

# The Mediating Effect of Perceived Value on Online Reviews' Purchasing Intention--Perspective of Prospect Theory

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#### **ABSTRACT**

Based on prospect theory, this paper studies the influence of online comments on consumers' perceived value and purchase intention from the perspective of bounded rationality, analyzes the mediating role of consumers' perceived value, understands the psychological changes of consumers, and enriches the theoretical framework of consumer purchase behavior research. Consumer perceived value was measured based on prospect theory. A model of online reviews' influence on consumers' purchase intention based on the mediating effect of perceived value was proposed. A scenario simulation experiment was conducted in the form of questionnaire to test the proposed model. Consumer perceived value measured based on prospect theory has a complete mediating effect between online reviews and consumers' purchase intention. The quantity, quality, emotional orientation and source credibility of online reviews significantly affect consumers' perceived value, and thus their purchase intention.

Keywords: online review, purchase intention, Prospect Theory, perceived value, the mediation effect.

# 1. INTRODUCTION

With the continuous development of the Internet, online shopping has become one of the most important shopping ways in people's daily life. Consumers use computers, mobile phones and other mobile devices to do online shopping, which greatly reduces the time and distance of traditional shopping, and improves the speed and efficiency of consumers' purchase of goods. At the same time, the virtual nature of the network increases the uncertainty of commodity purchase, bringing consumers certain purchase risks. Online reviews are comments made by consumers on goods purchased after they have confirmed receipt. When consumers are looking for a target product and want to know the authenticity of the product, they will browse the online comments of the product to understand the overall feeling of consumers who have bought the product. Online comments become an important channel for consumers to know about the product and an important factor affecting consumers to make purchase decisions. At present, study the influence of online reviews on consumer purchase intention by the wide attention of scholars, for example, Du used the introduction of attribution theory to explore the negative comments on potential customers online purchase intention influence mechanism and internal mechanism from negative online reviews and error severity two perspective[1]; Chen used perceived value as an intermediary and study the influence of proportion of negative comments on consumers' purchase intention under different product types<sup>[2]</sup>; Carla explored how contradictory online reviews affect consumers' purchasing decisions by using the dual-process theory<sup>[3]</sup>; Shan studied the influence of celebrity endorsements and online reviews on women's purchasing intention based on AIDMA and AISAS model<sup>[4]</sup>, Most scholars adopted experimental methods to verify the significance of online reviews' influence on purchasing intention, although some scholars also realized the bounded rationality of consumers' purchasing decisions in their studies. For example, Zhang used sentiment analysis to study the multi-attribute online comments of commodities and explore consumers' commodity selection methods based on the prospect theory<sup>[5]</sup>; Yang studied the difference of

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the influence degree of expert comments of the same degree on investment decisions based on prospect theory<sup>[6]</sup>; Considering the bounded rationality of consumers, Yang studied the influence mechanism of negative online comments on consumers' purchase intention by taking consumers' personal characteristics as a moderating variable<sup>[7]</sup>, but they did not mention how the micro psychological changes of consumers affect the change process of purchase intention. Therefore, from the perspective of consumers' bounded rationality, this paper intends to use the prospect value calculated by the value function and weight function of prospect theory to measure consumers' perceived value, explore its intermediary effect between online comments and purchase intention, reveal the relationship between the influencing factors of consumers' purchase intention, and further enrich and improve the theoretical framework of consumer purchase behavior research.

# 2. THEORETICAL BASIS AND MODEL CONSTRUCTION

# 2.1. Conceptual Model Construction

#### 2.1.1. SOR model

The Stimulus -- Organism -- Response model is developed from the SR model, which believes that external environment stimulates individuals to respond. Later generations have added the mediator O to the SR model, which is used to describe individual psychological changes, and the individual's reaction behavior is affected[8][9]. SOR model explains the impact of stimuli in the physical environment on individuals, and can well explain individual behavior. Later, it was widely used in the field of marketing to study consumer behavior. With the development of the Internet, the content of SOR model is also gradually enriched, "stimulation" is extended from traditional environment to the network environment<sup>[10]</sup>, "body" is extended from individual positive or negative emotions to consumers' perceived value, perceived usefulness and satisfaction<sup>[11]</sup>, and "response" is extended from tendency and avoidance behavior to individual participation behavior<sup>[12]</sup>, purchase behavior<sup>[13]</sup>, purchase intention<sup>[14]</sup>.

# 2.1.2. Conceptual model of mediating effect of perceived value

Scholars use SOR model to explain that consumers' purchasing behavior is caused by both psychological factors and external environmental factors. Under the stimulation of various factors, consumers will have psychological changes and have convergence or avoidance behaviors, so as to make decisions or intentions about whether to purchase goods<sup>[15]</sup>. SOR model can well explain the internal mechanism of consumers' purchase intention and better understand the psychological factors

of consumers' purchase intention. Based on this, as shown in figure 1, this paper expands SOR model and builds customer perceived value as the mediation on the impact of online reviews on purchase intention of the conceptual model: the online comments as stimulus, the purchase intention in response, consumers' perceptions of value as the intermediary variables to illustrate the psychological changes of consumers.

