

The Relationship of Consumer Perceived Value, Online Word-of-mouth and Behavioral Intention in Mobile E-commerce

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Abstract

The rapid development of mobile e-commerce has led to the spread of online word-of-mouth reputation and its impact more significantly than in the past and profoundly affects consumer behavior. From the perspective of cognitive theory, this study builds a theoretical model and explores the relationship between consumer perceived value, online word-of-mouth, and behavioral intention. Empirical research finds that consumer functional value and emotional value are significantly positively related to reconstruction intentions. online word-of-mouth can positively regulate this relationship, and this relationship will be strengthened with the increase in the strength of online word-of-mouth. Consumer functional value and emotional value are significantly positively related to the communication intention. online word-of-mouth can positively regulate this relationship, and this relationship will be strengthened with the increase of online word-of-mouth.

Keywords: *Consumer perceived value, Online word-of-mouth, Behavioral intentions, Mobile e-commerce*

1. Introduction

Mobile e-commerce has profoundly changed the daily consumption scene and become one of the main shopping methods. The impact of consumer perceived value on behavioral intention is discussed and the role of online word-of-mouth in it.

Leatham believes that the perceived value of consumers is the main factor that determines consumers' purchase intentions and purchase decisions. Consumers usually measure the gains and losses of a certain commodity under the constraints of purchase costs, knowledge reserves, and spending power. Then they will buy the goods with the greatest perceived value **Error! Reference source not found.** Sweeney et al developed the consumer perceived value scale (PERVAL), which measures the influencing factors of consumers' purchase intention and purchase behavior under the traditional retail model, and measures the perceived value of customers from four dimensions of emotion, society, quality, and price **Error! Reference source not found.** Dong Dahai and Yang Yi divide the perceived value of consumers under the network environment into three categories: outcome value, procedural value, and emotional value, and build a three-part model of the perceived value of consumers **Error! Reference source not found.** According to fan Xiucheng and Luo Haicheng, the perceived value of consumers is the subjective cognition of the specific value brought by the products or

Article history:

Received (October 26, 2019), Review Result (December 7, 2019), Accepted (February 19, 2020)

services provided by the sellers **Error! Reference source not found.** Therefore, based on the above research results, this study believes that perceived value belongs to the category of subjective impression, which is the overall evaluation of consumers on the utility of products or services from the perspective of perceived gains and perceived losses **Error! Reference source not found.** The perceived value of consumers is divided into two dimensions: functional value and emotional value to explore the impact on behavioral intention.

2. Research hypotheses

2.1. Impact of consumer perceived value on behavioral intentions

For large amounts of imported goods, consumers will not only weigh the gains and losses of purchasing this product or service but also consider the repercussions caused by the use of the product and whether they reflect their value and status.

No matter whether it is a subjective purchase or an objective purchase, consumers will more or less collect external evaluation information to support their decision-making. The intensity and frequency of external evaluation information will affect consumer value judgment and affect consumer behavior choices.

When a product or service meets the requirements of consumers, consumers often recommend it to friends and relatives and make positive comments on the platform, adopting active dissemination intentions.

Yang Qiang analyzed 397 consumer samples and found that consumer functional value and emotional value have a positive impact on impulsive buying behavior.

Based on the perspective of customers 'perceived value, Li Xianguo found that the perceived value of virtual brand communities directly affects consumers' willingness to buy new products.

Based on the above analysis, the following hypotheses are proposed:

H1a: Consumer functional value has a positive effect on the repurchase intention.

H1b: Consumer emotional value has a positive effect on repurchase intention.

H1c: Consumer functional value has a positive effect on communication intentions.

H1d: Consumer emotional value has a positive effect on communication intention.

2.2. The role of online word-of-mouth

Due to the prevalence of circle culture in China, the information asymmetry between consumers and manufacturers caused by the differences in the social and economic environment is more common. Compared with western countries, the impact of informal communication is greater **Error! Reference source not found.** The rapid emergence and disappearance of internet-famous goods is a good example. Hossain et al. Found that effective communication and relationship strength had a significant positive impact on the spread of online word-of-mouth. Yen CLA et al found that good evaluation is hard to buy **Error! Reference source not found.** Positive online word-of-mouth is more obtained by excellent product quality and performance. Zhang Hongyu and other researchers found that the number of word-of-mouth, word-of-mouth rating, and negative word-of-mouth can partially affect the online behavior of consumers **Error! Reference source not found.** Based on social relationship theory and SO-R model analysis, Wang Jian Jun et al. found that strange word-

of-mouth has a significant positive impact on consumers' perceived value and purchase willingness **Error! Reference source not found.**

Studies by Zuo Wenming found that the quality and quantity of online word-of-mouth affect purchase intentions **Error! Reference source not found.** Based on the above analysis, the following hypothesis is proposed:

H2a: Online word-of-mouth will regulate the relationship between consumer functional value and repurchase intention

H2b: Online word-of-mouth will regulate the relationship between consumer emotional value and repurchase intention.

