

Analysis of the Relationship between Online Shopping Consumers' Values and Consumer Loyalty

Qian Cao

Guangdong Polytechnic of Industry and Commerce, Guangzhou 510510 China

972159983@qq.com

Abstract. Online shopping has become an important way of life and a significant sales channel that not only brings convenience but also promotes economic development. This paper examines the impact and mechanism of consumer values on consumer loyalty from the perspective of consumer values and loyalty. Empirical evidence demonstrates that functional, social, and emotional values directly influence consumer loyalty. Therefore, it is recommended to continuously enhance the functionality of online shopping platforms to increase their recognition and establish a diversified interactive system to facilitate communication exchange with consumers.

Keywords: values; Loyalty; Online shopping

1 Introduction

Economic globalization has further propelled the networked trend of "buying globally and selling globally". Online shopping is not only a product of economic development at a certain stage, but also an inevitable trend of using technology in the economic field to drive the economy towards the world. Online shopping not only meets people's demand for convenience in shopping, but also serves as a sales channel for businesses. When consumers choose their shopping methods, they integrate their personal values into them, and different values directly influence their consumption behavior, which ultimately manifests in consumer loyalty. Therefore, this paper mainly addresses whether consumer values have a direct impact on consumer loyalty and explores the mechanisms through which these values (functional value, social value, emotional value) respectively affect consumer loyalty to verify the role of consumer values in influencing consumer loyalty.

2 Literature Review

2.1 Consumer Values

Scott (1973)^[1] defined the meaning of consumer values, stating that it refers to the individual's relatively constant choices and preferences when engaging in actual con-

© The Author(s) 2024

C. W. K. Chen et al. (eds.), Proceedings of the 9th International Conference on Engineering Management and the 2nd Forum on Modern Logistics and Supply Chain Management (ICEM-MLSCM 2024),
Advances in Engineering Research 243,

sumption behavior, i.e., the process by which individuals select characteristics of products they like from a multitude of products and services. Through an analysis of the relationship between virtual haptic fit, perceived value, and consumer loyalty, it is concluded that e-commerce companies should provide information that matches consumers' informed needs, emphasize integrity and commitment, establish a database matching consumer needs in order to enhance consumer loyalty [2]. In order for e-commerce companies to gain consumers' trust, they need to understand consumers' values and provide goods and services that match these values in order to gain their trust and loyalty. Research on customer perceived value, customer satisfaction, product involvement, and willingness to spread positive word-of-mouth shows that customer perceived value has a direct impact on customer satisfaction which ultimately affects consumers' willingness to spread positive word-of-mouth [4].

With the development of the Internet, higher levels of perceived quality and perceived value for online products can promote higher levels of consumer satisfaction; however, consumer expectations have little influence on consumer satisfaction; although consumer satisfaction does not directly affect consumer loyalty levels, it will affect through website trust which then impacts consumer loyalty; consumer complaints will affect levels of customer satisfaction thereby affecting customer loyalty [5]. The personal evaluation of the value of goods based on individual's consumption values plays a crucial role in determining consumer behavior. Therefore, it is important to explore the relationship between personality traits types consumer values, and online shopping decisions with an emphasis on guiding consumers scientifically based on their psychological characteristics towards establishing correct consumption values as this holds significant importance for providing scientific marketing strategies for businesses [6].

2.2 Consumer Loyalty

Consumer loyalty is the change in consumer attitudes caused by corporate reputation, which may affect consumer loyalty intentions and behaviors. This study mainly focuses on the interaction between corporate reputation, consumer-company identification, and relationship quality; analyzes the joint impact of consumer-company identification and relationship quality on consumer loyalty; integrates the mechanism of corporate reputation's impact on consumer loyalty; and studies the feedback effect of consumer loyalty attitudes on corporate reputation [7]. Through a questionnaire survey of consumers participating in short video interactions, it was found that both productoriented interactions and interpersonal interactions can enhance consumer loyalty. However, product-oriented interactions cannot influence perceived value, only interpersonal interactions can significantly enhance perceived value [3]. The reliability, responsiveness, security, and empathy of online shopping platform service quality have an impact on consumer loyalty. Therefore, online shopping platforms need to establish sound work norms, strengthen employee training, improve employee service levels to increase customer satisfaction and loyalty to the platform [8]. When brands engage in interactive marketing activities they should deeply explore the spiritual

connotation of their brand to cultivate consumers' attachment psychology and brand loyalty in order to achieve brand scale growth and long-term profitability [9].

