将其作为国际化战略决策的重要参考。本文的研究结论表明政府的股权持有与政策扶持对企业的海外并购模式决策具有不同的影响，并且均能够有效推动跨国并购的顺利完成。因此，本文在一定程度上为企业如何响应政府的“走出去”与“一带一路”战略提供了一定指导。

其次，为我国政府制定相应的对外直接投资政策提供了重要启示。例如，政府对企业“走出去”的大力倡导与政策推动，能够有效作用于我国企业的国际化，保证国际化的顺利进行；再如，政府可以加大政策扶持力度，并重点提高中部与西部地区的鼓励性政策强度，以保证我国各地区企业国际化的均衡发展。

### 4.3 研究不足与未来研究方向

本研究也存在一些不足。首先，本研究从交易成本理论对政府干预的作用机制进行了探讨，事实上，还存在其它的研究视角，如代理理论、制度理论的视角等，未来的研究方向可以进一步整合理论视角，构建更加完善的理论框架，更加全面的了解政府干预对企业国际化战略选择的影响。其次，本文所提出的理论框架还可以进一步扩展，比如，本文的研究框架主要关注政府如何作用于企业的海外进入模式决策，没有深入探讨干预结果与绩效之间关系的问题，同样有待未来的进一步研究。
5. 致谢

本文受国家电网公司科技项目“适应国企改革的公司业务分类评价方法及发展潜力分析研究”资助。

参考文献


Cause-related Marketing and Perceived Corporate Hypocrisy

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²School of Business, Macau University of Science and Technology

Abstract

This paper will focus on the study of the pre-variables impact on perceived corporate hypocrisy in cause-related marketing, design the hypothetical model, and conduct empirical research to analyze the influence of corporate reputation, company-cause fit, donation amount, participation effort and information transparency on perceived corporate hypocrisy. Data analysis shows that corporate reputation, company-cause fit, donation amount, and information transparency have negative impact on perceived corporate hypocrisy, whereas participation intentions has positive impact on perceived corporate hypocrisy. The research provides management implications and suggestions for enterprises to carry out cause-related marketing successfully.

Keywords: Cause-related marketing; Perceived corporate hypocrisy; Corporate reputation; Company-cause fit; Donation amount; Participation effort; Information transparency
善因营销与感知企业伪善

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摘要

本文将视角集中在善因营销中影响到消费者感知企业伪善的前置变量的研究，设计了假设模型，并通过实证研究，分析企业声誉、企业-善因匹配度、捐赠额度、参与努力、信息透明度等因素对消费者感知企业伪善的影响。分析结果显示，企业声誉、企业-善因匹配度、捐赠额度、信息透明度将对消费者感知企业伪善产生负向影响，而参与努力将对消费者感知企业伪善产生正向影响，本研究将为企业成功开展善因营销活动提供一定的管理启示。

关键词：善因营销；感知企业伪善；企业声誉；企业-善因匹配度；捐赠额度；参与努力；信息透明度

1. 引言

在当今激烈的商业竞争环境中，企业单纯地依靠质量和价格等传统产品属性越来越难以在竞争中脱颖而出。许多企业意识到履行社会责任也可以作为一种营销战略，越来越多的企业开始选择善因营销，借助独特的实施策略将非盈利事业与商业运作有效结合，最终实现社会与品牌的双赢。所谓善因营销，是指当顾客参与满足组织和个人目标的产品交换时，企业向特定的慈善事业提供一定数量的捐赠（Varadarajan & Menon, 1988）。

近年来，善因营销在欧美盛行后也逐渐传入中国。随着社会对公益事业的重视以及公众越来越冀望企业承担更多的社会责任，消费者对企业在社会慈善行为与公益活动方面的表现也尤为关注。本土企业也纷纷开始了善因营销的实践，如农夫山泉与宋庆龄基金会合作的“饮水思源”助学基金，李宁的爱心助学公益活动以及361度运动品牌的“买一善一”等项目都引起了消费者的广泛关注。但是善因营销在我国本土化实践的过程中，也遇到了一些问题。在我国社会公信力不高，人际信任相对缺失的背景下，企业善因营销的信任度也较低，消费者普遍对其动机持保留态度，有些消费者更是会将善因营销冠以“伪善”、“作秀”等负面评价，部分企业不仅未能通过善因营销活动提升社会声誉，反而深受其害，这些都为企业开展善因营销活动带来很大的难度和困扰。

在企业社会责任研究领域，Wagner, Lutz, and Weitz (2009)首次从营销视角提出了“感知企业伪善”（Perceived Corporate Hypocrisy）的概念，他将感知企业伪善定义为消费者的一种信念，即消费者认为企业对外宣称自身如何，但实质却与宣称的不一致，并证明了不一致的CSR信息会导致消费者的感知企业
伪善，并引起消费者对企业的负面评价。善因营销作为一种特殊的 CSR 活动形式，其本身就与企业经济目标相关联，消费者在面对不当的策略或冲突的信息时，其产生伪善感知的可能性会更高。因此，本文的研究主要基于消费者对企业伪善行为的感知（Perceived Corporate Hypocrisy）这个概念，考察消费者在面对企业善因营销活动时其伪善感知的影响因素。

2. 研究假设

2.1 企业声誉对感知企业伪善的影响

企业声誉是消费者根据其直接或间接经验所掌握的相关信息（如企业的竞争地位、知名度、产品与服务信息等）对企业所做出的认知评价和情感倾向（Schwager, 2004）。朱翊敏与颜宏忠（2010）的研究发现中国消费者倾向于认为声誉较好的企业参与捐赠活动的动机是热心公益活动，声誉较差的企业则主要是出于图谋自身利益。Shim and Yang（2016）研究也发现当企业声誉良好并且没有危机时，实施 CSR 的效果最好；声誉不好的企业（或公司存在危机）实施 CSR 会导致公众推断企业别有用心从而最可能感知企业伪善。消费者通常会认为，拥有良好声誉的企业往往实力更强，有能力进行捐赠活动，同时声誉良好的企业非常看重其长年积累下来的企业形象，不希望出现不负责任的善因营销活动对其形象造成影响；而声誉相对较差的企业，消费者一方面会怀疑其参与善因营销活动的动机，同时也会质疑其履行捐赠行为的能力，这种对企业形象和其行为冲突的感知就有可能会导致消费者感知企业伪善。基于以上研究，本文提出如下假设：

H1: 善因营销中企业声誉对感知企业伪善有负向影响

2.2 企业-善因匹配度对感知企业伪善的影响

企业-善因（或品牌-善因）的匹配度，是指消费者所感知的企业赞助的事因与企业（在使命、产品、市场、技术、特征等方面）或品牌（在品牌概念或其他关键品牌联想等方面）的一致性（Simmons and Becker-Olsen, 2006; Koschate-Fiser et al., 2012）。大量的研究表明高的企业-善因匹配在善因营销中对消费者的响应带来更加积极的影响，而如果企业-善因匹配度低或甚至不匹配的情况下，则容易让消费者怀疑企业善因活动的动机。我们可以认为，善因营销中企业与慈善事件的匹配度越高，消费者越会觉得公司在尽心尽力利用自己的专业帮助他人，同时试图建立一种公众认同的联想，从而形成消费者对其善因营销活动的积极评价。相反，若企业与慈善事件的匹配度越低，消费者越可能觉得企业不是认真对待慈善活动，而仅仅只是想要借慈善之名行销售产品之实，从而形成对企业的负面甚至虚伪的感知。基于以上研究，本文提出如下假设：

H2: 善因营销中企业-善因匹配度对感知企业伪善有负向影响

2.3 捐赠额度对感知企业伪善的影响

善因营销中的捐赠额度，也被称为捐赠水平或捐赠规模，通常被界定为捐赠的一定比例（如购买产品价格的百分比），或绝对数量（如每销售一单位产品捐赠多少钱或物品）（Koschate-Fischer et al., 2012）。善因营销中企业较低的捐赠额度可能会造成消费者对企业负面的动机归因和态度。当捐赠额度较小时消费者倾向于认为非营利组织受到了剥削（Dahl & Lavack, 1995）。Mohr et al.
（2001）也认为善因营销中小规模的捐赠可能对企业产生不良影响。当消费者在认知善因营销活动时会利用已有的说服知识去解读企业的营销策略，较小额度的捐赠会使得消费者认为仅仅是利用捐赠作为达到自身目的的一个手段，而不是企业的一种行动（Campbell & Kirmani，2008）。较低的捐赠额度会让消费者怀疑企业参与善因营销的诚意，甚至产生伪善的评价。基于以上研究，本文提出如下假设：

H3: 善因营销中的捐赠额度对感知企业伪善有负向影响

2.4 参与努力对感知企业伪善的影响

善因营销中的消费者参与努力是指为了使企业完成捐赠，消费者在购买行为之外所要花费的时间或精力（Folse, Niedrich, & Grau, 2010）。有些善因营销活动只需要消费者购买产品企业就会完成捐赠，但有些善因营销活动需要消费者购买产品并付出努力（如完成一些事项）企业才会进行捐赠。不少学者在研究商业促销中的参与努力和获得回报之间的关系，认为增加参与努力会降低奖励吸引力。当增加参与努力时，消费者会降低对奖励的喜欢，减少自己的参与意愿（Waugh & Gotlib, 2008）。Arora and Henderson（2007）的研究也认为在善因营销活动中，参与努力会给消费者带来额外成本，从而导致对产品态度的负面影响。在善因营销活动中附带额外的捐赠条件，增加消费者的参与努力可能会引起消费者的不悦和心理抵触。消费者会根据自己的知识和经验来评价善因营销活动的公平性和意图。善因营销需要消费者的参与努力比较高时，就相当于为消费者参与善因活动增加更多限制，这些限制会使部分消费者放弃参与该活动，而因为消费者参与的减少将可能导致企业捐款的总额减少，消费者更容易感知企业的利己动机，会质疑企业善因营销活动的目的，进一步增加消费者对企业伪善的感知。基于以上研究，本文提出如下假设：

H4: 善因营销中消费者参与努力对感知企业伪善有正向影响

2.5 信息透明度对感知企业伪善的影响

善因营销中的信息透明度是善因营销企业及时充分地披露慈善捐赠活动信息，包括活动具体的参与方式，合作的慈善机构，捐赠对象，资金的使用情况及后续活动效果等（王颖晖、丁红伟，2014）。王颖晖和丁红伟（2014）认为企业在善因营销活动中的信息透明度有利于确立企业善因营销行为的合法性和帮助企业提高其社会形象。消费者参加善因营销活动的动机可能是希望支持自己认可的慈善或公益事业，因此，他们对于其参加的善因营销活动会比较关注，特别是活动筹集的善款去向、善款使用情况等信息。毕楠等（2016）认为，中国消费者对于善款的去向问题特别关注，并主要以此来判断企业是伪善还是慈善。这意味着如果企业可以利用多种途径向消费者清楚地披露善因营销活动的进展情况，同时能够清楚记录和权威披露捐赠资金的去向，消费者会对善因营销活动给予积极评价并提升活动参与意愿。反之，如果企业仅仅只是宣称开展某项善因营销活动，而缺乏对活动信息尤其是捐赠信息及时清楚地披露，则有可能被消费者视为有意隐瞒，从而导致消费者对企业参与慈善活动真实性的怀疑，并产生伪善感知。基于以上研究，本文提出如下假设：

H5: 善因营销中信息透明度对感知企业伪善有负向影响
综上所述，本文提出如下研究模型（图片 1）：

图片 1. 研究假设模型

3. 研究设计

3.1 问卷设计

根据前期探索性调研的结果发现，虽然不少消费者对企业善因营销活动有一定的认知和经历，但是很少有人能完整地回溯或描述所经历的善因营销活动，涉及到研究变量的一些细节也比较模糊。因此，本研究在问卷设计上，将提供一些真实案例作为阅读材料，帮助被调研者更直观地进行判断。结合论文的研究变量，本调研在近年来国内企业开展的善因营销活动中选取了 5 个有代表性的案例（详见附录二），对案例的描述参考了企业自身和媒体的报导，尽量客观真实。被访者在阅读完案例材料后，结合自己的善因营销活动经历，对调查测项给出相应答案。


3.2 抽样设计

根据以往学者的研究，受过一定教育的年轻人更容易关注企业的善因营销活动（Webb & Mohr, 1998; Cui et al., 2003; Chang & Cheng, 2015），而年龄较大的消费者（45 岁以上），普遍对于善因营销的认知和接触较少，因此本研究将主要调研对象设定为 18–45 岁有一定教育背景的人群。在正式调研时，本研究
主要采用判断抽样的方法，向调研对象发放线上或线下问卷。调研对象为高校的大学生和企事业单位职员，被访者男性与女性比例基本相当，并会涉及到不同的教育背景和职业。

在问卷发放中，不同阅读材料（五个善因营销活动案例）的问卷比例相当。在被访者填答问卷时，对有疑问的问题，研究人员会针对性的进行解释，从而使问卷填写的有效性和准确度得到保障。

4. 数据分析

本研究将在预研究中已被证明有效的抽样和问卷发放方式应用在正式调研中，共回收问卷450份，因为错填，漏填等原因而造成的无效问卷共24份，有效问卷数为426份，有效问卷率为94.67%。

4.1 描述性分析

表格1. 被访者特征统计表

<table>
<thead>
<tr>
<th>特征</th>
<th>项目</th>
<th>频次</th>
<th>百分比</th>
</tr>
</thead>
<tbody>
<tr>
<td>性别</td>
<td>男</td>
<td>208</td>
<td>48.8%</td>
</tr>
<tr>
<td></td>
<td>女</td>
<td>218</td>
<td>51.2%</td>
</tr>
<tr>
<td>年龄（岁）</td>
<td>&lt;18</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td></td>
<td>18-25</td>
<td>220</td>
<td>51.6%</td>
</tr>
<tr>
<td></td>
<td>26-35</td>
<td>127</td>
<td>29.8%</td>
</tr>
<tr>
<td></td>
<td>36-45</td>
<td>75</td>
<td>17.6%</td>
</tr>
<tr>
<td></td>
<td>&gt;45</td>
<td>4</td>
<td>0.9%</td>
</tr>
<tr>
<td>职业</td>
<td>学生</td>
<td>212</td>
<td>49.8%</td>
</tr>
<tr>
<td></td>
<td>公司职员</td>
<td>140</td>
<td>32.9%</td>
</tr>
<tr>
<td></td>
<td>事业单位/公务员/政府工作人员</td>
<td>57</td>
<td>13.4%</td>
</tr>
<tr>
<td></td>
<td>自由职业者</td>
<td>11</td>
<td>2.6%</td>
</tr>
<tr>
<td></td>
<td>其他</td>
<td>6</td>
<td>1.4%</td>
</tr>
<tr>
<td>受教育程度</td>
<td>大专以下</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td></td>
<td>大专</td>
<td>6</td>
<td>1.4%</td>
</tr>
<tr>
<td></td>
<td>本科</td>
<td>311</td>
<td>73%</td>
</tr>
<tr>
<td></td>
<td>研究生及以上</td>
<td>109</td>
<td>25.6%</td>
</tr>
</tbody>
</table>

4.2 信度分析

表格2是利用软件SPSS21对量表进行信度分析后的结果汇总。从数据可以看出，所有变量的分量表的Cronbach’s Alpha值均高于.800，表明本研究的调查资料信度非常好。
### 4.3 验证性因素分析

本研究在正式研究阶段收回的有效问卷为 426 份，已经符合拟合度检验的样本数量要求。表格 3 是使用 AMOS21 统计分析软件，通过最大似然法对数据进行 CFA 验证性因素分析的结果。从模型拟合度指标可以看出，此测量模型的拟合度处于标准范围内，模型可以被接受。（CMIN/DF=3.251<5; SRMR=.065<0.08; RMSEA=.073<0.08; IFI=.916>0.9; TLI=.901>0.9; CFI=.915>0.9）

从表格 3 验证性因素分析的结果可以看出，各测量指标的因素负荷量皆大于 0.50，所有变量的组合信度 C.R. 值在 0.834～0.924 之间，均高于.600，平均提取方差 (AVE) 值在 0.537～0.804 之间，均高于.500，表明量表内部信度良好以及具有较好的收敛效度，模型的内在质量较理想。