H2c: Online word-of-mouth will regulate the relationship between consumer functional value and communication intention.

H2d: Online word-of-mouth will regulate the relationship between consumer emotional value and communication intention.

3. Research design and methods

3.1. Sample description

Empirical research is conducted through questionnaire surveys. Firstly, the survey questionnaire is designed to include basic information and variable information required for this study; secondly, issue it using E-mail, questionnaire, and network platform depending on the support of the project; finally, conduct statistics and analysis on the qualified questionnaire. A total of 720 questionnaires were distributed, 447 were recovered, and the recovery rate was 62.1%. Excluding the unqualified questionnaires, a total of 326 valid questionnaires were obtained. In the final sample, females accounted for 56% and men 43.4%. From their education, 48.6% were undergraduates 31.4% were junior colleges; youth were the mainstay, with 40.7% of 18-26 years old and 36.2% of 27-35 years old.

3.2. Variable measurement

The perceived value scale of variable measurement mainly refers to the perceived value scales of Sweeney et al **Error! Reference source not found.** and Li Xianguo, etc. **Error! Reference source not found.** And the perceived value scale is appropriately modified in the context of mobile e-commerce, including two dimensions: functional value and emotional value. The functional value is obtained by five items, such as the powerful function of the purchased goods, the ability of the purchased goods to meet my functional needs, and so on. The emotional value is obtained by five items, such as "using the goods to make me feel happy" and "the goods to make me very satisfied" A total of 10 items are used for measurement. Online word-of-mouth is measured from two dimensions: the number of word-of-mouth and the quality of word-of-mouth. Referring to the scale designed by a fan, and Huang Ying, the number of word-of-mouth refers to the number of word-of-mouth that can meet the consumer's demand for product understanding, measured by two items; the quality of word-of-mouth describes the relevance, comprehensiveness, and timeliness of online word-of-mouth, measured by five items in total. The measurement of behavioral intention includes two dimensions: repurchase intention and communication intention. Referring to the scale design of Hu Yaoying et al **Error! Reference source not found.**, the repurchase intention uses two items: "I would like to come back to the online store for shopping", "I will come to

the online store again for similar products”; the communication intention uses two items: “I will introduce the online store to others” and “I will introduce the product to others”. All items are scored with a Likert 7-point scale. 1 means “totally disagree”, 7 means “totally agree”, 4 means “unable to judge”.

3.3. Validity, reliability, and integration tests

As shown in [Table 1], the cumulative explanatory amounts of factor decomposition for each variable are 0.68, 0.53, 0.67, 0.55, and 0.61, all variables are greater than 0.50. It means that the five variables have good discriminant validity. The Cronbach’s coefficients of each variable were 0.85, 0.74, 0.79, 0.71, and 0.72, all of the variables were greater than 0.70, indicating the high reliability of the five variables. In team data aggregation test, the intragroup consistency coefficient r_{wg} of the 5 variables were 0.82, 0.79, 0.80, 0.72, 0.74, all greater than 0.70, and the F values were 2.94, 2.26, 2.67, 2.04, 2.18. Both are above the 0.01 significant level, indicating that the level of intragroup consistency is better. Therefore, the five variables of functional value, emotional value, online word-of-mouth, repurchase intention, and communication intention can be aggregated to the team level.

Table 1. Analysis results of variables

Variable	Factor decomposition cumulative interpretation amount	Alpha coefficient	rwg	F value
Functional value	0.68	0.85	0.82	2.94**
Emotional value	0.53	0.74	0.79	2.26**
Online word-of-mouth	0.67	0.79	0.80	2.67**
Repurchase intention	0.55	0.71	0.72	2.04**
Propagation intention	0.61	0.72	0.74	2.18**

Note: ** $p < 0.01$

4. Result in analysis

[Table 2] shows the Pearson coefficients of each study variable. The maximum Pearson coefficient between the variables is 0.534, which does not reach the multicollinearity threshold of 0.75, so the multicollinearity among the variables is not significant. According to the results, it was found that functional value ($r=0.534$, $p=0.01$) showed a positive correlation with repurchase intention. functional value ($r=0.492$, $p<0.01$) showed a positive correlation with communication intention; emotional value ($r=0.469$, $p<001$) showed a positive correlation with the repurchase intention, and the emotional value ($r=0.485$, $p<0.01$) was positively correlated with the communication intention; the adjustment variable - online word-of-mouth ($r=0.376$, $p<0.01$) was positively correlated with the repurchase intention. online word-of-mouth ($n=0.448$, $p<0.01$) showed a positive correlation with the communication intention. The proposed research hypothesis has been preliminarily tested, which provides empirical support for the next step.

