

The Influence of Mobile Payment Methods on Consumer Behavior in China

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Abstract

Mobile payment has gradually brought new changes to the consumption of Chinese consumers. With the continuous penetration of China's mobile payment into the traditional consumer market, the impact of mobile payment on the consumption of Chinese consumers has deepened. In order to have a deeper understanding on how mobile payment methods will influence consumer behavior, it designed and conducted this research. Firstly, it integrates the research reviews of domestic and foreign scholars on consumption behavior and mobile payment and compiles and summarizes the theories of mobile payment and consumption function. Secondly, the impact of mobile payment on Chinese consumers' consumption was discussed from the aspects of influencing behavior, influencing mechanism, and influencing effect.

Results show mobile payment has a promotional effect on consumers' consumption, and the development of mobile payment has promoted the direct increase of consumers' real income.

In this research, it focused on three aspects: "improving the mobile payment consumption system", "strengthening the security of mobile payment" and "increasing the supervision and support of functional departments". Prospectively, this research will benefit the healthy and orderly development of mobile payment in China with potential policy recommendations and promotes Chinese consumption and stimulate domestic demand.

Keywords: Mobile payment; consumer behavior; perceived cost; consumer satisfaction; influential effect

Vliv metod mobilních plateb na chování spotřebitelů v Číně

Abstrakt

Mobilní platby postupně přinesly nové změny ve spotřebě čínských spotřebitelů. S nepřetržitým pronikáním těchto plateb na tradiční čínský spotřebitelský trh, se vliv mobilních plateb na spotřebu čínských spotřebitelů prohloubil. Tento výzkum jsem navrhla a provedla, abych získala hlubší znalosti o tom, jak mobilní platební metody ovlivní chování spotřebitelů. Nejprve integruji výzkumné publikace domácích i zahraničních vědců zabývajících se chováním spotřebitelů a mobilních plateb, dále sestavím a shrnu teorie funkcí mobilních plateb a spotřeby. Následně rozeberu vliv mobilních plateb na spotřebu čínských spotřebitelů z aspektů ovlivňování chování, ovlivňující mechanismus a ovlivňující efekt.

Výsledky ukazují, že mobilní platby mají propagační účinek na spotřebu spotřebitelů a vývoj mobilních plateb podporuje přímé zvýšení reálného příjmu spotřebitelů.

V tomto výzkumu jsem se zaměřila na tři aspekty: „zlepšení systému spotřeby mobilních plateb“, „posílení zabezpečení mobilních plateb“ a „zvýšení kontroly a podpory funkčních oddělení“. Výhledově bude tento výzkum přínosem pro zdravý a řádný vývoj mobilních plateb v Číně s potenciálními politickými doporučeními, které podpoří čínskou spotřebu a povzbudí domácí poptávku.

Klíčové slovo: Mobilní platba; spotřebitelské chování; vnímané náklady; uspokojení spotřebitele; efekt vlivu

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1 Introduction

On March 5, 2018, Premier Li Keqiang praised the "Four New Inventions" in the government report: "High-speed rail networks, e-commerce, mobile payments, and sharing economy lead the world." The report pointed out that with the rapid rise of new kinetic energy, China has reconstructed its economic growth pattern and gradually changed its traditional way of life and production. From the birth of Alipay in 2004 to the emergence of computers, to the emergence of smartphones, China's mobile payment industry, led by Alipay, has continuously created dozens of unique application scenarios through innovation and technological improvements, which greatly facilitates The lives of Chinese people.

With the economic development and the continuous enhancement of internet technology, more and more people choose to use mobile payment to make daily life more convenient. Mobile payment has already existed in all aspects of our lives. The convenience of this way also stimulates consumers' desire to use mobile payment for entertainment, life payment, and shopping. The continuous improvement of communication technology and software technology has greatly improved the security performance of payment tools. More and more consumers choose and trust mobile payment. The number of mobile payment users has increased rapidly and even reached the point of popularity.

As an innovative payment method, mobile payment is ubiquitous in modern consumer life, such as daily payment of gas, water, and electricity, shopping, and purchase of various commodities. Mobile payment changes not only people's lives, but its profound impact is reflected in more aspects. The concept of mobile payment is gradually becoming familiar to people. Nowadays, more and more people choose mobile payment as the main daily payment method. Also, the impact of mobile payment on the economic field plays a pivotal role. Mobile payment has integrated decentralized economic transactions into one organism.

2 Objective and Methodology

2.1 Objective

The tendency to purchase is getting stronger and the scale of transactions is also expanding, the purpose of this paper is to study the impact of mobile payment on consumer behavior from a micro perspective; analyze the impact of mobile payment on consumption from macro data; analyze the current problems in mobile payments in China.

Through the research of the impact of mobile payment on consumer behavior, analyzes the existing problems in China's mobile payment platform, gives optimization suggestions and corresponding business strategy recommendations for mobile payment providers, and guides consumers to use mobile payment tools healthily.

2.2 Methodology

2.2.1 Literature research

To fully grasp the development of the research field, this article has collected and sorted out a large number of relevant documents both in China and other countries. By reading domestic and foreign scholars' relevant literature on the factors affecting the use of the mobile payment, summarize the existing theories in the current research on the factors affecting the use of consumers, analyze the advantages and disadvantages of existing research, and summarize the applicability of related theories. Form the research thinking of this article and propose the research model of this article.

2.2.2 Questionnaire survey

A questionnaire survey is an important part of the empirical part of this article. Based on a large number of documents, this paper designs the questionnaire for this article based on the variables and assumptions in the research model, combined with the characteristics of third-party mobile payments. In the process of issuing the questionnaire, first, conduct a pre-survey of the questionnaire, analyze the reliability and validity of the initial questionnaire, and adjust the content of the questionnaire, and then formally issue the questionnaire. After the questionnaire is collected, the questionnaire is screened, and after obtaining valid sample data, descriptive statistical analysis, reliability and validity analysis, and empirical result analysis of the model

is performed. The author will adjust the questionnaire survey method according to the development of the epidemic and choose the WeChat online questionnaire survey method.

Refer to Appendix A for the contents of the questionnaire.

This research uses the questionnaire survey method to collect data, the sample adopts a random sampling method and uses the professional data survey website "Questionnaire Star" to distribute questionnaires on the Internet. This questionnaire will be completed in one week from January 19th to 26th, 2020. This research plans to distribute 450 questionnaires, and retrieve 423, with a recovery rate of 94%. To ensure the accuracy and reliability of the survey results, the returned questionnaires are strictly screened. Among all the respondents, 26 did not use mobile payment, which did not meet the requirements of the respondents, so these 26 questionnaires were eliminated. Also, excluding 22 incomplete or incorrect questionnaires, 375 valid questionnaires were finally obtained, and the questionnaire effective rate was 88.7%.

1. Questionnaire design

The questionnaire survey method is currently the most commonly used measurement method for people to research consumer behavior. Effective measurement of key indicators and data collection are the prerequisites for reaching reasonable and reliable conclusions. This article adopts the method of online network survey to issue questionnaires, collect data, retain valid questionnaires, and conduct empirical analysis. First, according to the research results of the existing literature, we summarize the problems related to mobile payment and consumer behavior and get the measurement indicators related to the variables of this research. Then, according to the research purpose, design the questionnaire, modify the format, delete the unclear sentences, and then optimize the questionnaire to form the final formal questionnaire. To accurately reflect the research question, this questionnaire sets variables from the perspectives of mobile payment and consumer behavior. Each angle is subdivided into different measurement indicators. The measurement of each indicator is designed with corresponding questions. To facilitate the interviewees to make judgments, each item uses a positive statement. At the same time, this questionnaire adopts a multi-item method and uses a Likert five-level scale for measurement, including five levels of "strongly agree", "agree", "partly agree", "disagree" and "strongly disagree". The degree ranges from strongly agree to strongly disagree

and assigns a value of 1 to 5 respectively. To ensure the validity of the variables, all the questions in the questionnaire are derived from existing literature and modified according to this topic.

At the top of this questionnaire, the purpose and purpose of the questionnaire are listed, and the definition of mobile payment in the questionnaire is reminded so that the respondents can make accurate answers. The questionnaire is divided into four parts as a whole, which are as follows: The first part: the basic personal information of the surveyed person, including four aspects: gender, education, household registration type, and average monthly consumption; the second part: the basic situation of mobile payment use, divided into Whether to use mobile payment, the frequency of use of the mobile payment, the type of mobile payment used, the service life of mobile payment, and the maximum amount of mobile payment transactions; Part 3: Investigation of the reasons for the use of the mobile payment, mainly divided into three categories: convenience, security, and integration The fourth part: the impact of mobile payment on consumer behavior, which is the core part of this questionnaire. Among them, consumer behavior mainly includes four aspects, namely Consumption psychology, consumption level, consumption structure, and consumption experience.

The scale of this questionnaire contains two variables, mobile payment, and consumer behavior. Among them, mobile payment includes three variables, and consumer behavior includes four variables. Each variable has 4-6 items to ensure the questionnaire. Validity. There are a total of 48 questions in this questionnaire. See the appendix for details.

2. Pre-testing and modification of the questionnaire

After the initial version of the questionnaire is designed, a pre-test is carried out. In this study, 20 pre-test questionnaires were distributed through the internet. On this basis, a literal validity check was carried out. Through the discussion and modification of the options and answers of the returned questionnaire, the formal questionnaire was finally determined.

In the pre-test of the questionnaire, the author carefully recorded and controlled the whole process, to continue to improve the questionnaire. Mainly manifested in the following aspects: whether the question design is rigorous, whether the sentences are easy to understand, whether the order of the questions is gradual, from easy to difficult, and whether the interviewee

understands the purpose of the research. For example, change the question "How many times did you use mobile payments per week?" to "How many times did you use mobile payments in the last week?" so that respondents can better estimate their mobile payment usage frequency. Based on the above-mentioned aspects, the questionnaire is revised so that the respondent can better complete the questionnaire.

2.2.3 Descriptive research

Through the elaboration and research on the theory of mobile payment and consumption function, it locates the influence of mobile payment on the Chinese consumer market and discusses the influence of mobile payment on Chinese consumers from three aspects: influence behavior, influence mechanism, and influence effect. This article quotes the Absolute Income Hypothesis (John Maynard Keynes), Relative income hypothesis (James Stemble Duesenberry), Life-cycle hypothesis (Franco Modigliani), and Permanent Income Hypothesis (Milton Friedman), four theories to comprehensively demonstrate consumer behavior, thereby providing a theoretical basis for the research of the thesis.

2.2.4 Quantitative Method

Consumption is affected by many factors, such as disposable income, price level, interest rate level, etc. The macro analysis of this article mainly analyzes the impact of mobile payment on household consumption. Under normal circumstances, when studying household consumption at the macro level, the total retail sales of consumer goods are usually selected to represent household consumption.

Therefore, the direct impact of disposable income, consumer price index (price level), and the scale of Chinese Internet mobile payment transactions are mainly selected as independent variables and social consumer retail sales as dependent variables for analysis.

Total Retail Sales of Consumer Goods refers to the number of goods that companies and enterprises sell consumer goods to other companies, enterprises, and social groups through transactions that are not used for business operations or the services used by the tertiary industry Profitability. This paper will use this as a medium to express the level of consumption.

Consumer Price Index (CPI, Consumer Price Index) is an important parameter used to observe the consumption status of social groups and changes in the income of tertiary industry projects.

This parameter is mainly used to indicate changes in the implementation status of mass consumption and the fluctuation of consumer service prices when certain economic products or tertiary industry items change within a certain period.

The time range selected for this study is the data from the third fourth of 2019 to the third quarter of 2020. Since the research sample is a time series variable, the logarithm of the series will be taken as usual. The result processed by this method can not only eliminate the heteroscedasticity but also ensure that the time series of the variables will not be changed. The original co-integration relationship is well maintained. The data used in this study comes from the Chinese National Bureau of Statistics.

The article uses SPSS and MATLAB software to carry out relevant statistical analysis, use correlation analysis to study whether there is a dependency between mobile payment and consumer behavior; use Pearson correlation coefficient to determine the convenience, safety, and integration of mobile payment and Consumption psychology, consumption level, evaluate and analyze the correlation between consumption structure and consumption experience to explore the degree of correlation; use analysis of variance to compare the relationship with Consumption psychology, consumption level, consumption structure, and Consumption psychology, consumption level, and consumption structure in terms of gender, education, type of household registration, and average monthly consumption capacity. Carry out difference analysis on the influence relationship of Consumption experience, carry out a significant test on the difference of two or more sample means, and then determine which factors have a significant influence on the result variable, to determine the difference in the influence of mobile payment on consumers; Use regression analysis to explore the relationship between the influencing factors of mobile payment and the degree of dependence, analyze the impact of mobile payment on consumer behavior, and provide references for third-party mobile payment operators.

(1)Variance analysis, Regression analysis, Pearson correlation coefficient

Statistical analysis has been done with SPSS[1] and MATLAB[2], correlation analysis was used to study whether there is a dependent relationship between mobile payment and consumer behavior, Pearson correlation coefficient(r) (formula 1) [3]was used to evaluate the relationship

and its level between the convenience, safety, integration of mobile payment and consumption psychology, consumption level, consumption structure, and consumption experience.

$$r = \frac{\sum (x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum (x_i - \bar{x})^2 \sum (y_i - \bar{y})^2}}$$

Formula 1

Formula 1: r: correlation coefficient; x_i : values of the x-variable in a sample; \bar{x} : mean of the values of the x-variable; y_i : values of the y-variable in a sample; \bar{y} : mean of the values of the y-variable.

Variance analysis (ANOVA) [4] is used to test the significance of difference between two or more samples, here we used it to analyze the difference between the influence of gender, grade, household type and monthly average consumption ability on consumption psychology, consumption level, consumption structure and consumption experience. Significance test[5] was carried out on the difference of the mean values of two or more samples to determine which factor has a significant impact on the results, which will finally determine the difference of the impact of mobile payment on college students.

Regression analysis[6] was used to explore the relationship between the influence factors of mobile payment and their dependence degree, and to analyze the impact of mobile payment on college students' consumption behavior, so as to provide reference for third-party mobile payment operators.

The concept of "fuzzy" which is based on the Fuzzy Comprehensive Evaluation (FCE) method[7] has been introduced to "comprehensive assessment", the four indexes (consumption psychology, consumption level, consumption structure and consumption experience) have been integrated into consumer behavior to do the comprehensive evaluation, and then to decide to the degree of dependence of college students participating in the questionnaire on mobile payment.

(2) Correlation analysis and Regression analysis

Correlation analysis is a term used to denote the association or relationship between two (or more) quantitative variables[8], and discusses the correlation direction and degree of specific interdependent phenomena. It is a statistical analysis method to study the correlation between

random variables. Results of correlation analysis is a correlation coefficient whose values range from -1 to +1. A correlation coefficient of +1 indicates that the two variables are perfectly related in a positive (linear) manner, a correlation coefficient of -1 indicates that two variables are perfectly related in a negative (linear) manner, while a correlation coefficient of zero indicates that there is no linear relationship between the two variables being studied. The closer the absolute value of the correlation coefficient is to 1, the stronger the linear correlation between the two variables is (Figure 1). Among various correlation coefficients, Pearson's correlation coefficient is the most commonly used. This study used Pearson's correlation coefficient to analyze the relationship between the convenience, safety, integration of mobile payment and Consumption psychology, consumption level, consumption structure and consumption experience.

Regression analysis[6] is a statistical tool for the investigation of relationships between variables. Usually, the investigator seeks to ascertain the causal effect of one variable upon another. In regression model, assuming there is a linear relationship between the independent variable and the dependent variable, the average change of the dependent variable is finally measured when the independent variable changes. Cross Section Regression Model[9] was used to build the regression equations of mobile payment to Consumption psychology, consumption level, consumption structure and consumption experience respectively. Values of each system passes the significance test are considered statistically valid, and the goodness of fit R^2 is used to evaluate the measurement effect of the model.

(3) Cronbach's alpha value

Tau-equivalent reliability also known as Cronbach's alpha or coefficient alpha[10], is the most common test score reliability coefficient for single administration (i.e., the reliability of persons over items holding occasion fixed). In general, exploratory studies, Cranbach α coefficient is above 0.6, and in benchmark studies it is above 0.8. Normally, Cranbach's α coefficient is above 0.6, which is considered to be highly reliable.

2.2.5 SWOT Analysis

The development of mobile payment can promote the rise of consumption, but also shows that it is helpful to economic development. This section conducts a SWOT analysis on this. While

understanding its advantages, it can also discover the problems that exist, which provides a certain foundation for the improvement and development of mobile payment.

The SWOT analysis of mobile payment is shown in Figure 2.1.