### 表格 3. 验证性因素分析结果

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Items</th>
<th>Factor loadings</th>
<th>C. R.</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>感知企业伪善</td>
<td>感知企业伪善 1</td>
<td>0.872</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>感知企业伪善 2</td>
<td>0.780</td>
<td>0.858</td>
<td>0.669</td>
</tr>
<tr>
<td></td>
<td>感知企业伪善 3</td>
<td>0.799</td>
<td></td>
<td></td>
</tr>
<tr>
<td>企业声誉</td>
<td>企业声誉 1</td>
<td>0.782</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>企业声誉 2</td>
<td>0.759</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>企业声誉 3</td>
<td>0.774</td>
<td>0.874</td>
<td>0.537</td>
</tr>
<tr>
<td></td>
<td>企业声誉 4</td>
<td>0.728</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>企业声誉 5</td>
<td>0.757</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>企业声誉 6</td>
<td>0.578</td>
<td></td>
<td></td>
</tr>
<tr>
<td>企业-善因匹配度</td>
<td>匹配度 1</td>
<td>0.829</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>匹配度 2</td>
<td>0.789</td>
<td>0.834</td>
<td>0.626</td>
</tr>
<tr>
<td></td>
<td>匹配度 3</td>
<td>0.754</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
在区别效度方面，各变量 AVE 值的平方根均大于它与其它变量之间的相关系数，表示各变量之间存在较好的区别效度。具体分析结果见表格 4。

### 表格 4. 区别效度分析结果

<table>
<thead>
<tr>
<th>变数</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>捐赠额度 1</td>
<td>0.924</td>
<td>0.859</td>
<td>0.754</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>捐赠额度 2</td>
<td>0.809</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>参与努力 1</td>
<td>0.870</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>参与努力 2</td>
<td>0.914</td>
<td>0.924</td>
<td>0.804</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>参与努力 3</td>
<td>0.905</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>信息透明度 1</td>
<td>0.530</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>信息透明度 2</td>
<td>0.700</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>信息透明度 3</td>
<td>0.912</td>
<td>0.864</td>
<td>0.569</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>信息透明度 4</td>
<td>0.900</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>信息透明度 5</td>
<td>0.657</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

注：表中对角线中数据为 AVE 的平方根

### 4.4 模型路径分析

#### 4.4.1 相关性分析

表格 5 为假设模型各变量之间的相关性分析结果，显示各变量之间的相关关系显著，可对假设模型的回归分析予以支持。

### 表格 5. 各变量相关关系表

<table>
<thead>
<tr>
<th>变数</th>
<th>平均数</th>
<th>标准偏差</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>感知企业伪善</td>
<td>2.995</td>
<td>0.731</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1641
2. 企业声誉
   3.214 0.630 -0.335 ** 1.000

3. 企业善因匹配度
   3.561 0.649 -0.419** 0.224** 1.000

4. 捐赠额度
   3.022 0.851 -0.526** 0.285** 0.258** 1.000

5. 参与努力
   2.823 0.885 -0.382** -0.145** -0.122** -0.339** 1.000

6. 信息透明度
   3.043 0.711 -0.516** -0.105* -0.176* 0.438** -0.454** 1.000

Notes:* p<0.05, **p<0.01

4.4.2 路径分析

结构模型拟合度指标中卡方与自由度之比CMIN/DF为3.209，小于界值5；SRMR值为.067，RMSEA值为.072，均小于.08的界值；相对指数IFI、TLI与CFI分别为.915、.902与.915，高于.90的界值。此假设模型的拟合度处于标准范围内，模型可以被接受，同时也证明了此假设模型可以被用于分析感知企业伪善的影响因素。

路径分析结果显示，企业声誉与感知企业伪善之间的路径系数为-0.346 (P<.05)，企业善因匹配度与感知企业伪善之间的路径系数为-0.280 (P<.05)，捐赠额度与感知企业伪善之间的路径系数为-0.158 (P<.05)，参与努力与感知企业伪善之间的路径系数为.187 (P<.05)，信息透明度与感知企业伪善之间的路径系数为-0.381 (P<.05)。

通过前文中的路径分析可以得知，研究假设结果是否成立如表格6所示。

### 表格 6. 假设检验结果表

<table>
<thead>
<tr>
<th>研究假设</th>
<th>是否成立</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1：善因营销中企业声誉对感知企业伪善有负向影响</td>
<td>是</td>
</tr>
<tr>
<td>H2：善因营销中企业善因匹配度对感知企业伪善有负向影响</td>
<td>是</td>
</tr>
<tr>
<td>H3：善因营销中捐赠额度对感知企业伪善有负向影响</td>
<td>是</td>
</tr>
<tr>
<td>H4：善因营销中参与努力对感知企业伪善有正向影响</td>
<td>是</td>
</tr>
<tr>
<td>H5：善因营销中信息透明度对感知企业伪善有负向影响</td>
<td>是</td>
</tr>
</tbody>
</table>

5. 结论和讨论

5.1 研究结论

第一，信息透明度的高低会对消费者感知企业伪善产生重要影响。当企业善因营销活动中的信息透明度较低时，消费者感知企业伪善程度会较高。企业往往从自身利益出发，通过各种途径宣传善因活动的启动信息，而在活动中及活动结束后对于捐赠金额、捐赠去向等情况并未做及时而清楚的披露，从消费者的关注点来看，他们会认为企业有意隐瞒关键信息，从而容易产生企业伪善认知。
第二，企业声誉的高低也会对消费者感知企业伪善产生重要影响。企业声誉作为善因营销活动的背书者，会直接影响消费者对企业伪善的感知水平，企业声誉越高消费者感知企业伪善越低，企业声誉越低则消费者感知企业伪善越高。

第三，较低的企业—善因匹配度，会加深消费者感知企业伪善的程度。善因营销中企业与善因事件的匹配度越高，消费者会认为企业开展的善因营销是为了树立企业形象的长期战略或者是企业利用自身资源优势开展企业慈善。相反，如果企业与善因事件的匹配度较低，消费者会认为企业是临时起意，是出于自身短期利益考虑来支持一项善因活动或仅仅因为假借慈善之名来解决产品销售的短期困难，从而加深其感知企业伪善的程度。

第四，较低的捐赠额度，会加强消费者感知企业伪善的程度。消费者参加善因营销活动的动机是希望对企业宣传的公益事业产生切实帮助，如果企业的捐赠额度过小，消费者会认为自身的参与行为缺乏价值，同时也会认为企业缺乏对公益事业给予支持的诚意，从而会加强其感知企业伪善的程度。

第五，参与努力越高，越会让消费者感知企业伪善。消费者是出于社会良知通过企业善因活动对捐赠对象来实施捐赠，如果企业还需要消费者花费更多时间和精力才能完成捐赠行为，消费者会认为企业是故意在设置活动门槛，在借用慈善名义销售产品的同时有意降低捐赠金额，从而推动消费者感知企业伪善的形成。

企业声誉、信息透明度、企业—善因匹配度、参与努力、捐赠额度作为影响善因营销中消费者感知企业伪善的主要因素假设的检验成立，揭示了企业在开展善因营销时需要系统的考虑不同方面的因素，企业一旦在某一项或几项主要因素存在明显缺陷，就很可能导致消费者对于企业伪善的感知。

5.2 研究不足与未来研究方向

本研究还存在一定的局限性，主要表现在：1、调查方法的不足。由于善因营销在国内企业中尚未处于普遍应用状态，要在一定期间内对经历过善因营销活动并保留有较深印象的大量消费者开展直接调研有些不现实，本研究采用的调查研究法是将典型案例编写为文字素材，在调查时将被调查人引入特定的营销情境和活动过程中，让被调查人形成自身感受再回答调查问题。受此研究方法的局限，被调查人员对于案例材料的感知可能和实际经历过该活动的消费者的感知存在差异。2、研究领域的不足。由于善因营销在日用消费品领域中应用较多，本次调查选取的5个典型案例都是集中在日用消费品领域，研究案例针对的行业视角有限，而对于文化行业、服务行业等其它行业的特殊属性未纳入研究范畴。

基于本研究的诸多不足，该课题今后的研究方向可以从以下几个方面考虑：1、加入现场调查资料。今后可以跟踪开展善因营销的企业，在善因活动现场对企业的目标消费者开展调查，积累到一定量的不同企业的活动现场调查资料后，对本文所构建模型做进一步验证。2、扩大研究的行业范围。随着善因营销模式被更多企业和更多行业引用，今后可以选择一些不同行业的善因营销案例进行研究，并对不同行业的善因营销活动进行比较，找出在不同行业中影响消费者感知企业伪善的差异化变量，并探讨各研究变量在不同行业的影响程度，进一步扩大研究本课题的现实意义。
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   究. 管理学报, 13(3): 347-358.


附录一：问卷测项

<table>
<thead>
<tr>
<th>测量项目</th>
<th>测量内容</th>
<th>测项来源</th>
</tr>
</thead>
<tbody>
<tr>
<td>企业声誉</td>
<td>1. 我认为该企业处于行业领先地位</td>
<td>Schwaiger (2004)</td>
</tr>
<tr>
<td></td>
<td>2. 我认为该企业经营能力强</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. 我认为该企业知名度高</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. 我认为该企业令人赞赏和尊敬</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. 我认为该企业令人喜爱</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6. 如果该企业倒闭，我会觉得特别遗憾</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. 我认为该企业开展该慈善活动与其形象相符合</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. 我认为该企业开展该慈善活动非常有意义</td>
<td></td>
</tr>
<tr>
<td>捐赠额度</td>
<td>1. 我认为相对产品的价格，此捐赠额度是高的。</td>
<td>Koschate-Fischer et al. (2012)</td>
</tr>
<tr>
<td></td>
<td>2. 我认为此捐赠额度高于企业善因营销活动捐赠的平均水平。</td>
<td></td>
</tr>
<tr>
<td>参与努力</td>
<td>1. 在完成产品购买后，要完成捐赠行为，我需要花费较多努力</td>
<td>Folse et al. (2010)</td>
</tr>
<tr>
<td></td>
<td>2. 在完成产品购买后，要完成捐赠行为，我需要花费较多时间</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. 在完成产品购买后，要完成捐赠行为，我需要做较多事情</td>
<td></td>
</tr>
<tr>
<td>信息透明度</td>
<td>1. 我认为该企业有通过多种途径（如官方网站、媒体等）披露活动信息</td>
<td>王颖晖与丁红伟 (2014)</td>
</tr>
<tr>
<td></td>
<td>2. 我认为该企业清楚地披露了活动的开展情况（如开展方式、合作组织等）</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. 我认为该企业清楚地披露了活动的捐赠信息（捐赠总额、捐赠去向、捐赠对象等）</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. 我认为该企业及时地披露了活动的捐赠信息（捐赠总额、捐赠去向、捐赠对象等）</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. 我认为该企业披露了由社会中介机构出具的活动财务审计报告，活动信息比较可靠</td>
<td></td>
</tr>
</tbody>
</table>
1. 我认为该企业的行为虚伪
2. 我认为该企业说一套做一套
3. 我认为该企业假装履行社会责任

附录二：问卷阅读材料

阅读材料 1：2013 年 4 月 1 日，361°有限公司联合中国扶贫基金会启动了“买一善一”公益项目。该项目的帮助对象是贫困地区缺鞋的小学生，具体操作流程是：消费者在 361°天猫商城每购买一件 361°指定的公益专款鞋（价格 129 元至 399 元不等），就同步以消费者名义向受捐赠的贫困小学生捐出一双适合其尺码的 361°童鞋。网上成功购买产品后，消费者会及时收到来自“买一善一”的匹配短信，将被告知对应的被捐出的童鞋的去向，之后消费者可以通过“买一善一”活动网站查询捐赠进度，该网站也会不断更新童鞋的累计捐赠数量和发货情况，最后消费者还将收到被捐赠孩子亲笔写的回音卡。中国扶贫基金会负责采集贫困地区儿童信息以及捐赠童鞋的配送、发放等工作。361°通过官网及多家媒体对此次活动进行了广泛的宣传和报导，不少消费者参与了公益鞋的购买活动。

阅读材料 2：2012 年 5 月 31 日，娃哈哈集团携手中国扶贫基金会启动了公益项目“筑巢行动”。娃哈哈集团决定至 2012 年底，娃哈哈每销售一瓶营养快线，即向中国扶贫基金会“筑巢行动”捐赠一分钱，捐赠款项将用于支持贫困地区小学的爱心宿舍建设。揭开营养快线的标签，后面有一个 16 位字母+数字的“爱心码”，为了让大家参与到这场爱心行动中，娃哈哈设置了发送爱心码的环节，消费者根据提示输入并发送标签上的爱心码后，娃哈哈就捐出一分钱。娃哈哈召开了新闻发布会并通过多家媒体对此次活动启动进行了广泛的宣传报导。活动中和活动结束后，企业官方网站及媒体并未公布或报导有关活动的销售情况和最后捐款金额。

阅读材料 3：2016 年 7 月到 9 月，华美食品集团携手免费午餐公益基金共同举办了“你买一盒，我捐一块”的中秋公益活动。此次公益活动，消费者通过购买指定的华美月饼（每盒售价为 110 元至 198 元不等），扫一扫包装盒上的二维码，进入华美微信服务号活动主页面，华美食品就将捐赠一分钱，用于资助贫困山区学校的免费午餐项目，该项目为贫困学童提供免费午餐，以帮助他们健康成长。华美召开了新闻发布会并通过多家媒体对此次活动的启动进行了广泛的宣传报导。活动中和活动结束后，华美公司并未在官网或其他媒体公布活动的销售情况和最后捐款金额。

阅读材料 4：安康巴山雪公司于 2016 年 1 月正式投产，目前主要生产销售巴山雪牌瓶装和桶装天然饮用山泉水。巴山雪在投产近一年后，计划进入全国市场。2016 年 12 月，该公司启动了“喝一瓶巴山雪，捐一分钱”的活动。公司向社会承诺，从 2017 年 1 月开始三年内，每卖一瓶巴山雪瓶装水（零售价 3 元），捐出一分钱，作为爱心扶贫专项基金。捐助基金主要用于陕西当地精准扶贫和慈善、生态环保事业，具体使用由当地扶贫局与巴山雪公司商定。巴山雪公司通过官网及多家媒体对此次活动的启动进行了广泛的宣传报导。公司在每季度末通过企业官网及当地政府网站向社会公布捐赠资金募集情况及使用明细，广泛接受社会各界监督。
阅读材料5：2015年5月21日，美的集团生活电器事业部连手“免费午餐”公益项目在广州举办了美的鼎釜IH智慧电饭煲在中国的首发开售仪式，作为高端智慧电饭煲，美的鼎釜每台售价为2999元。在开售仪式上，美的宣布携手“免费午餐”一起掀起一场“米饭革命”：美的计划2015年全年在中国市场限量发售10万台鼎釜电饭煲，每卖出一台鼎釜电饭煲向免费午餐公益基金捐出20元。美的通过官网及多家媒体对此次活动进行了广泛的宣传和报导。美的公司在媒体报导中表示，按照每一顿营养午餐3元来计算的话，消费者购买一台“鼎釜”相当于为贫困地区一个孩子解决一周的免费午餐，美的希望通过携手免费午餐项目为公益助力。活动中和活动结束后，美的公司并未在官网或媒体公布及报导此次活动的销售情况和最后捐款金额。
The Entrepreneurial Culture on Business Model Innovation: Single Case Study of Phoenix Tea

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Abstract

Each place has its streams in from all over the country. Differences in resources, geographical location and customs have created distinctive regional entrepreneurial cultures, which exert different effects on business model innovation. Based on the theories of entrepreneurial culture and business model innovation, we divide entrepreneurial culture into four dimensions: farming consciousness and commodity consciousness, power desire and service consciousness, risk aversion and innovation consciousness, righteousness priority and interest priority. Taking Phoenix Tea established only five years ago as the research object, we use the single case study method to explore the root cause of the different results in Shandong province and Zhejiang province. Based on O2O, Phoenix Model is a new model of innovation and entrepreneurship. We find that the significant differences in regional entrepreneurial culture directly influence business model innovation. To a certain extent, Shandong's entrepreneurial culture restricts the development of novel business model, while Zhejiang's promotes business model innovation. Meanwhile, regional entrepreneurial culture also plays a key role in learning advanced business models. Only improving it fundamentally can we change the status quo. The results broaden the scope of the influencing factors of business model innovation and provide guidance for innovating
platform service model in the era of mass entrepreneurship and innovation.