Table 2. Correlation factors among variables

Variable	Functional value	Emotional value	Online word-of-mouth	Repurchase intention	Propagation intention
Functional value	1				
Emotional value	0.189*	1			
Online word-of-mouth	0.348**	0.325**	1		
Repurchase intention	0.534**	0.469**	0.376**	1	

Propagation intention	0.492**	0.485**	0.448**	0.210*	1
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Note: ** $p < 0.01$; * $p < 0.05$

To obtain more convincing empirical results, the data was further analyzed by multiple regression methods. To try to avoid the negative effects caused by multiple co-linearity problems, the consumer’s functional value, emotional value, online word-of-mouth, repurchase intention, and communication intention were centralized. The product term is the result obtained by multiplying the variables after centralization. Specifically, as shown in [Table 3], four models are included. Model 1 and Model 3. For functional value, emotional value, and online word-of-mouth were regressed by Model 1 and Model 3. In Model 2 and Model 4, the product term of moderator variable online word-of-mouth and two independent variables of functional value and emotional value are introduced. In the model, R2 increases with the increase of the variables, and the F value is significant. It indicates that each model is valid, and the explanatory power of the model is further enhanced with the addition of online word-of-mouth moderator variables.

Table 3. Multi-level regression analysis results

Variable		Dependent variable: repurchase intention		Dependent variable: Propagation intention	
		Model 1	Model 2	Model 3	Model 4
Independent variable	Functional value	0.389**	0.365**	0.261**	0.202**
	Emotional value	0.311**	0.142*	0.238**	0.127*
Moderator	Online word-of-mouth	0.274**	0.276**	0.366**	0.314**
Product	Functional value × online word-of-mouth	-	0.177*	-	0.143*
	Emotional value × online word-of-mouth	-	0.141*	-	0.122*
-	R2	0.478**	0.590**	0.522**	0.712**
	ΔR2	0.478**	0.112*	0.522**	0.190*
	F value	28.642	16.445	36.274	24.123

** $p < 0.01$, * $p < 0.05$

In Model 1, the effects of functional value, emotional value, and online word-of-mouth on the intention of reconstruction were analyzed, and it was found that the functional value ($\beta=0.389$, $p < 0.001$) and emotional value ($\beta=0.311$, $p < 0.01$) were significantly positively correlated to the reconstruction intention. The strongest predictive ability was the functional value. H_{a1} and H_{1b} were verified. This shows that when consumers’ functional value and emotional value requirements are met, the reconstruction intention can be enhanced.

Online word-of-mouth ($\beta=0.274$, $p < 0.01$) is significantly positively correlated with the intention of reconstruction, indicating that the quantity and quality of online word-of-mouth, significantly affect consumers’ intention to reconstruct.

Model 2 showed that all variables can explain at least a 59.0% change in reconstruction intention, the product term of functional value and online word-of-mouth ($\beta=0.1$, $p < 0.05$) is significantly positively correlated with reconstruction intention. and the product of emotional value and online word-of-mouth ($\beta=0.141$, $p < 0.05$) was significantly positively related to the reconstruction intention, indicating that online word-of-mouth positively regulates the impact of functional value and emotional value on the reconstruction intention, and it can be strengthened with the increase of the online word-of-mouth intensity. H_{2a} and H_{2b} are verified.

In Model 3, the effects of functional value, emotional value, and online word-of-mouth on the communication intention were analyzed. The results found that: the functional value ($\beta=0.261$, $p < 0.001$), the emotional value ($\beta=0.238$, $p < 0.01$) were significantly positively

correlated to the communication intention. Functional value has the strongest predictive ability. Thus, H1c and H1d have been verified, indicating that when the functional value and emotional value requirements are met, it can enhance consumers' intention to spread this product or service.

Online word-of-mouth ($\beta=0.366$, $p<0.01$) was significantly positively related to communication intentions, indicating that the quantity and quality of online word-of-mouth communication significantly affected consumers' communication intentions.

