

# *Research on the Influencing Factors of Mobile Phone Brand Selection and Purchase Intention among Chinese College Students*

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**Abstract:** This study conducted an empirical investigation on mobile phone brand selection and purchase intention among Chinese college students. Through collecting 323 valid questionnaire data and conducting in-depth analysis using SPSS PRO software, the study revealed the status and influence of various mobile phone brands in the Chinese college student market. The research findings indicated that Huawei holds a leading position among Chinese college students, enjoying a high market share and strong purchase intention. Meanwhile, brands like OPPO and vivo are gradually enhancing their market positions. Empirical analysis demonstrated that both brand value and perceived value positively impact purchase intention, with perceived value serving as a mediator between the two. Additionally, Internet finance plays a moderating role between perceived value and purchase intention. These discoveries provide valuable market insights and marketing strategy guidance for mobile phone brands.

## **I. Introduction**

With the continuous popularization of higher education in China and the steady increase in the total number of college students, this vast and active consumer group has increasingly garnered widespread market attention. According to the latest statistics from the Ministry of Education, as of 2023, the total scale of various forms of higher education in China has reached 47.6319 million students, an increase of 1.0811 million compared to the previous year <sup>[1]</sup>. As the main body of

college students in the new era, Generation Z is gradually becoming an important force in the consumer market. Their unique consumption concepts and ever-increasing consumption capabilities, especially their demand for electronic products, particularly smartphones, undoubtedly bring tremendous business opportunities to the market.

Smartphones play a crucial role in the lives of modern college students, and there are currently many brands chosen by them in China, such as Apple, Huawei, Samsung, Xiaomi, and more. These brands face fierce competition in the market. To occupy the youth market, cultivate future consumption habits, and grasp brand occupancy among young people is essential. Meanwhile, their brand selection and purchase intention are influenced by various factors. Price, brand, personal preference, and brand loyalty are all important considerations for college students when purchasing smartphones. Understanding these influencing factors accurately and developing effective marketing strategies based on them have become key issues faced by major smartphone brands.

Brand value and perceived value are significant factors that affect consumers' purchase intentions, especially among the special consumer group of college students. However, current research on smartphone purchase intentions mostly focuses on a single aspect of perceived value or brand marketing means, lacking comprehensive consideration of multiple influencing factors. Therefore, this study aims to deeply explore the combined effects of brand value, perceived value, and Internet finance on college students' smartphone purchase intentions.

The core objective of this study is to investigate the popularity of smartphone brands among Chinese college students and analyze how brand value, perceived value, and Internet finance collectively influence their smartphone purchase intentions. This aims to provide targeted marketing strategy suggestions for businesses. By subdividing brand value into three dimensions: stability, influence, and loyalty, we will delve into how these factors affect college students' smartphone purchase decisions and further reveal the mediating role of perceived value in this process. Additionally, considering the rapid development of financial technology today, we include Internet finance in our research scope to examine its moderating role between perceived value and purchase intention.

Through this study, we hope to provide empirical support for businesses to develop marketing strategies targeted at the college student market. Simultaneously, it offers theoretical guidance for Chinese smartphone brands on how to consolidate and expand their market share among college students. Furthermore, we aspire to guide college students toward more rational consumption concepts through this research and provide new evidence and perspectives for marketing and consumer behavior theories.

## II. Literature Review

### 1. Brand Value

Brand value, as a core concept in marketing, has long been a focus of scholars and the business community. From Smith's (1991) proposal that brand value is the essence of brand equity<sup>[2]</sup> to Keller's (2003) customer-based brand value model, the importance of brand value to both consumers and businesses has been emphasized<sup>[3]</sup>. In recent years, with the rise of social media and digital marketing, the connotation and extension of brand value have continued to evolve. Liu Yunli and Zhang Huixian (2019) believed that brand value is the main driver for consumers to purchase products<sup>[4]</sup>. Li Huamin and Li Xiaofei (2019) explored Chinese consumers' cognition and evaluation mechanism of brand value from the perspective of consumer perception<sup>[5]</sup>. Hua Zhaohong and Han Qing (2020) found through research that the functional value of products has a significant impact on customers' purchase intentions<sup>[6]</sup>. In addition, Zhang Zhiyong and Chen

Xiaohong (2021) analyzed the shaping and communication strategies of brand value in the new media era from the perspective of brand communication<sup>[7]</sup>. They proposed that the development of digital media provides new opportunities for the dissemination of brand value, and companies should make full use of new media platforms to interact with consumers and enhance brand influence.

Scholars from both China and abroad have given their own viewpoints on the dimensionality of brand value(See Table 1).

Table 1: Summary Table of Scholars' Views

Scholar/Year	Views
Keller(1993)	Brand value includes brand awareness, brand loyalty, brand image, brand associations, and other brand assets.
Aaker(1996)	Brand value encompasses brand loyalty, brand associations, brand awareness, perceived quality, and market performance.
Sintons and Mattila(2004)	Brand value consists of brand loyalty, brand image, brand awareness, self-expression, brand emotional connection, and perceived quality.
Yu Mingyang and Yang Xuming (2010)	Brand value comprises brand awareness, brand loyalty, brand reputation, brand value system, and brand associations.
Huang Jiatao (2011)	Brand value includes brand image, brand perceived quality, brand recognition, brand loyalty, brand market share, brand extension ability, and brand innovation ability.
Wang Yonggui and Liu Yang (2019)	Brand value encompasses emotional identification, perceived quality, and loyalty.
Zhang Rui and Zhang Yi (2020)	Brand value consists of functionality, cognition, emotionality, sociality, psychological, and experiential aspects.
Wu Jinfeng, Chang Yaping, Dong Junying (2018)	Brand value includes brand connectivity, emotion and loyalty, and cognition between the brand and consumers.