3 Research Design

3.1 Hypothesis Proposal

3.1.1 The Relationship between Functional Value and Consumer Loyalty.

Online shopping is a way of consumption, and different consumers will choose different shopping platforms according to their preferences. These platforms not only meet the shopping needs of consumers but also allow them to experience the joy of shopping. Online shopping can meet consumers' 24-hour shopping needs, with a wide variety of products, allowing consumers to freely choose products according to their preferences. The same product can be compared in price among multiple different stores, and relevant information about the product can be obtained based on shopping reviews. If there are quality issues with the product, returns or exchanges can be requested at any time through the backend.

The improvement of consumer value and satisfaction can enhance consumer loyal-ty. Product value includes product quality, authenticity guarantee, and product pricing which directly affect consumer loyalty and indirectly influence consumer loyalty to the platform by affecting perceived value and consumer satisfaction [12]. Suggestions for cultivating and maintaining consumer loyalty include optimizing pre-sale page design, simplifying pre-sale processes; ensuring the quality of pre-sale items with increased supervision; setting reasonable time pressure for pre-sales; improving logistics service quality; stimulating consumer willingness to share [11]. Therefore, the following hypothesis is proposed:

H1: Functional value positively influences consumer loyalty.

3.1.2 Social Value and Consumer Loyalty Relationship.

Through online shopping, one can connect with people from different regions around the world while online communication allows understanding of different cultures and viewpoints that provide reference for future purchases. The social experience in online shopping affects consumer satisfaction which directly impacts consumer loyalty [13]. Customer experience can affect trust in businesses as well as satisfaction which then influences customer loyalty. The improvement of customer value and satisfaction enhances customer loyalty where social value including platform reputation and platform socialization has a direct impact on customer loyalty while also indirectly influencing customer loyalty to the platform through affecting perceived value and customer satisfaction [12]. Therefore, it is hypothesized as follows:

H2: Social value positively influences customer loyalty.

3.1.3 Emotional Value and Consumer Loyalty Relationship.

Online shopping meets customers' emotional needs where they feel relaxed without pressure compared to traditional store shopping. The study theoretically demonstrates

that meeting customers' demands for interaction,hedonism, sense of belonging,enjoyment,negative evaluation directly or indirectly affects their brand's loyalties ^[10] Online Shopping forms motivational emotional values, brand emotional values, functional emotional values,and service emotional values. Through research, it was found that emotional values have significant positive effects on brand loyalties^[14]. Therefore, the following hypothesis is proposed:

H3: Emotional value positively influences brand loyalties.

3.2 Data Collection

This study utilized the online questionnaire platform, Wenjuanxing, to collect survey data. The target population for the online survey was individuals who have experience with online shopping, primarily consisting of young adults. The questionnaires were distributed from September to October 2023, with a total of 420 questionnaires distributed. After excluding invalid responses, 392 valid questionnaires were collected, resulting in an effective response rate of 93.3%.

4 Empirical Analysis

4.1 Reliability Test

The reliability of the survey questionnaire was tested using Cronbach's α coefficient method. A Cronbach's α greater than 0.8 indicates satisfactory reliability. In this study, SPSS 25.0 software was used to test the reliability of 392 survey questionnaires. As shown in Table 1, the Cronbach's α coefficients for each variable were all greater than 0.8, indicating high reliability. Therefore, it can be concluded that the scales used in this study have good internal consistency and high reliability.

