

Multilevel Cross Analysis of Chinese College Students' Consumption Behavior on Bilibili Platform

Kaining Dong

Yanshan University, Qinhuangdao, China

ydongkaining@stumail.ysu.edu.cn

Abstract. College students have become the mainstream of online consumption. The consumption potential of this special group has a significant impact on the future development of online consumption market. Bilibili is a typical diversified interest community based on video. Contemporary young people are building a sense of identity and trust through their own interests. This study uses a research model based on use and satisfaction theory to investigate the influencing factors of College Students' consumption behavior on bilibili platform. Based on the effective data of 335 Chinese college students, this study makes a cross analysis of gender, grade and consumption behavior motivation, and finally finds that the consumption of men is higher than that of women, and the consumption satisfaction of men is also higher than that of women. In the middle and low consumer groups, freshmen and junior students account for the majority. In the high consumption group, the number of consumers in all grades is very small. It can be seen that the Internet consumption behavior of contemporary college students is relatively rational as a whole. Their satisfaction and consumption behavior intention will affect the positive development of mobile Internet consumption in the future. This paper will be beneficial to provide new cases for online consumption and young consumption, and to the discussion of consumption intention.

Keywords: Social media; Consumer behavior; Cross Analysis.

1. Introduction

With the rapid development of network information technology and the rapid popularity of online shopping in recent years, the online sales market has demonstrated tremendous business opportunities and vitality. As the backbone of online consumption, nearly 85% of college students have the habit of online consumption, and this unique segment's consumption potential has a striking impact on the future development of the online consumption market. At the same time, contemporary young people have been building their sense of identity and trust through their interests, and Bilibili is a typical diversified video interest community. However, the motivations for consumption behavior in social media platforms are less considered in the literature. Furthermore, although various previous studies have revealed the manifestation of consumption motivations among college students in general, few studies have focused on consumption behaviors specifically in conjunction with social media. Therefore, a study on the factors influencing the satisfaction of college students' consumption at Bilibili is of utmost importance for improving the online spending market, boosting customers' satisfaction with online consumption, and improving the social media commercialization environment.

Customer perceived value was first proposed by Kolter and Levy in their study of customer satisfaction. They argued that "customer satisfaction depends on its perceived value" [1]. In Zeithaml's view, there are four different representations of perceived value as defined by consumers: value is low price; value is what the customer wants in a product or service; value is the quality that the customer gets for what he or she pays; and value is the total benefit that the customer gets for all of what he or she pays. In this study, customer perceived value is defined as a subjective value judgment made by customers in their consumption experience of Bilibili's consumer business by weighing and comparing perceived benefits and perceived gains and losses. This definition is consistent with the above-mentioned scholars' views and emphasizes three characteristics of customer perceived value: it comes from the consumption experience process, it is a result of weighing and comparing, and it is subjective in nature.

For the definition of consumer behavior intention, it refers to the possibility or tendency that the object of human attitude will be a definite activity or behavior. This study defines Bilibili consumer behavioral intention as the possibility that users will take further actions after using the Bilibili platform for a period of time, such as continued use and positive suggestions or updates for more consumer businesses. At present, some scholars have actively discussed the relationship between consumption behavior and consumption intention, and some scholars have done relevant research on Bilibili [2-5].

Maslow's hierarchy of needs is a motivational theory in psychology that includes a five-level model of human needs, often depicted as a hierarchy within a pyramid. From the bottom of the hierarchy upward, the needs are: physiological (food and clothing), safety (job security), social needs (friendship), respect, and self-actualization. This five-stage model can be divided into deficiency needs and growth needs. The first four levels are usually referred to as deficiency needs (D needs), while the highest level is called growth needs (B needs). 1943 Maslow stated that people need motivation to achieve certain needs and that some needs take precedence over others. During the consumption process, consumers' needs also rise to different levels. Therefore, the psychology of consumption at different levels of progression needs to be considered in the process of designing the questionnaire. Some scholars have used this theory for reference to study the consumption of college students, which provides some reference for this study [6-10].

In general, studies on the consumption behavior of mobile Internet users are increasing, and many scholars such as Wu Wenling and Luo Siqi have studied the general consumers' willingness to accept and adopt mobile Internet and their intention to continue using it [2, 5, 8, 10]. In contrast, the study of college students' consumption behavior in the context of mobile Internet is a territory that needs to be reclaimed. Obviously, a study on the factors influencing the consumption behavior of student groups in popular platforms in the context of mobile Internet, especially the consumption behavior of college students, will help to further focus the target group of the study and enhance the knowledge and understanding of the consumption behavior of this unique group of students.

2. Methodology

Following a pre-survey study, the experiment was further deepened by a questionnaire after learning about the use of Bilibili by contemporary college students, which mainly included the consumption and usage of Bilibili. After the reliability analysis, all responses were carefully checked, and the 335 participants with the most valid responses were used for further data analysis.