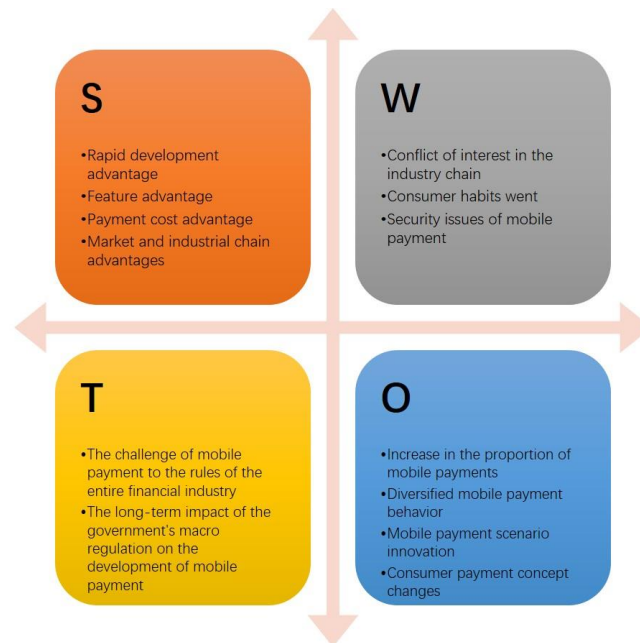


Figure 2.1. *The SWOT analysis of mobile payment*

The advantages of mobile payment are rapid development; convenience, integration, and security; low payment costs; and a complete mobile payment market.

Disadvantages of mobile payment: There are contradictions in the payment chain, and the consumption habits of some consumers, especially older consumers, are difficult to change; there are certain security risks.

Opportunities for mobile payment: the proportion of mobile payment continues to rise; consumer acceptance is strong, payment concepts have changed, payment behaviors diversified; payment ideas continue to improve.

The threat of mobile payment: government regulation of mobile payment; restrictions on financial industry rules, etc.

3 Literature review

3.1 Consumer research

3.1.1 Consumer Behavior Research

Based on the marginal utility theory of William Stanley Jevons, Carl Menger, and Léon Walras, Alfred Marshall put forward the "equilibrium price theory", which use the equilibrium price of the commodity to measure the value of the commodity, he believes that the equilibrium price and value are consistent, and the determination of demand price and supply price is very different. He put forward the equilibrium price theory through the analysis of demand and supply. Point out that when supply and demand reach equilibrium, output and price also reach equilibrium at the same time; John Hicks proposed the ordinal utility theory, It refers to the sequence of people's subjective evaluation of a certain commodity or the comparison of advantages and disadvantages to express and analyze the theory of utility. It is believed that utility is used to express a personal preference, but personal preference is a psychological activity. Therefore, the amount of utility is inherently immeasurable theoretically, conceptually, and practically, and can only be ranked according to the degree of consumer preference. Paul Anthony Samuelson proposed "revealed preference theory", through this theory, the best possible choice can be distinguished from consumer behavior. In other words, the consumption habits of consumers can show their preferences[11].

3.1.2 Consumption structure research

Engel analyzed the statistical data of household living expenses and found that as income increases, the proportion of household expenditures on food in total household expenditures will decrease instead.

The linear expenditure system (LES) model was the demand system model proposed in 1954 by the British economist, R. Stone, according to the Cobb - Douglas function. Lurch, then, proposed the expansion of the linear expenditure system model (ELES)[13]. Both are from the perspective of income and price, through the analysis of the demand for certain types of

commodities to study the consumption structure.

The Almost Ideal Demand System (AIDS), first developed by Angus Deaton and John Muellbauer, is a consumer demand model used primarily by economists to study consumer behavior. The AIDS model gives an arbitrary second-order approximation to any demand system and has many desirable qualities of demand systems.

3.1.3 Behavioral Consumption Theory Research

(Graham and Isaac) [12] argues that the neoclassical theory of consumer behavior makes strong assumptions about the informational and computational bases of consumer behavior. The core assumption is that consumer behavior is reasonably characterized as the maximization of expected lifetime utility subject to a budget constraint and conditional on the available information. In short, consumer behavior can be characterized as the solution to a discounted dynamic programming problem.

(Shefrin and Thaler)[14] suggest that wealth is divided into three mental accounts—current income, current assets, and future income—and that the temptation to spend is greatest for current income and least for future income.

(Matthew Rabin)[15] argues that consumers' self-awareness and self-control can be divided into three types, mature, naive, and partially naive.

(Drazen Prelec and George Loewenstein)[16] argues that in the short-term and certain state, the consumer's willingness to consume is the strongest in this state, so in the short-term, the consumer's waiting impatient degree is the strongest; in the long-term state, the consumer's waiting impatient degree can be ignored, so in the short term, consumers' waiting impatient degree is at the highest position, and as time goes by, consumers' waiting impatient degree gradually decreases.

(George Loewenstein) [17] argues that the scope of consideration of total utility needs to increase intangible utility, that is, emotional changes.

3.2 Mobile payment research

3.2.1 Research on the relationship between mobile payment and bank

(tmcnet.com)[18] Through analysis, it is pointed out that mobile payment, e-wallet, and mobile

banking will gradually penetrate consumers' daily consumption patterns in the future.

(Flavio Martins)[19] argues that nothing could be more convenient than being able to pay for goods and services all from your mobile device from whatever location you need to do so. As of the second quarter of 2014, the second most popular form of mobile payment was Near Field Communication (NFC) 37% of smartphone users paid for goods using this method while 19% of tablet users used this method.

(Reuver) [20] argues that mobile e-wallets are built on the transaction platform of the bank payment system. Users use mobile e-wallets to realize timely payment, consumption, and transfer functions, which greatly reduces operating costs.

3.2.2 Research on the Security issue of Mobile Payment

(Torsten J. Gerpott and Klaus Kornmeier) [21] pointed out that most users think that the transaction environment of mobile payment is insecure and point out that transaction security is the biggest stumbling block restricting the development of mobile payment. (Yogesh Kumar Dwivedi)[22] based on the theory of perceived risk, it is pointed out that the user acceptance of mobile payment will be influenced by factors such as the asymmetry of perceived information, the uncertainty of perception technology, and supervision.

(Yong Wang et al)[23] summarize the security services desired in mobile payment systems and also the security mechanisms which are currently in place. It further identifies and discusses three security threats, i.e., malware, SSL/TLS vulnerabilities, and data breaches, and four security challenges, i.e., malware detection, multi-factor authentication, data breach prevention, and fraud detection and prevention, in mobile payment systems.

Based on the Bayesian network, entropy method, and fuzzy evaluation method, (Zhang Xuan et al.) [24] constructed a mobile payment risk assessment model and used this model to conduct a risk assessment on Alipay cases. Paper also argued that one of the three major issues in the development of mobile e-commerce is that the security of mobile payment needs to be improved. The risk assessment and control of mobile payment platforms is an important part of it and has gradually become the focus of attention. In the mobile payment process, in addition to the mutual trust between the buyer and the seller, there is also a trust relationship between the buyer and the mobile payment platform. This trust relationship also affects the generation

of other risks in mobile payment to a large extent. Capital risk, etc. For an online transaction based on mobile payment, if both parties to the transaction do not trust the mobile payment platform, then this mobile payment process will not happen, and if people need to trust the mobile payment platform, they need to control the existence of the platform risks.

(Che Shengzong)[25] analyzes the risks of third-party mobile payment from two aspects: external risks and internal risks. Internal risks mainly come from technical risks, operational risks, and capital risks. External risk inspections mainly come from three aspects: policy, law, and reputation.

3.2.3 Research on the Business Model of Mobile Payment

(Liu Haier)[26] analyzed the payment principle, operation mode, and financial supervision method of mobile payment by studying the operating mode of the third-party mobile payment platform. (Huang Hui) [27] believes that the business model of mobile payment is divided into three types, namely, the business model led by mobile operators, led by third-party payment service providers, and led by financial institutions. Through the background, the comparative analysis of advantages and disadvantages draws on the experience of foreign mobile payment business model development and provides policy recommendations for the improvement of my country's mobile payment business model.

3.2.4 Research on the influence of mobile payment on traditional bank payment

(Wang Na) [28] argues that the current mobile payment system is dependent on the bank payment system, and in the future, the relationship between the two will turn to competition. (Li Yuhai and Wang Yinxia) [29] believes that compared with traditional consumption, the convenience, immediacy, and mobility of mobile internet make mobile internet consumption a new trend in contemporary development. (Lu Minfeng)[30] pointed out that in terms of payment operations, mobile payment is simpler and faster than the cumbersome online banking payment procedure. (Hu Jieqiong)[31] analyzes the quarterly data of mobile payment institutions and commercial banks and believes that the current competitive relationship between the two has played a mutually beneficial role. If the two shift from competition to cooperation, the mutual benefit of each other will be enhanced, which is conducive to the development of mobile payment institutions and commercial banks.

users to accept the first Three-party payment puts forward corresponding suggestions.

3.3 Conclusion

In terms of the impact of mobile payment on consumers, scholars believe that the factors that affect customers' acceptance and use of mobile payment include social influencing factors, effort expectation factor, performance expectations factor, user habits, and cost perception factors. The above factors have various effects on customers. In-depth and systematic research on customers' intention and behavior of mobile payment. Regarding the inherent system of mobile payment and bank payment, scholars believe that the current mobile payment system still adheres to the traditional payment system. Most of the research on mobile payment focuses on the concept of mobile payment, the security issues of mobile payment, the degree of users' acceptance of mobile payment, and the relationship between mobile payment and the traditional banking system. Due to the development and the constraints of objective conditions, previous studies have shortcomings. First, with the rapid development of information technology, the development of mobile payment is also changing with each passing day, and new situations and trends will emerge one by one. Second, with the gradual improvement and maturity of mobile payment, daily management tends to be more refined, competition within the industry will become increasingly fierce, and user behavior choices will also be differentiated.

4 Empirical Analysis of the Influence of Mobile Payment on

Consumer Behavior

In daily life, consumer behavior and habits are affected by many factors, such as expected income level, price level, interest rate level, family background, consumer credit status, system, customs, etc. The convenience and efficiency of mobile payment methods have led to their rapid development and popularity in a relatively short period. In this process, people's consumption patterns and habits are gradually changing. This chapter will analyze the impact of mobile payment on consumer behavior from the micro and macro perspectives. The microanalysis mainly uses questionnaire surveys to understand consumers' views and usage of mobile payment, and analyze whether convenient mobile payment methods affect consumers' purchase intentions and promote consumption; macro analysis is mainly based on China's macro economy data, analyze the relationship between the total amount of mobile payment and the total amount of social consumption, and analyze whether the continuous development of mobile payment promotes the increase of total consumption.

4.1 Micro-analysis of the influence of Internet mobile payment on residents' consumption

4.1.1 Research design and data collection

4.1.1.1 Theoretical basis

Based on the literature review and theoretical basis, the survey and research are designed, focusing on the measurement of each variable and the relationship between each other, setting up related scales, introducing data collection methods, and the basic situation of the data obtained conduct statistical analysis.

The theoretical basis of this research includes Maslow's five-level theory of needs, Baudrillard's theory of consumption signs, and Veblen's theory of conspicuous consumption.

A. Maslow's hierarchy of needs

American psychologist Abraham Harold Maslow put forward the hierarchy of needs theory in his article "The Theory of Human Incentives". The theory believes that human needs are hierarchical, from low to high: physiological needs, safety needs, emotional needs, respect

needs, and self-realization needs. The urgency of various needs shown by people in different periods is different. People's consumption of daily meals and ordinary clothing on the mobile payment platform is to meet their physiological needs, which are the most basic needs of people; for interactive consumption behaviors among close friends such as gifting each other and entertaining for a meal. Seen as one's own emotional needs; now that it is extremely easy to obtain information and there is less pressure in daily life, it is relatively more susceptible to environmental influences, forming conspicuous consumption or advanced consumption, such as high-end tourism or purchasing luxury goods. These consumptions belong to respectful needs; people spend on learning, such as examinations, training, and various related certificates. When they first enter the workplace, they start to learn various skills and spend on these intellectual investments. This type of consumption gradually increases. It can be classified as self-actualization needs. According to different levels and needs at different stages, the level of demand theory can well understand and explain the current consumption behavior of people, including their consumption status and structure.

B. Baudrillard's Theory of Consuming Symbols

The consumer society proposed by French sociologist Baudrillard refers to a social form that has emerged in the modern western developed countries due to the great abundance and systematization of materials. Baudrillard wrote in the book: "In people's lives, material possession and consumption are becoming more and more obvious. That is to say, people attach importance to material possession and consumption instead of being connected with others around them. This is also an essential change in the entire human living environment." Baudrillard believes that the basic characteristics of consumption are "symbols", that is to say, consumption is no longer the consumption of specific material objects or commodities with use-value, but the consumption of goods is given "symbols". significance. Baudrillard also mentioned "symbolic value". This symbol is not determined by its practical value, but by its social status and other factors. Symbol consumption enables consumers to obtain self-satisfaction while also showing the level of their status. Therefore, in Baudrillard's view, the consumer society is no longer a world of commodities or things, it has transformed into a society dominated by signs. That is, in a consumer society, the consumption system among

people is determined by the symbols represented by commodities, rather than simple consumer demand.

C. Veblen conspicuous consumption theory

Table 4- 1 The core content of each theory

Theory name	core content	Guidance for this article
Maslow's hierarchy of needs[42]	With proper techniques, unconscious needs can be transformed into conscious needs	Whether the integration of the mobile payment platform can turn users' unconscious needs into conscious needs, thereby affecting consumer behavior
Baudrillard's Theory of Consumption Symbols[43]	Consumption is no longer the consumption of concrete objects with material characteristics or commodities with use-value, but the meaning of "symbols" is given to the consumption of goods	The value of people using mobile payment platform for consumption is not only this item but also the convenient new lifestyle brought by mobile payment
Veblen's theory of conspicuous consumption[44]	When defining conspicuous consumption, the emphasis is on consumption beyond the basic survival of people. The core motivation of conspicuous consumption is conspicuous behavior	The real motivation for possession of wealth is to obtain a so-called honor, to achieve a certain degree of discriminatory comparison with others. While mobile payment improves the Consumption experience, can it promote irrational consumption behaviors such as conspicuous consumption?

American sociologist Veblen first put forward the concept of the leisure class and the emergence of conspicuous consumption in "The Theory of Leisure Class", and then put forward the "conspicuous consumption theory". When he defines conspicuous consumption, he emphasizes consumption that exceeds people's basic survival. The core motivation is conspicuous behavior, which means that such consumption follows all monetary principles such as waste, competition, honor, and discrimination. The author believes that people obtain self-satisfaction and honor in a certain sense through the possession of conspicuous goods, which means that people around them have intuitive feelings about their wealth, rights, status, and identity. Therefore, the real motivation for people to possess wealth is to obtain a so-called honor, to achieve a certain degree of discriminatory comparison with others. It can be found in daily life that women with

extraordinary beauty, elegant temperament, gorgeous clothes, and more luxury goods are seen as a symbol of economic strength. The same is true for men. Luxury cars and mansions are to a certain extent a status symbol, implying their wealth and showing their power, status, success, and honor. In short, this unproductive way of consumption is, in a sense, a sign of the power that people have, and it also advertises the social class of consumers, enabling them to gain honor and self-satisfaction while highlighting the close relationship between classes consumption and society.

4.1.1.2 Questionnaire design, variables, and measurement

A. Definition and measurement of variables

Engel and others believe that consumer behavior consists of two parts, one part is the process of consumers making purchasing behavior decisions, and the other part is the actual consumption action. Purchasing decisions are the psychological activities and tendencies of consumers before they make purchases of goods and services, which determine the formation of consumer attitudes; while purchasing behaviors are the practice of purchasing decisions. According to the above theory, this article divides consumption behavior into consumption level, Consumption psychology, consumption structure, and consumption experience. With the development of mobile payment, people's consumption patterns have also undergone corresponding changes, and consumption behavior has been affected. Mobile payment mainly affects consumer behavior from three aspects: integration, convenience, and safety. On the one hand, the integration and convenience of mobile payment help to speed up the decision-making process of consumers, enhance the consumption experience, and even increase their consumption amount. On the other hand, according to the theory of risk perception, in the process of preparing to purchase goods or services, if consumers are aware of losses and dangers, they will have an impact on consumers' experience and consumption behavior to a large extent. The improvement of payment security will also bring happiness and satisfaction to user groups, which will affect Consumption psychology and enhance the Consumption experience.

According to the theoretical basis and actual situation, this section discusses the definition and

measurement of mobile payment from three aspects: integration, convenience, and safety; discusses consumption from four aspects: consumption level, Consumption psychology, consumption structure, and consumption experience Definition and measurement of behavior.

B. Definition and measurement of mobile payment

This article mainly studies the impact of mobile payment on the consumption behavior of college students, involving two types of variables:

- 1) Independent variables, that is, the antecedent variables that affect consumer behavior, the convenience, security, and integration of mobile payment, a total of 3 variables;
- 2) Dependent variables, that is, people's consumption behavior, including four variables: Consumption psychology, consumption level, consumption structure, and consumption experience.