*Keywords*: Entrepreneurial Culture; Business Model Innovation; Creative Space
南橘北枳：创业文化对商业模式创新的影响
——基于凤岐茶社的单案例研究

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摘要

“一方水土养一方人”。资源禀赋、地理位置、人文风俗等区域差异，产生了各具特色的地域性创业文化，不同的创业文化对商业模式创新的影响天壤之别。本文基于创业文化与商业模式创新等理论，将创业文化划分为小农意识与商品意识、权力欲望与服务意识、风险规避与创新意识、重义轻利与利益优先四个维度，以成立仅五年的凤岐茶社为研究对象，运用单案例研究方法，探究凤岐茶社基于O2O打造的创新创业服务新模式——凤岐模式在山东和浙江呈现“南橘北枳”的根源。研究发现，区域创业文化的重大差异直接影响了商业模式创新，山东的创业文化在一定程度上制约新颖性商业模式的发展，而浙江的创业文化则促进商业模式创新；同时，区域创业文化在学习先进商业模式上也发挥关键作用，如果不对其进行根本变革，“北枳”终究难成“南橘”。研究拓宽了商业模式创新影响因素的研究范围，为“大众创业，万众创新”时代下创新平台服务模式提供指导。

关键词：创业文化；商业模式创新；众创空间

1. 引言

自2014年9月李克强总理首次在夏季达沃斯论坛开幕式上提出“大众创业，万众创新”号召之后，特别是随着大数据、云计算、移动互联、物联网技术的快速发展，“双创”服务平台模式不断涌现，如各种创业孵化园区、众创空间等。凤岐茶社正是借政策之东风，顺时代之潮流应运而生的国内首个基于O2O模式的创业资源共享和交流平台。这种新颖模式超越了产品之间的竞争，成为商业模式之间的竞争。商业模式创新（Business Model Innovation）成为企业形成竞争优势的主要来源，而O2O商业模式是新创企业的重要战略选择。

诞生于山东的凤岐茶社，在本地发展异常艰难，却在移师浙江后快速成长为“国家级众创平台”的“互联网+”农业创业孵化公司。短短4年，实现平台总资产超过100亿的骄人业绩，并形成了“新一代信息技术+综合型协同创新服务平台+全产业链改造升级”的现代智慧农业发展模式，成为互联网背景下商业模式创新的典型代表。
山东为何留不住凤岐茶社？浙江又是如何成功引进，助力其快速成长？外部环境如何影响创业活动，进而影响商业模式创新？

外部环境是影响商业模式创新的重要前因变量，比如技术、网络位置、利益相关者需求、竞争对手等；同时相关法律制度、规制、非正式制度等也是重要的调节变量（Foss等，2017）。其中，创业文化在企业商业模式创新中的作用不可忽视（王水莲等，2016），地域文化差异是导致商业模式选择不同的根本原因（易顺等，2017）。现有文献对于创业环境中地域文化对商业模式创新影响的研究还很欠缺和笼统，大多浮于表面、流于形式，缺乏对其作用机制的研究。因此，深入研究创造千年商业奇迹的商帮文化对商业模式创新和中国企业对话全球市场具有重要价值。实践中，对于凤岐茶社弃鲁奔浙的现象，山东省委书记刘家义等高度重视，多位省领导作出批示，要求认真学习凤岐模式，推动传统农业转型智慧农业，实现新旧动能转换。

鉴于此，本研究选取凤岐茶社这一具有典型性的新创企业，运用单案例研究方法，综合比较分析山东、浙江不同的创业文化对凤岐模式发展的影响，挖掘其弃鲁奔浙的根源，探究创业文化如何影响商业模式创新，为山东改善创业文化环境提出合理化建议。研究成果一方面将拓宽商业模式创新影响因素的研究范围，剖析创业文化的作用机制，丰富商业模式理论；另一方面有利于指导“大众创业，万众创新”，打造平台服务新模式，贯彻乡村振兴战略，助力传统农业转型。

2. 文献综述

2.1 商业模式创新

随着互联网和电子商务的发展以及经营管理理念的深刻变化，商业模式（Business Model）研究逐渐引起学术界的高度关注，甚至被视作是关系到企业兴衰成败的首要因素。Amit和Zott认为商业模式是企业获取利润的经营模式，也是企业与利益相关方构成的交易网络，同时还是以企业为中心的价值创造系统，商业模式的重要性获得学界一致认同。尽管研究者对商业模式定义的看法不一，但多采用Teece（2010）的概念，即企业创造价值、传递价值和获取价值的机制。

对于商业模式创新（Business Model Innovation）的研究，学者们主要从技术创新、战略学、营销学和商业模式等四种视角阐述商业模式创新。王雪冬等（2013）基于不同学科学者对商业模式创新认识，阐明商业模式创新是指组织为了实现更高的价值获取而对涉及到价值创造、传递和获取的一系列组织活动和架构进行的创新和变革，是一种系统化的创新活动，能够为客户创造并传递新价值。与产品创新和过程创新不同的是，商业模式创新强调组织结构、运作模式、商业流程和价值创造的重新设计（李永发等，2015）。Casadesus等（2011）认为商业模式创新必须回答两个问题：一是解决战略定位，即面向哪些客户及提供什么价值的问题；二是强调执行策略，即在提供服务、获取价值的过程中企业应具备哪些能力。Amit和Zott（2001）进一步提出商业模式创新的四大动因是新颖性、锁定性、互补性和效率性，其中新颖型商业模式和效率型商业模式探讨最多（2008）。Gronum等（2016）则认为新颖型商业模式对企业的正向影响更大。对于新创企业而言，商业模式创新尤为重要。
此外，商业模式具有可复制性，企业可对其进行复制并推广，实现效益最大化。商业模式复制是由主导者创造性地重复利用，而非简单的方案照搬（Winter 等，2001）。换言之，商业模式复制是企业对其成功的商业模式反复应用，并在复制过程中进行改进和完善（Dunford 等，2010）。从复制主体来看，商业模式复制分为两种，即企业的自我复制和竞争对手的模仿。商业模式的自我复制有两个阶段，第一阶段是商业模式的创造与提炼，第二阶段是大规模复制，即商业模式的稳定与推广（Bradach 等，1997）。企业对自身商业模式进行复制并重复应用的难易程度称为商业模式的可扩展性（周盼凤等，2015）。商业模式的可扩展性主要体现在业务类型、业务规模拓展以及地理空间转移等。企业可利用现有资源与机会进行商业模式复制，达到不断拓宽业务规模和企业边界并支撑企业持续成长获得竞争优势的目标。

2.2 O2O 商业模式


2.3 创业文化

创业文化是人类文化的一部分，指人们在创业过程中形成的与创业相关的心理意识、价值观念、文化氛围、思想观念等一系列社会意识形态的总和，其内核是创新（王明雪，2018）。创业文化是创业环境的重要组成部分，是促进创业活动发展的重要推动力，与企业的可持续发展紧密相连。创业环境是一个综合性的概念，指能够对企业成长产生影响的一系列外部因素所组成的有机整体，是企业发展的重要外部介质（贾兴平等，2014；Khelil，2016）。有关创业环境的研究历史悠久，早在两个世纪前就已经开始，最近几十年也逐渐成为该领域关注的热门话题。Gartner（1985）认为良好的环境对于提升创业成功的几率起决定性作用。在此基础上，姚晓芳等（2007）综合调查深圳、合肥、安庆三地后发现，由于地区间创业环境的差异，三个地区的创业者进行机会评价时选择的因素侧重点不同。
董保宝等（2014）突出强调新创企业要更加关注内外部环境变化，增强企业对外部环境的适应性，从而提升企业的竞争优势。相比之下，创业文化相关的研究文献比较匮乏，学者主要对创业文化的构成要素进行了不同维度的界定（见表1），并在此基础上进行了初步的研究。

表格1. 创业文化的构成要素

<table>
<thead>
<tr>
<th>研究视角</th>
<th>构成要素</th>
<th>引用</th>
</tr>
</thead>
<tbody>
<tr>
<td>创业者个人观点</td>
<td>个人价值观念、管理技能、经验和行为</td>
<td>Schumpeter，1934</td>
</tr>
<tr>
<td>社会认知视角</td>
<td>创业条件、创业特征、社会环境</td>
<td>Hilary等，2001</td>
</tr>
<tr>
<td>两者结合视角</td>
<td>思想意识、价值观、社会心理</td>
<td>邓建生，2000</td>
</tr>
<tr>
<td></td>
<td>思想意识、价值观、社会心理</td>
<td>辜胜阻等，2007</td>
</tr>
<tr>
<td></td>
<td>个人状况、人格取向、家庭取向</td>
<td>王文君，2010</td>
</tr>
<tr>
<td></td>
<td>思想意识、价值观、基本态度、行为方式、社会</td>
<td>仲伟伫等，2012</td>
</tr>
<tr>
<td>国家环境鼓励、社会认知态度、创业者个人特质</td>
<td>国家环境鼓励、社会认知态度、创业者个人特质</td>
<td>肖陆军，2014</td>
</tr>
</tbody>
</table>

资料来源：根据相关文献整理。

创业文化植根于创业环境中，因而具有鲜明的地域性、传承性、时代性、进步性等独特属性。创业文化是人们在特定的地理环境、经济条件、历史文化等基础上建立的思想价值观念，是自然环境与人文环境融合形成的商业生态系统，因此具有较强的地域性特征（王明雪，2018）。张佑林等（2010）经过研究文化影响区域经济发展路径和因素，发现山东经济发展总体落后于浙江的根本原因在于鲁浙两省文化的差异。张卫国（2005）进一步深入挖掘，认为商文化推崇重农抑商、官本位思想根深蒂固、封闭保守、循规蹈矩；江浙文化崇尚工商皆本、开放冒险、勇于创新。此外，王兴元等（2014）提出山东商人具有浓重的官商文化情结，善于单打独斗、重义轻利、保守稳健；浙江商人反对恪守教条、善于精诚合作、追求功利、敢为人先。

在梳理相关文献，针对鲁浙创业文化具体分析，以及借鉴霍夫斯泰德文化维度理论（Hofstede，1980）的基础上，本研究从农耕意识与商品意识、权力欲望与服务意识、风险规避与创新意识、重义轻利与利益优先四个维度来划分创业文化。同时，商业模式创新的影响因素包括内部和外部因素，也是企业可持续发展的关键点，创业文化在商业模式创新中的作用至关重要。综上所述，本文提出研究框架如图1所示。

图片1. 研究框架
3. 研究设计

3.1 研究方法与案例选择

案例研究通常基于多途径的数据来源，对于某种现象的具体表现进行实证性的描述（Yin, 2008），主要回答“为什么”、“怎么样”的问题。本研究属于案例研究范畴，且适合开展案例研究，主要采用探索性的单案例研究方法，以凤岐茶社这一新创企业为例探究创业文化对商业模式创新的影响。相比多案例研究，单案例可以更加聚焦分析（王水莲，2016），更具针对性。本研究选取凤岐茶社为案例研究对象，主要基于以下几点：

（1）选取案例过程遵循了理论抽样原则，以及与理论目标适配性原则（Glaser 等，1968）。所选案例出于研究目的需要，能够拓宽商业模式创新的影响因素，填补现有研究的空白。因此，凤岐茶社与研究目标存在适配性。

（2）案例选择兼顾了重要性和代表性原则（欧阳桃花等，2016; Patton，1987）。凤岐茶社自成立以来就受到鲁浙等省委书记高度重视，并指出大力推广学习其模式，且基于 O2O 模式形成的凤岐茶社商业模式具有典型的新颖性和独特性，研究价值高。

（3）案例研究的可行性。凤岐在短短 4 年间，从初创企业迅速成长为国家级众创空间，总资产突破 100 亿，发展阶段相对完整，数据资料比较丰富，可研究性强。

3.2 数据来源

本研究基于二手数据，多渠道收集各大媒体对凤岐茶社的专题报道和视频采访，凤岐茶社官方微信公众号相关资料、政府领导的相关批示、网络资源、期刊杂志专访、企业发展报告等。多样化的数据收集方式可实现数据间的交叉验证，保证了数据的丰富性和准确性，提高了案例研究的信效度，研究团队综合整理后形成文稿约 20 万字。

4. 案例描述
4.1 凤岐茶社简介

凤岐茶社于 2014 年在山东大学中心校区成立，所属济南果壳视界信息科技有限公司，创始人是傅骞。凤岐茶社采取线上线下茶社和线上平台相结合的方式，为创业者、投资机构、院校、企业和政府相关部门等创新创业参与者提供创新创业服务，是一个多维度共享和交流平台。依据服务对象不同，凤岐茶社主要有凤岐大学生创业基地和凤岐创业创新基地两类性质业务。

凤岐茶社创造了国内四个第一：国内首个基于 O2O 模式的创新创业资源共享和交流平台；首个在线视频创业教育平台；首个由政府指导企业建设管理的结合线上线下茶社和线上平台的创业孵化基地；首个为二三线城市的孵化器提供创业资源导引和创业培训的 O2O 平台。

截至 2019 年 3 月，该平台企业已在山东、浙江、贵州和北京等地构建了 13 家众创空间，其中 3 家被科技部认定为国家级众创空间，携手平安银行打造科技企业孵化器，在全国 11 个省成功孵化近 60 家智慧农业企业，共有入孵企业 280 多家，入库企业 3000 多家，总资产超过 100 亿元。

4.2 企业发展阶段

4.2.1 初创期——独树一帜，崭露头角（2014.6—2015.12）

顺应国家“大众创业，万众创新”号召，凤岐茶社应运而生。2014 年 6 月，首家凤岐大学生创业基地在山东大学正式成立并运行，主要业务包括创投基金、创业教育、产业对接、创业孵化、公共技术支撑等。并于当年 12 月在潍坊创立山东省首个基于 O2O 模式的创新创业孵化器——潍坊软件园，随后与车库咖啡、北京大学校友会、中科招商投资集团等数十家国内顶尖的创服机构、投资机构建立了长期友好合作关系，将优秀的创业资源通过线上平台源源不断地导入潍坊。到 2015 年 6 月，凤岐茶社已有 11 个项目团队入驻，与全国 20 多家创投机构、100 多家创投基金展开合作。两家孵化基地的运营，标志着通过线上平台大学与高新区的线下创业资源正式打通。

4.2.2 快速成长期——弃鲁奔浙，跨越发展（2016.1—2017.12）

2015 年 5 月，凤岐茶社在北京“双创周”活动上展示了智慧农业感知管理系统和食品可追溯系统，引起浙江桐乡市政府的高度重视，并以优厚的条件引进乌镇。2015 年 12 月，凤岐茶社正式落地乌镇，建立第一个“复制点”。此后，凤岐茶社在浙江成功孵化华腾牧业、丁香食品等传统企业，开始将凤岐模式向全国推广，主要包括让农企上云的云上农场、培育新农人的云上农校、保障食品安全的区块链追溯、构建融资新平台的五屏互动路演系统四大部分，迎来公司的跨越式发展。

4.2.3 稳定发展期——扶摇直上，引领行业（2018.1—）

到 2018 年，凤岐茶社以乌镇为中心，在全国多地建成 13 家众创空间，成功
孵化近60家智慧农业，并成为国家级众创空间。到目前，借助乌镇峰会效应，凤岐茶社打造成为国内知名的智慧农业发展和新动能提升的服务平台，逐渐形成了独具特色的凤岐商业模式——“新一代信息技术+综合型协同创新服务平台+全产业链改造升级”的现代智慧农业发展模式，即通过云计算、物联网、大数据、区块链、北斗导航模块等现代信息技术在农业领域的应用，实现农业生产过程的精确化、标准化和规范化，进而提升农业生产效率，保障食品安全，打造农产品品牌，提高农民收入，加快实现传统农业向智慧农业转型和新旧动能转换（见图2）。

图2. 企业发展阶段

5. 案例分析

古有齐国相国、山东大汉晏婴出使南方的楚国，留下了“橘生淮南则为橘，生于淮北则为枳”的名言。今有生于山东的企业孵化器——凤岐茶社，却在移入南方的浙江后快速成长为国家级众创空间，似乎反向成为“生于山东则衰，长于浙江则兴”。山东创服模式异乡生根开花，究其原因，在于鲁浙创业文化不同。基于图1的研究框架，本文从创业文化的四个维度进行展开分析。

