pISSN: 1906 - 6406 The Scholar: Human Sciences
eISSN: 2586 - 9388 The Scholar: Human Sciences
https://assumptionjournal.au.edu/index.php/Scholar

The Influencing Factors of Perceived Value, Satisfaction, And Intention to Reuse Online Shopping in College Students at A Public University in Hangzhou, China

Gong Zhen*

Received: April 29, 2024. Revised: September 2, 2024. Accepted: Frebuary 18, 2025.

Abstract

Purpose: This research aims to determine the factors influencing perceived value, satisfaction, and intention to reuse online shopping among college students at a public university in Hangzhou, China. The conceptual framework contains information quality, parasocial, delivery, website service quality, customer satisfaction, intention to reuse. **Research design, data, and methodology:** Researchers used a quantitative method for distributing the questionnaire online or offline to 500 university students in public schools in Hangzhou who come from the four core majors of Zhejiang Business College. The item-objective congruence (IOC) index and Cronbach's Alpha in a pilot study (n=30) were conducted for validity and reliability testing. The Structural Equation Model (SEM) and Confirmatory Factor Analysis (CFA) were used for the data analysis, including model fit, reliability, and validity of the constructs. **Results:** Information quality and parasocial interaction significantly influence perceived value. information quality, perceived value, parasocial interaction, and delivery significantly influence customer satisfaction. Furthermore, perceived value and customer satisfaction significantly influence intention to reuse. Nevertheless, website service quality has no significant influence on customer satisfaction. **Conclusions:** Improving customer satisfaction and reducing conversion costs are two major strategies for improving customer loyalty. Satisfaction actively influences consumers' intentions, with repeat purchase intention being one of the manifestations of this intention.

Keywords : Intention to reuse, Parasocial Interaction, Perceived Value, Customer Satisfaction, Online Shopping

JEL Classification Code: E44, F31, F37, G15

1. Introduction

In recent years, with the rapid development of the Internet, new retail, and mobile payments, online shopping has become the mainstream consumption method in society. The transformation of offline and online shopping models has given businesses and consumers greater flexibility and freedom. Consumers can shop more conveniently and quickly, and businesses can also cover a wider range of markets and audiences. However, with the rapid development of the Chinese e-commerce market and the increasing maturity of business models, competition among e-commerce enterprises has become more intense (Zhou et al., 2019).

Research has found that in an increasingly competitive market, the cost of attracting a new customer for a company is significantly higher than the cost of retaining an old customer (Sundar et al., 2003). Customer satisfaction and loyalty have become important measures and guarantees for enterprises to gain profits, enhance brand image, increase market share, achieve customer relationship management, and maintain competitive advantages, and this is also true for e-commerce enterprises (Oliver, 1980). Therefore, for e-commerce enterprises, how to improve consumer satisfaction, retain consumers, and further increase the intention to repurchase in the market context of almost exhausted traffic dividends, stable e-commerce traffic structure, and continuous increase in acquisition costs has

1*Gong Zhen, Zhejiang Business College, Hangzhou, China. Email: 371189942@qq.com

become an urgent problem that needs to be solved for the future development of e-commerce enterprises.

According to existing research, consumer repeat purchase intention is the main measure of consumer loyalty and an important indicator for predicting actual consumer purchasing behavior (Cronin & Brady, 2000). Therefore, improving consumer satisfaction and repeat purchase intention has become one of the important factors restricting the further development of e-commerce enterprises. Many factors affect consumer satisfaction and repeat purchase intention. Many domestic and foreign researchers have researched them, proposing factor models that affect consumer satisfaction and repeat purchase intention. However, in domestic research, empirical research on the factors influencing consumer satisfaction and repeat purchase intention in e-commerce enterprises is relatively limited, and there needs to be more effective validation of relevant research models proposed by foreign scholars.

The college student group is not only the largest group in the Internet era but also represents the consumption trend of the entire society in the future. College students have entered the "post-2000" era, and the new generation of college students has grown up in economic globalization, enjoying richer material conditions and a wide range of knowledge channels, possessing a richer spiritual world and diverse value orientations. They are more familiar with the Internet and emerging things and are more open to new shopping methods, so the shopping behavior of college students not only has distinct characteristics of the times but also has a stronger intention to participate and decision-making power in future online shopping. Therefore, this study chooses to target the group of college students, understand their consumption behavior status and tendencies, and then study the factors influencing their satisfaction and intention to repeat purchases, among other related issues. This has positive practical significance for enterprises to enhance customer value and create a good business ecosystem.

With the continuous updates of information technology, online shopping is also constantly changing. New shopping methods, such as live streaming sales and internet celebrity promotion, are emerging one after another, and the online shopping environment is becoming increasingly complex and changing. At the same time, as representatives of this generation of young people, college students are attempting the dual challenges of personality breakthrough and group integration. Faced with the constantly changing online shopping environment, analyzing the factors that affect the perceived value, satisfaction, and intention to reuse current college students in online shopping has important theoretical significance and practical significance.

2. Literature Review

2.1 Intention to reuse

At different times, scholars from various countries have proposed different conceptual expressions for the intention to reuse. However, most scholars define repeat purchase intention as customers' tendency to reuse online shopping. It refers to the tendency of consumers to repurchase the same brand, product, or service within a certain period. It is an important indicator for evaluating consumer loyalty and brand relationships, reflecting consumer satisfaction and loyalty towards a particular brand or product (Cronin & Brady, 2000).

The research scope on intention to reuse is relatively uniform, focusing mostly on exploring the factors influencing repeat purchase intention. When Khalifa and Liu (2007) studied the psychological relationship between online shopping experience and customer intention to reuse online shopping, using satisfaction as a mediator variable, it was found that consumer shopping experience significantly impacts satisfaction, thereby significantly promoting the formation of repeat purchase intention. Lin (2017) proposed that perceived usefulness, ease of use, value, reliability, privacy, and functionality all impact repeat purchase intention. The structural equation model of PLS-SEM was used to analyze the roles of consumer social responsibility perception, price, value, and quality in repurchase intention (Swati & Swati, 2022). The results indicate that perceived price fairness and perceived value significantly impact repurchase intention, while consumer social responsibility positively affects perceived price fairness and perceived quality.