The mobile payment mentioned in this research mainly refers to the behavior of transferring or paying through mobile phones through third-party payment platforms, such as Alipay, WeChat Pay, Apple Pay, and cloud flash payment.

The design of measurement problems for mobile payment is shown in Table 4-2. First of all, the convenience of mobile payment refers to the convenience and speed of consumption using third-party mobile payment platforms. The measurement indicators for the convenience of mobile payment include the speed of finding consumer products, the proficiency of use, and the ease of use. This study draws on Shi Kanghua's research and revised it to obtain a measure of the convenience of mobile payment.

Secondly, the security of mobile payment refers to the ability to withstand various situations that may occur during the use of a third-party mobile payment platform under normal conditions of use and to maintain the necessary overall stability after accidents occur. The measurement indicators of mobile payment security include personal information security, account security, transaction security, etc. This research draws on Zhang Juan's research and modified it to obtain a measurement index of mobile payment security.

Finally, the integration of mobile payment means that the third-party mobile payment platform integrates various information such as food, clothing, housing, transportation, and other aspects of daily life on the third-party mobile payment platform, which can realize a platform to pay

for goods with different attributes. The integrated measurement indicators of mobile payment include payment platforms integrating savings cards and credit cards of multiple banks, and integrating multiple consumption platforms and payment methods.

Table 4- 2 Measurement scale of reasons for using mobile payment[45]

Dimension	Test question
Convenience	I think it's easy for me to be proficient in mobile payment
	I can easily find the purchased goods and services on the mobile payment platform
	Mobile payment allows me to purchase goods or services anytime
	Most places I spend accept mobile payments
	Mobile payment can be paid by scanning code and other methods, avoiding the trouble of finding change
	Mobile payment terminal (ie mobile phone) is easy to carry, avoiding the trouble of cash withdrawal and card
Safety	I think mobile payment is generally more secure
	I am worried that personal information will be stolen during the use of mobile payment
	I am worried that when using mobile payment, will bring risks to my payment account
	If there is an error in the transaction using mobile payment, I am worried that I will not get the corresponding compensation
	I have used mobile payment without any security issues
Integration	Mobile payment can be bound to multiple bank cards to manage your account more conveniently
	Mobile payment integrates various application scenarios of food, clothing, housing, and transportation in life
	The mobile payment platform is classified and can easily realize entertainment life
	Mobile payment can provide personalized service recommendations based on the user's past transaction information and location

C. Definition and measurement of consumer behavior

Consumer behavior refers to the sum of the psychological and realistic manifestations of consumers' demand psychology, purchase motivation, consumption willingness and other aspects. The most important behavior is: buying behavior. The factors restricting it are: (1) Need. Including physical, social and psychological needs. The needs of consumers are the direct cause of purchase. (2) The level of disposable income and the level of commodity prices. Generally speaking, total consumption and the level of disposable income change in the same direction.

But for a specific commodity, an increase in the level of disposable income does not necessarily mean an increase in consumption. For example, as the level of disposable income increases, the purchase and consumption of certain mid- and high-end products will increase, while the purchase and consumption of low-end products will decrease. Commodity prices have a direct impact on consumers' purchasing motivation. (3) The characteristics of the product itself and the conditions of purchase, maintenance and repair of the product. Such as product performance, quality, appearance, packaging, etc., store location, service attitude and other purchasing conditions, as well as product maintenance and repair conditions, can all induce and affect consumers' purchasing behavior to varying degrees. (4) The impact of the social environment. Consumer needs, especially social and psychological needs, are more likely to be affected by this kind of change.

The design of the measurement problem of consumer behavior in this paper is shown in Table 4-3. consumer behavior is divided into four aspects: consumption psychology, consumption level, consumption structure, and consumption experience.

Consumption psychology refers to the psychological characteristics and the process of psychological activities that consumers show when they engage in consuming activities. There are roughly four kinds of Consumption psychology, namely: conformity, seeking difference, comparing, and seeking the truth. The Consumption psychology scale in this study is measured from the above four aspects. Consumption level refers to the number and quality of consumption objects obtained by a certain consumer and his family in a certain period, or the degree to which the living consumption needs of a certain consumer and his family in a certain period are satisfied. Consumption structure refers to the proportion of various consumption expenditures in total expenditures. Consumption experience refers to the feelings and knowledge a person experiences when using products or enjoying services.

Refer to Table 47 in Zhao Tingting's "Conspicuous Consumption Research of Contemporary College Students", and get the Consumption psychology measurement table of this article after modification.

Table 4- 3 Measurement scale of consumption behavior[46]

Dimension	Test question
Consumption psychology	The cashless transaction method of mobile payment made me have no idea of the specific amount of money I spent
	I see mobile payment service push or discount information, and I want to buy
	I often use mobile payment to buy popular products of the season
	I often compare products purchased through mobile payment with people around me
	I often use credit loans, such as Ant Huabei, campus loans, etc.
	Mobile payment launched a variety of financial products, allowing me to better plan my money
Consumption level	My monthly mobile payment consumption amount is higher than offline (cash or credit card) consumption amount
	By using mobile payment, I have obtained financial benefits, such as financial profitability, discount shopping
	Mobile payment service push or preferential information promoted my consumption
	After using mobile payment, my monthly consumption amount has increased
	For large payments, transfers, etc., I tend to use mobile payments
	I tend to buy goods or services that can use mobile payment
Consumption structure	To buy school supplies, books, and online courses, I tend to use mobile payment
	For games, entertainment and leisure, I tend to use mobile payment
	I tend to use mobile payment for daily meals, meals with friends, etc.
	For travel and transportation, I tend to use mobile payment
	I tend to use mobile payment for clothing, accessories, skincare, and beauty products
Consumption experience	The payment process provided by the mobile payment platform is convenient and fast
	Higher satisfaction with products or services purchased through mobile payment
	Mobile payment can avoid unhappiness with the sellers
	Through the mobile payment platform, you can have a better understanding of goods or services
	I think using mobile payment is a very pleasant thing

4.1.1.3 Data collection and basic situation analysis of the questionnaire

A. Analysis of the basic situation of the respondents

This study analyzes the basic situation of the respondents from four aspects: gender, education, type of household registration, and average monthly consumption.

(1) Gender distribution of respondents

As shown in Figure 4-1, in this survey, there are 135 male respondents, accounting for 36%; there are 240 female respondents, accounting for 64%, so there are mostly female respondents.

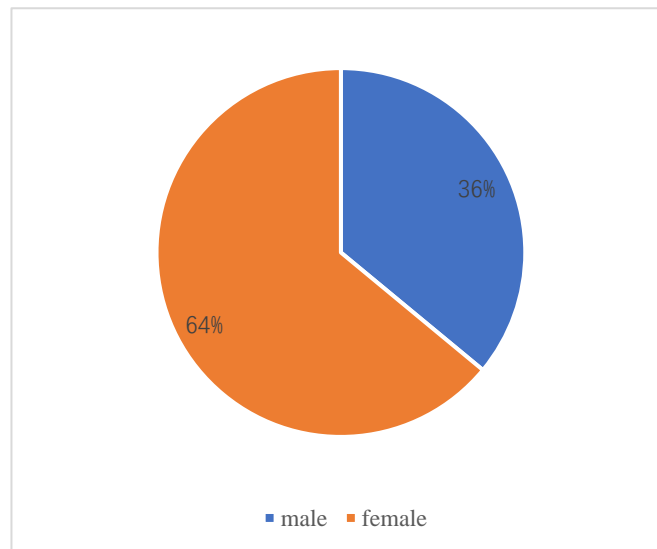


Figure 4-1 Gender distribution of respondents

(2) Education distribution of respondents

As shown in Figure 4-2, there are 48 freshmen, accounting for 12.8%; 29 sophomores, accounting for 7.7%; 34 juniors, accounting for 9.1%; 37 seniors, accounting for 9.9%. The

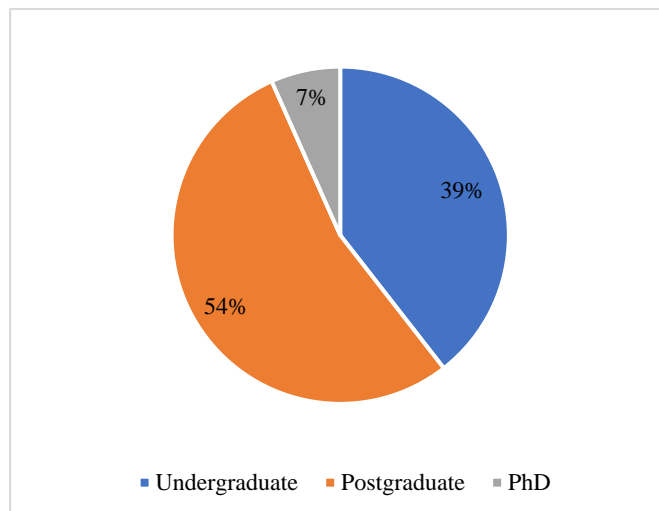


Figure 4-2 Education distribution of respondents

number of postgraduates with a master's degree is the largest at 202, accounting for 53.9% of the total; the second is undergraduates, accounting for 39.5% of the total; among the interviewees, there are 25 doctoral students, accounting for 6.7% of the total.

(3) Household register type distribution of respondents

The distribution of the household registration types of the surveyed persons is shown in Figure 4-3. Among all the surveyed persons, 208 were from urban residents, accounting for 55.5% of the total; 167 were from rural residents, accounting for 44.5%. The ratio of the two is similar.

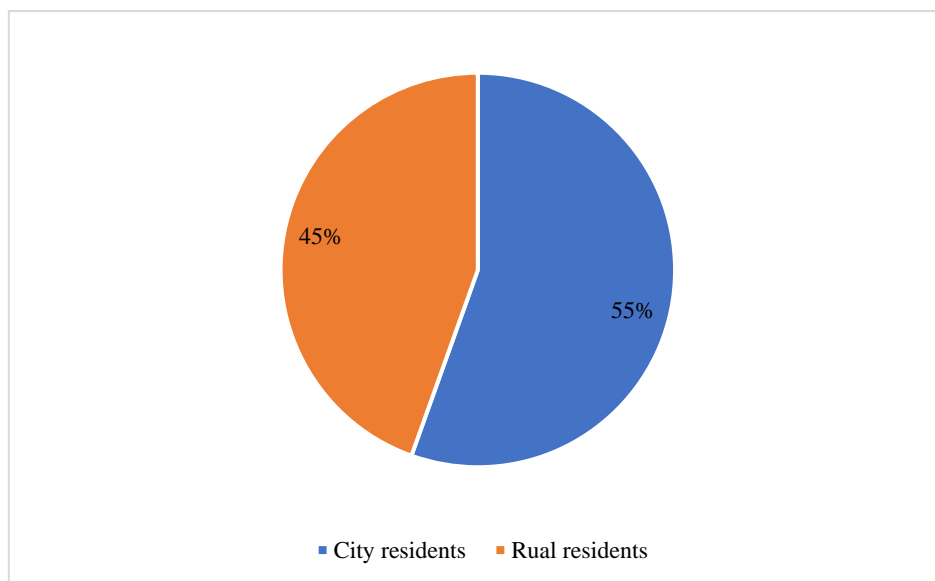


Figure 4-3 Household register type distribution of respondents

(4) Average monthly consumption distribution of respondents

The distribution of the average monthly consumption of the surveyed persons is shown in Figure 4-4. Among all the surveyed persons, the number of people with a monthly consumption level of 601-1500 yuan is the largest, accounting for 47.4% of the total; the second is 1501-2000 yuan, accounting for 26.9% of the total number of people; 46 people with an average monthly consumption of 2001-3000 yuan, accounting for 12.3% of the total; people with an average monthly consumption of 3001-5000 yuan, less than 600 yuan, and more than 5,000 yuan accounted for respectively 5.9%, 3.7%, and 3.5%. It can be seen from the above data that the consumption level of the respondents is mainly between 600 and 2,000 yuan, the number of people with high and low consumption levels is small, and the average monthly consumption of most respondents at a medium level.

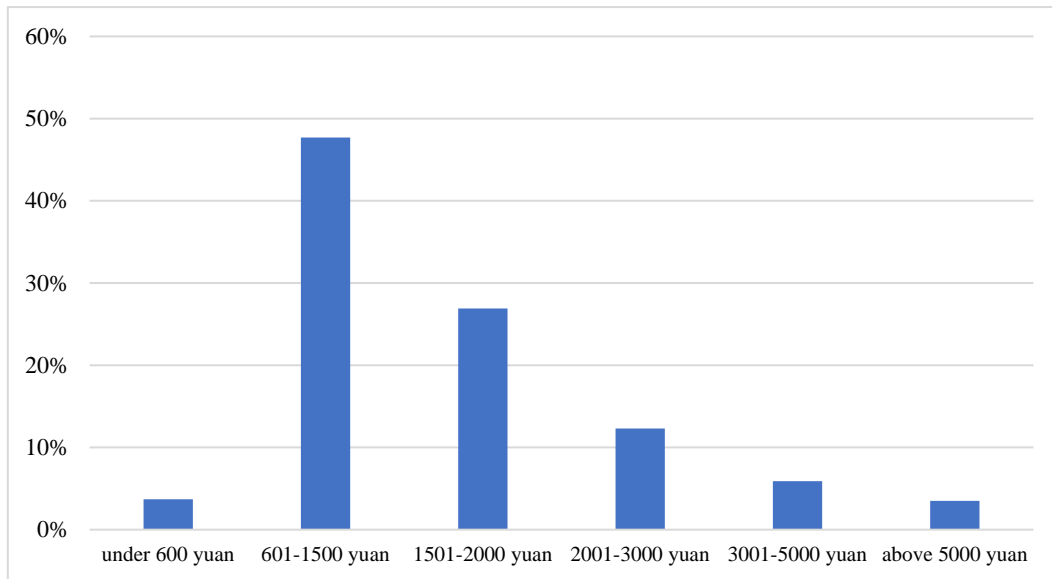


Figure 4-4 Average monthly consumption distribution of respondents

B. Reliability and validity analysis of questionnaire

Before conducting an in-depth analysis of the survey results of the questionnaire, we need to test the reliability and validity of the questionnaire. Only when the questionnaire has high reliability and validity can it provide reliable results for subsequent data analysis. Otherwise, the data surveyed by the questionnaire has low credibility, poor representativeness, and large deviation from the actual situation.

(1) Trust level analysis

The purpose of reliability analysis is to test the consistency and stability of the scale in the questionnaire. In inhomogeneity testing, the reliability coefficient can be used as an indicator of analysis. Reliability analysis mainly includes two aspects: internal reliability analysis and external reliability analysis. For most studies, analysts usually use internal consistency coefficients to measure questionnaire reliability. Normally, the value of the coefficient should be greater than 0.6. When the coefficient is between 0.6-0.7, it indicates that the questionnaire reliability is acceptable; when the coefficient is between 0.7-0.8, it indicates that the questionnaire reliability is good; When the coefficient is between 0.8 and 0.9, it indicates that the reliability of the questionnaire is very good; when the value is greater than 0.9, it indicates that the reliability of the questionnaire is very good.

Also, the reliability of the questionnaire can be measured based on the internal consistency coefficient value of the deleted item and the total correlation of the corrected item. The former

refers to the overall reliability coefficient of the scale after deleting certain items. If after deleting some questions, the internal consistency coefficient exceeds the original coefficient, it proves that the question is not of high homogeneity with other questions, and it can be deleted according to the actual situation. The latter is also an important indicator for analyzing the reliability of the questionnaire. When the total correlation value of the corrected item is lower than 0.4, it indicates that the question does not have an inevitable correlation with other questions and should be deleted from the questionnaire.

Based on the above reliability indicators, this research analyzes the convenience, security, and integration of mobile payment, as well as the seven scales of Consumption psychology, consumption level, consumption structure, and consumption experience in consumer behavior. First, for the mobile payment convenience scale, as shown in Table 4-4, the overall Cronbach's alpha value of the six items is 0.959, which is greater than 0.9, and the Cronbach's Alpha value of the deleted item is all less than 0.959. The correction of each item The minimum value of the total correlation of the items is 0.827, which is greater than 0.4. Therefore, it can be concluded that the reliability of the mobile payment convenience scale is very ideal. For the security scale, the overall Cronbach's alpha value of the five items is 0.787, which is greater than the deleted Cronbach's Alpha value, and the minimum value of the total correlation of the corrected items is 0.545. Therefore, the security of mobile payment The reliability of the sex scale is better. Finally, for the integrated scale, its Cronbach's Alpha value is 0.924, which is greater than the Cronbach's Alpha value of each item that has been deleted, and the minimum value of the total correlation of the corrected items is 0.790. The above data results indicate the integrated scale of mobile payment has very good reliability.