5.1 小农意识与商品意识对商业模式创新的影响

山东地理环境优越，自然资源丰富，长期以农耕为主，形成了自给自足的小农经济，呈现出强烈的农耕文化特征，小农意识根深蒂固，封闭的文化严重限制
了商业的发展。山东作为国内几大农作物产区之一，长期处于资源型农业社会，严重缺乏商品交换意识和商品经营行为，“重农抑商”的价值观念深入人心。在这种情况下，山东人形成了精耕细作、崇拜土地的行为作风，满足于自给自足、封闭保守的生活状态，落后的小农意识和“重农抑商”的观念制约了人们创新发展。

山东作为农业大省，传统农业亟待转型。2018年10月发布的《山东省农业“新六产”发展规划》中明确指出“山东农业大而不强特征明显，对标江苏、浙江等省，农业先发优势不再突出，有些领域甚至已经落后”。山东的农业科技贡献率和农村人均可支配收入均低于浙江，山东迫切需要加快新旧动能转换，智慧农业是重点，而风岐茶社的主营业务正与此高度契合，凤岐模式的创新之处就是为加快实现传统农业向智慧农业转变和新旧动能转换探索出一条高效路径，值得在山东大力推广。但现实中，山东人自古落后的小农意识、自给自足的心态阻碍了凤岐茶社在山东的发展。凤岐茶社原计划2015年在山东布局20个点，10家在高校，10家落户在各地高新区，却没有达到预期效果，山东迫切需要的凤岐模式难以推广。由此可见，山东创业文化中的小农意识制约商业模式创新。

对比之下，浙江的商业文化传统悠久而发达，早在先秦时代就提出了比较成熟的商业理论。明清时期，工商业的蓬勃使得商品经济和商业化的生活方式成为社会文化历史中重要的组成部分。浙江人在经商实践中形成了强烈的商品意识和重商主义，提倡“工商皆本”，发展商品经济。浙江人脚踏实地，艰苦创业，有超常的市场意识和经商头脑，创立大量民营企业，涌现大量民营企业家。并且，在经营发展中，浙江人非常注重与他人建立良好的合作关系，重双赢，求共赢，不断扩大企业规模，获得产业扎堆的集群效益。

在浓厚的商业文化氛围下，浙江自古以来重视发展商品经济，浙江人提倡“工商节本”，拥有强烈的商品意识和创业精神。近年来，浙江农业发展势头良好，农业科技贡献率屡创新高，农村人均可支配收入高达2.7万，相比之下，山东只有1.6万。在农业稳步发展的情况下，民营经济更是取得了辉煌的成绩，浙江兼获民营经济大省和民营经济强省，拥有众多民营企业，且大多面临转型升级。浙江也启动了“个转企、小升规、规改股、股上市”民营企业转型工程，这为凤岐茶社的发展提供了良好的传统企业基础，一系列的孵化项目助力凤岐模式优化升级。很明显，浙江创业文化中的商品意识促进商业模式创新，凤岐茶社的崛起也是依托浙江发达的民营经济。故此，提出命题1。

命题1a：山东创业文化中的小农意识制约商业模式创新；
命题1b：浙江创业文化中的商品意识促进商业模式创新。

5.2 权力欲望与服务意识对商业模式创新的影响

在封建等级制度及儒家文化“重仕轻商”和“君重臣轻”思想的影响下，形成了被冠以“官文化”的鲁商文化。创业文化中带有强势性和傲气，“官本位”思想严重（王兴元等，2014）。传统文化高度推崇集权思想和独裁观念，具有强烈的权力欲望，逐渐政治不善经济，形成了“士农工商”的社会格局，因而政府缺
乏为商人服务的意识。并且，“官本位”思想盛行使山东人陷入一种“唯权是图”的拜权主义扭曲观念之中，形成对权力的依赖心理，“当官”而非“创业”成为人生价值的标准，只考虑个人仕途，丝毫不顾规则、不顾后果，扰乱了市场经济秩序，增加了社会经营成本，很大程度上制约了山东创业创新，成为经济快速发展的障碍。此外，在“官本位”思想影响下，容易滋生腐败，助长官僚作风，形成“凡事全靠关系”的局面，破坏了山东的营商环境，服务意识、责任意识的严重缺乏造成创业路上困难重重。

凤岐茶社最初落户潍坊市高新区软件园时，山东省委领导曾对其发展给予高度重视。但到了地方层面，由于“官本位”思想严重，加之对新业态缺乏认知，相关部门的承诺迟迟未能兑现。凤岐茶社屡次因为水电网暖等待遇方面的问题与当地职能部门发生冲突，而凤岐茶社位于寿光的凤岐驿站也成为国内唯一一家主动关闭的分公司。据相关资料，寿光市曾许诺水电网暖等费用全免，然而入驻以后就不予免费，租金不要，但是要缴纳高额的租金。凤岐模式之所以在山东落地推广困难重重，与山东的营商环境密切相关。淄博市科技局党组书记指出，“凤岐事件”实质上是服务不到位、政策不落实等深层次问题；滨州市商务局党委书记张龙文称，山东与浙江营商环境的巨大差异折射出部分干部服务意识、责任意识严重不足。目前，山东“官本位”思想盛行，创业文化的权力欲望制约商业模式创新，迫切需要改变职能部门“唯权是图”的观念，营商环境亟待优化来促进创新创业的发展。

与鲁商“官文化”完全不同，浙商文化是标准的“民文化”，也称之为“草根文化”。浙江素有“百工之乡”的地利条件和“百姓经济”的发展土壤，政府敢于放手，让成千上万的“民商”自由发展（王兴元等，2014）。在此文化氛围中，政府始终坚持为创业者营造有利的经商环境，全心全意为创新创业服务，连续出台优惠政策，支持“大众创业、万众创新”。众所周知，营商环境是一个城市的重要软实力，更是核心竞争力。作为民营经济大省和强省，浙江正在努力打造审批事项最少、办事效率最高、投资环境最优、企业获得感最强的省份。

在2015年北京“双创周”活动上，桐乡政府主动接洽凤岐茶社，以优厚的条件招商引进乌镇。在凤岐茶社入驻乌镇后，当地政府立即履行协议负责牵线搭桥，介绍了5家迫切需要转型的传统企业与凤岐茶社合作，帮助其尽快打开局面，服务型政府的作用发挥得淋漓尽致。“我们来到乌镇后，很多事情最多只需要找一个人就可以办好。问题提出来，基本上两天之内就会有相关部门来反馈，很快就能够得到落实。”凤岐茶社负责人傅骞发自肺腑的话语正是浙江优越营商环境的最好证明，浙江长期坚持不懈优化营商环境成效显著，真正做到了“主动服务企业，服务到需求痛点上”。凤岐茶社在浙江的稳步发展，以及凤岐模式的成功推广，靠的是营商环境的力量，靠的是服务型政府的力量，浙江创业文化中的服务意识促进商业模式创新。基于以上分析，提出命题2。

命题2a：山东创业文化中的权力欲望制约商业模式创新；

命题2b：浙江创业文化中的服务意识促进商业模式创新。
5.3 风险规避与创新意识对商业模式创新的影响

山东具有典型的农耕文化特征，封闭落后的小农意识长期存在，以农为本、以土为本的价值观念深刻地烙印在山东人的性格里，使人们形成了固步自封的思维方式、不思进取的生活态度、自我满足的安逸心态。这也导致山东人创业大多是被动的，只要能够生活，能够生存，他们一般不愿打破既有的生活状态去冒险创业。因此，山东落后的地域文化观念和意识形态一定程度上束缚了人们的思想，限制了人们的创业行为，导致人们目光短浅、眼界狭窄、思想保守。在面对新事物和新思想时，态度不积极，反应很迟钝，缺乏创新意识和冒险精神。长此以往，山东人形成不愿开放、不愿冒险的封闭状态，难以把握市场发展机遇，且安于现状、因循守旧，缺乏积极进取和勇于挑战的精神，严重影响了创新创业发展，制约山东传统农业转型。

山东的创业公司、小微企业数量少，而在农业领域更以小作坊为主，难以称之为市场主体，凤岐茶社在山东缺乏产业基础。同时，自给自足的家庭作坊排斥转型，乐于维持现状、规避风险。不愿冒险、不愿开放的封闭状态束缚创新创业，缺乏拥抱互联网的眼光和视野，缺乏创新精神和包容意识。因此，凤岐茶社作为传统农业向智慧农业转型的助力器，在山东发展是“心有余而力不足”。2019年初，山东众多市县机关单位组织前往浙江乌镇学习先进的商业模式。首先，去学习凤岐模式本身，认真考察这一新颖商业模式是否符合山东发展实际，能否为山东智慧农业的提质增效贡献力量；其次，去学习勇于创新的精神，并将其发挥到日常工作中，在坚守底线的前提下敢于担当，敢于创新。但是，规模阵仗很大，学习效果却不佳，难以发挥先进商业模式应有的作用，究其原因还在于山东创业文化中的风险规避制约商业模式创新。

浙江悠久的文化历史传统中蕴含着丰富的商业文化，“重商主义”思想影响深远。浙江文化的基本精神是追求创新、鼓励冒险、经世致用、注重实践、工商皆本，这些精神激发了浙江人创业的热情和积极性。同时，由于受到海洋文化的影响，加上地理环境和自然资源的制约，浙江人对外界没有明显的依赖心理，具有更加强烈的忧患意识和敢于冒险、开拓进取的创业精神（胡钰，2011）。浙江浓厚的“双创”氛围使创业者选择主动创业，主动去实现自身的价值，形成了“千军万马办企业、千家万户搞生产、千山万水找市场”的创业局面。在新市场开拓中，不惧风险，敢为人先，属于风险偏好型，拥有强烈的企业家精神、超前的创新意识和炽烈的创业激情，始终不安稳于现状，时刻把握市场机遇，将创新发展进行到底。

浙江民营企业基础好，有强烈的转型欲望及创新意识，而凤岐茶社的优势恰是助力传统农业转型，凤岐模式更是综合运用现代信息技术，推动农业全产业链改造升级。凤岐茶社在浙江首家入孵企业——华腾牧业，存在农产品成本高、销售渠道闭塞、品牌知名度低等问题。凤岐茶社将这家养猪企业原有的设备通过电磁阀、感应器等物联网手段，实现自动喂水、喂料、排气、调温等，利用“食品追溯系统”给猪肉贴上二维码，实现全过程追溯。经过9个月的孵化，华腾牧业的企业估值从2000万增到超过10亿，并一跃成为世界互联网大会和杭州G20峰会的指定供应商。由此可见，浙江创业文化中的创新意识促进商业模式创新，凤岐茶社的商业模式创新正好契合了浙江以资本市场撬动区域发展的思路，使其
迎来跨越式发展，逐渐成长为国家级众创空间。综合上述分析，提出命题 3。

命题 3a：山东创业文化中的风险规避制约商业模式创新；

命题 3b：浙江创业文化中的创新意识促进商业模式创新。

5.4 重义轻利与利益优先对商业模式创新的影响

山东特有的地域文化基础和文化底蕴缺少理性精神和文化自觉，这使山东人自古就形成了“重义轻利”的价值取向，重人情而轻法理的人际观念，缺乏对利益的追求，缺乏理性思维能力。这个地域文化特征对山东经济的持续发展具有一定的消极影响：首先，重义轻利的价值取向与市场经济追求高额物质利益的价值观念背道而驰，山东人爱讲义气，不愿言利，正当的市场规则容易被感性取代，导致山东人缺乏规则意识和契约精神；其次，山东人重感情，缺理性，使正常的人际关系“变质”，人治代替法治，以“关系”为主的社会交往法则盛行，压制了创业人才自由成长，剥夺了公平竞争的机会。同时，山东人缺少理性思考和主体意识，更易产生服从心理和依赖意识，创新创业缺乏持续发展的动力（殷晓峰，2011）。

凤岐茶社是基于互联网构建的线上、线下相结合的资源共享和交流平台，互联网经济讲求资源共享、利益共得、生态共赢。而在“重义轻利”价值取向的束缚下，山东人缺乏追求利益的观念和致富的欲望，安于小利、自给自足。因此，凤岐茶社这一新颖平台失去了吸聚力，无法聚集资源、创造价值，再好的种子在山东也难以成长。当今时代，各地招商部门的杀手锏是平台的力量，山东创业文化中的重义轻利制约平台发展，也制约商业模式创新。山东人若不改变传统“重义轻利”的思想，难以学会让渡小利、追求大利，更不可能打造出在全国乃至全球具有影响力的平台，无法改变凤岐茶社在山东发展的尴尬局面。

浙江的文化传统是注重实践、讲求实效，在此影响下，浙江人在经商实践中倡导经世致用，追求功利、利益优先。在经济上提倡“工商并举”，大力发展商品经济。浙江人拥有创业的热血和激情，普遍缺乏资金和关系，创业起点为零，完全是白手起家。他们高度重视物质利益，有强烈的致富愿望，不会因为生意小获利少而放弃，只要有利可图，他们便抓住机遇开始创业，脚踏实地，直到做大做强（辜胜阻，2007）。浙江人始终坚信“不以利小而不为”的精神，把握一切商机实现致富。

凤岐茶社的创始人傅骞说，桐乡招商部门提供的优惠条件很多，如税收返还、免地租等，但正是“入驻乌镇”这一点彻底打动了他。乌镇作为一年一度世界互联网大会的永久举办地，具有超强的平台聚集效应，吸引众多创新型企业和项目，创业速度加快，最终目标是获得高额利润，浙江文化倡导追求利益，而乌镇又能给凤岐茶社足够的关注度和丰富的盈利项目。落地乌镇 4 年多，凤岐茶社以乌镇为基地孵化出浙江华腾牧业、扬州抱朴自然、贵州贵澳农旅等 60 多家智慧农业企业，仅华腾牧业的企业估值就实现从 2000 万到 10 亿的飞跃，在全国布局了 13 家众创空间，共有 280 多家企业入孵、3000 多家企业入库，总资产更是超过 100 亿。浙江创业文化中的利益
优先促进商业模式创新，而世界互联网大会这一具有全球影响力的高曝光度平台，正是将凤岐模式向全国推广复制的最佳“窗口”，进一步扩大规模，实现盈利新高。据此，提出命题4。

命题4a：山东创业文化中的重义轻利制约商业模式创新；

命题4b：浙江创业文化中的利益优先促进商业模式创新。

6. 结论与讨论

6.1 研究结论与理论贡献

本研究基于创业文化与商业模式创新等理论，归纳出创业文化的四个维度并据此分析鲁浙各具特色的地域性创业文化对商业模式创新的影响，主要得出以下结论：创业文化具有鲜明的地域性特征，不同的创业文化对商业模式创新的影响差异较大；山东创业文化中的小农意识、权力欲望、风险规避、重义轻利在一定程度上制约新颖性商业模式的发展，而浙江创业文化中的商品意识、服务意识、创新意识、利益优先则促进商业模式创新；同时，区域创业文化在学习先进商业模式上也发挥关键作用，如果不对其进行根本变革，难以实现商业模式创新与复制。

研究拓宽了商业模式创新影响因素的研究范围。以往对于商业模式创新的影响因素研究多关注于法律法规等外部因素和企业家精神等内部因素，忽视了地域性创业文化的关键作用。运用单案例研究方法，选取具有典型代表性的凤岐茶社，将创业文化划分小农意识与商品意识、权力欲望与服务意识、风险规避与创新意识、重义轻利与利益优先四个维度深入分析鲁浙各具特色的创业文化对凤岐模式创新发展的影响不同，弥补了以往研究的空白，丰富了商业模式理论，为后续商业模式创新的影响因素研究提供借鉴。

6.2 管理启示

本研究通过鲁浙创业文化的比较分析为改善地域性创业文化来促进商业模式创新提供指导。首先，创业文化对商业模式创新产生重要影响，发扬商品意识和创新精神，改善营商环境和服务态度，追求义利并举和创业致富，以此来促进新颖性商业模式的发展；其次，区域创业文化在新颖性商业模式的推广和复制上也发挥着不容忽视的作用，变革制约先进商业模式发展的创业文化，实现商业模式创新的效益最大化；第三，推广基于O2O打造的创新创业服务新模式，有利于指导“大众创业，万众创新”，贯彻乡村振兴战略，助力传统农业转型，发展现代智慧农业，实现新旧动能转换。

6.3 研究局限与展望

本研究还存在不少有待进一步研究的问题。（1）本研究只选取凤岐茶社这一新创企业，并以其发展所在的山东、浙江来分析创业文化的影响。鉴于各个企业都具有自身的独特性，未来研究可对其他企业的商业模式创新进行分析，并与
凤岐茶社进行比较，从而更加全面地探究创业文化对商业模式创新的影响；（2）
本研究基于二手数据的分析，虽然资料具有较高的可信度，但是未来高质量的研究
还需要更丰富的一手资料与二手资料相结合，保证资料的全面性和准确性，提
高研究的信效度。

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"Virtual Idol" Endorsement: Phenomenon, Mechanism and Influencing Factors

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Abstract

This article reviews the existing research results on the concept, mechanism and influencing factors of virtual idol endorsement. Starting from the anthropomorphic motivation of virtual idols, the effects of endorser, match-up effects, and self-referencing on the virtual idol endorsements are discussed.