2.2 Information Quality

Information quality is a concept with diverse perspectives, and its definition varies with changes in research and application fields. The definition and division of information quality mainly includes four stages. The first stage was proposed by scholars in the field of quality management, who believe that information quality should meet user needs and emphasize the applicability of information (Ballou & Pazer, 1985). The second stage emphasizes the user's perceived satisfaction with information, believing that information quality reflects the user's perceived satisfaction with information services (Mckinney et al., 2002). In the third stage, Pipino et al. (2002) believed that information quality refers to the quality of data itself, mainly reflected in the characteristics of information products. Based on the third stage, the viewpoints of the fourth stage are widely recognized, mainly combining the

objectivity of information quality with the subjectivity of user expectations (Kahn et al., 2002).

Using the Tobit model, it was found that information quality positively impacts user-perceived value, especially in products with a wider scope and higher value, where the impact of information quality is more significant (Yang, 2013). In addition, in the field of information quality based on online comments, Zhang et al. (2017) found through their research on Taobao online comments that information quality and source credibility can affect users' perception of the value of information, thereby promoting their adoption of information.

According to the success model of information systems, Petter et al. (2008) stated that there is a positive relationship between information quality and consumer satisfaction, and improving information quality can increase consumer satisfaction. Wang and Park (2012) studied the impact of shopping website attributes on consumer satisfaction and also found that the quality of information on websites has a positive effect on consumer satisfaction. During the same period, the perceived information quality of Chinese university students was positively correlated with consumer satisfaction (Liu et al., 2008). Therefore, below hypotheses are indicated:

H1: Information quality has a significant influence on perceived value.

H3: Information quality has a significant influence on customer satisfaction.

2.3 Parasocial Interaction

Parasocial interaction is using online shopping platforms to allow users to write, share, evaluate, discuss, and communicate with each other, conveying brand product information to customers in need, thereby achieving brand marketing goals. Sheizaf and Sudweeks (1997) believed that parasocial interaction refers to bidirectional communication between information sources and receivers and, more broadly, multi-directional communication between any number of information sources and receivers. Communication roles can be exchanged in parasocial interaction to achieve complete interaction (Sundar et al., 2003).

Parasocial interaction helps promote the perceived value and purchase intention, with perceived value meditating. In the online consumption environment, the synchronicity of parasocial interaction positively affects perceived functional value, while the bidirectional nature of interaction positively affects perceived emotional value (Yoo et al., 2010). The psychological needs of consumers partly come from their understanding of product information. The more comprehensive the information they have, the higher their perceived product value (Jiang et al., 2014).

In the context of online shopping, scholars examined the impact on customer perceived value and delved into the relationship between parasocial interaction and consumer satisfaction. Through empirical research, Jee and Lee (2002) revealed the close relationship between website parasocial interaction and user attitudes. In their study on interaction and satisfaction, Sun and Li (2011) confirmed through empirical analysis that parasocial interaction impacts consumer satisfaction. The interaction between interaction orientation and customer satisfaction showed a positive impact. Therefore, below hypotheses are indicated:

H2: Parasocial interaction has a significant influence on perceived value.

H5: Parasocial interaction has a significant influence on customer satisfaction.

2.4 Perceived Value

As early as 1954, Drucker proposed the concept of customer value perception, pointing out that value is the true meaning of customer pursuit, not the product. Zeithaml et al. (1988) was the first to fully define perceived value in his research, stating that it is a comprehensive evaluation of the utility of products or services purchased by consumers through subjective weighing. Subsequently, the concept of perceived value was further elaborated, which refers to the perceived net benefits that consumers receive and give, and there is a significant correlation between perceived value and purchase intention (Chiu et al., 2012).

In studying the impact of information on customer satisfaction, perceived value is an important indicator and a prerequisite variable for satisfaction, directly or indirectly affecting satisfaction and purchase intention (Xiong et al., 2008). When studying the intention to repeat purchases in online shopping malls, Chiu et al. (2012) pointed out that perceived value positively impacts customer trust and satisfaction and subsequently positively impacts the willingness to repeat purchases. Kim et al. (2016) explored the impact of perceived value on customer repeat purchase intention, satisfaction, and word-of-mouth communication under different retail formats, and the results demonstrated that perceived value has a significant impact on customer satisfaction and repeat purchase intention. Therefore, below hypotheses are indicated:

H4: Perceived value has a significant influence on customer satisfaction.

H8: Perceived value has a significant influence on intention to reuse.

2.5 Delivery

Research on logistics mostly revolves around the quality of delivery services, gradually shifting from the perspective

of enterprises to the perspective of customers through the service quality in the logistics field. The quality of delivery service aims to maximize the value of goods, improve service experience, and meet personalized consumer needs through product delivery, delivery time, reasonable delivery price, accuracy of product quantity, and accuracy of delivery location (Xie & Han, 2016).

Through in-depth analysis, Wei et al. (2020) indicated that convenience, communication, reliability, and responsiveness significantly impact customer satisfaction in delivery services, with the responsiveness of delivery services having the most significant impact on satisfaction. Based on the LSQ model, Shashank et al. (2011) constructed an e-LSQ model, and the analysis showed that the satisfaction of logistics delivery quality and delivery prices was positively correlated with customer satisfaction. By establishing an empirical model, it was found that the quality of delivery services impacts the satisfaction and retention of consumption consumers obtain when shopping online (Shashank et al., 2011). Therefore, a hypothesis is indicated:
H6: Delivery has a significant influence on customer satisfaction.

2.6 Website Service Quality

With the development of Internet shopping, scholars are increasingly interested in the comprehensiveness of website services. Aladwani and Palvia (2002) argued that website quality is complex and multidimensional. They defined website quality as the degree to which users meet their needs for website functionality and evaluate the website's overall effectiveness. Based on this definition, many scholars have extended the concept of website service quality. Electronic website service quality refers to the customer's evaluation of the services received during the product purchase and use.