Second, Table 4-5 shows the reliability analysis results of the consumer behavior scale. The overall Cronbach's alpha values of the four scales of Consumption psychology, consumption level, consumption structure, and consumption experience are 0.774, 0.812, 0.920, and 0.887, respectively, which are all greater than the Cronbach's Alpha value that has been deleted for their respective items. Also, their corresponding corrected items The minimum values of the total correlation are 0.435, 0.532, 0.739, and 0.656, all of which are greater than 0.4. Therefore, it can be concluded that the reliability of the Consumption psychology scale is good, the

reliability of the consumption level and consumption experience scale is very good, and the reliability of the consumption structure scale is very good.

Table 4- 4 Reliability analysis results of the mobile payment scale

Variable	Sign	Cronbach's Alpha	Corrected total correlation	Deleted Cronbach's Alpha
Convenience	C1	0.959	0.876	0.950
	C2		0.848	0.953
	C3		0.872	0.950
	C4		0.827	0.956
	C5		0.896	0.948
Safety	C6	0.787	0.907	0.947
	C7		0.559	0.755
	C8		0.635	0.719
	C9		0.618	0.739
	C10		0.597	0.745
Integration	C11	0.924	0.545	0.764
	C12		0.790	0.920
	C13		0.861	0.891
	C14		0.859	0.890
	C15		0.830	0.900

Table 4- 5 Reliability analysis results of consumer behavior scale

Variable	Sign	Cronbach's Alpha	Corrected total correlation	Deleted Cronbach's Alpha
Consumption psychology	D1	0.774	0.435	0.772
	D2		0.667	0.706
	D3		0.667	0.708
	D4		0.554	0.732
	D5		0.452	0.764
	D6		0.449	0.758
Consumption level	D7	0.812	0.630	0.767
	D8		0.532	0.797
	D9		0.657	0.758
	D10		0.591	0.779
	D11		0.596	0.777
Consumption structure	D12	0.920	0.748	0.909
	D13		0.765	0.907
	D14		0.816	0.900
	D15		0.827	0.899
	D16		0.739	0.910
	D17		0.745	0.910
Consumption experience	D18	0.887	0.656	0.879
	D19		0.767	0.853
	D20		0.730	0.862
	D21		0.731	0.865
	D22		0.787	0.853

Based on the above analysis, it can be seen that the seven scales and each item in this study have good reliability, and the stability and consistency of the questionnaire are high. In the follow-up analysis, more reliable results can be obtained based on the questionnaire data.

(2) Validity analysis

This article uses factor analysis to analyze the validity of the questionnaire. It is an analysis of the validity of the collected data and can judge whether the questionnaire has a good internal structure. If the scale is suitable for factor analysis, and the cumulative equation contribution rate is greater than 60%, and the factor loading of each item is higher than 0.5, it can be concluded that the scale has good validity. Before performing factor analysis, KMO and Bartlett's sphere tests are required to determine whether the conditions for factor analysis are met. For the KMO test, if the KMO value is greater than 0.6, it indicates that the scale value is suitable for factor analysis; if the KMO value is less than 0.5, it indicates that the scale data is

not suitable for factor analysis. In other words, the value range of KMO is 0 to 1, and the closer to 1, the more suitable the data is for factor analysis. For the Bartlett sphere test, the main purpose is to test the independence between variables. If the P-value is less than 0.05, it indicates that subsequent factor analysis can be performed.

The whole questionnaire includes 2 types of scales and 7 research variables. Table 2-6 shows the KMO and Bartlett sphere test results of the two types of scales for mobile payment characteristics and consumer behavior. It can be seen from the results in the table that the KMO values of the mobile payment characteristics and consumption behavior scales are 0.920 and 0.930, respectively, which are both greater than 0.6, indicating that the scale has passed the KMO test. Looking at the results of the Bartlett sphere test, the P-value of the mobile payment characteristic scale and the consumption behavior scale are both 0.000, which is less than 0.05, indicating that the scale can be factored.

Table 4- 6 KMO and Bartlett spherical test results

Factor	KMO measure of sampling	Bartlett sphericity test		
		Approx chi-square	df	P-value
Mobile payment characteristics	0.920	5123.093	105	0.000
Consuming behavior	0.930	5202.040	231	0.000

Next, the principal component analysis method and the maximum variance method are used for orthogonal rotation to further verify the validity of the mobile payment scale and the consumption behavior scale. Table 4-7 shows the rotation factor load, eigenvalue, variance contribution rate, and cumulative variance contribution rate results of each item of the mobile payment factor. According to the table, the 15 items of the mobile payment scale have extracted 3 common factors with eigenvalues greater than 1. The eigenvalues are 5.093, 3.889, and 2.491, and the variance contribution rates are 33.953%, 25.927%, and 16.604, respectively. %, the cumulative variance contribution rate reached 76.484%. Therefore, the three extracted factors can explain 76.484% of the total information of the scale, which is greater than the 60% standard. The three factors extracted from 15 items are convenience factor, safety factor, and integration factor, including 6, 5, and 4 items respectively. For 15 items, the minimum factor loading after rotation is 0.746, which is greater than 0.5, and the factors obtained are consistent

with the design. In summary, the validity of the mobile payment scale is better.

Table 4-7 Mobile payment factor analysis results

	Sign	Rotated load factor	Eigenvalues	Variance contribution rate%	Cumulative variance contribution rate%
Convenience	C1	0.857	5.093	33.953	33.953
	C2	0.823			
	C3	0.841			
	C4	0.803			
	C5	0.870			
Safety	C6	0.876	3.889	25.927	59.881
	C7	0.869			
	C8	0.910			
	C9	0.931			
	C10	0.850			
Integration	C11	0.885	2.491	16.604	76.484
	C12	0.746			
	C13	0.754			
	C14	0.790			
	C15	0.791			

Table 4-8 shows the selection factor loading, eigenvalue, variance contribution rate, and cumulative variance contribution rate results of each item in the consumption behavior factor analysis. According to the table, the 22 items of the consumption behavior scale have extracted 4 factors with eigenvalues greater than 1. The corresponding eigenvalues are 6.701, 3.000, 2.608, and 2.207, and the variance contribution rate is 30.460%, 13.635%, 11.857% and 10.032%, the cumulative variance contribution rate was 65.983%. Therefore, the four extracted factors can explain 65.983% of the information in the overall scale, which is also greater than 60%. Among the 22 items, factor 1 includes 6 items, which are Consumption psychology factors; factor 2 includes 5 items, which are consumption level factors; factor 3 includes 6 items, which are consumption structure factors; factor 4 includes 5 items, It is the Consumption experience factor. In 22 questions, the factor load after rotation is 0.506, which is greater than 0.5, and the factor obtained is following the design. Therefore, the consumption behavior scale also has good validity.

Table 4- 8 Factor Analysis Results of Consumer Behavior

	Sign	Factor loading	Eigenvalues	Variance contribution rate%	Cumulative variance contribution rate%
Consumption psychology	D1	0.711	6.701	30.46	30.46
	D2	0.804			
	D3	0.697			
	D4	0.6			
	D5	0.711			
	D6	0.804			
Consumption level	D7	0.75	3	13.635	44.095
	D8	0.508			
	D9	0.532			
	D10	0.506			
	D11	0.597			
Consumption structure	D12	0.69	2.608	11.857	55.951
	D13	0.729			
	D14	0.796			
	D15	0.843			
	D16	0.749			
	D17	0.708			
Consumption experience	D18	0.789	2.207	10.032	65.983
	D19	0.655			
	D20	0.689			
	D21	0.792			
	D22	0.544			

4.2 Descriptive analysis of the impact of mobile payment on consumer behavior

This part uses descriptive statistical analysis methods to explore the impact of mobile payment on consumer behavior. First, analyze the use of mobile payment; secondly, explore the reasons for the use of mobile from the three perspectives of convenience, security, and integration; finally, analyze the impact of mobile payment on consumption from the four perspectives of Consumption psychology, consumption level, consumption structure and consumption experience The impact of the behavior.

1. Description and analysis of mobile payment usage

In the era of large-scale popularization of mobile payment, college students are more likely to use mobile payment. Among the 450 respondents, only 26 people do not use mobile payment, which is enough to see that the university student group is the mainstream group using mobile

payment. Therefore, the following analysis of the use of mobile payment by university students. In the era of large-scale popularization of mobile payment, people are more likely to use mobile payment. Among 450 respondents, only 26 people do not use mobile payment.

(1) Types of mobile payment used

With the continuous development of technology and the popularization of mobile payments, there are more and more types of third-party payment platforms, such as Alipay, WeChat Pay, Apple Pay, Baidu Wallet, QQ Wallet, JD Wallet, Cloud QuickPass, etc. As shown in Figure 3-1, among many third-party payment platforms, Alipay and WeChat Pay are the two most popular mobile payment platforms. Among all the respondents, the proportion of people using Alipay and WeChat Pay is 98.7% and 97.3%, respectively, indicating that Alipay and WeChat Pay have similar positions in mobile payments. In contrast, QQ Wallet ranks third, with 26.4% of users. Other mobile payment platforms and JD Wallet accounted for 19.7% and 18.1% of users, respectively, while Apple Pay, Cloud QuickPass, and Baidu Wallet accounted for fewer users, with 10.7%, 8.5%, and 5.6% of users respectively. Therefore, Alipay and WeChat Pay are the two “giants” in the payment field, and currently lead the rapid development of mobile payment.

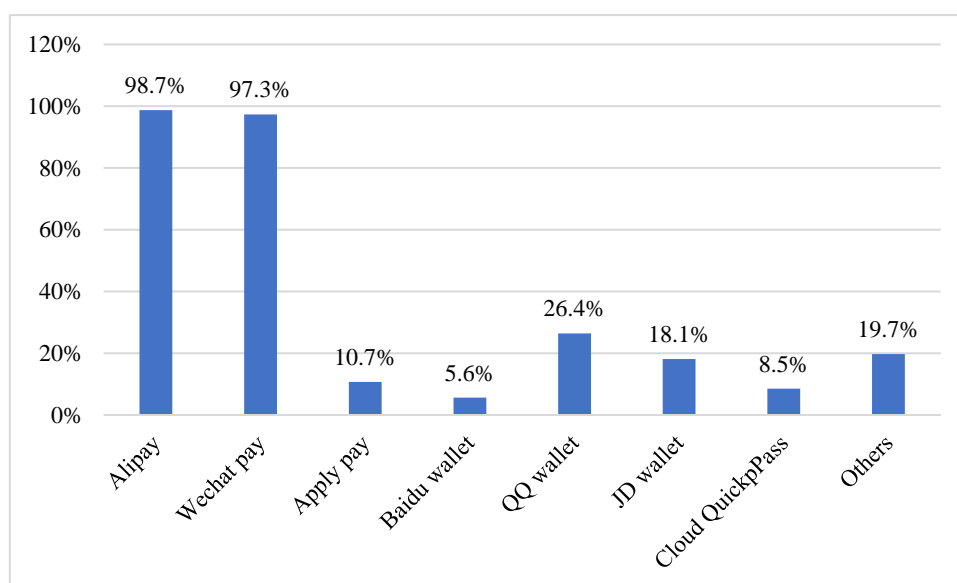


Figure 4- 5 Types of mobile payment

(2) Mobile payment usage time

The usage time of mobile payment is shown in Figure 4-6. Among all the interviewees, those who have used mobile payment for more than 2 years accounted for 51.7% of the total; those

who have used mobile payment for 1-2 years accounted for 32.5. %; The number of people whose service life is less than 1-year accounts for 15.7% of the total number of people.

According to the survey results, about 84.2% of the respondents have more than one year of mobile payment experience, indicating that mobile payment has had a far-reaching impact on the interviewed group.

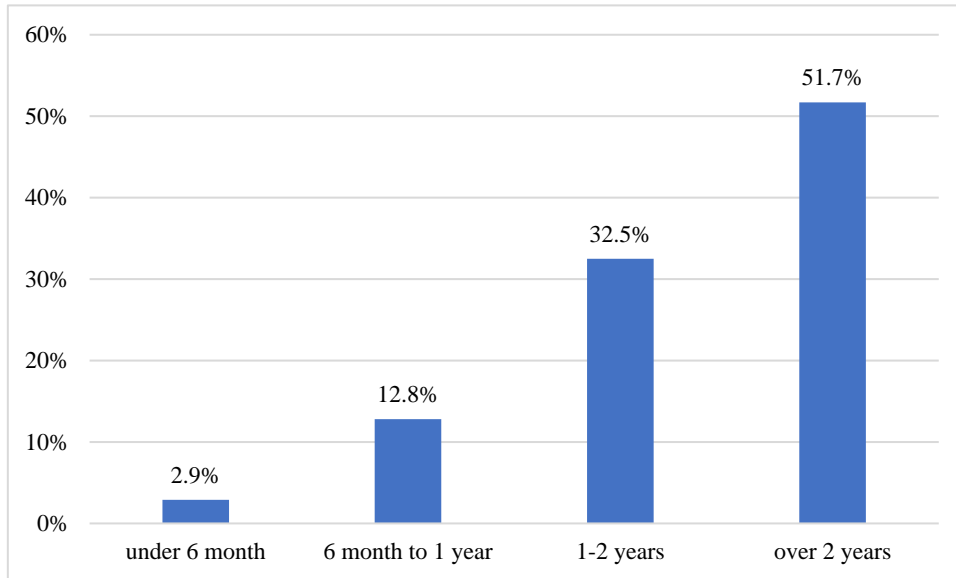


Figure 4- 6 Mobile payment usage time

(3) Frequency of mobile payment usage

The frequency of mobile payment usage is shown in Figure 4-7. Among all surveyed persons, the number of people who use mobile payment 5-10 times a week accounted for 33.3% of the total; secondly, those who used mobile payment more than 15 times a week accounted for 32.3% of the total number of people; and the number of people using less than 5 times and between

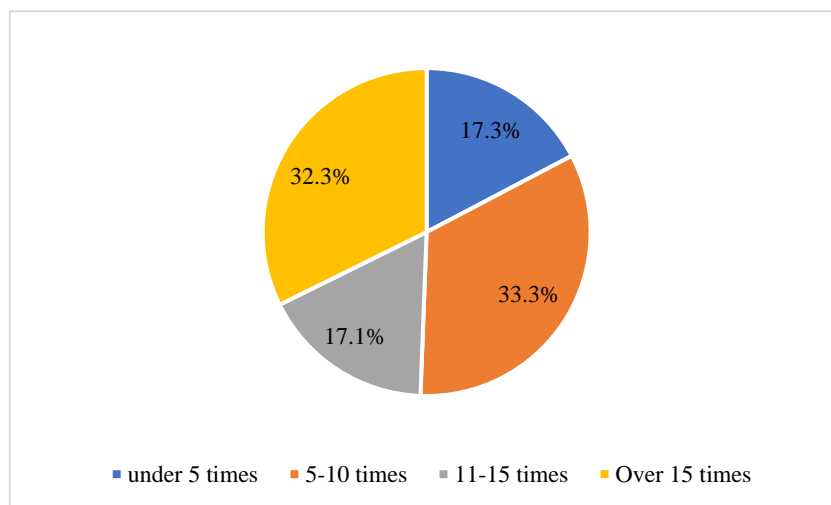


Figure 4- 7 Frequency of mobile payment usage

11-15 times a week accounted for 17.3% and 17.1% of the total number of users. According to the results of this data, it can be seen that mobile payment is used frequently, and most people use mobile payment at least once a day on average, indicating that mobile payment has become an essential tool for daily payment.

In summary, mobile payment has become an indispensable tool for people to pay. Alipay and WeChat payment are the two most popular mobile payment platforms. Most respondents have more than 1 year of mobile payment experience and mainly use Mobile payment for small consumption. After analyzing the usage of mobile payment, we will explore the reasons why people are willing to use mobile payment from multiple angles.

2. Description and analysis of mobile payment usage reasons

This section will explore the reasons for the use of mobile payment from three perspectives: the convenience, security, and integration of mobile payment.

(1) Analysis of the convenience of mobile payment

The scores for the reasons for the convenience of mobile payment are shown in Figure 4-8. From the perspective of the convenience of mobile payment, consumers most value mobile payment by scanning codes and other methods, avoiding the trouble of finding change. The average value is 4.47. ; Secondly, consumers believe that mobile payment terminals (ie mobile phones) are easy to carry, avoiding the trouble of cash withdrawal and carrying cards, thereby improving the convenience of mobile payment, with an average value of 4.46; among the reasons for the convenience of mobile payment, mobile payment is easy to be skilled The use and use of mobile payment can purchase goods and services at any time. The average scores of most merchants accepting mobile payment are 4.42, 4.23, and 4.21 respectively. The average score of the purchased goods and services found on the mobile payment platform was 4.14. It can be seen that the average scores for the convenience of consumers using mobile payment are relatively average, between 4.1 and 4.5, indicating that consumers value the convenience of mobile payment very much.