## 2. Perceived Value

Perceived value refers to the overall assessment made by consumers when comparing the benefits and costs associated with purchasing goods and services (Zaithaml, 1988)<sup>[8]</sup>. According to social cognition theory, individuals adjust their behaviors based on external information, meaning that an individual's perception of value affects their intention to purchase a product. Peng L (2019) and others proposed that consumers' perception of a product's value is directly proportional to their recognition of the product<sup>[9]</sup>. This suggests that consumers will reduce their risk expectations regarding purchase behavior, thereby decreasing risk perception, enhancing their positive attitude

towards the product, and increasing their willingness to buy <sup>[10]</sup>. Sun Jinhua (2021) and others' research indicates that when making consumption choices, people tend to follow the principle of maximizing self-interest and consider perceived value as a crucial basis for evaluating benefits. This concept significantly influences their purchasing behavior <sup>[11]</sup>. Li MJ & Chul JK's (2021) research inversely verifies the above viewpoint: the lower a consumer's perceived value of a product, the lower their expectations of it, leading to a lack of positive attitude and reduced purchase intention <sup>[12]</sup>.

### 3. Internet Finance

Internet finance originated in the United States in the 1980s. However, at that time, people referred to the combination of internet technology and finance as electronic finance, electronic banking, or online banking. We can understand internet finance from two perspectives: a broad perspective, which refers to new financial transaction methods and services provided by traditional financial companies or internet companies through the use of network technology and communication tools; and a narrow perspective, commonly known as internet finance, specifically referring to various types of financial products and services provided by internet companies that have entered the financial sector. However, in this study, we focus on consumer behavior analysis and tend to elaborate from a narrow perspective. Based on the above discussion, our final conclusion is that internet finance is a financial activity based on a network platform.

Regarding the relationship between internet finance and consumption, Jagtiani J. & Lemieux C. (2018) believe that the integration of financial technology and banking financial products is an inevitable trend of development. This not only meets the diverse needs of consumers but also promotes innovation in internet financial products and stimulates consumption growth <sup>[13]</sup>. Wan Hao et al. (2019) found that college students' consumption behavior is influenced by online loans, which they use to improve their quality of life and pursue better material enjoyment <sup>[14]</sup>; however, they lack understanding of their own consumption capabilities. Similarly, Zhu Di's (2019) research found that college students who perform poorly academically and come from relatively weak family economic backgrounds are more likely to choose online finance for shopping and consumption <sup>[15]</sup>. Therefore, the existence of internet finance has increased the purchasing power and willingness of college students.

### 4. Consumer Purchase Intention

Fishbein and Ajzen (1975) proposed the Theory of Reasoned Action, laying the foundation for research on consumer purchase intention. This study indicates that consumer purchase intention is jointly influenced by their subjective norms and attitudes <sup>[16]</sup>. Significant progress has been made in recent years regarding consumer purchase intention research. With the rapid development of the digital economy, digital marketing has become an important means of influencing consumer purchase intention. Wang Xin's (2019) research found that digital marketing activities provide convenience and innovative experiences, enhancing consumers' purchase intention, and brand loyalty is a crucial factor in Chinese consumers' purchase decisions <sup>[17]</sup>. Zhang Lihua and Liu Xiaoyun's (2021) study revealed that brand loyalty enhances purchase intention by affecting consumer trust and satisfaction <sup>[18]</sup>. Chinese culture emphasizes factors such as family, collectivism, and human relationships, and these cultural values have a significant impact on consumer purchase intention. Li Huamin and Li Xiaofei's (2019) empirical research showed that purchase intention is significantly influenced by Chinese consumers' traditional family values and social collectivism <sup>[19]</sup>.

### III. Research Hypothesis and Model Construction

#### (I) Research Hypothesis

##### 1. Brand Value and Purchase Intention

Academic research has continuously enriched the understanding of brand value to keep pace with the evolving times. Drawing from a comprehensive grasp of brand value and previous research findings, this study references three dimensions of perceived value, namely, stability, influence, and loyalty. Numerous studies have demonstrated a positive correlation between brand value and purchase intention. Han Dechao and Li Lijia (2023) investigated the impact of consumer purchase intention and brand effects on the performance of organic agricultural retail enterprises, concluding that brand value has a significant positive impact on consumer purchase intention<sup>[20]</sup>. Lin Xiaojing (2023) studied the Zhao'an lychee regional brand and proposed that brand value has a significant positive effect on consumer purchase intention<sup>[21]</sup>.

Based on the above, the following hypotheses are proposed:

H1-a: The stability aspect of brand value has a positive and significant impact on the willingness to purchase mobile phones;

H1-b: The influence aspect of brand value has a positive and significant impact on the willingness to purchase mobile phones;

H1-c: The loyalty aspect of brand value has a positive and significant impact on the willingness to purchase mobile phones.

##### 2. The Relationship Between Perceived Value and Purchase Intention

Perceived value is often used in studies related to purchase intention. Dai Guodan's (2022) research found that all four dimensions of supplier element brand perceived value positively affect consumers' purchase intention<sup>[22]</sup>. Zhang Qiyao and Li Na (2022) pointed out in their study on factors influencing consumers' purchase intention for deeply processed agricultural products that perceived value has a significant positive impact on consumers' purchase intention<sup>[23]</sup>. Sa Congmin (2011), based on a study of the influence of customer perceived value on purchase intention, concluded that brands have a positive impact on the three major dimensions of customer perceived value, but have no significant impact on the value-loss dimension<sup>[24]</sup>.

Based on the above, the following hypothesis is proposed:

H2: Perceived value has a positive and significant impact on the willingness to purchase mobile phones.