The usefulness and ease of use of a website are not only important components of the overall website image but also positively impact customer satisfaction and loyalty (Flavian et al., 2006). When exploring the impact of electronic service quality on customer perceived value, customer satisfaction, and loyalty, Chinomona et al. (2014) confirmed the positive impact of electronic service quality on perceived value and the relationship between perceived value and satisfaction. Based on survey data from online consumers, Rita et al. (2019) found a significant positive correlation between overall electronic service quality and customer satisfaction. Therefore, a hypothesis is indicated:
H7: Website service quality has a significant influence on customer satisfaction.

2.7 Customer Satisfaction

As early as 1965, the concept of customer satisfaction was proposed by Cardozo (1965) in marketing. He believed that customer satisfaction could increase consumer satisfaction towards products or services and help drive consumer intention to make repeat purchases. Customer satisfaction is an index of the degree of customer satisfaction, which refers to the degree to which customers feel that their needs or expectations have been met (Oliver, 1980). Homburg and Stock (2004) proposed that satisfaction is feedback on customer satisfaction, which is an evaluation of the performance of a product or service and the product or service itself. Providing a level of happiness related to the satisfaction of consumption is a psychological experience.

Based on the theory of expected identity, Chen et al. (2015) explained that perceived value, trust, and customer satisfaction positively impact repeat purchase behavior on online food delivery platforms. For college students, Wang and Wang (2016) emphasized the key roles of perceived price fairness, service quality, and customer satisfaction in their intention to repeat purchases. In marketing, the intention to continuously purchase the same brand can indicate that satisfaction plays a positive role (Zhou et al., 2019). Meanwhile, studies by Yao (2017) and Wu (2021) have all pointed out that the satisfaction of anchors has a positive impact on consumers' intention to repeat purchases. Therefore, a hypothesis is indicated:
H9: Customer satisfaction has a significant influence on intention to reuse.

3. Research Methods and Materials

3.1 Research Framework

Based on previous research frameworks, the conceptual framework of this study has gradually been formed. Its esta blishment is mainly based on three theoretical models. First ly, Tseng et al. (2021) indicated information quality (IQ) an d parasocial interaction (PI) as influencing variables of perc eived value (PV), exploring their relationship with consume r satisfaction (CS) and intention to reuse (IR). Secondly, ref erring to the research results of Ma et al. (2021), adding deli very (DEL) as a PR independent variable positively impacts customer satisfaction. Meanwhile, drawing on the study fr om Lin and Sun (2009) on customer satisfaction and loyalty , website service quality (WSQ) was also included as an ind ependent variable. The final conceptual framework of this s tudy is displayed in Figure 1.

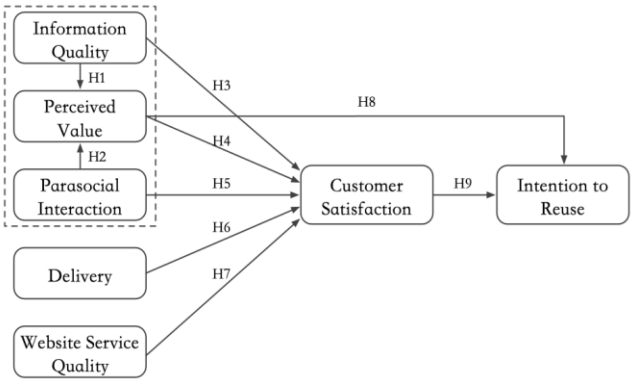

Figure 1: Conceptual Framework

H1: Information quality has a significant influence on perceived value.
H2: Parasocial interaction has a significant influence on perceived value.
H3: Information quality has a significant influence on customer satisfaction.
H4: Perceived value has a significant influence on customer satisfaction.
H5: Parasocial interaction has a significant influence on customer satisfaction.
H6: Delivery has a significant influence on customer satisfaction.
H7: Website service quality has a significant influence on customer satisfaction.
H8: Perceived value has a significant influence on intention to reuse.
H9: Customer satisfaction has a significant influence on intention to reuse.

3.2 Research Methodology

Researchers used a quantitative sampling method for questionnaire analysis, distributing the questionnaire online or offline to a group of university students in public schools in Hangzhou who come from the four core majors of Zhejiang Business College. The survey data has been collected and adopted. Researchers analyzed the key factors that significantly impact college students' satisfaction and intention to reuse online shopping. This survey is divided into three parts. The first part is screening questions, which are used to identify the main characteristics of interviewees. The second part is a survey of respondents' demographic information, which includes five questions related to gender, age group, frequency of online shopping, shopping device preferences, and the most important advantages of online shopping. Lastly, there is a 5-point Likert scale to measure seven-factor variables, analyzing the indicators of seven-factor variables and nine hypotheses in five ways: "strong agreement" to "strong disagreement." Fifty valid samples were selected for pilot testing using convenience sampling, and in order to achieve the item–objective congruence (IOC), three experts were appointed for evaluation and testing. Cronbach's Alpha was used in this study to measure the validity and reliability of research variables. After reliability testing, the questionnaire was distributed to 500 target respondents who received responses. This study adopts the structural equation modeling analysis method and uses tools such as SPSS and AMOS to analyze the data obtained from the questionnaire survey. Confirmatory Factor Analysis (CFA) measures the convergence accuracy and validation. This model is mainly used to measure whether the correspondence between variable factors and items is consistent with the researcher's expectations, which can Ensure positive, stable, and significant relationships. Finally, the Structural Equation Model (SEM) is used to study the relationship between latent and latent variables.

3.3 Population and Sample Size

The target population of this study will be college students with experience in online shopping who are potential users, and students from Zhejiang Business College will be selected as the research subjects. After calculation, the minimum sample size required for this study is 425. Considering the quality of the questionnaire data and potential factors such as statistical bias, it was ultimately decided to set the target number of respondents to 500.