Keywords: Endorser; Anthropomorphism; Virtual Idol; Advertisement
“虚拟偶像”代言：现象、机制和影响因素

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摘要
本文从拟人化、虚拟自我和代言人相关理论三方面，对虚拟偶像代言的概念、机制及其影响因素等方面对现有研究成果进行了梳理。从虚拟偶像的拟人化动机入手，简述代言人特质、匹配效应、自我参照等对虚拟偶像代言效果影响。

关键词：代言人；拟人化；虚拟偶像；广告

1. 引言

2012年，“初音未来”在日本代言了谷歌浏览器，此后陆续为众多著名品牌（力士洗发水、乐敦眼药水和丰田汽车等）担任日本地区代言人；2016年，游戏《最终幻想》角色“雷霆少女”为奢侈品牌路易威登全球代言；2017年期间，国产虚拟偶像“洛天依”就为包括肯德基、百雀羚和光明乳业等知名品牌代言。这些广告的代言人都可以统称为“虚拟偶像”，而每次虚拟偶像代言广告的出现，都引发媒体的关注与社交媒体上的广泛讨论。

下面我们拟从几个方面来介绍虚拟偶像代言的动机和营销影响展开研究，就国内外研究现状及对其发展动态进行综述。

2. 理论基础

虚拟偶像依托于虚拟空间。2017年我国网民规模达7.51亿，其中网络游戏用户占整体网民的56.1%（4.42亿），网络游戏市场规模达2355亿元，同比增长32%(中国互联网络信息中心,2018)。网民们为虚拟偶像提供了受众基础，玩家和爱好者对虚拟偶像相关视频的创作与分享，并通过弹幕网站（如哔哩哔哩）、短视频网站（如快手、抖音等）在内的用户生成内容（User-generated content,简称UGC）网站，进一步扩大了虚拟偶像的传播范围。

2.1 虚拟偶像的定义

根据现代汉语词典，“偶像”中的“偶”指“用木头或泥土等制成的人形”，“像”指“照人物做成的图形”。生活中，“偶像”多指运动员、娱乐圈艺人、作家等受人崇拜和追捧的人。“虚拟偶像”主要指用户在虚拟空间中的自主选择的虚拟
形象（如某些热门游戏如《王者荣耀》、《阴阳师》和《荒野求生》等游戏角色，或者初音与乐天依等音乐类虚拟偶像）。


2.2 拟人化的概念

将没有生气的事物赋予人类的行为，以自己的经验来了解外物，这种行为通常称作“移情”，如“云飞泉跃”、“山鸣谷应”（朱光潜，1980）。自古以来人类就有“拟人”传统，古希腊哲学家色诺芬尼（Xenophanes）将“拟人化”分为两类，将人的身体特征归因于非人类（如：脸、手），第二种包括将人的思想归因于非人类，如意图、自觉意识和次级情绪。（Lesher, 2015；Waytz, Cacioppo, & Epley, 2010）。


2.3 拟人化的原因


1) 引发媒介知识

因为我们只能以人类的感官和思维来理解其他事物，当看到高度拟人化的“虚拟偶像”时，感知相似性（perceived similarity）让我们更依赖以自我中心（人类）的经验对其“拟人化”（Epley 等, 2007）。

诱发主体知识的偏好受到很多因素的影响，这些因素可以分为信息处理因素和情景因素。情景因素指物体与人类的相似性，如动作和形态。信息处理因素指人们快速判断时，选择降低认知需求，缺乏思考，以经验作出判断，从而更有可能对物体拟人化（Epley 等, 2007）。
2) 效能动机

效能动机（Effectance motivation），指人类在面对行为不确定的非人类对象时，往往会将其行为拟人化，以获得确定感(Epley 等, 2007)。

3) 社会动机

社会动机在两方面增强我们的拟人倾向：一方面增强我们对社会联系资源的需求，另一方面提升我们识别事物类人特征的倾向(Epley 等, 2007)。长期孤独(chronic loneliness)、社会脱节(social disconnection)、依恋焦虑(attachment anxiety)等都会增强人们的拟人化倾向(如 Bartz, Tchalova, & Fenerci, 2016; Epley, Waytz, Akalis, & Cacioppo, 2008)

2.4 虚拟自我与拟人化

Fox 等 (2015) 将互联网上的“虚拟偶像”分为两种类型——“虚拟自我 (avatar)”和“代理 (agent)”: “虚拟自我”是由人类控制的，而“代理”是指计算机控制的人机交互形态 (human–computer interaction，简称 HCI)。以往研究探讨了利用计算机算法与真人控制结合的“网上客服”的用户行为影响(Benford, Bowers, Fahlén, Greenhalgh, & Snowdon, 1997; Gerhard, Moore, & Hobbs, 2001)，认为如果用户认为与他们互动的是人类的“虚拟自我”，而不是计算机程序的“代理”，就可能更容易受到社会影响理论 (social influence) 的影响(Lim & Reeves, 2010; Okita, Bailenson, & Schwartz, 2008)。

社会影响的定义很广泛，包括个人认知、态度、生理反应，还包括因另一个人在场而产生的行为，以及对这个人的定性 (或归因，attributions)(Heider, 1958)。社会影响有很多运作机制，如社会规范 (感知一般行为、会遭惩罚的违规行为)，一致性 (改变个人态度或行为以从众)、服从 (默许他人的请求和他人期望的行为) 和身份认同 (被喜欢的或类似的人说服)(Kelman, 1961; Fox 等, 2015)。

人类与计算机交互行为受“计算机作为社会行为者理论(Computers as Social Actors，简称 CASA)”影响。根据该理论，人们与计算机互动时，会无意识地应用社会规则；当计算机展现人类特征时，CASA 现象会更加明显 (Nass & Brave, 2005)。如拟人化的无人驾驶车系统，会比非拟人化的系统得到人们更多的信任与宽容(Waytz, Heafner & Epley, 2014)。

2.5 拟人化的个体差异

拟人化使人们能将“虚拟偶像”看作我们的同类，从而在我们之间产生公众影响力。拟人化可以视作人类处理事物的一个过程，也能看成每个人对事物处理的一种倾向。既然每个人的生理状态各有差异，那么个体的拟人倾向也必然不同。

Waytz 等 (2010) 认为，拟人倾向个体差异与次级情绪感知相关，他们提出了拟人化个体差异问卷 (Individual Differences in Anthropomorphism Questionnaire, IDAQ)。其中对 3 种常见的拟人化对象：非人类动物(nonhuman...
通过 IDAQ 问卷与磁共振成像（MRI）、功能性磁共振成像（fMRI）等脑成像设备，证实了拟人化与颞顶联合区（temporoparietal junction）的关系，这个区域与心智化能力相关（Waytz 等，2010; Cullen 等，2013）。心智化能力又称“心灵理论”（theory of mind，简称 ToM），基于体验认知（embodied cognition）理论，心智化指一种能够理解自己以及周围人类的心理状态的能力，这些心理状态包括情绪、信仰、意图和欲望等（Frith & Frith，2003）。

3. 应用研究

3.1 拟人化的应用


前文提到，社会性动机、效能动机和认知因素影响着拟人倾向（Epley 等, 2007），这些倾向受消费者群体的消费动机影响。用户在游戏过程中，观看虚拟偶像视频时，均处于陌生的虚拟化环境，陌生感让他们对游戏中的虚拟角色或人机交互代理产生更高的拟人倾向。Waytz 等（2010）的研究结果表明，人们在预测无规律的、非人物体的行为时，更倾向于将其拟人化。

针对拟人化在营销的应用，Letheren（2017）通过 IDAQ 问卷对被试拟人化倾向的研究发现，将旅游目的地广告文本拟人化，能使高拟人化倾向的消费者能产生更积极的情绪，从而产生更有利的态度和更高的旅行意图。


3.2 代言人的特质

营销业者需要确保名人与品牌具有某种相似性，这个概念称为意义转移模型（meaning transfer mode）。社会适应理论（social adaptation theory）认为，人们就会为适应环境而接受相关的信息来源。如果代言人和产品之间存在某种相关属性，人们就会以代言人的适应性意义作为信息来源（Kamins, 1990）。图式理论（schema theory）认为，如果名人图式与产品图式能匹配，名人的个性特质更容易结合到现有的产品特质中（Lynch & Schuler, 1994）。
因此，在选择虚拟偶像作为代言人时，需要考虑品牌与虚拟偶像的个性相符。代言人的个人特质（personal trait）分为可信度来源、吸引力来源（如熟悉、喜爱和相似）和品牌一致性，其中，吸引力指名人的外形或其他如智力或生活方式（Erdogan, 1999）。有吸引力的名人更有效地传达代言品牌的相关信息（Till & Busler, 2000），可能会影响产品的购买意愿、品牌回忆和品牌态度（Friedman & Friedman, 1979; Till & Busler, 2000）。

学者们普遍认为，可信度侧重于诚信和专业知识（Goldsmith, Laflerty, & Newell, 2000; Ohanian, 1991; Pornpitakpan, 2003）。诚信指消费者对代言人诚实、客观程度的评估，专业知识指消费者对名人知识、可信度的评估。可信度会影响包括消费者对品牌、产品与广告的态度以及购买意愿等代言效果的众多指标（Friedman & of Friedman, 1979; Pornpitakpan, 2003; Silvera & Austad, 2004）。

3.3 虚拟自我与自我参照

“虚拟偶像”的拟人与以往“拟人化”研究的差异是：“虚拟偶像”在本身就是以人类参考物的形象，是用户自主创造的、真实世界中的映射。虚拟偶像作为消费者虚拟社会的替身，可以作为消费者自我参照（self-referencing）的一部分，能激发消费者在虚拟空间的经验。通过虚拟偶像代言，品牌与消费者产生联系，鼓励消费者将产品与自己或自己的体验联系起来，来说服消费者的产品价值。


3.4 虚拟代言人与广告涉入度

代言人广告的效果与受消费者涉入度影响，详尽可能性模型（Elaboration likelihood model）认为，与产品优点相关的说服力来源可以而使消费者以更高的涉入度接收广告信息。消费者在低涉入度情况下，会通过外围途径（例如，独特的广告，有吸引力的图片，幽默等）来形成对广告产品的看法（Kang & Herr, 2006）。特殊性理论（Distinctiveness theory）认为，虚拟代言人能作为特别的刺激物可以抓取注意力，让人印象更加深刻（Heiser, Sierra & Torres, 2008）。

3.5 虚拟偶像与寻求感觉偏好

寻求感觉（Sensation Seeking，简称 SS）代表个体追求新颖刺激体验的倾向（Zuckerman, 1984），包括寻求经验、寻求刺激和冒险、解除抑制以及厌倦的敏感性四方面（Zuckerman 2005）。寻求感觉偏好影响认知加工过程（cognitive processing）（Ball & Zuckerman 1992），寻求感觉的水平较高的个体，相对于二维的自我参照广告，更倾向于三维的虚拟偶像广告（Keng & Liu, 2013）。
4. 小结与未来研究展望

以往关于虚拟偶像代言研究针对虚拟代言人和单独一对一的虚拟自我与代理的人机交互，鲜有针对虚拟公众人物的探讨。本文针对虚拟偶像的拟人化与虚拟偶像代言的理论基础和应用研究进行了回顾和分析，旨在对虚拟偶像代言形成更深层次的理解。基于本文的回顾和梳理，我们认为该领域总的来说，以下问题值得进一步探讨:

首先，进一步探讨虚拟偶像代言人的特质的关系。虚拟偶像代言目前已在业界广泛应用，比如前文提及的食品、个人洗护产品和汽车等。这些代言涉及了众多跨度较大的产品类别。每位名人的背后都包含了一组丰富的文化意义（如阶级、地位、性别和种族等）(McCracken, 1989)，虚拟偶像往往能代表网络虚拟空间、计算机科学，和纯粹、完美、虚幻的形象。而现有的文献尚未对虚拟偶像这个类别进行系统性归纳。哪一种产品能发挥虚拟偶像代言的最大效果？如何高效实施虚拟偶像营销？虚拟偶像的应用情景是怎么样的？现有研究缺乏对这些问题的系统性、整体性分析，而这些问题都有着较大的实践以及理论意义，值得未来的研究关注。

其次，探讨消费者拟人化倾向对虚拟偶像代言的影响。年轻人、观念开放者、情绪较不稳定者和收入较高者的拟人倾向更高(Letheren, Kuhn, Lings & Pope, 2016)。拟人动机的差异如何影响虚拟偶像代言的营销效果？它们的作用机制是怎样的？前文提及，社会性动机、效能动机和认知因素影响了拟人倾向(Epley 等, 2007)。这些动机如何影响虚拟偶像代言效果？

最后，关注虚拟偶像代言恐怖谷效应。学者普遍认为，较高程度的外观拟人可能会让受众产生与病人、尸体的联想，从而产生恐怖谷效应(Masahiro, Karl, & Kageki, 2012)。所以在虚拟偶像外观的拟人上，需要考虑拟人程度个体差异与恐怖感觉的相关性。因此，我们有必要关注什么样的虚拟偶像会导致恐怖谷效应的产生，是否存在转化临界点等。只有全面考虑虚拟偶像的负面效应，才能更为完善地构建理论体系。

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Hui Business Group and Shanghai Muslim Society

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Abstract
Since the opening of Shanghai, Hui people in Jiangsu, Central China and North China have migrated to Shanghai, forming a Hui business group with religion as the center and nationality as the link. Shanghai Hui people have made some achievements in economy, culture, education, charity and religious dialogue. This is due to Shanghai's open and inclusive economic and social environment, and the willingness and practice of Hui businessmen to actively integrate into Shanghai.