##### 3. Brand Value and Perceived Value

Scholars generally agree that there is a positive relationship between brand value and perceived value. Lin Yuna et al. (2022) proposed that the key to brand value lies in consumers' overall perception and evaluation of branded products or services<sup>[25]</sup>. Jia Ping and Han Xinran (2020) believed that there is a close relationship between brand value and perceived value<sup>[26]</sup>. Li Wei (2019) summarized indicators related to brand strength and brand competitiveness and proposed four suggestions for enhancing the strength of Internet finance brands, including improving platform stability. This suggests that stability has an influence on brand value<sup>[27]</sup>. Yan Yi et al. (2015) found through empirical research that non-participants can be influenced by reference groups' perceptions of a brand, altering their own perceptions of their connection to the brand<sup>[28]</sup>. This means that the influence of a brand can affect consumers' perceived value. Shang Pengfei

(2021) confirmed in his empirical research on the formation mechanism of brand loyalty for durable consumer goods that brand loyalty can affect consumers' perceived value <sup>[29]</sup>.

Based on the above, the following hypotheses are proposed:

H3-a: The stability aspect of brand value has a positive and significant impact on perceived value;

H3-b: The influence aspect of brand value has a positive and significant impact on perceived value;

H3-c: The loyalty aspect of brand value has a positive and significant impact on perceived value.

#### 4. The Relationship between Perceived Value, Brand Value, and Purchase Intention

Many scholars have established research models related to purchase intention. Zhao Dongmei and Ji Shuxian (2010) constructed a conceptual model of factors influencing consumers' online purchase intention based on the perceived value model <sup>[30]</sup>. Liang Sheng and Zhao Le (2022) demonstrated, based on the SOR model, that perceived value mediates the effect of external stimuli on purchase intention <sup>[31]</sup>. Yan Xiuxia et al. (2021) studied and constructed a theoretical model that reflects the relationship between live streaming characteristics, perceived value, and purchasing behavior, arguing that perceived value mediates between live streaming characteristics and purchasing behavior <sup>[32]</sup>.

Based on the above, the following hypothesis is proposed:

H4: Perceived value mediates between brand value and purchase intention.

#### 5. The Relationship between Internet Finance, Perceived Value, and Purchase Intention

Liu Yanan (2019) explored whether financial institutions can influence consumers' purchase intention through pre-purchase education on financial products from the perspective of customer perceived value <sup>[33]</sup>. Yu Tingting (2020) pointed out in her study on the impact of internet consumer credit on college students' consumption behavior that consumer credit in internet finance provides convenience for college students' consumption and has changed their traditional consumption concepts. This influence has increased college students' consumption demand, enhanced their desire to consume, and ultimately led to advanced consumption behavior <sup>[34]</sup>.

Based on the above, the following hypothesis is proposed:

H5: Internet finance has a moderating effect between consumer perceived value and the willingness to purchase mobile phones.

### (II) Model Construction

Based on the above research hypotheses, the initial structural model is proposed as follows(See Figure 1):

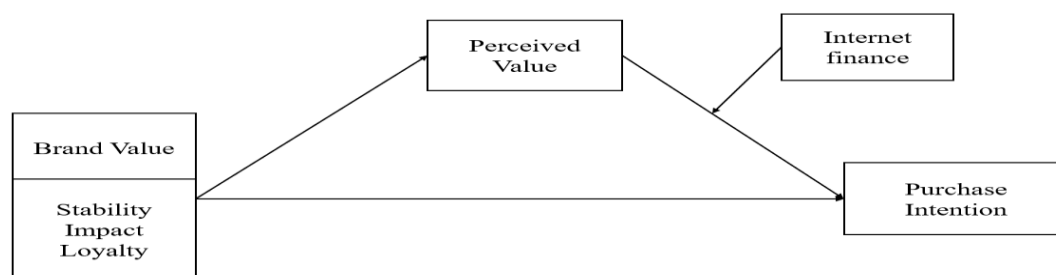


Figure 1: Model Diagram

## IV. Data Statistics and Analysis

### Descriptive Statistical Analysis

As can be seen from Table 3, the male-to-female ratio in this survey is relatively balanced, indicating a certain degree of representativeness. Among the surveyed population, the majority hold an undergraduate degree, specifically, 55% of the respondents are bachelor's degree holders. Furthermore, over half of the respondents reported a monthly disposable income of less than 2,000 yuan.

Based on the survey data, we can observe the following:

Firstly, regarding the usage of current mobile phone brands among Chinese college students(See Figure 2), Huawei still holds the leading position with a market share of 31%. Xiaomi, OPPO, and Apple follow closely behind with market shares of 18%, 20%, and 18%, respectively. The market shares of vivo and other brands are relatively smaller. This indicates that Huawei has strong brand awareness and competitiveness in the market, while other brands are actively seeking competitive advantages.

Secondly, in terms of the willingness to purchase the next mobile phone brand(See Figure 2), Huawei ranks first with a proportion of 34%. OPPO and vivo rank second and third with proportions of 23% and 17%, respectively. Xiaomi and Apple rank fourth and fifth with proportions of 6% and 13%, respectively. Other brands rank sixth with a proportion of 7%. This suggests that Huawei has a strong brand image and appeal among college student consumers, while OPPO and vivo are gradually gaining favor among this demographic.