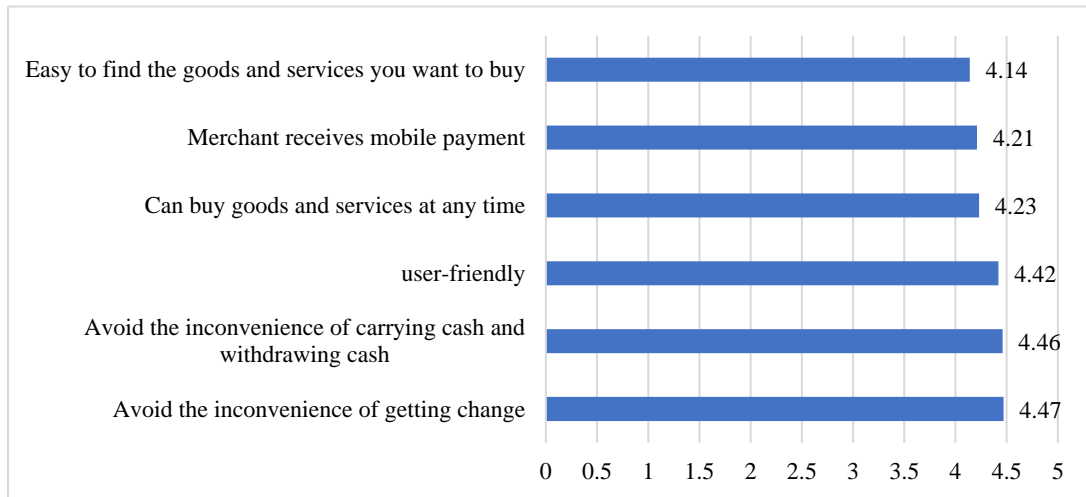


Figure 4- 8 Convenience score of mobile payment

(2) Security Analysis of Mobile Payment

The scores of security reasons for consumers using mobile payments are shown in Figure 4-9. From the perspective of mobile payment security, the scores of various security reasons are relatively average, all between 3.60-4.0. Most consumers have no security problems when using mobile payment, with an average score of 3.94; secondly, consumers believe that mobile payment is relatively safe, and the average score, for this reason, is 3.75; and they are worried that they will not get corresponding results when the transaction is wrong. The average scores for compensation, worry about theft of personal information, and worry about the risk of payment accounts were 3.70, 3.66, and 3.60 respectively. From the above, consumers generally believe that mobile payment is relatively safe.

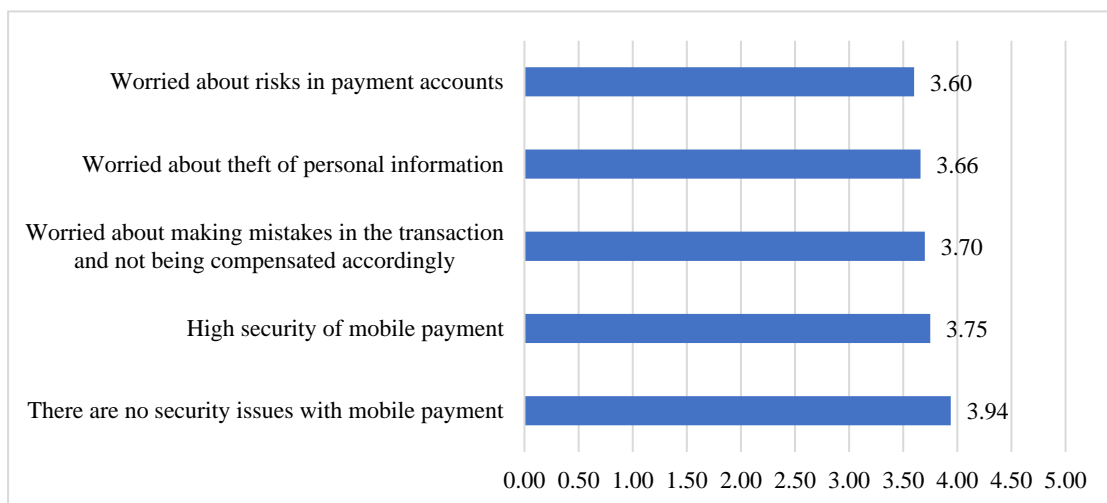


Figure 4-9 Consumers' scores for security reasons using mobile payment

(3) Integrated analysis of mobile payment

Consumers' scores for the integration reasons for using mobile payments are shown in Figure 4-10. From the perspective of the integration of mobile payments, consumers most value the use of mobile payments to integrate various application scenarios of life, clothing, food, housing, and transportation. It is 4.21; secondly, consumers value that using mobile payment can easily achieve entertainment life, with an average score of 4.15; and mobile payment can provide personalized service recommendations based on the user's past transaction information and location, and manage their account scores more conveniently. The average values are 4.10 and 4.05. It can be seen that the average scores for the integration reasons of consumers using mobile payments are relatively average, between 4.0-4.3, and the scores are high, indicating that consumers pay more attention to the integration of mobile payments.

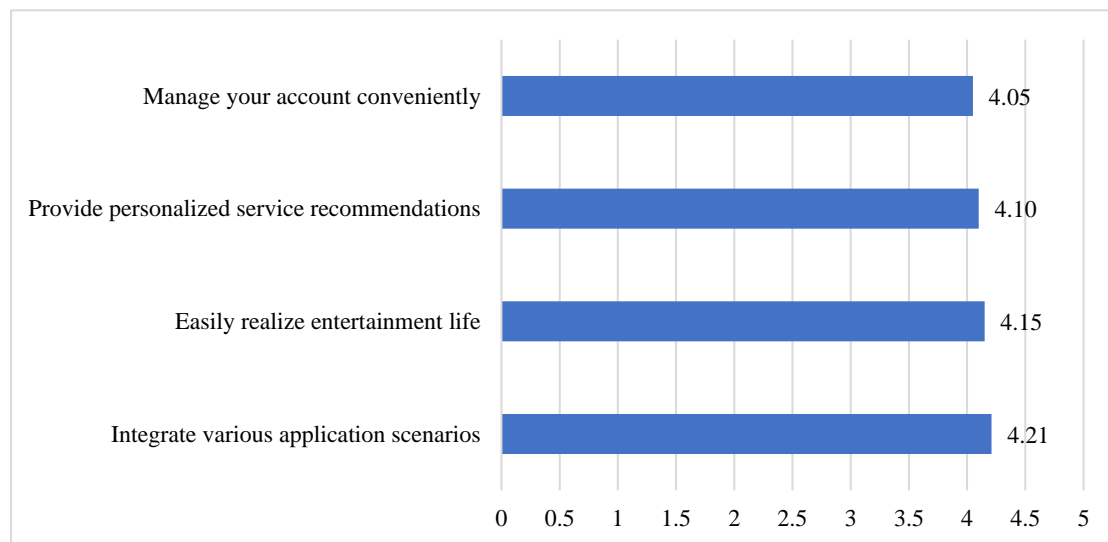


Figure 4-10 Consumers' scores for integrated reasons for using mobile payments

To sum up, in terms of the reasons why consumers use mobile payment, consumers value the convenience of mobile payment most. Most consumers believe that mobile payment avoids the trouble of finding change and thus improves the convenience of payment; secondly, consumers value the convenience of mobile payment. Concerning the integration of mobile payment, consumers generally believe that mobile payment integrates various application scenarios of food, clothing, housing, and transportation in their lives, thus facilitating their lives; relatively speaking, consumers least value the security of mobile payment. Based on the reasons why consumers use mobile payment, the following will analyze the impact of mobile payment on

consumer behavior.

3. Description and analysis of mobile payment consumption behavior

Based on the survey data of consumer behavior, this part analyzes the impact of mobile payment on consumer behavior from four perspectives: Consumption psychology, consumption level, consumption structure, and consumption experience.

(1) Analysis of the influence of mobile payment on Consumption psychology

As can be seen from Figure 4-11, in the influence of mobile payment on Consumption psychology, the average score of the concept of reducing consumer money is the highest, which is 3.77; the second is increasing desire to buy and frequent purchase of local popular products, with the average being 3.34 and 3.33 respectively; The average value of mobile payment products purchased by people is 3.09, reaching 60% of the full score; while the average scores of planning their own money and frequent use of credit loans are relatively low, 2.96 and 2.53, respectively, less than 60% of the full score. This shows that: from the perspective of Consumption psychology, respondents believe that mobile payment has the greatest impact on the concept of reducing consumer money, and believe that mobile payment service push or preferential information can increase the purchase impulse and encourage consumers to use mobile payment Buy products that are popular in the season; and believe that mobile payment has a low impact on promoting consumers to plan their own money and use credit loans.

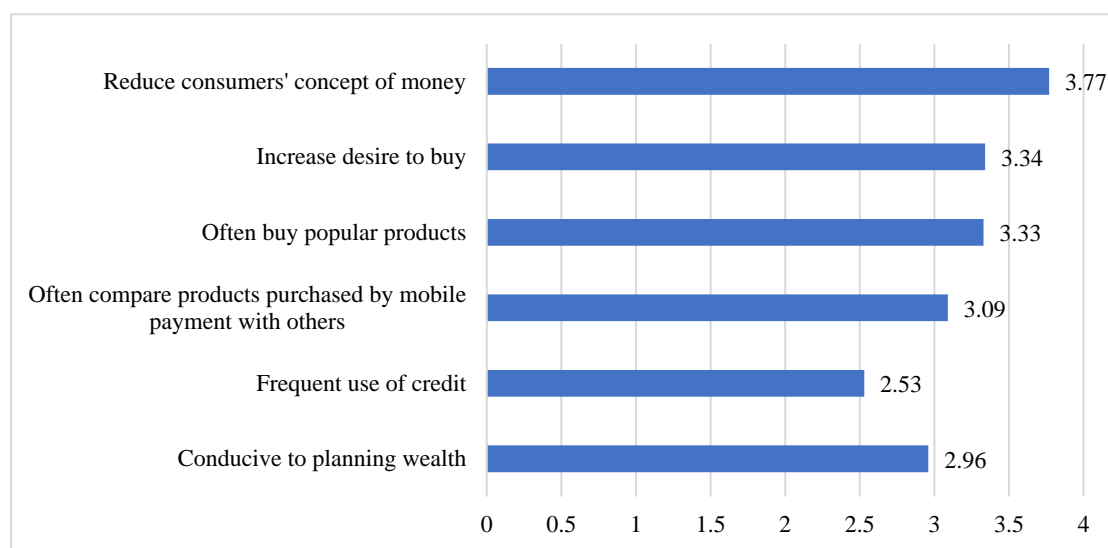


Figure 4-11 Analysis of the impact of mobile payment on consumer psychology

(2) Analysis of the impact of mobile payment on consumption levels

As can be seen from Figure 4-12, in the influence of mobile payment on consumption level, the consumption amount of mobile payment is higher than the offline score, the highest average score is 3.97; after that, the tendency to use the mobile payment for large-value payments and transfers, and the increase in consumption amount And push information to promote consumption, the average values are 3.86, 3.75 and 3.65 respectively; while the average value of economic benefits obtained through mobile payment is the lowest at 3.75, still reaching 60% of the full score. This shows that: in terms of consumption level, respondents generally believe that the consumption amount of using mobile payment is higher than the consumption amount of offline cash or card swiping, and they are more inclined to use the mobile payment for large-value payments and transfers and said that they are using mobile payment Later, the monthly consumption amount has increased. Among them, mobile payment service push or preferential information has played a role in promoting consumption, but the role of mobile payment in improving consumer economic benefits through financial profit and discount shopping is not high.

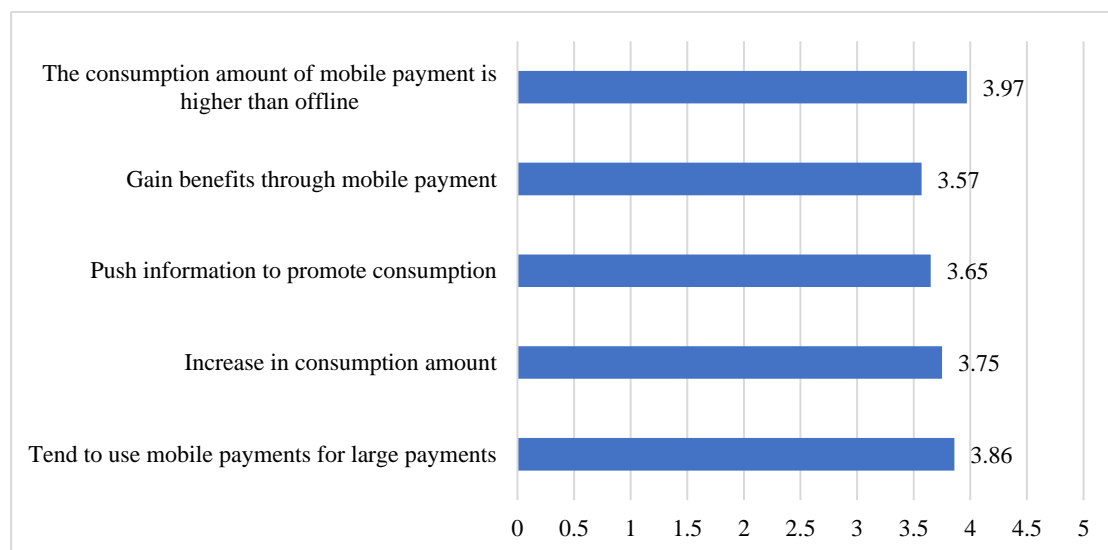


Figure 4-12 Analysis of the impact of mobile payment on consumption levels

(3) Analysis of the influence of mobile payment on consumption structure

As shown in Figure 4-13, in the influence of mobile payment on the consumption structure, the average score for daily meals and friends gathering with mobile payment is the highest at 4.17; followed by mobile payment for leisure and entertainment, mobile payment for school supplies

and book networks, Prefer mobile payment for clothing and skincare and beauty products, and mobile payment for travel and transportation. The average values are 4.07, 4.05, 4.01, and 4.01, respectively, each reaching 80% of the full score, which is relatively high; the preference is for buying mobile payment products and services. The average is the lowest at 3.93, which is also close to 80% of the full score. This shows that mobile payment has occupied an important position in all aspects of consumer life.

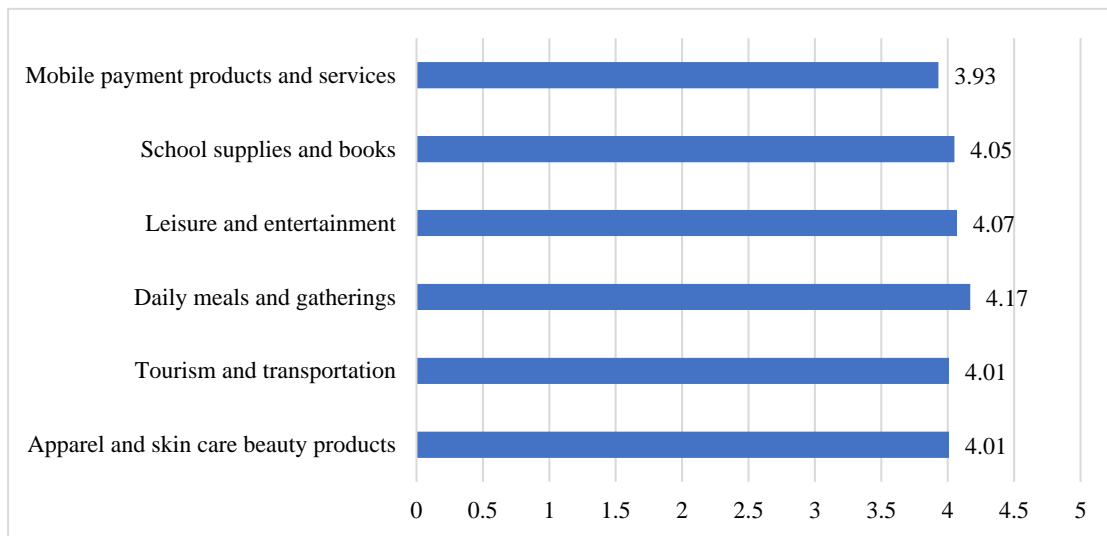


Figure 4-13 Analysis of the impact of mobile payment on consumption structure

(4) Analysis of the impact of mobile payment on Consumption experience

From Figure 4-14, it can be seen that in the impact of mobile payment on the Consumption experience, the process is more convenient and faster, and the average value of mobile payment makes people enjoy the highest score, which is 4.29 and 4.09, respectively, reaching 80% of the full score; followed by improving purchase satisfaction. The average values are 3.76, 3.74, and 3.63 respectively, reaching 60% of the full score, avoiding disputes with sales personnel, and facilitating understanding of goods and services. This shows that: in terms of Consumption experience, respondents generally believe that the payment process provided by mobile payment platforms is convenient and fast and that mobile payment makes people happy; at the same time, many consumers believe that products or services purchased through mobile payment are more satisfied. High, and mobile payment is convenient for consumers to avoid conflicts with commodity sellers, which is helpful for consumers to increase their understanding of goods and services.