Variables	Cronbach's Alpha	Number of Items
Functional value	0.927	5
Social value	0.875	5
Emotional value	0.892	5
Consumer values	0.941	15
Purchase experience	0.909	5
Product quality	0.915	5
Transportation and delivery	0.921	5
Consumer loyalty	0.964	15

Table 1. Analysis of Consumer Values and Consumer Loyalty Credibility

4.3 Validity Testing

4.2.1 Model Fit Test.

The data were analyzed using AMOS 25.0 software, as shown in Table 2. The results of the structural equation model fit test indicate that CMIN/DF (chi-square degrees of freedom ratio) = 10.833 and RMSEA (root mean square error of approximation) = 0.159. Additionally, the test results for IFI, TLI, and CFI all exceed 0.8. Therefore, based on a comprehensive analysis of the results, it can be concluded that the Consumer Values CFA model exhibits good fit.

Indicator	Results of the actual measurement
CMIN/DF	10.833
RMSEA	0.159
IFI	0.835
TLI	0.801
CFI	0.835

Table 2. Model Fit Test

4.2.2 Convergence Validity Testing.

AMOS25.0 software was used for data statistics and analysis, as shown in Table 3. Under the premise of good fit of the Consumer Values Scale CFA model, further examination will be conducted on the convergent validity (AVE) and composite reliability (CR) of each dimension of the scale. The examination process involves calculating the standardized factor loadings of each measurement item on its corresponding dimension using the established CFA model, and then computing the values of convergent validity and composite reliability for each dimension according to the formulas. According to standards, AVE should reach a minimum requirement of 0.5, and CR should reach a minimum requirement of 0.7 in order to indicate good convergent validity and composite reliability. The calculation formulas are as follows:

$$CR = (\sum \lambda_i)^2 / (\sum \lambda_i)^2 + \sum \theta_i$$

$$AVE = \sum \lambda_i^2 / n$$

Table 3. Convergence Validity and Composite Reliability Test of Consumer Values Scale Dimensions

Path Relationship		Estimate	AVE	CR	
GN1	<	Functional Value	0.912		
GN2	<	Functional Value	0.922	0.740	0.937
GN3	<	Functional Value	0.938	0.749	0.937
GN4	<	Functional Value	0.851		

GN5	<	Functional Value	0.676		
SH1	<	Social Value	0.752		
SH2	<	Social Value	0.75		
SH3	<	Social Value	0.818	0.593	0.879
SH4	<	Social Value	0.856		
SH5	<	Social Value	0.659		
QG1	<	Emotional Value	0.771		
QG2	<	Emotional Value	0.807		
QG3	<	Emotional Value	0.819	0.629	0.894
QG4	<	Emotional Value	0.749		
QG5	<	Emotional Value	0.814		

4.2.3 Discriminant Validity Test.

The discriminant validity test results for each dimension indicator are shown in Table 4. It can be seen that all variable coefficients are positive and less than the square root of their average value, indicating good overall discriminant validity.

Variable	Functional Value	Social Value	Emotional Value
Functional Value	0.749		
Social Value	0.586	0.593	
Emotional Value	0.754	0.811	0.629
Square root of AVE value	0.87	0.77	0.79

Table 4. Discriminant Validity Test for Each Dimension

4.4 Hypothesis Testing of Consumer Value and Consumer Loyalty

According to the correlation analysis of functional value and consumer loyalty in Table 5, it is found that functional value has a positive impact on consumer loyalty (Pearson correlation coefficient = 0.769, P < 0.01). The significant correlation between the two indicates that the hypothesis H1 is established.

		Functional Value	Consumer Loyalty
Functional Value	Pearson correlation	1	.769**
	Sig. (two-tailed)		0
Consumer Loyalty	Pearson correlation	.769**	1
	Sig. (two-tailed)	0	

Table 5. Correlation Analysis of Functional Value and Consumer Loyalty (N=392)

^{**.} At the 0.01 level (two-tailed), the correlation is statistically significant

The correlation analysis of social value and consumer loyalty in Table 6 shows that social value positively influences consumer loyalty (Pearson correlation coefficient = 0.693, P < 0.01). It is found that the two are significantly correlated, therefore, hypothesis H2 is established.