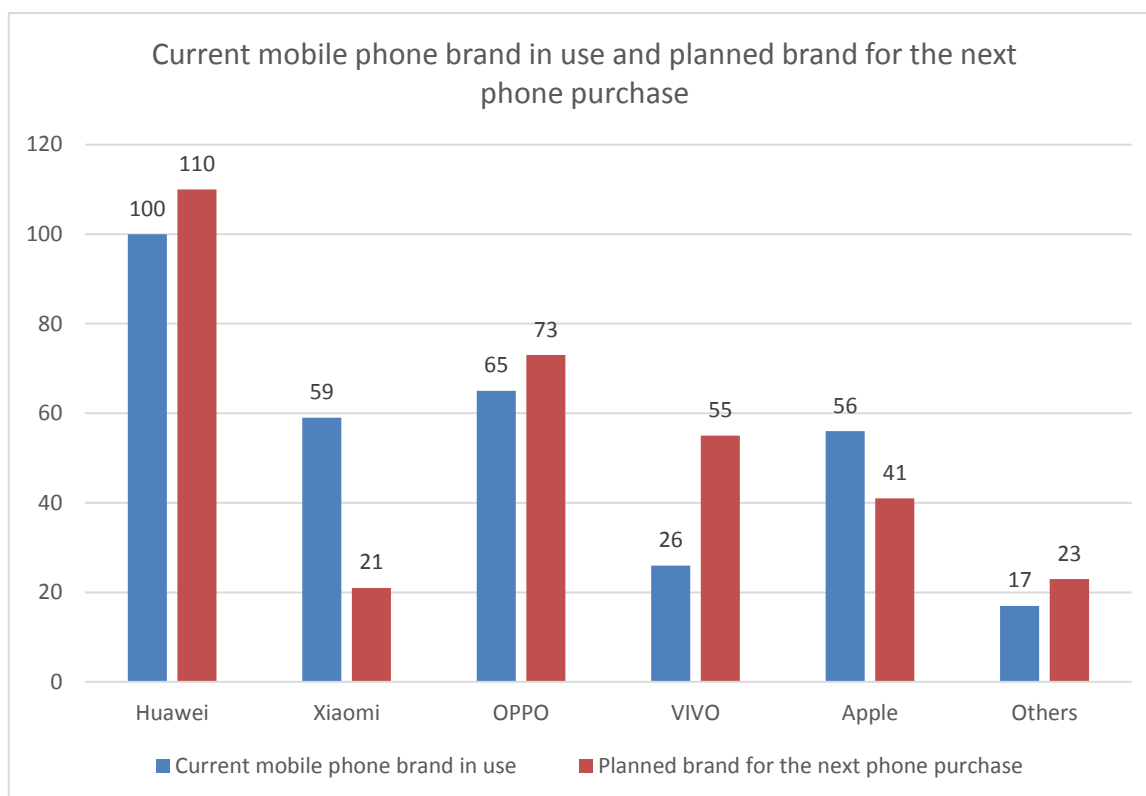


Figure 2: Comparison between Currently Used Brands and Planned Purchase Brands

By comparing the usage of current mobile phone brands with the willingness to purchase the

next brand, it can be observed that Huawei performs well in both datasets, demonstrating significant competitive advantages. OPPO and vivo show better performance in terms of willingness to purchase the next brand, indicating that these two brands are gradually enhancing their market position and competitiveness. Although Xiaomi and Apple have larger market shares, their performance in terms of willingness to purchase the next brand is average. The market shares of vivo and other brands are smaller, but they show good performance in terms of willingness to purchase the next brand, indicating that these brands are actively seeking breakthroughs and development opportunities.

In summary, based on the survey data, the following conclusions can be drawn: Huawei has strong brand recognition and competitiveness in the mobile phone market, with a large market share; OPPO and vivo are gradually enhancing their market position and competitiveness; Xiaomi and Apple are underperforming and show a trend of gradually losing the college student market; vivo and other brands are actively seeking breakthroughs and development opportunities. In the smartphone industry, Chinese mobile phone brands such as Huawei occupy a significant market share among college students and have a high brand occupancy. This current situation not only reflects the success of Chinese mobile phone brands in technological innovation, brand building, and marketing promotion but also demonstrates college students' recognition and support for local Chinese brands. These conclusions can provide a certain market reference for mobile phone brand enterprises, helping them understand market trends and competition, thereby formulating corresponding marketing strategies and product innovation strategies. At the same time, it is also necessary to pay attention to the limitations and variability of the data, and comprehensive analysis should be conducted in combination with other factors in practical applications.

Based on the questionnaire survey data, we can see (refer to Figure 3 and Figure 4):