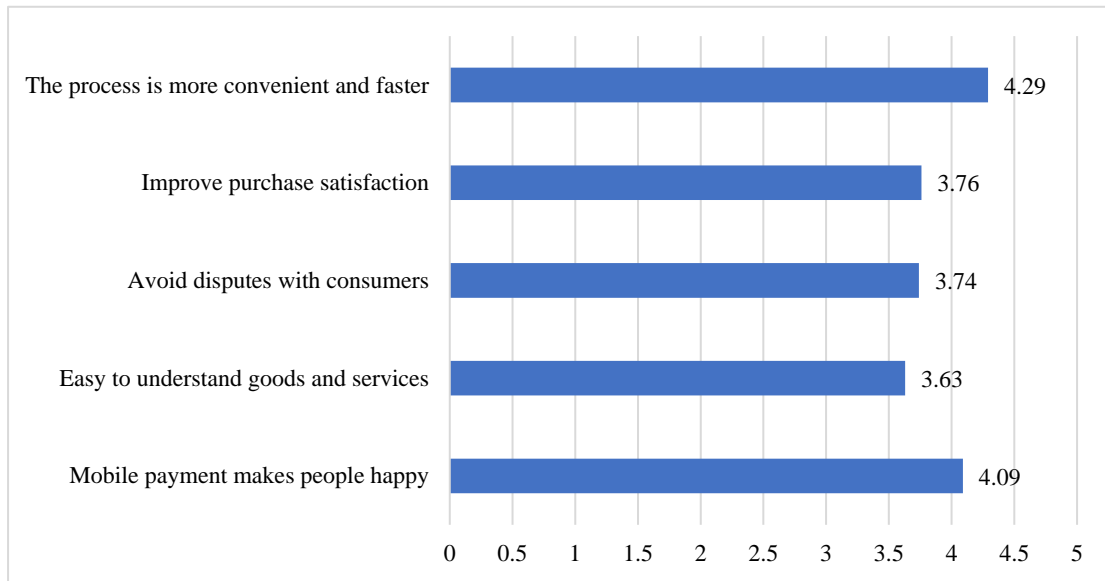


Figure 4- 14 Impact analysis of mobile payment consumer experience

4.2.4 In-depth analysis of the impact of mobile payment on consumer behavior

This chapter will use correlation analysis, cross-sectional regression analysis, variance analysis, and fuzzy comprehensive evaluation methods to deeply analyze the impact of mobile payment on consumer behavior.

4.2.4.1 Quantification of mobile payment and consumer behavior scale indicators

To further analyze the impact of the convenience, integration, and security of mobile payment on Consumption psychology, consumption level, consumption structure, and consumption experience, the simple average method is used to integrate multiple dimensional indicators under the measurement table to form a comprehensive indicator, namely convenience Comprehensive indicators of nature, comprehensive indicators of integration, comprehensive indicators of safety, comprehensive indicators of Consumption psychology, comprehensive indicators of consumption level, comprehensive indicators of consumption structure and comprehensive indicators of the Consumption experience. Based on the above indicators, correlation analysis, regression analysis, variance analysis, and fuzzy comprehensive evaluation methods are applied to analyze the impact of mobile payment on consumer behavior.

4.2.4.2 Analysis of the impact of mobile payment on Consumption psychology, consumption level, consumption structure, and consumption experience

With the popularization and promotion of mobile payment, more and more consumers choose to use mobile payment. So how will mobile payment affect consumer behavior? This chapter will use correlation analysis and regression analysis to discuss the issue. Correlation analysis mainly studies whether there is a certain dependence relationship between phenomena, and discusses the related direction and degree of correlation of specific dependent phenomena. It is a statistical analysis method to study the correlation between random variables. The degree of correlation between two variables is measured by the correlation coefficient, which ranges from -1 to 1. When the correlation coefficient is between 0 and 1, it indicates that there is a positive correlation between the two variables; if the correlation coefficient is Between -1 and 0, it indicates that there is a negative correlation between the variables. The closer the absolute value of the correlation coefficient is to 1, the stronger the linear correlation between the two variables. Among the various correlation coefficients, the Pearson correlation coefficient is the most commonly used. This study uses this coefficient to analyze the correlation between the convenience, safety, and integration of mobile payment and Consumption psychology, consumption level, consumption structure, and consumption experience. Regression analysis is a statistical analysis method to determine the quantitative relationship between two or more variables. In the regression model, it is assumed that there is a linear relationship between the independent variable and the dependent variable, and finally measures the average change of the dependent variable when the independent variable changes. To explore the impact of mobile payment on college students' consumption behavior, this study adopts the method of cross-sectional regression analysis to construct the regression equations of mobile payment on Consumption psychology, consumption level, consumption structure, and consumption experience. Generally speaking, each coefficient value that passes the significance test is considered to be statistically valid, and the goodness of fit R^2 is used to measure the measurement effect of the model.

A. Using mobile payment will produce impulsive and conspicuous Consumption psychology

According to the results in Table 4-1, the convenience and integration of mobile payment are positively correlated with Consumption psychology. The Pearson correlation coefficients are 0.318 and 0.370 respectively, and the corresponding significance is 0.000, which is statistically significant at the 0.01 level. The results show that the higher the convenience and integration of mobile payment, the more likely it is for consumers to have impulsive consumption, conspicuous consumption, and advanced consumption. For security, it has a negative correlation with Consumption psychology. The Pearson correlation coefficient is -0.097, which is statistically significant at the level of 0.1, indicating that the higher the security, the more likely it is for consumers to produce impulsive consumption and other Consumption psychology on the mobile payment platform. Table 4-2 and 4-3 are the regression analysis results of mobile payment and Consumption psychology. It can be seen from the table that although the model's goodness of fit R-square and adjusted R-square are 0.152 and 0.147, respectively, the F value of the model is 33.225, the P-value is 0.000, and the P-value of the corresponding coefficients are both 0.000, which is statistically significant, That is, the regression model between the convenience, security, and integration of mobile payment and Consumption psychology is established, and the regression coefficient is significant.

In fact, with the rapid development of mobile payment, its convenience and integration have greatly stimulated consumers' desire for consumption. Since mobile payments are all cashless payments, after using mobile payments, consumers do not have a clear concept of the specific amount they spend, and thus cannot plan their consumption better. Also, mobile payment platforms, such as Alipay, WeChat Pay, JD Pay, etc., will often push consumers' preferential information on some products or services. There are a wide variety of products that enable consumers to buy things that cannot be bought nearby. Low prices are also an important reason for attracting consumers to consume, and to a large extent stimulate their desire to consume. Most mobile payment platforms provide consumers with fast payment channels, that is, after binding the bank card, they can complete the shopping by entering the payment password. This convenience is for consumers' consumption.

Provides new consumption channels. Also, the mobile payment platform provides various credit products, such as Ant Huabei, Campus Loan, Jingdong Baitiao, etc., which also meet the consumer needs of college students. Most college students' monthly consumption is between 600-1500 yuan. If they want to buy For products with higher prices, mobile payment credit products undoubtedly provide a good channel for them, which indirectly promotes consumers' advance consumption. Although the mobile payment platform has also launched a variety of financial products, its popularity among consumers is not very high. This may be because it does not have a fixed source of income, has a small monthly living cost balance, does not require financial management, and its The concept of financial management is relatively weak, and there is little understanding of financial products on payment platforms. Many consumers only choose financial products such as Yu'eobao, and their financial management methods are relatively simple.

In summary, the convenience, security, and integration of mobile payment will have an impact on consumers' Consumption psychology, such as impulsive consumption, ostentatious consumption, and advanced consumption.

Table 4- 9 Analysis of the correlation between mobile payment and consumer behavior

		Consumption psychology	Consumption level	Consumption structure	Consumption experience
Convenience	Pearson correlation	0.318***	0.523***	0.595***	0.575***
	Significance (two-tail)	0.000	0.000	0.000	0.000
Safety	Pearson correlation	-0.097*	0.092*	0.145***	0.184***
	Significance (two-tail)	0.067	0.076	0.005	0.000
Integration	Pearson correlation	0.370***	0.587***	0.666***	0.657***
	Significance (two-tail)	0.000	0.000	0.000	0.000

Note: 1. * indicates a significant correlation at the 0.1 level (two-tail); 2. ** indicates a significant correlation at the 0.05 level (two-tail); 3. *** indicates a significant correlation at the 0.01 level (two-tail).

Table 4-10 Model test results of mobile payment and Consumption psychology

Model	sum of square(ss)	Degree of freedom(df)	Mean square(ms)	F value(F)	Significance (p)
Regression	36.339	2	18.170	33.225	0.000
Residual	203.432	372	0.547		
total	239.771	374			

Table 4- 11 Regression coefficient test results of mobile payment and Consumption psychology

Variable	Coefficient	Standard error	t value	Significance
Constant term	1.148	0.251	4.568	0.000
Convenience	0.121	0.003	3.115	0.000
safety	0.298	0.064	4.696	0.000
Integration	0.211	0.050	4.220	0.000

Note: The R-square of the model and the adjusted R-square are 0.152 and 0.147 respectively.

B. Mobile payment improves the overall consumption level

The convenience, security, and integration of mobile payment are all positively correlated with consumption levels. The respective Pearson correlation coefficients are 0.523, 0.092, and 0.587, which are statistically significant at the levels of 0.01, 0.1, and 0.01, respectively. This result shows that the higher the convenience, the higher the security, and the stronger the integration of mobile payment, the higher the consumer's consumption level. Looking at the results of the regression analysis, as shown in Tables 4-12 and 4-13, the goodness of fit R-square is 0.302, and the adjusted goodness of fit R-square is 0.298, that is, the regression model can explain the total consumption behavior of consumers. The variation is 30.2%, and the model is established. Also, the F value of the model is 80.391, the corresponding significance is 0.000, which is less than 0.05, which is statistically significant, and the coefficients are also significant at the 1% level, which further proves that the convenience, security, and integration of mobile payment will affect consumption. The consumer's consumption level has an impact.

One of the most important characteristics of mobile payment is its convenience and integration, covering almost all areas of consumption. Compared with traditional payment, mobile payment belongs to a new category of things and has a wider user group. As a product of online culture, consumers quickly accepted mobile payments. For most college students, their monthly mobile payment consumption amount is higher than offline consumption. And various mobile payment platforms launch various preferential activities, such as using Didi taxi coupons for taxis,

consumers will often save some costs; another example, JD Daojia launches a mobile application, and purchases through the application will enjoy better Big discounts. Although these discounts can help consumers save money, they will also increase their consumption levels and promote their monthly spending. According to the above analysis of the influence of mobile payment on Consumption psychology, it can be seen that the payment process of mobile payment is relatively simple. Once consumers decide to buy goods, they can complete the shopping behavior, which is likely to cause consumers to have impulsive consumption. It is not a necessary product, which will also increase its consumption level. Also, although the security of mobile payment needs to be improved, most consumers are more inclined to use mobile payment when facing large payments and transfers. Compared to mobile payment, traditional cash payment, bank transfer, etc. will also have certain risks, and in the face of the same risk, the convenience of mobile payment is more attractive, making most consumers choose to use Mobile payment.

Table 4-12 Model Test Results of Mobile Payment and Consumption Level

Model	sum of square	Degree of freedom	Mean square	F value	Significance
return	67.223	2	33.612	80.391	0.000
Residual	155.534	372	0.418		
total	222.757	374			0.000

Table 4- 13 Regression coefficient test results of mobile payment and Consumption psychology

Variable	Coefficient	Standard error	t value	Significance
Constant term	0.158	0.035	5.281	0.000
Convenience	0.216	0.056	2.549	0.000
safety	0.415	0.044	3.889	0.000
Integration	0.158	0.035	9.496	0.000

Note: The R-square of the model and the adjusted R-square are 0.302 and 0.298, respectively.

C. Mobile payment diversifies the consumption structure

In addition to Consumption psychology and consumption level, mobile payment also has a profound impact on consumers' consumption structure. The Pearson correlation coefficients of the convenience, security, and integration of mobile payment and consumption structure are 0.595, 0.145, and 0.666 respectively, showing a positive correlation, and they are all statistically significant at the 0.01 level. Also, Tables 4-14 and 4-15 further reveal the impact of mobile

payment on the consumption structure. From the results in the table, it can be seen that the regression model can explain 37% of the total variance of the consumer's consumption structure. The significance of the coefficients is all less than 0.05, and the model is established.

In the consumer life of consumers, they are more inclined to purchase goods or services that can use mobile payment. Consumers' consumption shows a diversified trend, and they are all involved in learning, leisure and entertainment, daily food, transportation, travel, and clothing accessories. Tend to use mobile payment.

In the era of mobile payment, especially under the influence of the COVID-19, learning expenses cover a wider range, ranging from buying books, stationery, and other school supplies through mobile payment platforms to buying online courses from the Internet. With the development of the Internet, consumers can obtain more learning-related resources from the Internet. Many courses need to be purchased through the Internet. On the other hand, the consumption level of consumers' mobile payment has also been improved. Compared with the previous single learning expenditure, the development of the network has promoted more expenditure on learning.

For daily meals, the popularity of takeaway platforms has given consumers a wider range of choices, not just limited to dining in restaurants, but also convenient for buying takeaway food. For tourism and transportation, consumers no longer need to line up at the gate of the train station in advance to buy tickets, nor do they need to go to the 12306 websites to buy tickets on time. Instead, consumers can buy tickets anytime and anywhere through mobile payment. Also, in addition to the more popular mobile applications such as Didi Taxi, taking the subway through mobile payment has entered the trial operation stage in Shanghai. Therefore, mobile payment is changing all areas of consumer life.

Consumers spend more on clothing accessories, which is related to the higher prices of clothing accessories. At the same time, clothing accessories are also commodities that consumers are prone to impulsive consumption and conspicuous consumption. Consumers can easily purchase them through mobile payment.

In summary, mobile payment makes consumers' consumption structure more diversified. Mobile payment plays an important role in each field, and there is no obvious difference in the

amount of money spent in each field. In the era of cash consumption, there are fewer ways to spend, and the form is relatively simple. Consumers spend more money on daily meals and expenses. With the development of mobile payment, mobile payment has covered all aspects of life, and its convenience and integration have also opened up a wider range of ideas for consumer consumption. In addition to daily expenses, it can also save more money. Spend on school supplies, leisure, and entertainment, clothing accessories, etc.

Table 4-14 Model test results of mobile payment and consumption structure

Model	sum of square	Degree of freedom	Mean square	F value	Significance
return	78.147	2	39.073	109.114	0.000
Residual	133.212	372	0.358		
total	211.359	374			

Table 4- 15 Regression coefficient test results of mobile payment and consumption structure

Variable	Coefficient	Standard error	t value	Significance
Constant term	1.356	0.203	6.671	0.000
Convenience	0.025	0.012	1.597	0.000
safety	0.158	0.051	3.063	0.002
Integration	0.485	0.040	12.010	0.000

Note: The R-square of the model and the adjusted R-square are 0.370 and 0.366, respectively.

D. Mobile payment can enhance the Consumption experience

Consumer behavior not only refers to the Consumption psychology before consumption and the consumption level and consumption structure in the consumption process but also the consumption experience after consumption. According to the correlation analysis results in Table 4-17, the convenience, security, and integration of mobile payment have a high positive correlation with consumers' consumption experience. The Pearson correlation coefficients are 0.575, 0.184, and 0.657, respectively, and the correlation is Both are statistically significant at the 0.01 level. Therefore, it can be concluded that the convenience, security, and integration of mobile payment can improve consumers' consumption experience. However, compared with convenience and integration, consumers are more concerned about the security of mobile payment, so security has the lowest correlation with the Consumption experience. Table 4-16 and Table 4-17 respectively show the model and regression coefficient test results of mobile payment and Consumption experience. As shown in the table, the R-square and adjusted R-

square of the model are 0.348 and 0.345, respectively. This regression model can explain college 34.8% of the total variance of student consumption behavior, the F value of the model is 99.337, the corresponding P-value is 0.000, and the P-value of each coefficient is less than 0.05, indicating that the convenience, security, and integration of mobile payment will affect consumers. The Consumption experience has an impact.

Mobile payment can improve the Consumption experience mainly because: First, the payment process provided by the mobile payment platform is convenient and fast. Anyone can master the mobile payment process, and the high popularity of mobile payment allows consumers anytime, anywhere. Carry out consumer behavior. Second, before consumption, you can have a better understanding of the product through the mobile payment platform, and have a longer time to make purchase decisions, and in the process of selecting and comparing products, there is no salesperson to communicate with them, so you can successfully avoid it. Unpleasant, therefore, consumers are often more satisfied with the purchased goods. Third, most consumers think that it is a pleasant thing to purchase goods or services through mobile payment. The convenience feature allows consumers to avoid the trouble of cash withdrawal and change, as well as saving shopping time.