3.4 Sampling Technique

Considering factors such as students' shopping habits, consumption characteristics, and relevance to their professional backgrounds, this article selects senior students majoring in e-commerce, accounting, marketing, and business English as the final target population displayed in Table 1. In this study, the sampling population was divided into four groups based on profession, and a certain number of interviewees were randomly selected from each professional group. At the same time, proportional stratified sampling technology was applied to calculate the number of target interviewees in each group. Subsequently, the researchers used convenient sampling to distribute questionnaires online and offline to complete the survey (Fottrell & Byass, 2008).

Table 1: Sample Units and Sample Size

Four main subjects	Population Size	Proportional Sample
Students of Electronic Commerce Major	1,650	203
Students of Accounting Major	1,540	189
Students of Marketing Major	551	68
Students of Business English Major	322	40

Four main subjects	Population Size	Proportional Sample
Total	**4,063**	**500**

Source: Constructed by author

4. Results and Discussion

4.1 Demographic Information

According to Table 2, the target demographic participants are 500 students, and the demographic characteristics of the respondents are as follows: Male respondents represent 56.4%, and female respondents account for 43.6%. In terms of subjects' background of respondents, from four main subjects, the major group was Electronic Commerce students at 40.6%, afterward accounting students accounted for 37.8%, followed by Marketing students at 13.6% and Business English students at 1.3% respectively.

Table 2: Demographic Profile

Demographic and General Data (N=500)		Frequency	Percentage
Gender	Male	282	56.4%
	Female	218	43.6%
Program	Electronic Commerce Students	203	40.6%
	Accounting Students	189	37.8%
	Marketing Students	68	13.6%
	Business English Students	40	8%

4.2 Confirmatory Factor Analysis (CFA)

This study established the measurement model through Confirmatory Factor Analysis (CFA). In a measurement model, each observed variable is associated with one or more latent variables, which are usually expressed by path coefficients that represent the degree of influence of a latent variable on an observed variable. CFA can be used for validity analysis of mature scales and for combination reliability analysis (Rosenbaum, 2009). All items in each variable are significant, representing the factor load for testing discriminant validity. The significance and acceptable values of their factor loading represent the goodness of fit (Vongurai, 2022).

Further hypothesis testing can be conducted based on measuring project consistency through CFA. Factor load (FL) represents the correlation between each variable and its potential factors. The acceptable value for factor loading is equal to or greater than 0.50 (Hair et al., 1998). Construct reliability (CR) and Average variance extracted (AVE) are other ways to measure the internal consistency of measurement variables (Tentama & Anindita, 2020). Fornell and Larcker (1981) expounded that the value of CR is 0.7 or higher, and the value of AVE is 0.4 or higher, which is acceptable. As shown in Table 3, all estimated measurements are important and effective.

Table 3: Confirmatory Factor Analysis Result, Composite Reliability (CR) and Average Variance Extracted (AVE)

Variables	Source of Questionnaire (Measurement Indicator)	No. of Item	Cronbach's Alpha	Factors Loading	CR	AVE
Information Quality (IQ)	Wang et al. (2019)	3	0.847	0723-0.759	0.786	0.550
Perceived Value (PV)	Wang et al. (2019)	3	0.866	0.641-0.821	0.801	0.576
Parasocial Interaction (PI)	Tseng and Lee (2014)	3	0.871	0.762-0.793	0.824	0.610
Delivery (Del)	Xie and Han (2016)	4	0.918	0.681-0.815	0.838	0.565
Website service quality (WSQ)	Lin and Sun (2009)	4	0.901	0.647-0.815	0.847	0.583
Customer Satisfaction (CS)	Wang et al. (2019)	4	0.937	0.719-0.782	0.837	0.562
Intention to Reuse (IR)	Wang et al. (2019)	3	0.884	0.721-0.759	0.786	0.550

In this study, the square root of the average variance extracted is greater than the absolute values of other data in the same column, and the discriminant validity value is greater than the correlation between all factors, as in Table 4. Therefore, the scale of this study has ideal discriminant validity. On the other hand, in CFA testing, GFI, AGFI, NFI, CFI, TLI, and RMSEA are also used as indicators for model fitting.

Table 4: Goodness of Fit for Measurement Model

Fit Index	Acceptable Criteria	Statistical Values
CMIN/DF	< 5.00 (Al-Mamary & Shamsuddin, 2015; Awang, 2012)	525.612 / 231 or 2.275
GFI	≥ 0.85 (Sica & Ghisi, 2007)	0.926
AGFI	≥0.80 (Sica & Ghisi, 2007)	0.904
NFI	≥ 0.80 (Wu & Wang, 2006)	0.899
CFI	≥0.80 (Bentler, 1990)	0.940
TLI	≥0.80 (Sharma et al., 2005)	0.929
RMSEA	< 0.08 (Pedroso et al., 2016)	0.051
Model Summary		**Acceptable Model Fit**

Remark: CMIN/DF = The ratio of the chi-square value to degree of freedom, GFI = goodness-of-fit index, AGFI = adjusted goodness-of-fit index, NFI = normalized fit index, CFI = comparative fit index, TLI = Tucker Lewis index, and RMSEA = root mean square error of approximation

The data in Table 5. confirms that the variables in the study are all greater than the acceptable values, demonstrating the effectiveness of convergence and discrimination. The above model measurement results further validate the discriminant validity and predict the applicability of the structural model in subsequent research.

Table 5: Discriminant Validity

	IQ	PV	PI	Del	WSQ	CS	IR
IQ	**0.742**						
PV	0.328	**0.759**					
PI	0.182	0.497	**0.781**				
Del	0.080	0.051	0.202	**0.752**			
WSQ	0.010	-0.019	0.117	0.032	**0.764**		
CS	0.226	0.362	0.354	0.252	0.075	**0.750**	
IR	0.236	0.294	0.349	0.182	0.147	0.357	**0.742**

Note: The diagonally listed value is the AVE square roots of the variables
Source: Created by the author.