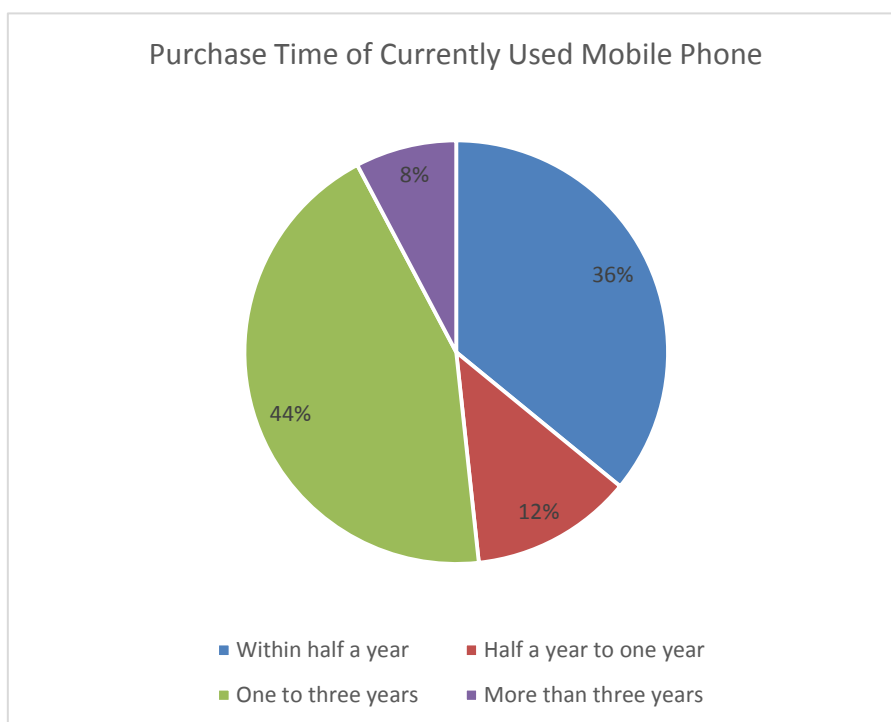


Figure 3: Purchase Time of Currently Used Mobile Phone



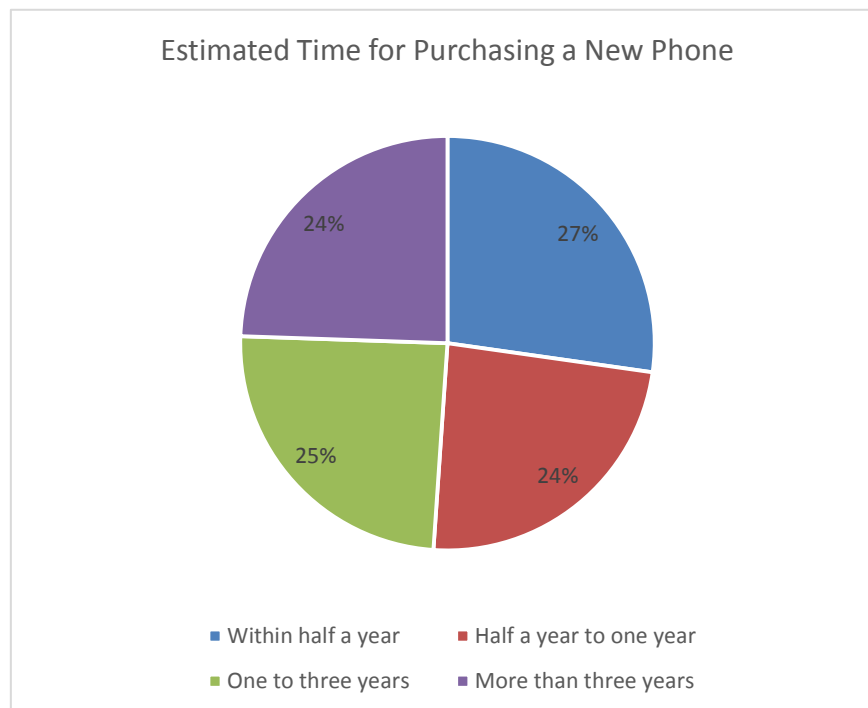


Figure 4: Estimated Time for Purchasing a New Phone

**Purchase Cycle:** The data indicates that approximately 64% of consumers purchased their mobile phones within the last three years. And 66% of consumers are expected to purchase a new phone within the next six months. This suggests that the typical purchase cycle for consumers is around one to three years.

**Update Frequency:** Comparing the data for "Recent Phone Purchase Time" and "Expected New Phone Purchase" reveals some discrepancies. For instance, while 36% of consumers purchased their phones three months ago, only 27% are anticipating a new phone purchase within the next three months. This indicates that some consumers may update their phones when new models are released or during specific promotional events, rather than following a fixed time interval.

**Future Expectations:** Within the next three years, 79% of consumers are expected to purchase a new phone, suggesting significant growth potential in the mobile phone market. Additionally, 25% of consumers anticipate buying a phone within the next one to three years, indicating stable demand in the medium term.

**Market Trends:** Based on the data from "Recent Phone Purchase Time," the market appears to have entered a mature phase, with no significant spikes in purchases during any particular time period. Meanwhile, the projected future purchase trends also indicate that the market is likely to remain stable in the coming years.

Overall, we believe that the consumer market dynamics for mobile phones among college students are currently stable. Both the distribution of recent phone purchase times and the expected purchase times for new phones show relatively stable proportions across different time periods. This suggests that the demand distribution in the mobile phone market is relatively balanced, with no significant fluctuations. Looking at the data from "Recent Phone Purchase Time," most consumers tend to choose a time frame of one to three years or more when purchasing a new phone. This may indicate that consumers have a longer phone replacement cycle, and brands and products need to be attractive enough to motivate consumers to switch phones. The distribution of expected new phone purchase times also shows a relatively balanced proportion across different time periods. This suggests that consumers have a stable expectation of future new phone purchases, with no

significant advances or delays in purchasing. Since both the recent phone purchase times and expected new phone purchase times are relatively stable, this may indicate that consumers have a high level of brand loyalty and are less likely to change their purchase decisions due to external factors.

## (II) Data Analysis

### 1. Reliability Analysis

In this paper, Cronbach's  $\alpha$  coefficient is used to test the reliability of the scale. According to the data shown in Table 2, the Cronbach's  $\alpha$  for each dimension exceeds 0.8, indicating that the scale has good reliability and can be used for further data analysis.

Table 2: Results of Reliability Analysis

Variable	Number of Items	Cronbach's $\alpha$ Value
Brand Value	6	0.875
Perceived Value	7	0.902
Internet Finance	6	0.916

### 2. Validity Analysis

Table 3: Results of Validity Analysis

Variable	Number of Items	KMO Value	Significance	Total Variance Explained (%)	Approximate Chi-Square Statistic
Brand Value	6	0.855	0.000	61.6	943.275
Perceived Value	7	0.894	0.000	66.9	1091.07
Internet Finance	6	0.92	0.000	71.7	1347.843

As shown in the table above, the KMO test values for each scale are all above 0.8 and have passed the Bartlett's test of sphericity. The cumulative variance explained is greater than 60%, indicating that the data can fully explain the total variance. Therefore, the data meets the requirements for validity.

### 3. Discrimination Analysis

Table 4: Results of Discrimination Analysis

	Group (Mean $\pm$ Standard Deviation)			t	P
	0%-27%	27%-73%	73%-100%		
Total Score	75.58 $\pm$ 13.815	72.007 $\pm$ 17.187	64.773 $\pm$ 15.251	4.926	0.000***

Note: \*\*\*, \*\*, and \* represent significance levels of 1%, 5%, and 10%, respectively.