Keywords: Hui Business Group; Modern Shanghai; Social Development; Urban Integration
回族商帮与近代上海穆斯林社会

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摘要

自上海开埠后，江南、华中、华北等地回族移居上海，形成了以宗教为中心，以民族为联系的回族商帮，在经济、文教、教务、慈善与宗教对话等方面取得了一定成就，这得益于上海开放包容的经济与社会环境，和回族商人群体主动融入上海意愿与实践。

关键词：回族商帮；近代上海；社会发展；城市融入

1. 近代上海穆斯林来源与回族商帮的形成

上海地区的伊斯兰教发源，与商业息息相关。北宋时期，上海地区已有穆斯林商人开展贸易活动。但伊斯兰教真正的传入、扎根，应该是元代西域与中亚地区的穆斯林随蒙古铁骑，在华亭定居，并在元至正年间创建上海地区第一座清真寺。1840 年之前，尽管上海还出现了几座清真寺，但伊斯兰教整体上发展缓慢，回族（穆斯林）群体始终维持在数百人的规模，影响甚小，未引发外界的注意。

上海开埠后，大量外来人口涌入，上海人口增长迅速。第一次回族大量迁入，是因为自然灾害与社会局势的动荡。1849 年江南水灾，南京难民涌入上海，暂居南市草鞋湾一带，遂此地又称“南京街”，这其中有不少回民。

1852 年，为了宗教生活的需要，逐步稳定下来的南京籍回民，赁地搭建棚屋三间，供礼拜、沐浴与教长起居。1853 年太平天国定都南京，南京、镇江、扬州一带回族再次成规模的进入上海。1861 年，芦花湾开设跑马场，不少山东、河北、江苏等地回族贩马至此，从事养马、驯马的营生。20 世纪初，浙江富商叶贻铨创办江湾跑马厅，有一批宁夏、河北、山东回族到此谋生。

19 世纪末 20 世纪初，多家日资纺织厂在上海沪西苏州河沿岸投产。在回族富商的介绍联系下，先后有来自湖北、山东、安徽、河南等地的回族进厂务工。加之 30 年代，黄淮流域水灾，一批河南、山东、安徽回族逃荒而来，集中在沪西药水弄一带。至此，此地成为上海另一个重要的回族聚居区域。
共租界边缘的今虹口区景星路一带，主要聚居了清末民初数次苏北洪水而来的苏北籍回族。


近代上海回族发挥善经商的传统，在发展传统行当的同时，又迅速融入上海特殊的商业环境，使得民族经济得到一定发展。与上海其他商帮比较，上海回商有其独特的特征。

首先，回族商帮是以“宗教”为中心，以“民族”为联系。在上海这座典型的移民城市中，回族群体人口较少，且来源与江苏、河南、安徽、山东等多个省份，其中南京籍回族人口占多半，其他各地人数不等。散落在汉族社会中的回族，自古形成了“天下回回是一家”的传统，人口较少，来源广泛，强化了宗教信仰的凝聚力作用。各地回族来沪，其婚丧嫁娶、衣食住行，都离不开高度生活化的宗教习俗。所以有别于传统以“地区”、“行业”划分商帮，回族中形成了跨域地区和行业的商业群体，并对回族社会发展产生影响。

其次，回族商帮从事行业广泛且有鲜明的民族特色，进而细化了商帮的构成。近代上海回族商业，有一定规模的有餐饮业、皮毛业、毛纺业、西药业、进出口业、五金业、百货业、印刷业等。清真餐饮业是回族传统行当，江南回族主营鸡鸭、茶食，河南回族主营牛羊肉餐馆，京津回族主营涮锅、京式糕点，加之清真酱菜、西餐厅，鼎盛时期的上海有清真餐饮店铺300余家。不仅满足了回族群众的饮食需求，洪长兴、青梅居、杨同兴等“教门馆”，也是当时上海著名的餐馆。

而皮毛业、宗教出版等具有鲜明民族特色的行业也是回商主要从事行业。可以说，既有民族传统、家族传承，又有白手起家、创业经商，但凡与回族习俗不相违背的产业，都有回族商人经营者。

其三，回族商帮中，有具有“同乡同业”的特征，即来源同一地区的回族基本从事同一行业，例如，南京籍回族主要从事古玩珠玉业、鸡鸭业、西药业，镇江籍回族主要从事五金业，安徽和县籍回族主要从事印刷业，湖北籍回族主要从事棉花业。他们从事的行业基本延续了移民至上海前其家族或地区回族的行业，这既能较好的保留原有的商业传统，又在竞争的行业中，共同协作，互保互助，对抗风险。[4]

2. 回族商帮与近代上海伊斯兰教的发展

2.1 社团组织的发展与回族内部的团结

近代社会改良思潮的涌动，创团体、设学校、办报刊等热潮逐渐散播。思想与社会发展最前沿的上海，也为社团组织方面，在全国回族中起了领头羊的示范作用。上海回族社团之始是成立于1905年的“务本堂”，其主要任务是开展清真寺管理、从事慈善活动、参与婚丧嫁娶等。为应对伊斯兰教发展带来的各种新问题，深感“无领袖不足以维统人心，有权衡方足解决事理”，以“教中集会、兴学、培堂，整规，暨一切兴利除弊诸要务”为宗旨，1909年清真董事会成立。
上海回教商界大老悉数加入，丰裕的资金支持，使其社团活动有声有色。之后因时局变化，领导者辞世等原因，清真董事会经历了数次更名、改组，其在兴建、管理上海清真寺与公共墓地，兴办回民教事业，发展慈善公益事业，对外交流与维权等方面起到了至关重要的作用。清真董事会这一具有鲜明宗教特征的社团组织，其功能类似于汉族商帮的会馆、同乡会。

新中国成立前的百年，上海先后涌现了大大小小的回族社团数十个，其中有文化社团、慈善社团、经济社团，亦有中国第一个穆斯林妇女社团—上海伊斯兰妇女协会、第一个穆斯林宣教组织—中国回教宣传所。这些社团的出现，正是体现了当时回族活动在发展到一定水平、一个规模后，逐渐实现规范化，进一步加强了回族群体的凝聚力。

2.2 宗教场所的修建与宗教活动的兴盛

上海开埠前，松江、青浦、七宝等地区都曾修建过清真寺，但由于穆斯林人口较少，清真寺及宗教活动发展缓慢。1840 年后，各地穆斯林涌入上海，一是宗教活动的需要，二时经济条件的支持，上海迎来了清真寺修建的黄金时期。从 1852 年，南京籍皮货业回商王子明、马松山等集资创建了上海城区内第一座清真寺——草鞋湾清真寺，至 1950 年，先后修建清真寺 20 余座，期间，相当部分清真寺都多次重修扩大。清末至辛亥革命前后，主要出资修建清真寺并维持日常运作的是南京籍回族商界人士。他们是近代早期回族移民的主体，不乏古玩珠宝业、餐饮业等行业的大商人，财力相对丰裕。1920 年后，逐渐增多且站稳脚跟的湖北、山东、河南、苏北籍回族，先租房设立简易礼拜场所开展宗教活动，后在再包括南京籍回族商界等的辅助下，创建清真寺。近代上海除江宁路清真寺是由警界中的山东籍回族创建，其余清真寺的创建、返修都是有回商捐助。这其中既有诸如金子云、金陵蒋氏、哈少夫等大富商，亦有牛庄业、宰牛业、贩马业等小商贩行会的参与。清真寺的修建，反映了当时回族人口的迅速增加和宗教活动的需求，也反映了当时回族经济发发展。

2.3 文教事业的发展与文化传统的延续

近代上海无疑是中回伊斯兰教教文教事业重镇之一。文教事业的发展，也是民国时期上海伊斯兰教发展最为显著的特点之一。《上海清真董事会会志》中记载学董马树周论：“德法之战，俾士麦宰相归功于小学。诚以小学即为强国之根。小学若办得好，则忠臣孝子胥出其中。小学若办不好，亦乱臣贼子出其中也”。上海回教上层人士将基础教育提升到民族兴盛、国家兴旺的高度，教育改革的也着重在从基础教育开始。自 1909 年马乙棠、哈少夫、金星伯等回族富商以“注重国民教育，兼重天方经文教育”为宗旨，创办“上海清真两等小学堂”始，上海回族相继兴办回民中小学十余所。国民教育的兴起，提高了普通回民群众的文化水平，促进了他们融入上海社会，寻求新的发展空间。

在商界的支持下，1925 年，哈德成大阿訇发起成立的中国回教会在，在当时享有极高的声誉，成为“近代中国回教徒第一次自觉发动的文化运动”（顾颉刚语）中最有影响力的学术组织之一。成立于 1928 年的上海伊斯兰师范学校更是民国时期最有影响力的回族学校之一。近代上海回族还经营了中国回教经书局、上海穆民经书社、上海协兴公司售经处、上海伊斯兰文化供应社等多家出版机构,
大量印刷、进口宗教书籍，还创办的《中国回教月刊》、《回教青年》、《人道》、《绿旗》、《伊斯兰学生》等十余种报刊。

2.4 社会活动的活跃与慈善事业的影响

正是因为近代上海是移民构建的“新世界”，为回族群体与外界社会、其他民族与宗教信仰者的接触创造了更频繁、深入的机会。所以，近代上海回族，特别是回族商界人士社会活动颇为活跃，文化界、出版界、文艺界、书画界、武术界、慈善界等方面都有回族商人参与。

社会活动中，最有影响力的活动是上海回族慈善活动，不仅是民族内部的互助，随着社会变革，能力增强，慈善事业的外延辐射到教内外。富商哈少夫先后参与战区难民救济会执行委员等多个慈善救济组织的，组织难民救济，筹募救济经费，在上海慈善界颇有名望。另一位回族商人杨叔平多次参与发起组织难民救济处，并个人出资设立“回教灾民救济处”，救助回族难民，开展民族自救。回族富商蒋星阶则动员子媳、女儿赶制丝绸背心及慰问品送抗日战士，其妻杨氏更是变卖家产以助军用。敦化小学、云生小学、崇本小学、伊光第一小学等多座回民学校，招收汉族学生，并给予经济资助。这些善举不仅赢得教内的赞誉，也赢得教外社会的好评，从而提高了伊斯兰教界的社会声誉。

2.5 宗教对话的兴起与宣教活动的开展

上海回教大老哈少夫是开展宗教对话最积极者，他曾应邀作为回教代表参加美国基督教传教士李佳白发起的尚贤堂，并发表《应尚贤堂民教相安论》的演讲。之后，哈少夫还担任尚贤堂主席一职，邀请各大宗教领袖、学者开讲，促进宗教对话。[5]作为大商人、慈善家、金石鉴赏家的哈少夫，“积极主张各宗教间的相互尊重和理解，争取做到和平相处和友善为邻，这的确表现了上海伊斯兰教界人士崇高的思想境界和社会观。”[6]

在商界的支持下，1933年成立的中国回教宣传所和1939年成立的中国回教宣教所是近代回族组织中极少见的两个宣教组织，一些阿訇、学者，还利用广播、传统、宣教会等方式开展宣传活动。打破宗教传承一般仅限于民族、家庭内部的中国伊斯兰教传统，主动对外宣教，显然这也是受到上海开放积极的宗教氛围的影响。宗教对话与宣教活动的最终目的，纵然有发展教徒之意图，但从实际效果上看，是通过主动的对话与交流，消除外界社会对穆斯林群体的误解，加强不同族群的认识与理解，提高社会影响，扩展生存空间。

3. 回族商帮与近代上海回族城市融入

近代上海是典型的移民城市，回族只是移民大军的少数。回族商帮能在政治、社会、经济、文化等都明显区别于原籍的上海，不仅站稳脚跟，而且在宗教、经济、文化等事业上取得一定的发展成就，较好的引领上海回族融入城市中，取决于其独特的主客观条件。

得益于上海相对简单的政治环境、枕江滨海的地理位置和商业发达的经济基础，近代上海吸引了国内外大量人口的流入。人口的流动，也是文化的流动，经济的流通。华洋混杂的上海文化，因其人口构成的复杂，而具有“极大的融合性”，高度开放与包容的经济与社会环境，进一步增强了对移民的吸引力，并为各种群
体的发展提供了较为平等、自由的空间。回族商人与外界经济往来愈加频繁，回族社会就与外界交往就愈加密切。

“同乡共教敬恭，笃桑梓之情，异地一心合力，收大同之效。”回族移民的不断融入，回族群体的不断发展，得益于近代上海回族社会开放、包容的环境与氛围。伊斯兰教文化虽然落户上海历史悠久，但人口数量及影响力始终有限。近代上海国内外文化多元共存，既带来了生存发展的机遇，也有诸多挑战。从外来看，辱教事件时有发生，文化隔阂难以消除，而假冒清真、强迁墓地等侵犯回族利益事件亦有发生。从内部看，繁华大都市中，回族群体的信仰危机，文化危机，引发内部深度忧虑。所以，上海伊斯兰教界展现了独有的团结奋进商业气质，虽处世俗尘世，宗教意识不减，民族感情高涨。

传统的回族聚居地区，随着人口与经济发展的长期沉淀，形成了“家庭-家族-姻亲-寺坊-教派-民族-族群团体”为层次的回族商帮结构，形成了甘肃临洮商帮、河州商帮，内蒙古归绥商帮、云南茶马商帮等代表性商帮。而对于以各地移民集聚而形成的近代上海伊斯兰教界社会，其商业结构是以“教”、“乡”、“行”为序，即首先以宗教为纽带，团结各地回族穆斯林大众，再以同乡为基础，加强内部关系，最后以行业为补充，加深经济联系。近代上海畸形膨胀的消费经济，为回族群体提供了生存发展的经济条件。如前所述，近代上海伊斯兰教发展中兴力量是南京籍回族。南京本是江南伊斯兰教重镇，因地理优势进入上海较早，人口较多，且多有富商家族。使得从事古玩珠玉等消费行业的南京籍回族富商不断积累财富，加之重文尚教，热心社会事务，不少人逐渐步入上海上流社会。其他地区较早进入上海，从事餐饮、棉花、西药等行业的回族也具有较为殷实的经济条件。他们中不乏热心教门事业、积极投身慈善者，对于上海回族社会事务投入巨大。但毕竟大商人、大商号仍然是回族中的极少数，各地涌入的回族群众仍然是普通劳苦大众，他们在此扎根、生存，首先得到了回族富商的巨大帮助和支持，包括资助清真寺、学校、墓地等的建设、维持经费，介绍、提供就业岗位等。这对他从融入上海回族社区这一小环境开始，进而最终融入上海大都市的大环境，提供了过渡桥梁和后盾保障。

主观上，大部分是被动迁徙的“生存型”移民。站稳脚，求温饱，图生存一直是回族群体在上海的主要诉求。上海回族展现了较强的重商文化，以此推进社会适应，加强融入上海社会的主观意愿。一个鲜明的例子，本是清真寺内清修解惑的宗教教职群体也加入到商业活动中。例如 1927 年，刘彬如阿訇倡议集资，开办申春清真食品有限公司，并任总经理，购买部分机器设备，采用先进技术，生产出了多种清真糕点、糖果、罐头，颇受长江下游地区回民的欢迎，产品还远销香港，是苏南回族商帮创办新式食品工业的开端。回族皮革富商马晋卿邀请刘彬如阿訇为其商号协理兼财务总司。同时聘刘耀卿阿訇、周子宾阿訇为襄理，协助刘彬如处理公司事务。在江苏、安徽、河南、湖北所设的分号，亦请当地清真寺阿訇担任经理。此举一是各地牛羊屠宰多由各地阿訇按照伊斯兰教传统持刀，阿訇对于当地牛羊皮市场十分熟悉，二是以宗教教职人员的身份为保证，得以诚信经营，稳定市场。

上海回族商帮的中流砥柱是南京回族商人，江苏（镇江、苏州、扬州等）、安徽、河南、湖北等回族商人亦是重要组成部分。这些地区近代商业发展较传统穆斯林地区更为发达，商业气氛浓厚。在这些地区伊斯兰教这一外来宗教与本土
文化相交融较为深入，回族在保存宗教文化的同时，受儒家传统文化影响深远。明清之际，以南京为中心的江南地区，涌现了一批以儒释经的儒回学者，推进了伊斯兰教的本土化。在这种文化交融的影响，回族商帮既以伊斯兰教重视商业、诚信守约传统的影响，又崇尚义利并举、以德治商、和气生财等富含儒韵的商道思想。

上海回族商帮中，涌现了一批具有较高中国传统文化底蕴的商人。例如南京蒋氏家族，以“公益为人生分内事”及“遗子以经不以金”为家规，涌现了蒋长魁、蒋长洛、蒋国榜等一批慈善家、社会活动家，成为江南地区回族中首屈一指的大家族。蒋氏家族还培养了蒋锡嘏、蒋有絖两代院士。古玩富商哈少夫是上海闻名的贤达，热心社会公益，同时又是公认的金石家、收藏家、文物鉴赏家，与吴昌硕、汪洵等文化名流交往密切。这些回族富商意识到，要在开放、进步的上海生存，自我封闭的文化，保守自闭的教育显然是不足应对民族发展的调整。所以，他们高度关注上海回民教育文教活动，既是一种文化自觉，也是一种主动融入。回族学校课程设置中突破传统民族教育的藩篱，在保留教义、阿文等民族宗教类课程的同时，与社会国民教育逐步接轨，甚至办学水平得到了社会的肯定（例如敦化小学）。接收各方捐赠，聘请汉族老师，招收汉族学生，加强了与外界社会的接触与认识。中国回教学会宣称，“本会之唯一希望，在联合吾教优秀人才……深申固拒之义，收集思广益之功。”中国回教经书局以“宣扬发展圣教，沟通回汉文化”为宗旨，都可见，当时回族社会，强烈的革新意识及与外界社会沟通的愿望。

葛壮先生认为，近代上海伊斯兰教复兴的重要因素之一，是穆斯林社会中涌现出三种人构成的中坚力量，即具有丰富宗教常识、良好口碑的宗教教职人士，有深厚学识、热衷回族文化事业的学者群体和具有重要号召力、热心教门事务的上层人士。宗教教职人员与学者群体中有从商者，上层人士更是主要为大富商，他们的号召力、示范性巨大，不仅仅对于上海伊斯兰教，乃至全国伊斯兰教都有一定影响力。他们之间较强的凝聚力和长期合作共事的经历，及在上海政治、经济、文化、宗教等领域主流社会发展的经验，使得多元组成的上海穆斯林群体能够保持团结、稳定的发展态势，始终在社会融合、坚持传承的大浪淘沙中不迷失前进方向。30年代中后期，哈少夫、金子云、蒋星阶、马刚侯等回教商界大老相继归真。抗战爆发，一批领导者等离开上海避难。一时间，上海伊斯兰教界群龙无首，回族各项事务活动皆遭受打击。4. 回族商帮视角下当代上海回族-伊斯兰教文化的式微