4.3 Structural Equation Model (SEM)

Structural equation modeling (SEM) combines the characteristics of path analysis and factor analysis, which can be used to validate existing theoretical models or construct new theoretical models, as well as factors that affect the intention to reuse online consumption behavior. By evaluating the model fit, Table 6. compares the statistical values of the index with the acceptable goodness-of-fit values for the Structural Equation Model (SEM). The model fit measurement should be less than 3 for the Chi-square/degrees-of-freedom (CMIN/DF) ratio, and GFI and CFI should be higher than 0.8. The statistical values of index were CMIN/DF = 2.496, GFI = 0.915, AGFI = 0.895, NFI=0.884, CFI = 0.926, TLI = 0.916, and RMSEA = 0.055. By comparing the statistical values of the index with acceptable values, it is clear that all indicators are acceptable.

Table 6: Goodness of Fit for Structural Model

Fit Index	Acceptable Criteria	Statistical Values
CMIN/ DF	< 5.00 (Al-Mamary & Shamsuddin, 2015; Awang, 2012)	606.603 / 243 = 2.496
GFI	≥ 0.85 (Sica & Ghisi, 2007)	0.915
AGFI	≥0.80 (Sica & Ghisi, 2007)	0.895
NFI	≥ 0.80 (Wu & Wang, 2006)	0.884
CFI	>0.80 (Bentler, 1990)	0.926
TLI	≥0.80 (Sharma et al., 2005)	0.916
RMSEA	< 0.08 (Pedroso et al., 2016)	0.055
Model Summary		**Acceptable Model Fit**

Remark: CMIN/DF = The ratio of the chi-square value to degree of freedom, GFI = goodness-of-fit index, AGFI = adjusted goodness-of-fit index, NFI = normalized fit index, CFI = comparative fit index, TLI = Tucker Lewis index, and RMSEA = root mean square error of approximation

4.4 Research Hypothesis Testing Result

The basic principle of hypothesis testing is first to make certain hypotheses about the characteristics of the independent and dependent variables and then use statistical inference of standardized path coefficients to infer whether this hypothesis is acceptable (Sanbonmatsu et al., 1998). The hypothesis testing results in Table 7 show that except for H7, all other eight hypotheses are supported. In online shopping, the perceived value was significantly influenced by parasocial interaction, followed by information quality. Customer satisfaction with online shopping was significantly driven by information quality, perceived value, parasocial interaction, and delivery. Customer satisfaction, followed by perceived value, influences the intention to reuse online shopping.

Table 7: Hypothesis Results of the Structural Equation Modeling

Hypothesis	(β)	t-value	Result
H1: IQ→PV	0.248	4.902*	Support
H2: PI→PV	0.620	9.810*	Support
H3: IQ→CS	0.144	2.623*	Support
H4: PV→CS	0.267	3.445*	Support
H5: PI→CS	0.186	2.570*	Support
H6: DEL→CS	0.236	4.770*	Support
H7: WSQ→CS	0.073	1.536	Not Support
H8: PV→IR	0.240	3.968*	Support
H9: CS→IR	0.342	5.582*	Support

Note: * $p<0.05$
Source: Created by the author

The result from Table 7 can be refined that:

Information quality also strongly influences perceived value, with a standardized path coefficient of 0.248 and t-value e at 4.9of in H1. The diversity, usefulness, and effectiveness of information related to information quality significantly impact users' perceived value to previous studies by Ranganathan and Ganapathy (2002). The strongest influence on perceived value is parasocial interaction. With H2, the path relationship between parasocial interaction and perceived value has a standardized path coefficient of 0.620 and a t-value of 9.810. Parasocial interaction in terms of interaction frequency, responsiveness, and mutual recognition is another key characteristic of the perceived value of online shopping intention. Customer satisfaction is significantly influenced by information quality as well, with a standardized path coefficient of 0.144 and a t-value of 2.623 in H3, stating the studies of Petter et al. (2008) that the quality of information positively affects users' satisfaction and intention to participate continuously, enhancing their sense of pleasure. Customer satisfaction mainly originated from perceived value with a standardized path coefficient of 0.267 and t-value at 3.445 in H4. Perceived value is the dominant factor and antecedent

variable of consumer satisfaction, and it positively influences consumer trust. Parasocial interaction also significantly influences customer satisfaction with a standardized path coefficient of 0.186 and a t-value of 2.570 (H5). When customers shop online, positive interactive relationships contribute to a good customer experience, which drives consumers' psychological attachment to the product and establishes consumer satisfaction (Rosenbaum, 2009). In H6, delivery is another significant factor influencing customer satisfaction, with a standardized path coefficient of 0.236 and a t-value of 4.770. From this, delivery quality, delivery quality, service information interaction quality, and emergency response quality are all key delivery attributes that actively affect consumer satisfaction. Customer satisfaction was not influenced by website service quality at a standardized path coefficient of 0.073 and t-value at 1.536. Therefore, H7 is not favored.

On the other hand, this unsupported discovery is consistent with the research by Ahmad and Khan (2017), which stated that website service quality did not significantly impact customer satisfaction. The strongest influence on intention to reuse online shopping is perceived value with a standardized path coefficient of 0.240 and t-value at 3.968 in H8. The dimensions of efficiency value, economic value, perceived value, social value, and image value significantly affect the intention to repeat purchases of products. Perceived value indirectly affects users' repeat purchase or continuous use behavior by influencing satisfaction as a mediating variable. Customer satisfaction significantly influences the intention to reuse online shopping directly with a standardized path coefficient of 0.342 and t-value at 5.582 in H9, then perceived value. Improving customer satisfaction and reducing conversion costs are two major strategies for improving customer loyalty. Satisfaction actively influences consumers' intentions, with repeat purchase intention being one of the manifestations of this intention.