For the total score variable, the significant P-value of 0.000\*\*\* indicates statistical significance,

rejecting the null hypothesis. This suggests that the scale items have high discrimination and the overall design is relatively reasonable. By comparing the mean values of the analysis results, it is believed that differences can be explored.

#### 4. Correlation Analysis

The results in the table below show that the significance level of each variable involved in the hypotheses is less than 0.05, indicating statistical significance. This means that each hypothesis has received support from correlation validation.

Table 5: Correlation Analysis Results Table

Correlation			
	Brand Value	Perceived Value	Internet Finance
Brand Value	1	/	/
Perceived Value	0.4395***	1	/
Internet Finance	0.497***	0.478***	1

\*\*\*, Significant correlation at the 0.01 level (two-tailed).

#### 5. Testing the Mediating Role of Perceived Value

Table 6: Results Table for Mediating Effect Analysis

	-	Coefficient	Standard Error	t	P	Standardized Coefficient
Purchase Intention	Constant	2.88	0.308	9.361	0.000***	-
	Stability	0.009	0.086	0.108	0.914	0.008
	Influence	0.027	0.083	0.329	0.742	0.024
	Loyalty	-0.129	0.072	-1.784	0.075*	-0.114
	Perceived Value	\	\	\	\	\
	R <sup>2</sup>	0.011				
	Adjusted R <sup>2</sup>	0.001				
	F	F(3,319)=1.146,P=0.331				
	-	Coefficient	Standard Error	t	P	Standardized Coefficient
Perceived Value	Constant	0.813	0.133	6.111	0.000***	-
	Stability	0.202	0.037	5.445	0.000***	0.248
	Influence	0.265	0.036	7.348	0.000***	0.341
	Loyalty	0.275	0.031	8.819	0.000***	0.36

	Perceived Value	\	\	\	\	\
	R <sup>2</sup>	0.598				
	Adjusted R <sup>2</sup>	0.593				
	F	F(3,319)=158.161,P=0.000***				
Purchase Intention	-	Coefficient	Standard Error	t	P	Standardized Coefficient
	Constant	2.215	0.305	7.271	0.000***	-
	Stability	-0.156	0.084	-1.857	0.064*	-0.13
	Influence	-0.189	0.084	-2.241	0.026**	-0.165
	Loyalty	-0.353	0.075	-4.694	0.000***	-0.314
	Perceived Value	0.819	0.121	6.745	0.000***	0.555
	R <sup>2</sup>	0.134				
	Adjusted R <sup>2</sup>	0.121				
	F	F(4,318)=12.351,P=0.000***				
Note: ***, **, and * represent significance levels of 1%, 5%, and 10%, respectively.						

Table 7: Summary Results of Mediation Effect Test

Item	Stability=>Perceived Value=>Purchase Intention	Influence=>Perceived Value=>Purchase Intention	Loyalty=>Perceived Value=>Purchase Intention
c Total Effect	0.009	0.027	-0.129
a	0.202	0.265	0.275
a(P) Value	0.000***	0.000***	0.000***
b	0.819	0.819	0.819
b(P) Value	0.000***	0.000***	0.000***
a*b Mediation Effect Value	0.165	0.217	0.225
a*b(Boot SE)	0.039	0.042	0.043
a*b(Z)	4.264	5.152	5.284
a*b(P)	0.000***	0.000***	0.000***
a*b(95%BootCI)	0.093-0.242	0.145-0.309	0.152-0.319
c' Direct Effect	-0.156	-0.189	-0.353
Conclusion of the Test	Masking Effect	Masking Effect	Masking Effect

Perceived value (M) does not directly influence the process from brand value (X) to purchase intention (Y), and the significance of coefficient c is not essential. This is due to the possibility that

the sign of the indirect effect ( $a*b$ ) may be opposite to that of the direct effect ( $c'$ ), concealing its actual effect. This phenomenon is known as mediation in a broader context.

Based on the graphical representation, it is evident that both  $a$  and  $b$  are significant, and  $a*b$  bears an opposite sign to  $c'$ . Therefore, it is concluded that perceived value plays a mediating role.

## 6. Testing the Moderating Effect of Internet Finance

Table 8: Results Table for Moderating Effect Analysis

	-	Coefficient	Standard Error	t	P
Path 1	const	1.616	0.3	5.38	0.000***
	Perceived Value	0.254	0.061	3.137	0.002***
	Internet Finance	\	\	\	\
	Perceived Value * Internet Finance	\	\	\	\
	R <sup>2</sup>	0.03			
	Adjusted R <sup>2</sup>	0.027			
	F	F(323,1)=9.843,P=0.002***			
	△R <sup>2</sup>	0.03			
	△F	△F(1, 323)=9.843,P=0.002***			
	Path 2	const	1.437	0.302	4.757
Perceived Value		0.708	0.166	4.267	0.000***
Internet Finance		-0.397	0.127	-3.12	0.002***
Perceived Value * Internet Finance		\	\	\	\
R <sup>2</sup>		0.058			
Adjusted R <sup>2</sup>		0.053			
F		F(2,320)=9.923,P=0.000***			
△R <sup>2</sup>		0.058			
△F		△ F(1,320)=9.736,P=0.000***			
Path 3		const	6.496	0.939	6.917
	Perceived Value	-0.915	0.328	-2.794	0.000***
	Internet Finance	-2.463	0.385	-6.403	0.000***
	Perceived Value * Internet Finance	0.602	0.106	5.661	0.000***
	R <sup>2</sup>	0.144			
	Adjusted R <sup>2</sup>	0.136			

	F	F(3,319)=17.94,P=0.000***			
	$\Delta R^2$	0.144			
	$\Delta F$	$\Delta$ F(1,319)=42.935,P=0.000***			

Note: The dependent variable is purchase intention. \*\*\*, \*\*, and \* represent significance levels of 1%, 5%, and 10%, respectively.