1937年抗战爆发，上海回族政治、经济、文教事业受到冲击，社团组织相继关闭，教育机构停止办学，一批回教大老或离世，或离开上海避难。抗战后期，逐渐恢复元气。新中国成立后，作为上海人数最多的少数民族，回族的经济生活发生了巨大变化。

近代上海商业协会公所领导层主要来自汇业、钱业、丝业、茶业、五金洋货业等五大行业。另外包括石油、交通、船运、发电等大行业，回族商人涉足较少。新中国成立后，上海过度发展的消费经济迅速萎缩，对于回族商帮影响巨大。古玩玉器、金石字画等行当规模急剧缩小，社会主义改造、公私合营后，回族小商铺、小作坊数量大量减少，回族群体逐渐脱离传统行业，就业更加多元化。例如，
1958年4月，中国古物商场与中国古玩市场合并为公私合营上海古玩市场，市场从业人员175人，其中回族76人。回族从业人口比1946年时，少了200余人，比1956年社会主义改造时，少了85人。

新中国成立后，教育事业的发展，普通回族群众受教育机会的增加，促使从民族特色的劳动密集型就业向大众型技能密集型、知识密集型就业转变。建国后，上海涌现了中国科学院院士、大学教授等回族知识分子，更多人成为工人等普通劳动者，走上了社会主义国家建设之路。

具有鲜明民族特色的经济，是回回民族发展的重要纽带。古玩珠玉、清真餐饮、皮毛业等行当多是回族传统经济行当，与回族的风俗传统有密切相关。可以说，职业决定了回族始终与本民族群体、本民族的传统保持密切联系。直至今日，一座城市回族文化保存相对传统、完整，那么肯定保留了一定规模的回族经济，例如清真餐饮等回族传统行当。

近代上海回族居住格局与商业密切联系，最为典型的例如从事贩马、驯马业的回族聚居在江湾跑马场一带，从事餐饮业的回族聚居在豫园一带，从事牛羊肉与面饼业的回族聚居在药水弄一带。传统行当的式微，不仅影响到回族的职业再选择，也影响到他们居住地点的变迁。加之城市化进程、旧城拆迁改造等诸多因素的影响，原有居住格局已发生巨大变化，原本"围寺而居"的传统教坊式回族社区几乎都已消失。

今天上海，各清真寺周围已无成规模的回族聚居区。回族的饮食、婚嫁（族内通婚）、土葬等具有鲜明宗教特色的传统习俗，被视为守旧落后、封建迷信，普通穆斯林的宗教生活与宗教习俗，无法延续。直到1979年，逐步开放沪西清真寺、小桃园清真寺等（大部分再未恢复），宗教活动逐渐恢复。但一代人、甚至两代人的宗教习俗传统已经断代，民族传统的传承已经举步维艰。

新中国成立后，上海城市回族-伊斯兰教文化式的消亡并不是个案。这种融入，是以一个群体的风俗习惯、文化传统的消亡为代价的，是以“同化”为结果的。这一历史过程，伴随着回族群体在经济方式、商业活动等方面的变化，更是因为特殊年代，无法选择的命运。

5. 结语

百年以来，回族都是上海人口最多的少数民族。是因为移民来源地，回族也是当地人口最多的少数民族。民族学界一直认为“回族是除了汉族外，分布最为广泛的少数民族。”这与回族的形成，与元朝色目人的广泛分布，“元时回回遍天下”的历史有关，与明初南京等江南回族受命迁徙各地有关。更与回族先民为生计（如东北回族多为华北各地闯关东，运河沿岸回族随运河贸易而迁徙），为生存（如清末回民起义大量回民迁徙新疆）等有关。回族-伊斯兰教文化，在思
想观念、礼仪规范、生活习俗等方面本与汉族（及其他民族）有较大差别，但迁徙之路从未停止，文化传统从未停滞，与各地文化的互动互融从未停顿。应该说，回族在与汉族及其他民族的接触中，为生计生存，形成了一套成熟的生存哲学与处世方式。

相比近代上海穆斯林群体主要是由江南、华北、华中等地回族组成，今天流动穆斯林的构成更加多元。国内群体中，青海、甘肃等地来沪经营清真餐饮的回族（也包括撒拉族、东乡族等）人口最多。云南、华北、东北等地回族亦有一定数量。新疆籍的维吾尔、哈萨克民族也主要从事餐饮业。当然，还有来自全国各地在沪各高校求学、企事业单位工作的穆斯林也是重要组成部分。而外籍穆斯林组成更加复杂，留学生、领事馆工作人员、求职者来自于全世界。

民国初年，穿心街清真寺“平日礼拜者约百余人”的盛况已经不复存在。随着清真寺周边回族聚居区的消失，而现在流动穆斯林分散在整个城市的大街小巷，各清真寺每天五次的礼拜活动参加者已不多。但每到周五主麻日聚礼日时，上海所有的清真寺都处于饱和状态。开斋节、古尔邦节等伊斯兰教大型节日中，甚至要采取清真寺周边暂时性封闭的措施，方能满足穆斯林进行宗教活动。格致路、浙江中路一带有新疆、青海、河南、甘肃等地口味的清真菜馆及清真牛羊肉铺、点心店、馕饼等近 20 家，形成一定数量规模的清真食品街区。其中心与源头，就是曾经的浙江中路清真寺。但整体上来看，上海穆斯林在空间上的“哲麻体”（穆斯林社区）已经不复存在，更多是精神上的“哲麻体”，流动的“哲麻体”。

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Analysis of WuDang Tea Ceremony Experience Marketing Path Under the View of "Internet"

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Abstract

With the rapid growth of the scale of online shopping users, consumer demand is also changing, more and more attention is paid to the spiritual pursuit and enjoyment in the process of consumption, "one table, one pot, one water injection," The traditional tea-selling mode, such as making tea, has been unable to adapt to the fast-paced lifestyle of people in the internet age. Shiyan Taoist culture is rich and profound, is an important birthplace of Chinese tea, but also an important node of "Wanli Tea ceremony". At present, Shiyan City has grasped the great opportunity of "Belt and Road" construction, focused on integrating tea brands, meticulously created the first cultural famous tea in China-Wudang Dao tea, and actively tried "Internet". + " Tea industry experience marketing mode , with a view to establishing a solid emotional bond with consumers , to get rich profits , and to push forward the transformation and upgrading of Wudang 's tea industry .

Based on the theory of experiential marketing, this paper puts forward the inevitability of implementing experience marketing in Wudang Taoism tea enterprises on the basis of field investigation of the present situation of Wudang Taoism tea sales
and the difficulties faced by traditional tea marketing management. If Wudang tea enterprises want to bring consumers a good experience of consumption and create more good opportunities for drinking tea under the "Internet" perspective, they must create a new mode of tea sale and actively implement experience marketing strategies. Wudang Road Tea experience Hall in the global urban life circle, buy tea online, provide tea DIY experience offline, expand product sales channels and market space, build ecological tea garden, and create new business pattern of Wudang tea industry.

**Keywords:** Internet; Wudang Tea; experience Marketing; Transformation and upgrading
“互联网+”视域下武当茶道体验营销路径探析

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摘要
随着网络购物用户规模急剧增长的同时，消费者的需求也在发生改变，越来越关注消费过程中精神层面的追求与享受，“一张桌、一把壶、一注水、一泡茶”等客上门的传统售茶模式已经无法适应互联网时代人们快节奏的生活方式。十堰市道教文化底蕴博大精深，是中国茶叶的重要发源地，也是“万里茶道”的重要节点。当前十堰市紧紧抓住“一带一路”建设重大机遇，着力整合茶叶品牌，精心打造中国第一文化名茶——武当道茶，积极尝试“互联网+”茶产业体验营销模式，以期与消费者建立坚实的情感纽带、获取丰厚利润、全力推进武当道茶产业升级。

本文基于体验营销理论，在实地调查武当道茶销售现状及传统茶叶营销管理面临的困境基础上，提出了武当道茶企业实施体验营销的必然性。武当道茶企业要想在“互联网+”视域下带给消费者良好的消费体验、创造更多喝茶的大好机会，必须开创新型售茶模式，积极实施体验营销策略，在全球城市生活圈布局武当道茶体验馆，线上买茶，线下提供茶艺DIY体验，拓展产品销售渠道和市场空间，建设生态茶园，打造武当道茶产业发展新业态。

关键词：互联网+；武当道茶；体验营销；转型升级

1. 引言
中国是茶的故乡，制茶、饮茶已有几千年的历史了，中国茶不仅有健身、治疗疾病的功效，同时还可以陶冶情操。饮茶始于中国，中国人在饮茶上有着诸多讲究。武当山是十堰三张名片之一，更是旅游胜地，武当道茶作为武当山的特产，更是有不可磨灭的地位。2016年是“十三五”开局之年，十堰市提出实施“61”产业强农计划。其中一项就是，力争到2020年，全市茶叶基地达到100万亩，综合产值达到100亿元，茶叶从业人员达到100万人，努力把武当道茶打造成驰名中外的茶业品牌，把十堰建成名副其实的“武当茶谷”。

茶叶市场的竞争越来越激烈，而面对日益激烈的市场竞争，武当道茶等茶叶企业存在营销力度不够、营销方式雷同等问题。茶叶企业要发展壮大，应将体验营销的思想贯穿整个经营管理过程，针对体验经济时代消费需求的变化趋势，顺应营销模式的变化，创造全方位的顾客体验，通过消费者一系列愉悦的体验，得到消费者的认可，提高消费者的满意度，否则必然要被市场淘汰。因此，体验营销模式将成为武当道茶茶企营销的必然趋势，是茶叶企业发展壮大的必然选择。

为进一步开拓武当道茶国内国际市场，深入对接国家“一路一带”战略，十
堰市相关部门和企业将加强与“万里茶道”沿线节点城市的文化交流和经贸合作，在全国重点城市增设武当道茶经销门店和网点，积极实施“互联网+茶产业”模式。

2. 体验营销概述

随着社会经济的不断发展，市场中的产品层出不穷，给人眼花缭乱的感觉，消费者的消费观念也随之发生了翻天覆地的变化。体验营销是体验经济时代的产物，是人们为了适应现代消费观念而产生的一种全新的营销模式。

2.1 体验营销的概念

体验营销，广义指从消费者的感受、情感、思考、行动、关联等方面入手，从消费者的角度设计、定位企业营销的一种策略。消费者购买茶叶的目的不再是以前只是为了满足基本的饮用需求，更多地转为关注购茶过程中个性化的茶产品和服务，所以对整体的消费经历和感受更加严格与细腻。茶行业所开展的体验营销一般是以茶叶及相关服务为道具，激发并满足消费者的各种体验需求，引导消费者对茶文化的理解和欣赏。而这样的体验营销对消费者来说有些被动，因为消费者是跟着商家在走，商家提供了什么样的体验，消费者就要接受什么样的体验，没有任何选择。这种被动式的不平等营销体验，往往达不到预期效果。

而传统的茶叶营销方式形式单一，基本都是等着顾客上门服务，产品同质化严重，无法满足消费者多样化、个性化的消费需求，与现代人的消费观念相去甚远，因而受到极大冲击。所以武当道茶企业需要改变营销方式来适应现代消费观念。

2.2 体验营销的要素

（1）体验营销的出发点是消费者的体验需求

体验营销的出发点是消费者的体验需求。体验从心理学的角度看，主要是来自于一种经历对消费者内在情感的触动，这种触动能使消费者将企业、品牌与自己的生活方式联系在一起。而企业推行体验营销活动的内在需求就是将消费者的感官、情感、思考、行动和关联等体验因素整合在产品之中，并将作为评价产品和服务的重要依据，通过满足消费者的个性化需求达到销售产品的目的。

（2）体验营销的目标是消费者的忠诚度

在产品种类多、同质化严重、市场竞争激烈的情况下，顾客的购买需求不仅仅是希望得到物质上的满足，也希望能在购买中得到精神上的满足。体验营销就是通过各种手段不断强化和刺激顾客的消费感受，当然顾客的消费感受要是愉悦的，让顾客在企业创造的产品中，得到与众不同的体验感受。企业通过销售产品的过程，不断提高和巩固顾客对产品的满意程度，提升顾客的忠诚度，从而使消费者与企业之间建立长期稳定的合作关系。

（3）体验营销的手段是促使消费者主动参与

所谓体验，就是指消费者必须与企业进行互动，依靠产品特殊的属性，使消费者在感官上产生某种共鸣。体验营销的着重点在于消费者的体验，而企业销售过程中提供的场景、产品或者服务，给消费者提供能参与到场景的布置、服务
的设计机会，甚至引导消费者去完成产品或服务的设计、生产和消费的过程，目的就是让消费者主动参与到体验销售的过程。这是体验营销与传统营销模式最明显的区别。而在主动参与的过程中，企业与消费者之间围绕产品所进行的信息和情感交流，获取双方的信任，并通过相互配合，促进形成良好的双向互动关系，进一步感染和触动消费者，使其形成购买的欲望。

（4）体验营销的产品是在终端上体验差异化

企业在展示和传递产品时使用提供服务这个体验平台，体验营销是在服务中增加消费者的体验环节，使消费者充分了解产品的个性化和差异化。企业试图从产品自身的卖点和营销场所提供的服务等与消费者直接接触的环节入手，通过产品传递全方面的体验感受，减短消费者与产品的磨合期。

2.3 体验营销与传统营销的区别

体验营销与传统的营销方式在关注的焦点、对消费者的认知、营销侧重点等三方面存在较大的不同。具体如表 2-1 所示。

表 2—1 体验营销与传统营销的区别

<table>
<thead>
<tr>
<th>关注的焦点</th>
<th>传统营销</th>
<th>体验营销</th>
</tr>
</thead>
<tbody>
<tr>
<td>对消费者的认知</td>
<td>消费者是理智的购买决策者，把消费者的决策看成一个解决问题的过程，非常理性的分析、评价、最后决策购买</td>
<td>消费者既是理性的也是感性的，消费者因理智和追求乐趣、刺激等一时冲动购买的概率相同。</td>
</tr>
<tr>
<td>营销侧重点</td>
<td>关注产品分类及在竞争中的营销定位。</td>
<td>在广泛社会背景中检验消费情景</td>
</tr>
</tbody>
</table>

来源：《体验营销——如何增强公司与其品牌的亲和力》，刘银娜等译，北京，清华大学出版社，2004 年 4 月

3. 武当道茶的发展现状

十堰是湖北省四大茶区之一，是中国道茶文化之乡，也是中国有机生态茶之乡。武当道茶产自秦巴山区，也叫太和茶，因武当山而得名。人生至境，平和至极，谓之太和，由此成为千余年来盛传不衰的名茶和贡品。全市茶叶基地达 70 万亩，尚有 80 万亩的发展空间；现有茶叶企业近 300 家，其中国家级龙头企业 1 家，省级龙头企业 5 家。全省十大茶叶名厂中，我市有 4 家；在全省率先通过欧盟有机茶认证，有机茶品牌 28 个，占全省 1/3 以上。2014 年，全市茶叶总产量近 3000 万斤，生产产值高达 24.7 亿元，综合产值近 70 亿元。茶叶已成为农业特色支柱型产业中全市发展最好、效益最高的。

3.1 武当道茶及茶文化

（1）武当茶生产历史悠久。武当茶的生产已经有几千年的历史了，根据史料
记载，在唐朝早期，秦巴山的“梅子贡茶”是在石岩地区的，因为优良的质量，曾进贡给朝廷，所以自明朝以来，武当茶一直是皇帝的贡品。17世纪初，秦巴山区一带的武当山茶，一路沿着汉江，专注于襄阳，然后到河南、内蒙古北部，最后进入俄罗斯；一路由十堰郧阳码头往上，运送到陕西，然后通过公路穿越秦岭的西部、甘肃、新疆，再通过丝绸之路进入中亚和阿拉伯国家，十堰因此成为“茶道”一个重要的节点。这些经历史记载，传承着种茶、制茶、品茶、售茶的悠久历史，也证实了十堰是中国茶树的原产地和武当道茶叶的发源地。