Table 4-16 Model test results of mobile payment and Consumption experience

Model	sum of square	Degree of freedom	Mean square	F value	Significance
return	72.772	2	36.386	99.337	0.000
residual	136.258	372	0.366		
total	209.03	374			

Table 4- 17 Regression coefficient test results of mobile payment and Consumption experience

Variable	Coefficient	Standard error	t value	Significance
Constant term	1.295	0.206	6.295	0.000
Convenience	0.125	0.048	2.579	0.000
Safety	0.162	0.052	3.106	0.002
Integration	0.464	0.041	11.349	0.000

Note: The R-square of the model and the adjusted R-square are 0.348 and 0.345, respectively.

4.2.5 Analysis of Differences in the Impact of Mobile Payment on Consumer Behavior

Mobile payment will have an impact on consumers' consumption behavior. After analyzing the overall impact, we will pay attention to the differences in the impact of mobile payment on different consumers. This section uses the analysis of variance method to analyze gender, education, type of household registration, and month. Four aspects of average consumption level are analyzed and discussed. The analysis of variance is mainly to test the significance of the difference between the mean of two or more samples, and then determine which factors have a significant influence on the outcome variable. This study uses independent sample T-tests to determine the differences in the effects of gender and household registration types on consumer behavior and uses one-way analysis of variance to study the effects of "educational background" and "average monthly consumption level" on consumer behavior. Normally, if the P-value of the significant coefficient is less than 0.05, it is considered that there is a significant difference in the mean of the observed variable at different levels of the control variable; conversely, when the P-value is greater than 0.05, there is no significant difference.

1. Women's consumption level is higher, and they are prone to impulse consumption psychology

According to Table 4-18, in these four aspects, the P-value corresponding to the F value is greater than 0.05, indicating that the null hypothesis of the Levene test of the variance equation is accepted, that is, the variances are equal. According to this table, it can be further concluded that the differences in the influence of mobile payment on male and female Consumption psychology, consumption level, consumption structure, and consumption experience are -0.2600, -0.1440, -0.0880, and -0.0094, respectively. For Consumption psychology, the P-value corresponding to the T-test is less than 0.01, and the difference is statistically significant at the 0.01 level; for the consumption level, the P-value corresponding to the T-test is less than 0.1, and the difference is statistically significant at the 0.1 level; for the consumption structure and consumption experience, The P-value corresponding to the T-test is greater than 0.05, indicating that there is no significant difference between genders in the consumption structure and consumption experience of consumers. The reasons for the above differences are analyzed as

follows:

First of all, from the perspective of Consumption psychology, the nature of women's preference for consumption also determines their preference for mobile payment. In mobile payment, women are always in the dominant position. Compared with men, women are more likely to have Consumption psychology such as impulsive consumption, conspicuous consumption, and advanced consumption. After using the mobile payment to purchase goods, women often compare and communicate with each other, and are more susceptible to the opinions and ideas of people around them. Also, the integrated nature of mobile payment is more attractive to women. From the mobile payment platform, women can get more information about products and discounts. Women can often browse product information on the mobile payment platform for a long time. Mobile payment satisfies this Consumption psychology of women. In contrast, men pay more attention to the convenience of mobile payment. By using mobile payment, they can make consumption and shop more convenient. Therefore, the integration of mobile payment makes it easier for women to produce impulsive consumption and other Consumption psychology, which has a greater impact on it.

Second, from the perspective of consumption level, it has a certain relationship with Consumption psychology. The convenience and integration of mobile payment provide women with more shopping opportunities and channels. They can pay anytime and anywhere when shopping. If there is not enough in the bank card You can also advance your expenses in advance through credit channels such as Ant Huabei. Also, mobile payment is a cashless payment, which makes it easy for people to lose the concept of their specific consumption amount. In contrast, women are keener to use interactive functions in mobile payments, such as WeChat red envelopes. Also, most of the overseas purchasing agents that have emerged in recent years are done through mobile payments and mobile phone transfers. The main products of overseas purchasing agents are clothing and cosmetics to meet the shopping needs of female consumers. According to the results of this study, although women's mobile payment consumption levels are relatively high, they are maintained at a low-to-medium level. In other words, men are more inclined to spend large amounts on mobile payments. Therefore, although the preferential information of mobile payment can help save certain expenses, women are more likely to be

attracted by various information such as discounts, which leads to an increase in their consumption level.

Finally, gender has no significant impact on consumption structure and consumption experience.

This shows that both men and women have similarities in mobile consumption structure and Consumption experience, and mobile payments have a greater impact on them. The consumption structure of men and women is similar, and they both generate more expenditure in areas such as leisure and entertainment, study, daily diet, transportation and tourism, clothing, etc., and the convenience and integration of mobile payment are simultaneously accepted by men and women.

Table 4- 17 Independent sample T test of the impact of gender-based mobile payment on consumer behavior

variable		Levene test of variance equation				T test for the mean equation				
		F value	Sig.	T value	Degree of freedom	Sig.	Mean difference	Standard error	95% confidence interval of difference	
									Lower	Upper
Consumption psychology	Assuming equal variances	0.409	0.523	-3.051	373	0.002	-0.2600	0.0852	-0.4275	-0.0924
	Assuming not equal variances			-2.995	263	0.003	-0.2600	0.0868	-0.4309	-0.0891
Consumption level	Assuming equal variances	0.236	0.627	-1.739	373	0.083	-0.1440	0.0828	-0.3068	0.0188
	Assuming not equal variances			-1.697	258	0.091	-0.1440	0.0849	-0.3111	0.0231
Consumption structure	Assuming equal variances	0.235	0.628	-1.089	373	0.277	-0.0880	0.0809	-0.2470	0.0710
	Assuming not equal variances			-1.056	254	0.292	-0.0880	0.0834	-0.2522	0.0761
Consumption experience	Assuming equal variances	1.045	0.307	-0.116	373	0.908	-0.0094	0.0805	-0.1677	0.149
	Assuming not equal variances			-0.115	272	0.908	-0.0094	0.0811	-0.1691	0.1504

2. The consumption structure of undergraduates is more diverse and the consumption experience is better

For the analysis of the impact of different educational levels, this study divides them into three educational levels: undergraduate, master, and doctoral. Table 4-18 is the result of a single-factor analysis of variance based on the influence of mobile payments with different educational backgrounds on consumer behavior. It can be seen from this table that the effects of educational qualifications on Consumption psychology and consumption levels are not significant, and the F values are 2.068 and 1.728, The corresponding P values are 0.128 and 0.179, both greater than 0.05. In contrast, the impact of academic qualifications on consumption structure and consumption experience is significantly different at the 0.1 level, with F values of 2.800 and 2.819, and corresponding P values of 0.062 and 0.061, which are less than 0.1. The discussion is as follows:

First, in terms of consumption structure, there is a big difference between undergraduates and master's and doctoral students. This is because the study and lifestyle of master and doctoral students are quite different from those of undergraduates. In contrast, the college life of undergraduates may be more colorful, including leisure and entertainment, social activities, etc., so their consumption structure is more diverse. Although master students and doctoral students will devote more time to study, even in the study life, the consumption of undergraduates is different from that of masters and doctoral students. Most undergraduates will study according to their interests. In addition to the knowledge in textbooks, they may also choose to obtain qualifications that cannot be taken, such as accounting qualification certificate, teacher qualification certificate, language level examination, etc. They will have more opportunities to pay for learning expenses through mobile payments. The research directions of master students and doctoral students are more professional and specific, and they have their tutors to guide them, and the consumption range of learning consumption is relatively narrow. Also, there is a certain age gap between undergraduates and master and doctoral students. Undergraduates are more likely to accept new things and get a higher consumption experience. In contrast, the latter may have higher requirements for the entire mobile payment shopping process, leading to a worse consumption experience.

Table 4- 18 Single-factor analysis of variance based on the impact of mobile payments with different educational backgrounds on consumer behavior

Variable		sum of square	Degree of freedom	Mean square	F value	Significance
Consumer psychology	Between groups	2.637	2	1.318	2.068	0.128
	Within group	237.170	372	0.638		
Consumption level	Between groups	2.050	2	1.025	1.728	0.179
	Within group	220.707	372	0.593		
Consumption structure	Between groups	3.135	2	1.568	2.800	0.062
	Within group	208.243	372	0.56		
Consumer experience	Between groups	3.121	2	1.56	2.819	0.061
	Within group	205.909	372	0.554		

In terms of consumption psychology and consumption level, there is no significant difference in the impact of mobile payment on undergraduate, master and doctoral students, which indicates that in the face of relatively new mobile payment, people of different age groups will have the psychology of impulsive, showy and overspending. In addition, mobile payment can improve the consumption level of college students as a whole, with no significant differences across educational background.

It is worth noting that people with a high degree of education (a graduate degree or above) have become the main force in luxury consumption. Today's highly educated people are different from those who are detached from productive labor as proposed by Veblen. Highly educated people are still social workers. Although they may have a high income compared with people with low education, they are still not enough to support consumption desire.[47]

Therefore, educational backgrounds are not a key factor affecting consumer behavior, and unhealthy consumption habits and behaviors are not caused by educational backgrounds, and further research is needed.

Table 4- 19 Single-factor analysis of variance based on the impact of mobile payments in different grades on consumer behavior

variable	Educational level (I)	Educational level (J)	Mean difference (I-J)	Standard error	Sig.	95% confidence interval of difference	
						Lower	Upper
Consumer psychology	Undergraduate	Master	-0.0813	0.0864	0.347	-0.2512	0.0886
		Phd	0.2511	0.1727	0.147	-0.0884	0.5906
	Master	Phd	0.3324	0.1693	0.05	-0.0005	0.6653
Consumption level	Undergraduate	Master	-0.1474	0.0833	0.078	-0.3112	0.0165
		Phd	0.0064	0.1666	0.969	-0.3211	0.3339
	Master	Phd	0.1537	0.1633	0.347	-0.1674	0.4749
Consumption structure	Undergraduate	Master	-0.1886*	0.081	0.02	-0.3478	-0.0294
		Phd	-0.1847	0.0818	0.022	-0.3629	0.2734
	Master	Phd	0.1439	0.1586	0.365	-0.1680	0.4558
Consumer experience	Undergraduate	Master	-0.1852*	0.0805	0.022	-0.3434	-0.0269
		Phd	-0.1860	0.0809	0.021	-0.3323	0.3003
	Master	Phd	0.1692	0.1577	0.284	-0.1410	0.4793

3. There is no "urban-rural difference" in the impact of mobile payment on consumers

According to Table 4-20, in the four aspects of Consumption psychology, consumption level, consumption structure, and consumption experience, the corresponding P-value of the T-test in each aspect are greater than 0.05, that is, the impact of mobile payment on urban consumers and the impact on rural consumers There is no significant difference in consumer influence. In other words, the type of household registration has no significant impact on consumers' mobile payment consumption behavior. According to this result, as China's urbanization process continues to intensify, the gap between urban and rural consumers is gradually narrowing. As an emerging thing, mobile payment has had a greater impact on all consumers, profoundly changing the way consumers consume. It is precise because of its convenience and integration characteristics that consumers, whether from towns or villages, accept it and use it more widely.

Table 4- 20 Independent sample T test of the impact of mobile payment on consumer behavior based on household registration type

variable		Levene test of variance equation					T test for the mean equation			
		F value	Sig.	T value	Degree of freedom	Sig.	Mean difference	Standard error	95% confidence interval of difference	
									Lower	Upper
Consumption psychology	Assuming equal variances	6.917	0.009	-0.188	373	0.851	-0.0157	0.0833	-0.1795	0.1482
	Assuming that the variances are not equal			-0.193	373	0.847	-0.0157	0.0813	-0.1755	0.1442
Consumption level	Assuming equal variances	0.929	0.336	0.198	373	0.843	0.0159	0.0803	-0.1420	0.1738
	Assuming that the variances are not equal			0.202	372	0.840	0.0150	0.0788	-0.1391	0.1709
Consumption structure	Assuming equal variances	4.752	0.030	0.636	373	0.525	0.0497	0.0782	-0.1040	0.0710
	Assuming that the variances are not equal			0.652	373	0.515	0.0497	0.0763	-0.1002	0.1996
Consumption experience	Assuming equal variances	3.323	0.069	0.838	373	0.402	0.0651	0.0777	-0.0877	0.2179
	Assuming that the variances are not equal			0.862	373	0.389	0.0651	0.0756	-0.0835	0.2138

4. Mobile payment has a greater impact on consumers with medium consumption levels

In the questionnaire of this research, the average monthly consumption level is divided into 6 levels, which are below 600 yuan, 601-1500 yuan, 1501-2000 yuan, 2001-3000 yuan, 3001-5000 yuan, and above 5000 yuan. To facilitate analysis and discussion, according to the results of descriptive statistical analysis, we divide the average monthly consumption level into three levels: low, medium, and high. Among them, the low consumption level means that the average monthly consumption is below 1500 yuan; the medium consumption level is between 1501-3000 yuan; the high consumption level refers to the average monthly consumption above 3,000 yuan.

According to Table 4-21, at different monthly average consumption levels, there are significant differences in the impact of mobile payment on Consumption psychology, consumption level, consumption structure, and consumption experience. The F values are 5.183, 5.024, 3.699 and 2.874, the corresponding P values are 0.006, 0.007, 0.026 and 0.058, respectively. Specifically, the results in Table 4-22 show that there is a significant difference between the average monthly consumption level of medium and low average monthly consumption levels. For the four aspects of Consumption psychology, consumption level, consumption structure, and consumption experience, low monthly consumption The average monthly consumption scores were lower by 0.2788, 0.2580, 0.2209, and 0.1859, and the corresponding significance levels were 0.001, 0.001, 0.007, and 0.023, all of which were less than 0.05, showing statistical significance. The difference between low consumption level and high consumption level is not significant. The reasons for the specific differences are as follows:

Consumers with high average monthly consumption have a better life and spend more on mobile payment; while consumers with low average monthly consumption also spend less on mobile payment, and the average monthly consumption of consumers is positively correlated with their mobile payment expenditure. Among the three types of average monthly consumption levels, consumers with low consumption levels spend less on their monthly average, and are more cautious in spending, and may plan their mobile payment consumption better. Therefore, they produce impulsive consumption or show off The Consumption psychology probability of sexual consumption is low. In terms of consumption structure, the

consumption structure of consumers with low monthly average consumption levels is more simple, and they have greater expectations for the purchased goods or services. Therefore, the impact of mobile payment on their consumption structure and consumption experience is similar to that of consumption at medium average monthly consumption. There are significant differences. In this survey, the number of consumers with an average monthly consumption of more than 3,000 yuan is relatively small, their average monthly consumption itself is relatively high, and their consumption structure is more diversified. Therefore, mobile payment has no other monthly average impact on their consumption behavior. Consumers have a large impact on consumption levels. For consumers whose average monthly consumption is at a moderate consumption level, mobile payment will have a greater impact on them.

Table 4- 21 Single-factor analysis of variance based on the impact of mobile payment on consumer behavior based on different monthly average consumption levels

Variable		sum of square	Degree of freedom	Mean square	F value	Significance
Consumer psychology	Between groups	6.501	2	3.25	5.183	0.006
	Within group	233.306	372	0.627		
Consumption level	Between groups	5.859	2	2.929	5.024	0.007
	Within group	216.899	372	0.583		
Consumption structure	Between groups	4.122	2	2.061	3.699	0.026
	Within group	207.256	372	0.557		
Consumer experience	Between groups	3.180	2	1.590	2.874	0.058
	Within group	205.849	372	0.553		

Table 4- 22 Single-factor analysis of variance based on the impact of mobile payment on consumer behavior based on different monthly average consumption levels

variable	Average monthly consumption (I)	Average monthly consumption(J)	Mean difference	Standard error	Significance	95% confidence interval of difference	
						Lower	Upper
Consumer psychology	Low	Medium	-0.2788*	0.0867	0.001	-0.4493	-0.1084
		High	-0.1000	0.1455	0.493	-0.386	0.1861
	Medium	High	0.1789	0.1490	0.231	-0.114	0.4718
Consumption level	Low	Medium	-0.258*	0.0836	0.002	-0.4224	-0.0936
		High	-0.0137	0.1403	0.923	-0.2895	0.2622
	Medium	High	0.2444	0.1436	0.090	-0.0380	0.5268
Consumption structure	Low	Medium	-0.2209*	0.0817	0.007	-0.3815	-0.0602
		High	-0.1355	0.1371	0.324	-0.4052	0.1341
	Medium	High	0.0853	0.1404	0.544	-0.1907	0.3614
Consumer experience	Low	Medium	-0.1859*	0.0805	0.022	-0.3434	-0.0269
		High	-0.1772	0.1367	0.196	-0.4459	0.0916
	Medium	High	0.0087	0.1399	0.950	-0.2664	0.2838

5 Research conclusions and policy recommendations

According to the above discussion and analysis, while mobile payment brings convenience to consumer consumption, it also profoundly affects consumer behavior. Encouraging consumers to use mobile payment healthily not only has a direct impact on their development of good consumption habits and the establishment of reasonable values but also affects the rationality of consumption throughout the country.