Based on the moderating effect analysis table shown above, it can be seen that the significance P-value of the interaction term "Perceived Value \* Internet Finance" is 0.000\*\*\*. The interaction term in Model 3 is significant, indicating that the moderating variable, Internet Finance, significantly interferes with the effect of perceived value on purchase intention.

A significant change implies the existence of a moderating effect.

### (III) Summary of Hypothesis Testing

This study analyzed 323 valid questionnaires and used SPSS PRO and other statistical analysis software to draw the following conclusions, as summarized in the table below:

Table 9: Summary of Hypothesis Testing Results

Hypothesis Number	Hypothesis Content	Test Result
H1-a	The stability of brand value has a positively significant impact on mobile phone purchase intention.	Supported
H1-b	The influence of brand value has a positively significant impact on mobile phone purchase intention.	Supported
H1-c	The loyalty in brand value has a positively significant impact on mobile phone purchase intention.	Supported
H2	Perceived value has a positively significant impact on mobile phone purchase intention	Supported
H3-a	The stability of brand value has a positively significant impact on perceived value.	Supported
H3-b	The influence of brand value has a positively significant impact on perceived value.	Supported
H3-c	The loyalty in brand value has a positively significant impact on perceived value.	Supported
H4	Perceived value plays a mediating role between brand value and purchase intention.	Supported
H5	Internet finance plays a moderating role between perceived value and mobile phone purchase intention.	Supported

### V. Research Conclusions and Suggestions

This study conducted a survey on mobile phone brand selection and purchase intention among

Chinese college students through empirical analysis. By collecting 323 valid data and using SPSS PRO software for in-depth analysis, we drew a series of conclusions. Firstly, in terms of market share of mobile phone brands, Huawei maintains a leading market position among Chinese college students, with significantly stronger brand awareness and competitiveness than other brands. Huawei not only dominates current mobile phone usage but also ranks top in college students' future purchase intentions. This indicates that Huawei has achieved remarkable results in brand building, product quality, and market strategy. Meanwhile, brands like OPPO and vivo are gradually improving their market position and competitiveness, especially showing strong growth momentum in college students' future purchase intentions.

Secondly, through empirical analysis, we found that brand value has a positive impact on purchase intention. The stability, influence, and loyalty of a brand are important factors that consumers consider when purchasing mobile phones. This means that the brand's long-term market performance, reputation accumulation, and consumer loyalty building will directly enhance consumers' purchase intentions.

Furthermore, perceived value has also been proven to have a positive impact on purchase intention. Consumers' perceived value of products, including product quality, price reasonableness, and service experience, directly affects their purchase decisions. This discovery emphasizes that companies should focus on enhancing consumers' overall perceived value of products in marketing. In addition, this study also reveals the mediating role of perceived value between brand value and purchase intention. This means that brand value not only directly affects purchase intention but also indirectly affects it by influencing consumers' perceived value. This discovery provides a new perspective for companies to formulate more precise market strategies.

Finally, the moderating role of Internet finance is also an important discovery. In the context of rapid development of financial technology, the convenience and safety of financial services have become important factors affecting consumers' purchasing decisions. Especially for the young consumer group of college students, they have a high acceptance of financial technology and higher expectations for the convenience and safety of financial services. Therefore, when formulating marketing strategies, companies should fully consider how to use Internet finance to enhance consumers' purchase intentions.

In summary, this study reveals the characteristics and influencing factors of Chinese college students in mobile phone brand selection and purchase intention through empirical analysis. These findings not only provide valuable market insights for companies but also provide strong data support for their marketing strategy formulation and product innovation. In future market competition, companies should focus on shaping brand value, improving product perceived value, and effectively utilizing Internet finance to better meet consumer demands and enhance market competitiveness. Although some conclusions have been drawn in this study, there are still shortcomings. The sample selection of this study mainly comes from college students in Guangdong Province, which is difficult to fully represent consumers in the entire Chinese college student mobile phone market. Future research should expand the sample range to more comprehensively understand consumer behavior in different regions and groups.