	-		
		Social Value	Consumer Loyalty
Social Value	Pearson correlation	1	.693**
	Sig. (two-tailed)		0
Consumer Loyalty	Pearson correlation	.693**	1
	Sig. (two-tailed)	0	

Table 6. Correlation Analysis of Social Value and Consumer Loyalty (N=392)

According to the correlation analysis in Table 7, emotional value has a positive impact on consumer loyalty (Pearson correlation coefficient = 0.880, P < 0.01). It is found that there is a significant correlation between the two, so we can assume that H3 holds true

Table 7. Correlation Analysis of the Relationship between Emotional Value and Consumer Loyalty (N=392)

		Emotional Value	Consumer Loyalty
Emotional Value	Pearson correlation	1	.880**
	Sig. (two-tailed)		0
Consumer Loyalty	Pearson correlation	.880**	1
	Sig. (two-tailed)	0	

^{**.} At the 0.01 level (two-tailed), the correlation is statistically significant.

Based on the analysis of the above table, it can be concluded that the hypotheses H1, H2, and H3 are verified. Therefore, it can be inferred that online consumers' values influence consumer loyalty.

5 Conclusion

This study empirically investigates the impact of consumer value on consumer loyalty from the perspective of consumer value. The study conducts verification from the aspects of reliability and validity testing, hypothesis testing, etc. The results indicate that functional value is positively related to consumer loyalty, social value is positively related to consumer loyalty, and emotional value is positively related to consumer loyalty. This provides certain guiding suggestions for the strategic marketing framework development of e-commerce enterprises.

^{**.} At the 0.01 level (two-tailed), the correlation is statistically significant

Acknowledgement

Foundation: Scientific Research and Development Center of Higher Education, Ministry of Education

Research on ChatGPT Technology Enabling Vocational College Education (No. : 2023KY035)

References

- Scott, J.E., & Lamont, L.M. (1973). Relating consumer values to consumer model and method for investigation. In T.W.Greer(Ed.), Increasing productivity. Chicago, IL: American Marketing Association, 283-288.
- Zhang Buyuan. (2023). The relationship between virtual haptic fit, perceived value and consumer loyalty. Business Economic Research, 9. 65-66. https://kns.cnki.net/kcms2/article/abstract?v=2R7H8JGA7Ex4A01oxwYkYGsqpg2wWZd E5FSXc7uqB0Kb_UNJTe7GGgmy3fF5TY_XgFi4bCbuybqj84FnZt8slT1-FeCPWDXkoLsQkh4EqhyCsj-
 - FHcFpmwoRSVpC6cjgyylCHCSkAUKy40x67j8KLA == &uniplatform = NZKPT&language = CHS
- 3. Fan Enze. (2022). The correlation between short video interaction and consumer loyalty from the perspective of perceived value. Business Economic Research, 16.72-75 https://kns.cnki.net/kcms2/article/abstract?v=2R7H8JGA7Ex7WPIcAoMH7ccfDn6DDXn TIW12iwW7aaw2lC_GXRBWUMxOrG2-0V1Sbx-2eV8EsYU0CW_scRgYLKvwvWJWcalUbAc1L4pX2oq6Nvo0QO2PT_YjqsVQ73Mgbo T1cKxhiib49npEBu3-DA==&uniplatform=NZKPT&language=CHS
- 4. Zhao Jiekun. (2014). The impact mechanism of customer perceived value on consumers' willingness to spread positive word-of-mouth[D]. Beijing University of Posts and Telecommunications, 5.90-105.
 - $https://kns.cnki.net/kcms2/article/abstract?v=2R7H8JGA7Ez4PQ3PIpur2Y2McUpl8FO1ootEr5DheGUM2EQHvZKBv126iIeVd1mRx2ImzYpAdkSUyZINcxIR9LND4gP246_NJtQHKKMCVRYBtLRGak59EoJ-$
 - 0igHJ39dKu0kqv5Msu4aLPLkxf1cw=&uniplatform=NZKPT&language=CHS
- 5. Yin Xiajun & Xie Ting.(2021) Exploring the path from cross-border e-commerce platform customer satisfaction to consumer loyalty.Business Economic Research ,1 90-93.https://kns.cnki.net/kcms2/article/abstract?v=2R7H8JGA7Exf5jokLi-
 - R8X61NcHak2QoPcQZIshoIVCWe7ZqPgNiWarQKQ9-
 - 0rjR5QsafTe39rlfJn0iuydMUIEXqTVo_-18vk3vI-
 - $XRcx8fXnVj1J4xPz2fGfFRkdc7DT1APkk_VjDx_6JdjML2YA == \&uniplatform = NZKPT \& language = CHS$
- 6. Ding Yi.(2019) A study on the relationship among vocational college students' temperament type, consumption values and online consumption decision-making style[D]. Yunnan Normal University ,5.34-42.
 - https://kns.cnki.net/kcms2/article/abstract?v=2R7H8JGA7EymoKkX0J2VhMVLEK64HFNF2wSOW_LN62XqVk5PYz7PEGyLXu39Y2hKbbqVNDkq70bZobMdcSAoWa7zU_DP6pYr3RDNEZpjUpG7HmkszEl_FNLe_47JgEIp1RKpR4pPC5P9MUymx7pLcw==&uniplatform=NZKPT&language=CHS