（2）武当茶与道文化相辅相成。著名的古寺多好茶。传说真武祖师在武当修行时，一直通过茶来磨练自己的身体和心理，最后才得以修仙。如今，每年的农历新年“三月三日”，“九月九日”，武当山都举行盛大活动，用最好的茶来祭拜真武祖师。武当道教仍把功夫茶作为四大基础课程之一。武当道茶代代相传，西湖龙井、武夷岩茶和寺庙禅茶一起，被列为中国的四大名茶。

（3）武当茶和道教思想相通。武当道茶奉行的哲学是崇尚自然，崇尚简单，注重生活，修身养性，这与道教文化中的效果自然和道教思想有相同的地方。在古代，武当道茶是生命的本体，是长寿的最高追求，大家都追求得道成仙。现代的武当道茶，以尊重自然规律和经济规律为“道”，以健身养生、陶冶情操、惠及民生、和谐天下为最终目的。随着社会文明的进步，武当道茶和道教文化的形势和内容上虽然一直在变化，但与自然法则、造福人类是一脉相承的，让人在喝茶的同时能放松身心，好好感受自然，这也构成了武当道茶“养生、养心、保持良好的健康”等文化特征。

3.2 武当道茶取得的成就

武当道茶品牌的成功打造，不仅极大地增强了全市上下开发茶产业的积极性，而且引发了产品深度开发、产业效益大幅提升、企业迅速扩张等一系列连锁效应，促进了山区农业招商引资和企业扩张。武当道茶品牌成功打造，吸引了一批市外知名企业参与到十堰市茶叶产业开发的过程中来。目前，十堰市有国家级龙头企业，省级茶叶龙头企业有家。

（1）茶产业科技含量提高。市农业局组织专家和技术骨干，成立了武当道茶技术研发中心和分中心，制定生产技术规程和产品标准，创新鸡茶粮三元复合生态种养模式，研发乌龙茶和红茶制作工艺，大力推广标准化茶园建设，全市茶叶科技含量大幅提高，武当道茶被亚太环境保护协会授予“亚太国际低碳农业奖”武当道茶系列产品中有机乌龙茶、两个茶食品获国家发明专利武当道茶生产技术规程和产品标准通过省级评审，已由省技术监督局发布为省级标准。

（2）茶农收入和茶业效益得到提高。围绕市委、市政打造重要农业特色产品生产加工基地，推进区域性中心城市建设这一战略，市农业局进一步发挥山区农业地理优势，加强武当道茶品牌打造力度，以此示范带动全市特色农业深度开发。用最短的时间，将全市茶叶茶园面积达到100万亩，综合产值达到100亿元。茶叶企业品牌的打造，不仅提高了茶叶企业的整体形象，而且将茶叶产业培育成了100万亩基地、100万从业人员、100亿产值的整合性支柱产业。随着武当道茶品牌知名度的提高，全市茶叶平均售价有很大提高，有力带动了茶农增收。2016年，茶叶对全市农民收入贡献率高达6%，是特色产业的第一名。武当道茶同时也深受国内外消费者青睐，产品畅销国内10多个大中城市，远销东南亚及欧盟
市场。

（3）茶产业高端系列产品的开发得到推进。武当道茶主要有三大系列产品，到目前为止，有多个产品多次在国际、国内农博会及茶叶评审会上获奖。通过技术的升级改造和工艺创新，开发有机乌龙系列茶产品，将湖北不产乌龙茶的空白填补了起来。开发的红茶、茶多酚、茶微粉、茶工艺品、茶食品等一系列新产品，技术含量特别高，产业链也长，大大增加了就业机会，也极大地提高了十堰市茶资源利用率，深受消费者欢迎。

3.3 体验营销对武当道茶企业发展的意义

（1）体验营销有利于茶叶企业培养忠诚客户

忠诚的顾客会给企业带来巨大的商业价值，比如一个顾客忠于一个企业的品牌，就会去购买更多的这个企业生产的产品，为企业带来新的顾客，同时也为企业做了免费的宣传，积极地为企业提出建议等。有资料显示，企业去争取新客户的成本大大超过了留住老客户的成本，甚至能达到五到六倍，培养忠诚客户可以降低企业成本，企业无需费劲心思做宣传。体验营销作为一种新的营销理念，需要茶叶企业各个部门间的积极配合，共同为实施这一理念勇敢前进一步。茶叶企业应关注消费者的审美、娱乐、情感、生活等各方面的需求，从而更好地为消费者带来全方位和个性化的体验。通过一系列的愉悦的体验，拉近与消费者距离，得到消费者的情感认同，顾客总成本不变或者降低，顾客总价值却大大提高。顾客让渡价值是指顾客总价值减去顾客总成本的差，顾客满意度是顾客总价值与顾客总成本的比值。体验营销使顾客让渡价值提高的同时也提升了顾客满意度，从而培养出更多的忠诚客户。另一方面，消费者更注重的是整个消费体验过程中愉悦的心理体验和情感体验，而不仅仅是产品本身，他们愿意为独特的体验过程付费，降低了消费者对茶叶本身价格的敏感度，还减弱了还价的意识，为茶叶企业赢得更多的忠诚客户。

（2）体验营销有利于茶叶企业的长远发展

体验营销是茶叶企业能够获得长远发展的核心经营理念，通过顾客深度体验消费的过程中给顾客带来值得回忆的美好体验，从而提升顾客对品牌的好感度、忠诚度，从而重复购买，可以带动企业销售额的上升和利润的增长，实现企业经营目标。体验营销在结合茶叶企业自身资源优势的同时，又可以将中国博大精深的茶文化精髓贯彻到体验的过程中，既能实现消费者自身价值追求与茶叶企业品牌理念的完美融合，又使消费者和茶叶企业共同成长，又能提升茶叶企业的公众形象，为茶叶企业可持续发展打下坚实的基础。

4. 武当道茶发展中的问题

在过去的很长时间内，武当道茶企业在产品销售过程中，往往只采用原始的熟客发展的模式，通过熟客的介绍、带动来不断增加自己的客户源。这种销售模式，对产品信息传播较慢，企业的销售规模发展缓慢，因而企业在市场中的竞争力迟迟得不到发展。

4.1 营销模式单一

“好酒不怕巷子深”已经满足不了日益激烈的市场竞争。武当道茶茶文化营
销模式比较单一，大部分商家还是采用传统的售茶方式，等顾客上门，这样不仅不能提高茶叶的销量，而且不能有效提高武当道茶的知名度和影响力。

武当道茶的销售模式也缺乏创新精神，必须根据市场的供需关系，针对消费者的喜好和需求，关注茶叶消费的变化趋势，采取多种文化营销手段，吸引消费者，从而提高茶叶企业的市场运作空间。

4.2 建园质量差，单产水平低
十堰市现有的茶园大部分都是在20世纪80—90年代建的，由于在建园时没有重视茶园的质量，许多茶园耕作层浅，没有或很少施用基肥，有机质含量低，土壤保水、保水能力差，现有的茶园没有运用现有的地理优势发展种植园，导致215万亩的茶园，每亩产茶不到15千克，亩产值不足150元，加上管理粗放，重种轻管，重采轻培，有些茶场甚至只管采不管养，导致茶树衰老现象比较严重，一部分茶园缺兜、缺株现象较多。这些茶园单产量低，茶叶品质较差，效益不高，严重影响了茶农种茶的积极性。

4.3 茶叶品牌知名度低，缺乏标准化管理
十堰市各种茶叶品牌达100多个，有的品牌茶叶年产值仅有几万元。各种茶叶品牌各自为政，分散经营，未能形成规模优势，即使像龙峰茶、圣水毛尖、梅子贡茶这些有较大影响的茶叶品牌，其销售也主要集中在十堰地区，更不要说武当道茶了，外地市场份额小，名气也不高。全市只有少数几家有实力的茶场在种植武当道茶之外，绝大部分茶企种植规模较小，机制不活，实力不强，龙头带动能力弱。

品牌是企业产品性能、服务、质量、信誉的综合表现，是诚信的标志和载体，体现了企业的综合竞争力，决定企业是否在竞争中胜出。强大的品牌实力能使企业占领更多的市场份额，带来丰厚的收益。但当前十堰市境内茶叶品牌虽多，却没有核心品牌，没有标准化的生产方式，没有良好的企业形象，包括产品的质量、包装也参差不齐，宣传缺乏新意，给人一种“脏、乱、差”的形象。

4.4 不能有效满足消费者需求
中国茶叶市场划分为两个市场，一个是国际市场，另一个是国内市场。我国多年来出口最多的茶是绿茶，国内市场对绿茶的品牌非常推崇，使得绿茶在国内的销量更好。这无疑给武当道茶带来了巨大的品牌竞争压力，武当道茶在国内外知名度不够，宣传工作也没有做到位。十堰市出产的武当道茶虽然历史悠久，但是在省外、国外，很多消费者都没有听说过这些产品。在全国各个省市中，宣传力度远远不如其它各类名茶，宣传方式不全面，产品影响力不大。

5. “互联网+”下武当道茶体验营销对策建议
随着信息时代的发展，以及互联网和电子商务的涌现，传统的销售模式受到很大的冲击，不断涌现出一系列更加先进的销售模式。企业在茶叶的销售过程中，借助互联网的优势，慢慢形成了利用互联网进行茶叶新型参与体验式的新型销售模式。运用这种模式能解决传统模式中的问题。

5.1 运用“互联网+”模式
在这个信息飞速发展的时代，网购已经成为消费者最常用的购物方式，人们喜欢足不出户就能享受到自己想要的东西。武当道茶可以利用电商平台，打造良好的口碑来增加销售额，消费者的评价是打造良好口碑最重要的依据。因此诚信经营是必须的，网页首页可以放置武当道茶的制作过程相关视频，让消费者更加清晰的了解到制茶过程，提高消费者对茶叶品质的可信度，从而提升武当道茶的销量，同时还能起到宣传效果。

（1）通过微博开展茶叶新型参与式营销

微博的出现受到年轻人的强烈追捧，年轻人习惯于将自己的所见所闻所感通过微博的形式与更多的人分享，并且愿意分享、追捧自己的偶像，吸引粉丝。如果武当道茶企业能够建立自己的微博营销团队，指派专门的工作人员负责微博的销售以及与顾客的互动，不断的将武当道茶的养生文化和道教文化介绍给自己的粉丝，可以引起广大粉丝的注意，提高产品的知名度，可以在无形之中帮助武当道茶进行免费的宣传，大大降低了销售成本。

（2）通过QQ开展茶叶新型参与式营销

目前，QQ成为了人们使用最多的社交平台，从1998年发展到2017年QQ用户只增不减，说明具有极大的影响力。武当道茶企业要想扩大自己的经营销售规模，就不能忽视QQ空间等的作用，可以将QQ空间作为发布武当道茶新产品的平台，在空间里做品牌推广，吸引更多的人参与到新产品的体验中，通过这种方式让顾客了解到更多关于武当道茶的功能和文化。

（3）通过微信开展参与式营销

微信作为一种新型的更加便捷的平台，早已开始扩展电子商务的业务平台，成为了淘宝的又一延伸。微信是一个适合营销的平台，因为微信中的中老年用户比QQ中多，也就是说微信中的潜在客户更多，但对于这个年龄段的客户需要带着服务性质的营销，最忌讳刷屏。通过微信使顾客参与武当道茶新产品的体验，在与顾客的互动过程中获得顾客的好感度，使顾客产生主动购买的行为。并且，可以通过微信平台，向中年消费者推送武当道茶养生文化信息，向年轻消费者推送趣味的饮茶信息，吸引不同层次的消费者追求茶文化，获得他们的青睐。从目前的市场发展规律来看，参与体验式消费必将成为主流的发展方向。因此，武当道茶企业应当充分把握互联网和电子商务的优势，利用微博、QQ、微信等平台使消费者参与到产品的研发、销售、体验等各个环节，从而不断拓展自己的客户群体，获得长远的发展。

5.2 提升生产基地，建设生态茶园

（1）选育推广优良的茶树品种。增加武当道茶的种植面积，大力引进、筛选出一批优良的专用型及兼制型茶树良种，运用互联网的便利条件，加强武当道茶茶树新品种的引进、选育、区试、推广等科研和推广工作，了解世界各国茶叶的营销模式，汲取可以借鉴的地方，研究更多的新产品，力争将武当道茶整体质量升级。

（2）建设生态茶园。改造和新建两头抓，一个也不能忽视，划出最适合生产的地区，运用先进的互联网管理系统，用电脑取代人工管理，在全市建成基础设施完善、品种结构合理、良种良法配套、机械化作业和标准化管理的生态茶
园示范园，并且从互联网和书籍中寻找先进的种植方法，重点实施改良树种、改善土壤、改良化肥和农药，改变种植，完善基础设施，大力推广武当道茶绿色生产模式及配套技术、茶园采机机剪机耕机防“四机”集成技术，实现基地良种化、机械化、标准化、信息化、园林化和无害化。

5.3 优化升级加工，提高产品附加值

（1）升级一批加工设施。在核心区新建一批标准化示范晒场、萎凋室、摇青室、清筛室、发酵室、清洁化初制车间，实现武当山茶厂运行和加工管理规范化标准化。

（2）培植一批新型经营主体。实行“三个一批”：新建一批具有先进设施的高标准加工厂，改造提升一批初级茶叶加工厂，淘汰一批作坊式的落后小加工厂。重点扶持具有高科技含量、高附加值的加工型龙头企业，开发出经过深加工的终端产品，开发优质毛茶、精制茶、茶饮料、茶食品、速溶茶、茶多酚、茶保健品等终端产品，推进产业升级换代，延长产业链条。这样不仅能提升武当道茶的销量，同时可以让消费者能亲自来参观产业链，能更充分的了解武当道茶的优势。

5.4 提供茶艺 DIY 体验

现代茶馆兴起于 20 世纪末，在 20 世纪 90 年代后期迅速发展壮大起来，为消费者提供了一个结交朋友、办公洽谈、休闲娱乐的平台，消费者来茶馆也是为了寻求一种与在家喝茶不同的身心感受和体验。

所以经营武当道茶的茶馆可以请专门训练的茶艺表演队向消费者展示丰富生动的茶艺表演，利用图片、实物、文字等介绍茶艺发展过程，编排几套易掌握、有特色的冲泡方式让消费者学习体验。还可以选取几套不同种类、不同风格的茶样或茶具，同时加入小朋友使用的茶具，以“DIY”（自助茶）的形式，让消费者根据自己的喜好自由选取茶叶冲泡，在亲自体验茶艺 DIY 乐趣的同时也增进了家人之间的感情。在体验的同时也可以放映一些与武当道茶有关的视频、录像或典雅的音乐，如古典音乐、轻音乐或古筝演奏等，体现武当道茶与众不同的文化和氛围。做出这些活动的同时，需要企业拍成视频上传在网上，不仅能起到宣传作用，同时能吸引更多消费者来增加企业回头客。

结束语

“互联网+”模式下的体验营销是通过影响消费者的购物体验及情感交流来完成购买行为的过程，让消费者切身感受，体会到品牌或产品的魅力或优势。它比广告更能起到宣传的效果，既能更好的推广自己的产品，又能通过线上或线下的体验活动来赢得口碑，获得客户忠诚度。原始的“口口相传”演变成现今的“口碑传播”，网络口碑在消费者购买决策过程中扮演重要的角色，企业需要聆听网络口碑并融入到网络体验营销中，这更加考验了企业的产品质量。

当顾客对企业和其商品或服务感到满意并产生认同时，他们会积极地对周围的人宣传和推荐。如果体验后，客户对产品的评价都是差评、恶评，相信肯定不会有人去购买这些新产品，甚至企业品牌形象的口碑也会受到一定冲击。所以说，网络体验营销并不是万能的，它是有好有坏的。我们应该客观看待网络体验营销，既不要忽视它的作用，也不要夸大它的作用，只有结合企业自身的特点与需求并
且能满足客户的喜好与需求，那么才能将它的正面作用发挥出来。由此可见，武当道茶运用体验营销有利也有弊。

随着人们对茶叶的需求增大，出现的挑战与威胁也越来越多，武当道茶虽然得到了大家的认可以及政府的支持，但在竞争越来越激烈的经济时代，还需要不断创新产品，这样武当道茶才能一直经营下去。武当山国际机场的开通无疑是给武当道茶的发展创造了新的发展机遇。

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