5. Conclusion and Recommendation

5.1 Conclusion

This research comprehensively analyzes the important factors influencing the perceived value, satisfaction, and intention to reuse online shopping of college students from public universities in Hangzhou, China. The proposed hypothesis is used as a conceptual framework to study how information quality, perceived value, parasocial interaction, delivery, website service quality, and customer satisfaction significantly influence the intention to reuse online shopping. The survey questionnaire developed is mainly aimed at students from the four main majors of Zhejiang Business College in Hang Zhou, China. The data analysis section mainly studied and verified the factors influencing perceived value, satisfaction, and intention to reuse online shopping among Hangzhou public university students. After collecting the data, Confirmatory Factor Analysis (CFA) was used to measure and test the goodness of fits and construct the validity of the research conceptual model. Meanwhile, Structural Equation Modeling (SEM) has also been used to analyze the factors that influence the satisfaction and intention of college students to reuse online shopping.

Three main findings can sum up the outcome of this research. Firstly, among the predictive factors, customer satisfaction is the greatest predictor of intention to reuse online shopping compared to perceived value. As Cardozo (1965) stated, customer satisfaction can help satisfied consumers increase their intentions to purchase again by increasing their love for the product. Therefore, understanding the effectiveness of consumer satisfaction is crucial for stimulating the intention to reuse online shopping. Secondly, according to the ranking of measurement results, perceived value, delivery, parasocial interaction, and information quality have significant predictive factors for customer satisfaction. Consumers gain the benefits of the product itself and, more importantly, the pleasant experience they experience during this period (Wood & Badley, 1981). By improving perceived value, we can gain a consumer satisfaction experience and increase intention to reuse. Lalonde and Zinszer (1976) indicated that delivery services should be understood as ensuring satisfaction. In the online environment, strong parasocial interaction and information quality motivate consumers to experience satisfaction and make the intention to reuse (Wood & Badley, 1981). Finally, the predictive factors influencing perceived value are ranked based on parasocial interaction and information quality. Kim et al. (2016) indicated that parasocial interaction and information quality also positively impact experience and intrinsic pleasure, thereby contributing to the improvement of perceived value.

5.2 Recommendation

The researcher validated the main factors of information quality (IQ), perceived value (PV), parasocial interaction (PI), delivery (DEL), website service quality (WSQ), and customer satisfaction (CS) influencing intention to reuse (IR) to use online shopping on the four core majors from Zhejiang Business College, in Hangzhou, China. Therefore, it is recommended that online shopping platforms' management, sales, and development personnel ensure that information quality, perceived value, social interaction, and delivery attributes are improved and ensured when using them. The functions online shopping can provide should be related to previous research, which requires convenience, diversity,

and security. These functions require strengthened technical support in the face of complex hidden dangers. In addition, sufficient service training is also required to improve the service level of industrial and sales, thereby helping customers have a better shopping experience and increasing their intention to accept online shopping. Once the platform ensures service quality, it should promote the experience, operation process, and other supported devices of online shopping to young groups, such as promotional activities and live streaming sales, to increase their awareness and recognition. With the continuous development and improvement of e-commerce, these features stimulate customers' willingness to consume online and the possibility of using online shopping during the shopping process.

In summary, this study allows managers, salespeople, and developers of online shopping platforms to distinguish variables that affect college students' willingness to reuse online shopping. These variables can be fully applied to the transformation of traditional enterprises, the development of e-commerce enterprises, and the integration of online and offline models.

5.3 Limitation and Further Study

There are several limitations and suggestions for this research, which are listed below. Firstly, this research concentrates only on public university students and selects students from four core majors of Zhejiang Business College in Hangzhou as data collection. Therefore, the sample size is limited. Secondly, this study is limited to online shopping based on the Internet as the research subject. Further research can be conducted on business models such as mobile shopping or new retail methods in more scenarios, such as live streaming sales, short video sales, and community marketing for online shopping. If we study various types and forms of online shopping business models from different perspectives, there may be many discoveries and different conclusions.

To some extent, it is more conducive to improving the universality of research models and obtaining more universal results. Thirdly, in this study, the respondents were limited to college students from Zhejiang Business College. In further research, in addition to college students, young people from various industries will be included as the main online shopping group in the survey to understand more young people's views on the intention of reusing online shopping. Fourthly, there may be bias in the causal relationship between the talent variables in the research. Further research can use different measurement experimental methods to adjust for the impact of specific independent variable factors on the intention of the dependent variable. Besides, qualitative research can be expanded to quantitative research to understand young people's intention to reuse online shopping further.

References

Ahmad, A., & Khan, M. N. (2017). Developing a website service quality scale: A confirmatory factor analytic approach. *Journal of Internet Commerce, 16*(1), 104-126. https://doi.org/10.1080/15332861.2017.1283927

Aladwani, A. M., & Palvia, P. C. (2002). Developing and Validating an Instrument for Measuring User-Perceived Web Quality. *Information and Management, 39,* 467-476. https://doi.org/10.1016/S0378-7206(01)00113-6

Al-Mamary, Y. H., & Shamsuddin, A. (2015). Testing of the Technology Acceptance Model in Context of Yemen. *Mediterranean Journal of Social Sciences, 2*(1), 11-23. https://doi.org/10.5901/mjss.2015.v6n4s1p268

Awang, Z. (2012). *Structural equation modeling using AMOS graphic* (1st ed.). Penerbit Universiti Teknologi MARA

Ballou, D. P., & Pazer, H. L. (1985). Modeling Data and Process Quality in Multi-Input, Multi-Output Information Systems. *Management Science, 31*(2), 150-162. https://doi.org/10.1287/mnsc.31.2.150

Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin, 107*(2), 238-246. https://doi.org/10.1037//0033-2909.107.2.238

Cardozo, R. N. (1965). An Experimental Study of Customer Effort, Expectation, and Satisfaction. *Journal of Marketing Research, 24*(8), 244-249. https://doi.org/10.1177/002224376500200303

Chen, H. T., Li, T. Q., & Song, S. S. (2015). Modeling and Empirical Research on Repeated Purchase Behavior of Online Delivery Platform Users. *Soft science, 29*(11), 79-82.

Chinomona, R., Masinge, G., & Sandada, M. (2014). The influence of e-service quality on customer perceived value, customer satisfaction and loyalty in South Africa. *Mediterranean Journal of Social Sciences, 5*(9), 331-341.