- 7. Xu Shuangqing.(2009) Analysis of the influence mechanism of corporate reputation on consumer loyalty[D]. Zhejiang University, 4.230-240.
 - https://kns.cnki.net/kcms2/article/abstract?v=2R7H8JGA7ExQuvTBHjDpdHjQq3ZDJvnMIc-
 - MJBuDDFO4ib8bZVcuxV81p8ogcVFUIXLTx1YAI9zL8X8nidKQJaOUTZxUxo5rf0IpxFm_TNmc2lwd2m0zxWBN4PvZBo2LHbOfVhvXAIUdDGc6NmM_x4w==&uniplatform=NZKPT&language=CHS
- Chu Yan et al.(2023) The impact of service quality on consumer loyalty in cross-border ecommerce platforms—Based on the mediating effect of customer satisfaction. Jiaxing College Journal .7.110-112.
 - https://kns.cnki.net/kcms2/article/abstract?v=2R7H8JGA7Exq0Fmsu-J74fF_pzK0BX-CpwJtNFN1akcDfOQi_ocnGK53m0IDG7S8ZyB8UEPpziFtTUcsgMdOum9dV6tX1q5FnQz01o107oUlxEJEbHbfK7XFPjH-
 - $kUXNmVV8JaLGqEn9hzOkxO5agQ \hbox{$=$$} \& uniplatform \hbox{$=$} NZKPT\& language \hbox{$=$} CHS$
- Liu Yang. (2023) An analysis of the influence of brand interactive marketing on consumer loyalty and boundary conditions. Business Economic Research, 8.63-64. https://kns.cnki.net/kcms2/article/abstract?v=2R7H8JGA7EyMcUtNupUEmUDOvG9yQE YZsJHvqwtHopKSZEjjRh4-
 - 3EgybveZU224f8TO9zHnShXWreG9tOm9pZmdpyhWYPfQ28eKYfXcmg1r5lWeXTdVGn1feZ7EoEuLsNUklHx9dEf0XzWlUQkg==&uniplatform=NZKPT&language=CHS
- 10. Lian Jie.(2019) Study on the influencing mechanism of virtual brand community on consumer loyalty[D]. Dongbei University Of Finance And Economics, 12.110-115. DOI: 10.27006/d.cnki.gdbcu.2019.000072
- Zhang Sen .(2021) Study On The Influence Of Corporate Social Responsibility On Consumer Loyalty. Henan University Journal, 11.25-26.
 DOI: 10.15991/i.cnki.411028.2021.06.004
- 12. Li Huiwen .(2021)Study On Factors Influencing Consumer Loyalty To Imported Cross-Border E-Commerce Platforms-Based On Consumer Value Perspective.Dongnan Daxue, Dissertation, 5 .46-48. DOI:10.27014/d.cnki.gdnau.2021.001504
- Zhu Jie . (2020)Research On Influencing Factors Of Community Fresh E-Commerce Consumer Loyalty. South China Agricultural University Journal, 6.45-48.
 DOI: 10.27152/d.cnki.ghanu.2020.001244
- 14. Tian Geng (2010) Research on the influence of emotional value on brand benefit positioning[D]. Northwestern Polytechnical University. 3 35-38.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (http://creativecommons.org/licenses/by-nc/4.0/), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