5.1 Analysis conclusion

In this survey, there were a total of 375 valid interviewees, of which 36% were men and 64% were women. The reliability and validity of the questionnaire are very satisfactory. Alipay and WeChat Pay are currently the most important third-party mobile payment platforms, far higher than other mobile payment tools. Nearly 90% of consumers have more than one year of mobile payment experience and are old users of mobile payment. Although the application of mobile payment is relatively popular among consumers, the consumption amount of consumers through mobile payment is a small payment of less than 1,000 yuan. According to this survey, the following conclusions are drawn: First, the main reasons consumers use mobile payment are convenience and integration, and the security of mobile payment is the bottleneck restricting its further development. Second, when using the mobile payment to consume, consumers will have impulsive, conspicuous, and advanced Consumption psychology; mobile payment has improved the overall consumption level of consumers; mobile payment has made consumers' consumption structure diversified; mobile Payment can enhance the Consumption experience of consumers. Third, consumers now rely more on mobile payment in their consumption methods, and they have entered the "cashless transaction era." Fourth, there are differences when different types of consumers use mobile payments. Among them, women's consumption level is higher, and they are prone to impulsive consumption; undergraduates' mobile payment consumption structure is more diversified and their consumption experience higher; there is no "urban-rural difference" in the impact of mobile payment on consumer behavior; Consumers at a medium monthly average consumption level have a greater impact.

5.2 Research and Analysis on the Influence of Mobile Payment on Consumer Behavior

From the previous analysis, it can be found that the three characteristics of mobile payment are

fast consumption, time-saving, and perception. Specifically, the consumption, time-saving, and perception of mobile payment have a positive impact on consumers for resource-saving. Among them, the consumption of mobile payment is the most prominent performance for consumers to use mobile payment to obtain convenience, and the time saving of mobile payment Sex and perception is of great significance to consumers using the mobile payment for consumption. Also, it is found in the research that these three characteristics are related to each other, and there is a corresponding correlation. Time-saving provides time convenience for consumer consumption, and consumption provides perception. The medium and foundation, the existence of the characteristics of consumption make it more convenient for consumers in the process of mobile consumption using the Internet, greatly saving consumption time also allows consumers to perceive great convenience in the consumption process, saving consumption costs, At the same time, the risk factor is reduced. Consumers have a significant positive impact on consumers' purchase intentions due to their consumption, time-saving, and perception; at the same time, due to these three characteristics, consumers also have drawbacks in the process of using mobile consumption. Consumers buy unsatisfactory products in the process of consumption, which greatly reduces the consumption and perception, and perception may bring about consumption impulse, and also affect consumers' consumption and consumer willingness to buy.

In summary, mobile payment has both advantages and disadvantages for consumers. Although the three characteristics of mobile payment may bring unexpected difficulties and troubles to consumers in the consumption process, it may affect consumption and even some disadvantages. Merchants will also use the loopholes of mobile payment to harm the interests of consumers. However, the three characteristics of mobile payment, consumption, time-saving, and perception have brought great convenience for consumers to use mobile payment and can realize mobile payment for consumption. The unique services brought by the authors also stimulated the Chinese economic market.

5.3 Related suggestions

From a global perspective, mobile payment has occupied the current main way of consumption, providing consumers with great convenience in payment methods. Mobile payment has brought

a lot of benefits to consumers and has also changed the current consumption mode and economic structure of the international economic market. Mobile payment starts from both the online network and offline clients, which has promoted the current consumption in the financial field, making the market positioning more precise and the consumer's consumption methods more diverse. According to the content of this article, combined with the consumption habits of consumers, this article puts forward the following suggestions:

Closely link the consumer transaction platform provided by mobile payment with consumers and merchants, use the flexibility and low threshold of mobile payment, closely integrate mobile payment methods with consumers' asset structure, consumption methods, and consumption levels, and use the Internet The advancement of the company has even achieved a tailor-made set of consumer-friendly consumption plans for consumers, protects consumers' financial management, maximizes the benefits of consumers' production and life, and protects consumers' mobile payment rights and interests. For mobile payment consumers, a mobile payment economy market that is safer has a broader prospect and can maximize consumption income, etc.

Use the diversification of mobile payment to expand the services that the mobile payment platform can provide, closely connect the Internet mobile platform with real life, do a good job in harmony with all aspects of consumer life, and effectively provide convenience for mobile payment consumers. The mobile system must be diversified. In terms of living payment, the mobile payment merchant platform must negotiate with relevant departments to strengthen consumption in living expenses, continuously increase the window of consumers in living consumption, and do a great The time-saving nature of payment can make the daily life of mobile payment consumers more convenient because of mobile payment. Similarly, mobile payment client platforms must also provide offline transaction services to facilitate consumers' consumption in the process of daily consumption. Offline mobile payment service outlets should communicate and negotiate well, so that offline mobile payment business outlets can play their role, and promote and apply mobile payment software.

Strengthen the interface design of the mobile payment platform software. The current mobile payment platform page is too fancy, consumers cannot obtain effective information on it, and

cannot obtain the information consumers want accurately and for the first time. Therefore, the mobile payment client must think To strengthen consumers' sense of consumption experience, it is necessary to do a new layout for the current client's layout, and do a good job in mobile payment interface design, to achieve a novel mobile payment platform page that can attract consumers. Concise and convenient, it is necessary to strengthen the operability of mobile payment, so that consumers can use the mobile payment platform to find what they need in the first time, to maximize the mobile payment platform to better serve consumers The degree of user satisfaction of the mobile payment client enables the mobile payment client to truly achieve its consumer goals, and can truly bring consumer enjoyment and payment convenience.

The reform and innovation of mobile payment methods should also pay attention to the security construction of third-party payment methods. Currently, mobile payment still has potential security problems. The rectification measures for the problems that have been exposed also need to be further refined and improved. To solve this problem, if the mobile payment consumption model is to be further improved, the mobile payment platform must strengthen the connection with major banks and financial institutions, and raise the safety factor of mobile payment to the highest level, to reduce the level of consumer service and make consumption more convenient Consumers make mobile payments for shopping and consumption. The security problems of mobile payment consumer platforms have caused consumers to suffer huge losses. The reason is that consumers cannot accurately know the process of software operation in the application of the background program software. It will make the security performance not guaranteed, and this security also seriously affects consumers' interest in using mobile payments. Also, the mobile payment platform can launch more offline activities, increase the base of consumers through offline promotion, expand the scale of consumers' use of mobile payment, and build a more complete consumer mobile payment market.

5.4 Marketing advice for mobile payment

Pay attention to the risk management of mobile payment and improve its security. While the scale of mobile payment is growing rapidly, security risks are gradually increasing, and more attention has been paid to mobile payment risk management. On the one hand, attention should be paid to the cognitive risks of mobile payments. The mobile payment platform has a large

user base and a large difference in awareness. As an emerging payment format, most existing third-party mobile payment users are not aware of the security risks and operational risks of third-party mobile payments. And This lack of cognition will hinder the further healthy development of the third-party mobile payment industry. On the other hand, attention should be paid to the operational risks of mobile payment platforms, especially fund security and network security. The mobile payment platform attaches importance to the user experience, and the payment operation is simple while ignoring the control of operational risks. This makes users worry about the leakage of account information and personal information, which makes the number of mobile payment users stagnant. The mobile platform should improve the management and control of payment risks without reducing user satisfaction. The government should issue supporting technologies, systems, or rules in areas such as safety, standards, and supervision to promote the healthy development of the industry.

Make full use of the role of social influence to enhance the attractiveness of mobile payment. Make full use of the role of social influence to increase the attractiveness of third-party mobile payment. For potential third-party mobile payment users, the recommendations and sharing of relatives, friends, classmates, and colleagues around will affect themselves to a certain extent Decision-making. First, for young people, strengthening the social interaction of mobile payment is the best method at present. In the design of product functions, highlight some payment services that require collaboration with others, such as AA payment, scan code payment, etc.; interactive behavior is also an effective way of promotion. During the Chinese New Year holiday, students and friends scan the QR code to receive the red envelope. When the recipient consumes the red envelope, the other party can also receive the same amount of red envelope. These activities on the mobile payment platform have greatly strengthened the social attributes, resulting in rapid promotion and high satisfaction. Second, third-party payment platforms can also bind and cooperate with offline physical merchants to jointly launch some preferential activities, such as discount coupons, red envelopes, etc., to increase the attractiveness of third-party mobile payments to potential users.

Expand the mobile payment scenario and enhance the Consumption experience. Once consumers form a mobile payment habit, they will be migrated, and they hope that mobile

payment will extend to every corner of citizen's life. For example, the current coverage of urban transportation mobile payment across the country, the coverage of buses is extremely small, only a few cities You can use your mobile phone to pay for bus fares; the same is true for subways. In cities with subways, very few can use third-party mobile payment platforms to pay, and in a subway station, only a few self-service ticket machines can implement mobile payments; As for taxis, mobile payment can only be used by using taxi-hailing software, and most taxis cannot regulate the use of mobile payment in the state of "wave and stop". The popularization of mobile payment in urban transportation should be greatly strengthened to achieve the real penetration of multiple scenarios of mobile payment.

5.4.1 Guiding strategies to encourage consumers to use mobile payment healthily

Consumption behavior is compatible with the development level of social productivity and the development level of society and culture. The development of the economy and science and technology is slowly changing people's consumption patterns, affecting their consumption behaviors, and gradually forming new consumption concepts. However, in the era of mobile payment, consumers' consumption behaviors are also showing some problems. We are required to formulate guiding strategies to encourage consumers to use mobile payment healthily.

Promote rational consumption. First, investigation and research on Consumption psychology and behavior should be strengthened. Pay attention to and strengthen the attention to consumer consumption and strive to discover and solve problems in the process of studying their Consumption psychology and behavior. Also, the values of frugality and anti-waste should be spread in the society, and consumers' ability to consume rationally and the awareness of scientific financial management should be continuously improved, and consumers' concept of conspicuous consumption should be gradually changed with the concept of scientific consumption.

Optimize the consumption structure and establish a correct consumption concept. According to this survey, consumers' consumption of mobile payment is mainly in terms of leisure and entertainment, daily diet, clothing, and other aspects. The payment costs are ranked from high to low, and most consumers' expenditure on learning ranks lower. It can be seen that the main direction for consumers to use mobile payment is to improve the quality of daily life. Unhealthy

consumption habits and irrational consumption psychology will lead to an unbalanced consumption structure and unhealthy development of the consumption concept of the whole society. This is why more and more hatred of the rich has appeared, adding many unstable factors to society.

Everyone plays a different role in different scenarios. Consumers' living standards continue to improve, and the social environment is also affected. Consumers' cognitive abilities are limited and their ideological awareness is not mature enough, so their consumption behavior is inevitably affected by the social environment. The mass media should pay more attention to the promotion of material civilization, strengthen the guidance of spiritual civilization, and actively promote diligence and thrift. Appropriate consumption allows consumers to absorb as much influence as possible, resist blindness, conformity, and comparison of Consumption psychology, and construct reasonable and correct consumer concepts. Correct guidance is better than rough intervention. Consumers should also establish correct values, money concepts, and have a healthy life.

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Appendixes

Appendix A

Questionnaire on the influence of mobile payment on consumer behavior

Dear interviewee:

Hello! I am a graduate student at the Czech University of Life Sciences Prague. To better understand the impact of mobile payment on consumer behavior, I made this survey. Sincerely hope that you can support and help with your busy schedule. This questionnaire is divided into four parts: A, B, C, and D. Please fill it in truthfully according to your situation. Each item you fill in will play an important role in our research! We will keep the information you fill in strictly confidential. Thanks for your cooperation.

Note: The mobile payment mentioned in this questionnaire mainly refers to the behavior of transferring or paying through mobile phones through third-party payment platforms, such as Alipay, WeChat Pay, Apple Pay, and Cloud QuickPass.

A. Basic Information			
A1. Gender	A2. Education	A3. Household type	A4. Average monthly consumption
1. Male	1. Undergraduate	1. Urban residents	1. under 600 yuan
2. Female	2. Postgraduate	2. Rural residents	2. 601-1500 yuan
	3. Ph.D.		3. 1501-2000 yuan
			4. 2001-3000 yuan
			5. 3001-5000 yuan
			6. above 5000
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B. Mobile payment usage situation			
B1. Which of the following third-party payment methods do you use (multiple choice)			
1. Alipay		5. QQ Wallet	

2. WeChat payment	6. JD Wallet	
3. Apple Pay	7. Cloud QuickPass	
4. Baidu Wallet	8. Other	<input type="text"/>
B2. Do you use mobile payment		
1. Yes		
2. No (Stop investigation)		
B3. Is mobile payment your main payment method?		
1. Yes		
2. No (Stop investigation)		
B4. The number of years you have used mobile payment		
1. Less than half a year		
2. Half a year~1 year		
3. 1 year~2 years		
4. More than 2 years		
B5. The number of times you used mobile payment in the last week		
1. Less than 5 times		
2. 5~10 times		
3. 11~15 times		
4. More than 15 times		
B6. The maximum amount of mobile payment transactions: [fill in the blanks]		
<input type="text"/>		

C. Investigation on the Reasons for the Use of Mobile Payments						
N	o.	Questions	stro	disa	par	stro
			ngly	gree	tly	ngly
			disa	gree	agr	agre
			gree		ree	ee
						e
1. Convenience						
C	1	I think it's easy for me to be proficient in using mobile payment				
C	2	I can easily find the purchased goods and services on the mobile payment platform				
C	3	Mobile payment allows me to purchase goods or services at any time				
C	4	Most places where I spend my money accept mobile payments				
C	5	Mobile payment can be paid by scanning code and other methods, avoiding the hassle of finding change				

C 6	Mobile payment terminal (ie mobile phone) is easy to carry, avoiding the trouble of cash withdrawal and card					
2. Safety						
C 7	I think the mobile payment is generally more secure					
C 8	I am worried that personal information will be stolen during the use of mobile payment					
C 9	I am worried that when using mobile payment, will bring risks to my payment account					
C 10	If there is an error in the transaction using mobile payment, I am worried that I will not get the corresponding compensation					
C 11	I have not had any security issues when using mobile payment					
3. Integration						
C 12	Mobile payment can be bound to multiple bank cards, making it easier to manage your account					
C 13	Mobile payment integrates various application scenarios of food, clothing, housing, and transportation in life					
C 14	The mobile payment platform is classified, which can easily realize the entertainment life					
C 15	Mobile payment can provide personalized service recommendations based on the user's past transaction information and location.					
D. Investigation on the influence of mobile payment on consumer behavior						
N o.	Questions	stro ngly disa gree	disa gree	par tly agr ee	ag ree	stro ngly agre e
1. Consumption psychology						
D 1	The cashless transaction method of mobile payment makes me have no idea about the specific amount of money I spend					
D 2	I see mobile payment service push or discount information, and I want to buy					
D 3	I often use mobile payment to buy popular products of the season					
D 4	I often compare products purchased through mobile payment with people around me					
D 5	I often use credit loans, such as Ant Huabei, credit cards, etc.					

D 6	Mobile payment launched a variety of financial products, allowing me to better plan my money					
2. Consumption level						
D 7	My monthly mobile payment consumption amount is higher than offline (cash or credit card) consumption amount					
D 8	By using mobile payment, I have obtained financial benefits, such as financial profit, discount shopping					
D 9	Mobile payment service push or preferential information promoted my consumption					
D 10	After using mobile payment, my monthly consumption amount has increased					
D 11	For large payments, transfers, etc., I tend to use mobile payments					
3. Consumption structure						
D 12	I tend to buy goods or services that can use mobile payment					
D 13	I tend to use mobile payment to buy school supplies, books, and online courses, etc.					
D 14	For games, entertainment and leisure, I tend to use mobile payment					
D 15	I tend to use the mobile payment for daily meals, meals with friends, etc.					
D 16	I tend to use the mobile payment for travel, transportation, etc.					
D 17	I tend to use the mobile payment for clothing, accessories, skincare and beauty products, etc.					
D 18	On average, I use mobile payment every month for the following expenses, and the expenses are ranked from most to least					
	1. school supplies					
	2. Leisure and entertainment					
	3. Daily diet					
	4. Tourism, transportation					
	5. Costume jewelry					
	4. Consumption experience					
N o.	Questions	stro ngly disa gree	disa gree	par tly agr ee	ag ree	stro ngly agre e

D 19	The payment process provided by the mobile payment platform is convenient and fast					
D 20	Higher satisfaction with products or services purchased through mobile payment					
D 21	Mobile payment can avoid unhappiness with the sellers					
D 22	Through the mobile payment platform, you can have a better understanding of goods or services					
D 23	I think using mobile payment is a very pleasant thing					
Thank you very much for your cooperation						