Chiu, C. M., Hsu, M. H., Lai, H. C., & Chang, C. M. (2012). Re-examining the influence of trust on online repeat purchase intention: The moderating role of habit and its antecedents. *Decision Support Systems, 53(*04), 835-845. https://doi.org/10.1016/j.dss.2012.05.021

Cronin, J., & Brady, M. (2000). Assessing the effects of quality, value, and customer satisfaction on consumer behavioral intentions in service environments. *Journal of Retailing, 76*(2), 193-218. https://doi.org/10.1016/s0022-4359(00)00028-2

Flavian, C., Guinaliu, M., & Gurrea, R. (2006). The role played by perceived usability, satisfaction and consumer trust on website loyalty. *Information & Management, 43*(01), 1-14. https://doi.org/10.1016/j.im.2005.01.002

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research, 18*(1), 39-50. https://doi.org/10.1177/002224378101800104

Fottrell, E., & Byass, P. (2008). Population survey sampling methods in a rural African setting: measuring mortality. *Population health metrics, 6*(1), 1-11. https://doi.org/10.1186/1478-7954-6-2

Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate data analysis* (1st ed.). Prentice-Hall

Homburg, C., & Stock, R. M. (2004). The link between salespeople's job satisfaction and customer satisfaction in a business-to business context: A dyadic analysis. *Journal of the Academy of Marketing Science, 32*(2), 144-158. https://doi.org/10.1177/0092070303261415

Jee, J., & Lee, W. N. (2002). Antecedents and consequences of perceived interactivity: An exploratory study. *Journal of interactive advertising, 3*(1), 34-45. https://doi.org/10.1080/15252019.2002.10722066

Jiang, C., Zhao, H. X., & Meng, L. (2014). Research on Online Interaction of Online shopping and Consumers' Impulsive Purchase Behavior. *Inquiry into economic issues, 4*(5), 64-73.

Kahn, B. K., Strong, D. M., & Wang, R. Y. (2002). Information Quality Benchmarks: Product and Service Performance. *Communications of the ACM, 45*(4), 184-192. https://doi.org/10.1145/505248.506007

Khalifa, M., & Liu, V. (2007). Online consumer retention: contingent effects of online shopping habit and online shopping experience. *European Journal of Information Systems, 16*(6), 780-792. https://doi.org/10.1057/palgrave.ejis.3000711

Kim, W., Sara, L. W., & Gilbert, S. (2016). The impact of customer value types on customer outcomes for different retail formats. *Journal of Service Management, 27*(04), 591-618.

Lalonde, B. J., & Zinszer, P. H. (1976). *Customer Service: Meaning and Measurement.* National Council of Physical Distribution Management.

Lin, G. T. R., & Sun, C. (2009). Factors influencing satisfaction and loyalty in online shopping: an integrated model. *Online Information Review, 33*(3), 458-475. https://doi.org/10.1108/14684520910969907

Lin, T. H. (2017). Service Innovation, Experience Marketing, and Post-purchase Behavior: The Case of Team Working in a Direct Marketing Organization. *Journal of Social and Administrative Sciences, 4*(3), 273-282.

Liu, X., He, M., Gao, F., & Xie, P. (2008). An empirical study of online shopping customer satisfaction in China: a holistic perspective. *International Journal of Retail & Distribution Management, 36*(11), 919-940. https://doi.org/10.1108/09590550810911683

Ma, K. X., Mather, D. W., Ott, D. L., Fang, E., Bremer, P., & Mirosa, M. (2021). Fresh food online shopping repurchase intention: the role of post-purchase customer experience and corporate image. *International Journal of Retail & Distribution Management, 50*(2), 206-228. https://doi.org/10.1108/ijrdm-04-2021-0184

Mckinney, V., Yoon, K., & Zahedi, F. M. (2002). The Measurement of Web-Customer Satisfaction: An Expectation and Disconfirmation Approach. *Information Systems Research, 13*(3), 296-315. https://doi.org/10.1287/isre.13.3.296.76

Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research, 17*(4), 460-469. https://doi.org/10.1177/002224378001700405

Pedroso, R., Zanetello, L., Guimarães, L., Pettenon, M., Gonçalves, V., Scherer, J., Kessler, F., & Pechansky, F. (2016). Confirmatory factor analysis (CFA) of the Crack Use Relapse Scale (CURS). *Archives of Clinical Psychiatry (São Paulo), 43*(3), 37-40. https://doi.org/10.1590/0101-60830000000081

Petter, S., DeLone, W., & McLcan, E. (2008). Measuring information systems success: models, dimensions, measures, and interrelationships. *European journal of information systems, 17*(3), 236-263. https://doi.org/10.1057/ejis.2008.15

Pipino, L. L., Yang, W. L., & Wang, R. Y. (2002). Data Quality Assessment. *Communications of the ACM, 45*(4), 211-218. https://doi.org/10.1145/505248.506010

Ranganathan, C., & Ganapathy, S. (2002). Key dimensions of business-to-consumer web sites. *Information & Management, 39*(6), 457-465. https://doi.org/10.1016/s0378-7206(01)00112-4

Rita, P., Oliveira, T., & Farisa, A. (2019). The impact of e-service quality and customer satisfaction on customer behavior in online shopping. *Heliyon, 5*(10), e02690. https://doi.org/10.1016/j.heliyon.2019.e02690

Rosenbaum, M. S. (2009). Exploring commercial friendships from employees' perspectives. *Journal of Services Marketing, 23*(1), 57-66. https://doi.org/10.1108/08876040910933101

Sanbonmatsu, D. M., Posavac, S. S., Kardes, F. R., & Mantel, S. P. (1998). Selective hypothesis testing. *Psychonomic Bulltion & Review, 5*(2), 197-220. https://doi.org/10.3758/bf03212944