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## References

- [1] Xinhua News Agency. *China's total higher education enrollment reached 47.6319 million in 2023* [N]. Xinhua News, 2024.3.1. [http://www.moe.gov.cn/fbh/live/2024/55831/mtbd/202403/t20240301\\_1117760.html?ivk\\_sa=1023197a](http://www.moe.gov.cn/fbh/live/2024/55831/mtbd/202403/t20240301_1117760.html?ivk_sa=1023197a).
- [2] Smith, P. R. (1991). "Brand value and brand equity." *Marketing Theory*, 1(1), 43-54.
- [3] Keller, K. L. (2003). "Brand Synthesis: The Multidimensionality of Brand Knowledge." *Journal of Consumer Research*, 29(4), 595-600.
- [4] Liu Yunli, Zhang Huixian. *Exploring the Evaluation of Brand Asset Value* [J]. *Economic Research Guide*, 2019(20):129-131.
- [5] Li Huamin, Li Xiaofei. (2019). *Research on Chinese Consumers' Cognition and Evaluation Mechanism of Brand Value - Based on Consumers' Perception*. *Business Economics Research*, (13), 64-67.
- [6] Hua Zhaohong, Han Qing. *An Empirical Analysis of the Impact of Marine Fishery Brand Value on Customer Purchase Intention - Taking Sea Cucumber Brand as an Example* [J]. *China Fishery Economics*, 2020,38(04):89-99.
- [7] Zhang Zhiyong, Chen Xiaohong. (2021). *Shaping and Communication Strategies of Brand Value in the New Media Era*. *Journalism and Communication Research*, (5), 94-105.
- [8] Zaithaml, V. A. (1988). "Consumer Perceptions of Price, Quality, and Value: A Means-End Model and Synthesis of Evidence." *Journal of Marketing*, 52(3), 2-22.
- [9] PENG L, ZHANG W, WANG X, et al. *Moderating effects of time pressure on the relationship between perceived value and purchase intention in social e-commerce sales promotion: considering the impact of product involvement* J. *Information and Management*, 2019(2):317-328.
- [10] Tu Hongbo, Zhu Qingjian. *The influence and mechanism of external clues on the willingness to purchase geographical indication agricultural products online* [J]. *China Circulation Economy*, 2020(8):37-47.
- [11] Sun Jinhua, He Miao, Hu Jian. *The Influence of Knowledge Anxiety on Platform Users' Willingness to Pay for Knowledge from the Perspective of Perceived Value* [J]. *Modern Intelligence*, 2021(6):129-138.
- [12] LI M J, CHUL J K. *A study on the influence of social e-commerce perceived value, self-efficacy, and interactivity on user attitudes and intentions for continuous use of mobile social network apps* [J]. *Journal of Distribution and Management Research*, 2021(5):141-156.
- [13] Jagtiani J, Lemieux C. *Do Fintech Lenders Penetrate Areas that are Underserved by Traditional Banks?* [J]. *Journal of Economics and Business*, 2018, 100(11):43-54.
- [14] Wan Hao, Deng Zhiping. *Analysis of College Students' Internet Loan Phenomenon from the Perspective of Consumerism* [J]. *Contemporary Youth Research*, 2019(2):104-108.
- [15] Zhu Di. *Credit Consumption of Contemporary College Students and the Risks of "Campus Loans"* [J]. *Youth Research*, 2019(6):53-63+96.
- [16] Fishbein, M., & Ajzen, I. (1975). *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research*. Addison-Wesley.
- [17] Wang Xin. *Optimizing Brand Building with Social Responsibility as the Orientation* [J]. *China Power Enterprise Management*, 2019, (29):6-7.
- [18] Zhang Lihua, Liu Xiaoyun. (2021). *The Influence of Brand Loyalty on Consumers' Purchase Intention: The Mediating Role of Trust and Satisfaction*. *Business Economics Research*, (8), 66-69.
- [19] Li Huamin, Li Xiaofei. (2019). *The Influence of Family Values and Collectivism on Chinese Consumers' Purchase Intention: An Empirical Study*. *Marketing Science Journal*, 15(2), 43-59.



- [20] Han Dechao, Li Lijia. *The Influence of Consumer Purchase Intention and Brand Effect on the Performance of Organic Agricultural Product Retail Enterprises* [J]. *Business Economics Research*, 2023, (19):65-72.
- [21] Lin Xiaojing. *Research on the Influencing Factors of Zhao'an Lychee Regional Brand Building from the Perspective of Brand and Consumer Relationships* [J]. *Market Modernization*, 2023, (09):7-9.
- [22] Dai Guodan. *Research on the Influence of Supplier Element Brand Perceived Value on Consumer Purchase Intention* [D]. Xi'an: Xi'an University of Technology, 2022. 2022.000508.
- [23] Zhang Qiyao, Li Na. *Research on the Influence of Perceived Value on Consumers' Purchase Intention of Deeply Processed Agricultural Products* [J]. *Jiangxi Science*, 2022, 40(06):1185-1193.
- [24] Sa Congmin. *Research on the Influence of Brand, Advertising, and Word of Mouth on Purchase Intention Based on Customer Perceived Value* [D]. Guangzhou: South China University of Technology, 2011.
- [25] Lin Yuna, Jin Shao, Jin Xin. *Empirical Research on Consumer Behavior and Perceived Value of Science Fiction Works - Taking Consumers in Beijing as an Example* [J]. *Beijing Cultural Creativity*, 2022, (03):67-76.
- [26] Jia Ping, Han Xinran. *Analysis of the Formation Mechanism of Logistics Enterprise Brand Value Based on Customer Perceived Value* [J]. *Logistics Technology*, 2020, 39(11):14-17.
- [27] Li Wei. *Research on the Measurement of Internet Financial Brand Strength* [D]. Nanjing: Nanjing University of Finance and Economics, 2017.
- [28] Yan Yi, Wang Haizhong, & He Zhenxin. (2015). *Can Participatory R&D Enhance Customers' Self-Brand Connection? - The Moderating Effect of Perceived Innovation*. *Journal of Marketing Science*.
- [29] Shang Pengfei. *Research on the Formation Mechanism and Empirical Research of Brand Loyalty for Durable Consumer Goods* [D]. Beijing: University of Science and Technology Beijing, 2021.
- [30] Zhao Dongmei, Ji Shuxian. *An Empirical Study on Trust and Perceived Risk on Consumers' Online Purchase Intention* [J]. *Mathematical Statistics and Management*, 2010, 29(02):305-314.
- [31] Liang Sheng, Zhao Le. *Research on the Influencing Factors of Audience Purchase Intention Based on the SOR Theoretical Model - Taking Xinghai Concert Hall as an Example* [J]. *Arts Management (Chinese and English)*, 2022, (03):51-62.
- [32] Yan Xiuxia, Dong Youheng, Zhang Mengmeng, et al. *Research on the Influence of Live Streaming on Consumer Purchasing Behavior - With Perceived Value as an Intermediary* [J]. *Price Theory and Practice*, 2021, (06):137-140.
- [33] Liu Yanan. *Research on the Influence of Pre-purchase Education of Financial Products on Customer Purchase Intention* [D]. Chengdu: Southwestern University of Finance and Economics, 2019.
- [34] Yu Tingting. *Research on the Influence of Internet Consumer Credit on College Students' Consumption Behavior* [D]. Haikou: Hainan University, 2020.