In this study, the Expectancy Confirmation Theory (ECT) was used to set up eight Likert scales in order to investigate the consumption behaviors of Bilibili among the college students. The study also used structural equation modeling and Maslow's hierarchy of needs model of consumer satisfaction. In this research, for the seven variables of satisfaction, consumer satisfaction (CS), perceived risk (PR) perceived service quality (SQ), perceived self-actualization (PSE), perceived price level (PP), perceived usefulness (PU), and perceived entertainment (PE) in the above model hypotheses, the following mature scales were used. These variables are all part of consumer satisfaction and can positively contribute to continued behaviour intention to use (BI). Cronbach 's coefficient was used to test the internal consistency of the variables.

A total of 335 respondents, including 173 males and 162 females, completed the questionnaire. Participants were not informed of the purpose of the experiment at the time of the study, and were asked to jump through the questions to answer questions based on different uses of the Bilibili. This study was completed entirely by a relatively large number of college students and a few graduate Bilibili users.

In terms of gender, 173 of them are male, accounting for 51.6%, and 48.4% are female, with a relatively balanced ratio of men to women. From the viewpoint of the year segment, the number of junior students accounted for the largest number, as high as 41.5%, while the number of graduate students was smaller, containing only 21 people. In terms of disciplines, students in science and

technology received the majority of questionnaires, followed by students in economics and management and students in literature, history and philosophy. Agricultural and education students filled out the least number of questionnaires.

Table 1. Basic information of respondents

Item	Group	Number	Percentage
Gender	Male	173	51.6%
	Female	162	48.4%
Grade	Freshman	59	17.6%
	Sophomore	79	23.6%
	Junior	139	41.5%
	Senior	37	11.0%
	Graduate	21	6.3%
Major	Humanities	61	18.2%
	Economics	72	21.5%
	Law & S-S	27	8.1%
	Engineering	94	28.1%
	Agriculture	13	3.9%
	Medicine	21	6.3%
	Education	15	4.5%
	Art	32	9.6%
Expenses (RMB)	<1000	9	2.7%
	1000-2000	178	53.1%
	2000-3000	108	32.2%
	>3000	40	11.9%

3. Results

On the basis of determining the model and hypothesis of college students' Bilibili users' consumption behavior, this research paper tested the model by means of questionnaire research with college students and postgraduates as the research subjects, and the research results demonstrated that the relevant hypotheses were effectively verified.

3.1 Gender-related cross analysis

Males tended to consume more than females. Over the eight categories, it can be found that males and females tend to spend under 500RMB. Males exceeded females in the amount of money they spent on Bilibili by a ratio of 1.5:1. It is also worth noting that a marginally smaller percentage of females reported spend 500-1000RMB on Bilibili. This phenomenon is also basically in line with the distribution ratio of college students' living expenses.

Males tend to be more satisfied with females in Bilibili consumption. Among these five valid categories, males reported an average of 7% consumer satisfaction and females 5%. Through the observation of the chart, it can also be found that the consumption satisfaction of men and women on Bilibili is mostly concentrated in the range of 40%-60%. In other words, college students do not enjoy a very satisfactory experience in spending on Bilibili.

3.2 Grade-related cross analysis

It can be significantly identified that students spending less than \$500 make up the largest percentage of juniors. In the middle and low spending segment, freshmen and juniors occupy the major proportion of the population. While students in their senior year and above spent less. Similarly, in the high spending segment, the number of spenders in all grades is extremely small.

It also can be seen that junior students mainly hold a negative status in consumption feelings compared to other grades, while sophomores mainly support a low to medium range of consumption satisfaction. The consumption satisfaction of freshmen and seniors is in line with the overall satisfaction conclusion. Among them, the graduate student population also has a skeptical attitude towards high consumption satisfaction, accounting for less than 1%.

3.3 Consumer behavior intention score

As shown in the figure, these are the user behavior intention indicators listed according to the model. Overall consumers' ratings for consumer behavior are basically above the average score. It is clear to note that respondents all have a high perceived service quality as well as a high perceived level of service. It is also worth noting that it is more difficult for users to achieve a high level of perceived self at the time of consumption.

Table 2. Consumer behavior intention

Item statistics	Average value
SQ1	4
SQ2	3.71
SQ3	3.91
PP1	3.57
PP2	3.56
PR1	3.47
PR2	3.14
PR3	3.08
PU1	3.52
PU2	3.6
PE1	3.42
PE2	3.45
PSE1	3.25
PSE2	3.06
PSE3	2.91
CS1	3.47
CS2	3.18
BI1	3.55
BI2	3.16
BI3	3.13

3.4 Bilibili user usage habits

As can be seen from the table 3, up to a quarter of the interviewees have been using Bilibili for more than 5 years. The number of college students who have been using Bilibili for more than one year also accounts for 90% of the total number of interviews. This is also enough to state that Bilibili has a high user stickiness.