Sharma, G. P., Verma, R. C., & Pathare, P. (2005). Mathematical modeling of infrared radiation thin layer drying of onion slices. *Journal of Food Engineering, 71*(3), 282-286. https://doi.org/10.1016/j.jfoodeng.2005.02.010

Shashank, R., Goldsby, T. J., Griflis, S. E., & Lyengar, D. (2011). Electronic logistics service quality (e-LSQ): It is impact on the customer's purchase satisfaction and retention. *Journal of Business Logistics, 32*(2), 167-179. https://doi.org/10.1111/j.2158-1592.2011.01014.x

Sheizaf, R., & Sudweeks, F. (1997). Networked Interactivity. *Journal of Computer-Mediated Communication, 2*(4), 243-256. https://doi.org/10.1111/j.1083-6101.1997.tb00201.x

Sica, C., & Ghisi, M. (2007). The Italian versions of the Beck Anxiety Inventory and the Beck Depression Inventory-II: Psychometric properties and discriminant power. In M. A. Lange (Ed.), *Leading-edge psychological tests and testing research* (pp. 27-50). Nova Science Publishers.

Sun, N., & Li, H. (2011). Can Perceived Interaction Generate Customer Satisfaction: An Empirical Study Based on the Mechanism of Experience Value, Consumer Engagement, and Task Types. *Economic management, 33*(12), 107-118.

Sundar, S. S., Kalyanaraman, S., & Brown, J. (2003). Explicating Web Site Interactivity: Impression Formation Effects in Political Campaign Sites. *Communication Research, 12*(6), 33-40. https://doi.org/10.1177/0093650202239025

Swati, S., & Swati, A. (2022). Drivers of Repurchase Intention of Organic Food in India: Role of Perceived Consumer Social Responsibility, Price, Value, and Quality. *Journal of International Food & Agribusiness Marketing, 34*(3), 246-268.

Tentama, F., & Anindita, W. D. (2020). Employability Scale: Construct Validity and Reliability. *International Journal of scientific & technology research, 9*(04), 3166-3170.

Tseng, S. M., & Lee, P. S. (2014). The Effect of Knowledge Management Capability and Dynamic Capability on Organizational Performance. *Journal of Enterprise Information Management, 27*, 158-179. http://dx.doi.org/10.1108/JEIM-05-2012-0025

Tseng, T. H., Lee, C. T., Huang, H. T., & Yang, W. H. (2021). Success factors driving consumer reuse intention of mobile shopping application channel. *International Journal of Retail & Distribution Management, 50*(1), 76-99. https://doi.org/10.1108/ijrdm-08-2020-0309

Vongurai, R. (2022). Key Drivers of Operational Performance of E-commerce Distribution Service Providers in Thailand. *Journal of Distribution Science, 20*(12), 89-98. https://doi.org/10.15722/jds.20.12.202212.89

Wang, L., Ficici, A., & Fan, B. (2019). *Processes of Knowledge Transfer in Multinational Enterprises: Intra-firm and Inter-firm Perspective.* KSP Book.

Wang, X. L., & Wang, C. Y. (2016). An Empirical Study on the Factors Influencing the Repetitive Purchase Intention of College Students under the B2C Model. *Journal of University of Electronic Science and Technology (Social Science Edition), 18*(2), 62-66.

Wang, X. W., & Park, C. (2012). The Effect of Online Store Attributes on Consumer Satisfaction and Loyalty in China: higher experience vs lower experience. *Korea Journal of Business Administration, 25*(7), 2955-2976.

Wei, Y., Peng, Y. X., & Chen, J. Y. (2020). Research on the Influencing Factors of Purchasing Intention of Brand Agricultural Products from the Perspective of Perceived Value. *E3S Web of Conferences, 214*(2), 01043. https://doi.org/10.1051/e3sconf/202021401043

Wood, P., & Badley, E. M. (1981). *People with disabilities: Towards acquiring information which reflects more sensitivity to their problems and needs.* World Rehabilitation Fund, Inc.

Wu, J. (2021). Research on the influencing factors of consumer repeat purchase behavior in the context of e-commerce live streaming. *Nanjing University of Finance and Economics, 2*(1), 1-10.

Wu, J.-H., & Wang, Y.-M. (2006). Measuring KMS success: A respecification of the DeLone and McLean's model. *Information & Management, 43*(6), 728-739. https://doi.org/10.1016/j.im.2006.05.002

Xie, G. Y., & Han, Y. X. (2016). Empirical Study on the Quality of Logistics Service in China's Online Shopping. *Journal of Beijing Jiaotong University (Social Sciences Edition), 15*(4), 102-114.

Xiong, S. C., Chen, Y., & Luo, Y. H. (2008). Research on the Impact of Public Information of Enterprises on Customer Expectation Perception Satisfaction. *Soft science, 8*(09), 77-82.

Yang, S. (2013). The Impact Mechanism of Information Quality and Community Status on the Perceived Usefulness of User Created Product Reviews: Based on Tobit Model Regression. *Management Review, 25*(5), 136-143.

Yao, J. (2017). A Study on Consumer Repetitive Purchase Intention in the Internet Red Economy Environment. *Dongbei University of Finance and Economics, 2*(2), 1-10.

Yoo, W. S., Lee, Y., Park, J. Y., Sang, W., Lee, Y. J., & Park, J. K. (2010). The role of interactivity in e-tailing: Creating value and increasing satisfaction. *Journal of Retailing & Consumer Services, 17*(2), 89-96. https://doi.org/10.1016/j.jretconser.2009.10.003

Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1988). Communication and control processes in the delivery of service quality. *Journal of marketing, 52*(2), 35-48. https://doi.org/10.1177/002224298805200203

Zhang, Y. H., Li, Z. W., & Zhao, Y. C. (2017). The Impact of Information Quality on the Usefulness of Online Comments Based on Taobao Comment Data. *Journal of management, 14*(1), 77-85.

Zhou, S. L., Liu, Z. H., & Yao, J. (2019). Research on the influencing factors of repeat purchase intention among internet celebrity e-commerce consumers. *Journal of Dalian University, 40*(1), 99-108.