It can be seen from Model 4 that all variables can explain at least a 71.2% change in communication intention. The product term of functional value and online word-of-mouth ($\beta=0.143$, $p<0.05$) is significantly positively related to communication intention. The product term of emotional value and online word-of-mouth ($\beta=0.122$, $p<0.05$) is significantly positively correlated with communication intention, indicating that online word-of-mouth positively regulates the impact of functional value and emotional value on communication intention, and this relationship can be strengthened with the increase of online word-of-mouth. H2c and H2d get verified.

5. Conclusion

In the background of mobile e-commerce, online word-of-mouth is increasingly affecting people's consumption behavior. From the perspective of consumer perceived value, this paper explores the impact of functional value and emotional value on consumer reconstruction intentions, communication intentions, and online word-of-mouth.

As the results, Firstly, the functional value and emotional value have a significant positive impact on the reconstruction intention, indicating that when consumers' requirements for functional value and emotional value are met, they will need the same or similar products and services in the future, and will continue to purchase from same corporate which led to restructuring.

Secondly, online word-of-mouth can positively regulate the relationship between functional value, emotional value, and reconstruction intention. It shows that e-commerce is becoming more and more developed today, online word-of-mouth is playing an increasingly important role in the marketing of enterprises, which can help enterprises retain repeat customers.

Thirdly, functional value and emotional value have a significant positive impact on communication intentions, indicating that when consumers' requirements for functional value and emotional value are met, people with the same requirements will be actively recommended for communication in the future.

Fourthly, online word-of-mouth can positively regulate the relationship between functional value, emotional value, and communication intention, indicating that the good online word-of-mouth obtained by the consumer's perceived value evaluation can bring new customers to the company as the communication intention increases.

References

- [1] V. A. Zeithaml, "Consumer perceptions of price, quality, and value: a means-end model and synthesis of evidence," *Journal of Marketing*, vol.52, no.3, pp.2-22, (1988) DOI: 10.1177/002224298805200302
- [2] J. C. Sweeney and G. N. Soutar, "Consumer perceived value: The development of a multiple item scale," *Journal of Retailing*, vol.77, no.2, pp.203-220, (2001) DOI:10.1016/S0022-4359(01)00041-0
- [3] D. Dong and Y. Yang, "Theoretic analysis of perceived value by consumers under internet environment," *Chinese Journal of Management*, vol.5, no.6, pp.856-861, (2008)

- [4] X. Fan and H. Luo, "Study on the competitiveness of service firms: A customer perceived value perspective," *Nankai Business Review*, vol.6, no.6, pp.41-45, **(2003)**
- [5] Q. Yang, Y. Zhang, and C. Liu, "An empirical research about the impact of perceived value and face threat on the consumer's impulsive purchase behavior," *Forecasting*, vol.33, no.6, pp.8-14, **(2014)**
- [6] D. Wang and J. Wang, "Research on the influence mechanism of negative IWOM on brand switching behavior: Perspective of virtual community involvement," *China Soft Science*, vol.2013, no.11, pp.112-122, **(2013)**
- [7] C. L. A. Yen and C. H. H. Tang, "The effects of hotel attribute performance on electronic word-of-mouth (eWOM) behaviors," *International Journal of Hospitality Management*, vol.76, no.A, pp.9-18, **(2019)** DOI: 0.1016/j.ijhm.2018.03.006
- [8] H. Zhang, T. Zhou, and H. Yan, "Research on the impact of online word of mouth on consumers' online behavior." *Management World*, vol.2014, no.3, pp.178-179, **(2014)** DOI: 10.19744/j.cnki.11-1235/f.2014.03.020
- [9] J. Wang, L. Wang, and M. Wang, "How eWOM and perceived value influence purchase intention: An investigation of mediation-moderation effects," *Journal of Industrial Engineering and Engineering Management*, vol.33, no.4, pp.80-87, **(2019)**
- [10] W. Zuo, X. Wang, and C. Fan, "Relationship between the electronic word of mouth and purchase intention in social commerce environment: A social capital perspective," *Nankai Business Review*, vol.17, no.4, pp.140-150, **(2014)**
- [11] X. Li, N. Chen, and X. Zhang, "The influence mechanism of virtual brand community's perceived value on purchase intention of a new product - Based on the double mediation of group identity and brand identity," *China Business and Market*, vol.31, no.2, pp.93-100, **(2017)** DOI: 10.14089/j.cnki.cn11-3664/f.2017.02.012
- [12] Y. Hu, Y. Li, and X. Hu, "Research on the effect of different attribution on customer subsequent behavioral intention after the failure of online shopping services," *Soft Science*, vol.30, no.7, pp.113-117, **(2016)** DOI: 10.13956/j.ss.1001-8409.2016.07.25

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