Table 3. Length of time users use Bilibili

Option	Subtotal	Proportion
More than 5 years	84	25%
4-5 years	46	14%
3-4 years	67	20%
2-3 years	74	22%
1-2 years	32	10%
Less than 1 year	16	5%
Not used	16	5%

Users are most likely to learn about Bilibili through both verbal and digital media, which is in line with the current state of information dissemination. It is very obvious to discover that college students use Bilibili mainly to learn various types of knowledge, and also the vast majority of users include Bilibili in their lifestyle habits and open the software when they want to relax and have fun. At the same time, users are also very used to relying on this video software. What is remarkable is that a relatively small number of users are accustomed to buying peripherals in Bilibili.

The most significant form of spending by users is topping up the large membership on Bilibili, with about a third of such people. And nearly an equal number of people choose not to spend on Bilibili. Users also frequently purchase membership products and use and recharge for Bilibili-derived games in Bilibili. The lowest spending by college students on Bilibili is the purchase of a membership card that allows them to watch videos without traffic, accounting for only 3% of the total.

4. Discussion

4.1 Innovative Research Structure

This study used structural equation modeling and Maslow's hierarchy of needs model of consumer satisfaction. Unlike the previously available studies, this study includes all the variables referenced by the consumer satisfaction model. The seven variables included are perceived risk (PR), perceived service quality (SQ), perceived self-actualization (PSE), perceived price level (PP), perceived self-actualization (PSE), perceived usefulness (PU), and perceived entertainment (PE). These seven variables all positively respond to consumer satisfaction, and also satisfaction positively influences willingness to continue using (BI).

4.2 Theory of questionnaire design

Maslow's hierarchy of needs is divided into five areas: physiological needs, security needs, social needs, respect needs and self-actualization needs, people in turn by a lower level of a certain level of needs to get the corresponding limit of satisfaction, before the pursuit of higher-level needs. This step-by-step rise becomes the internal motivation to promote further efforts. Therefore, when designing the questionnaire is not designed from a single level of one question and one answer, but the questionnaire design concept of progressive advancement is introduced. Psychological analysis of college students, analysis of consumer environment and analysis of influencing factors before and after college are all secondary indicators that constitute satisfaction. Satisfaction is influenced by multiple perspectives, so designing research questions in conjunction with Maslow's hierarchy of needs theory can give a more comprehensive account of college students' consumption satisfaction.

4.3 Users' suggestions and opinions

As for the prospective development of Bilibili, over 60% of college students think that Bilibili will grow better and better. A small number of nearly one-fifth of respondents think that the prospective development of Bilibili will not be very good. Therefore, in the subsequent study, the prospective development of Bilibili can be explored more deeply.

The questionnaire design was also designed with opinions and suggestions for the future development prospects of Bilibili, and the following word cloud diagram was designed for respondents' comments. A number of users felt that in recent years, Bilibili had deviated from its original development and hoped that the platform would continue to develop in accordance with its original design concept. At the same time, some users mentioned content diversity, and there are two different voices under this keyword: some users still like the original design of bilibili, while some users enjoy the happy experience brought by content diversity. Users' comments about negativity are mostly focused on content review. College students have made sharper criticisms of the creators' content audits and believe that the platform should increase the various efforts of content audits. On the other hand, users' positive comments about using Bilibili are mostly focused on the richness of

the resources. College students believe that Bilibili's resources can meet most of their needs, not only for learning, but also for entertainment and consumption.

5. Conclusions

In this survey, data on the spending habits of current college students and graduate students on Bilibili were collected through questionnaires distributed on the Internet platform. Cross-tabulation analysis and sampling analysis were used to further process the data. The survey explored the gender-related cross-tabulation analysis, for example, gender and spending amount, gender and consumer satisfaction, even also include grade-related cross-tabulation analysis, for instance, grade and spending amount, grade and spending amount. Consumer behavior intention score and Bilibili user usage habits are also investigated. Based on the user experience and evaluation collected from this questionnaire, the article argues that more emphasis can be placed on exploring the future of Bilibili and the user experience in the subsequent research. The paper suggests that the effectiveness of paid content and the self-fulfillment of users' paid experience can be more controlled in the future development of Bilibili.

This study has both theoretical and practical implications. In terms of practical significance, college students, as a special consumer group, not only have a unique consumer culture and characteristics, but also have a significant impact on social consumption, social productivity and modern people's lifestyles. Since college students have a deeper rational understanding of mobile Internet consumption, they not only represent the mainstream group of current mobile Internet consumption, but also are the backbone of future consumption. College students' mobile Internet consumption is not only reflected in the degree of expectation and confirmation of commodity value and shopping process, but also reflects the potential trend of mobile Internet consumption. In a certain sense, the satisfaction and consumption behavior intention of mobile Internet college students' consumers determine the depth and breadth of mobile Internet consumption development in space and time.

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