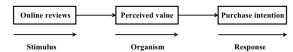


Figure 1 A conceptual model of the influence of online reviews on purchase intention mediated by consumers' perceived value

## 2.2. Measurement Model Construction

## 2.2.1. Prospect theory

Kahneman and Tversky proposed the prospect theory, which means that people will be affected by different social and psychological factors and make decisions in uncertain situations that are not completely rational. They also proposed that people prefer risks when facing losses and are risk-averse when facing gains. And the pain of loss is more sensitive than the joy of gain<sup>[16]</sup>. In the decision-making process of the prospect theory, people choose the best one among many alternatives as the result, and this process is divided into two stages: editing stage and evaluation stage.

Editing stage: editing is a preliminary analysis and simplification of different prospects, and then re-coding them. Different prospects have different outcomes, and this outcome depends not on the final gain or loss, but on the gain or loss relative to the reference point. The selection of reference points will have a great influence on the decision result, so the selection of reference points is very important.

Evaluation stage: the evaluation stage is based on the results of the editing stage for further calculation, through the value function v(x) and weight function  $\pi(x)$  constitute the prospect value. The foreground value is usually represented by V, and the formula is

$$V = \sum_{i=1}^{n} v(x_i) \pi(x_i)$$
 (1)

①Value function. The value function is the subjective perceived value generated by decision makers according to gains or losses. Decision makers show risk preference when facing losses, so the loss region below the reference point is convex function (reflection effect). Decision makers are risk averse when they face returns, so the return region above the reference point shows a concave function (definite effect). In addition, decision makers are more sensitive to losses than gains, so the slope of value



function in loss region is larger than gain region (avoiding loss effect), and its power function form is as follows<sup>[7]</sup>:

$$v(x_i) = \begin{cases} \Delta x_i^{\alpha} & \Delta x_i \ge 0 \\ -\theta(-\Delta x_i)^{\beta} & \Delta x_i < 0 \end{cases} \quad i = 1, 2, ..., n \quad (2)$$

Where,  $\triangle$  x is the degree of the attribute value deviating from the reference point. When  $\triangle$  x $\ge$ 0, it represents the benefit, and when  $\triangle$ x<0, it represents the loss. The parameters  $0 < \alpha, \beta < 1$  respectively reflect the sensitivity of decision makers to gains and losses. The parameter  $\theta$  represents the loss avoidance coefficient, and when  $\theta > 1$ , it indicates that decision makers are more sensitive to losses<sup>[17]</sup>. Kahneman and Tversky obtained  $\alpha = \beta = 0.88$ ,  $\theta = 2.55$  through experiments<sup>[16]</sup>.

②Weight function. The weight function replaces the objective probability with the change of overall utility brought by the probability of a single event in the prospect, and expresses the decision maker's judgment on the subjective weight of the alternative. The formula is as follows:

$$\pi(p_i) = \begin{cases} \frac{(p_i)^{\gamma}}{[(p_i)^{\gamma} + (1-p_i)^{\gamma}]^{\frac{1}{\gamma}}} & \Delta x_i \ge 0\\ \frac{(p_i)^{\delta}}{[(p_i)^{\delta} + (1-p_i)^{\delta}]^{\frac{1}{\delta}}} & \Delta x_i < 0 \end{cases} \quad i = 1, 2, ..., n \quad (3)$$

Where,  $\gamma$  is the risk attitude coefficient of decision maker when he perceives gain,  $\delta$  is the risk attitude coefficient when he perceives loss,  $\gamma$  and  $\delta$  are the curvature that determines weight.  $p_i$  represents the objective probability of event occurrence. The smaller the

value is, the greater the bending degree of weight function will be, and the overestimation of events with small probability will occur. In general,  $\gamma$ =0.61,  $\delta$ =0.69<sup>[16]</sup>.

# 2.2.2. A measurement model of perceived value

reflects the psychological Prospect theory characteristics and behavioral characteristics of bounded rationality decision-makers in making decisions, which refer to the utility brought by events to decision-makers, and makes decisions based on the psychological perceived utility<sup>[16]</sup>. Consumers' perceived value also makes a final comprehensive evaluation of services or products from a psychological perspective, describing a subjective feeling or a kind of utility<sup>[18]</sup>. Consumers obtain perceived utility by subjectively feeling their value. In both cases, decisionmakers perceive the utility of something dynamically and subjectively from the psychological perspective and express their preference for something. In addition, prospect theory believes that the subjective attitude of decision-makers makes them make bounded rational decisions, while the perceived value of consumers is the perception of profit and loss of products or services purchased, not direct profit and loss. Such perception of profit and loss is bounded rational, so the acquisition of the perceived value of consumers conforms to the prospect theory<sup>[19]</sup>. Therefore, this paper uses the prospect value of consumers to measure the perceived value of consumers, and constructs the measurement model of perceived value according to the decision-making process of prospect theory, as shown in Figure 2.

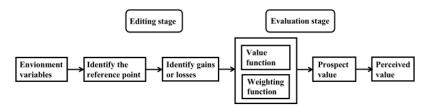


Figure 2 Measurement model of perceived value constructed by decision process based on prospect theory

# 3. RESEARCH HYPOTHESIS AND EXPERIMENTAL DESIGN

## 3.1. Research Hypothesis

The development of online purchasing increases the uncertainty of products, so online shopping platforms require consumers to evaluate products only after they have purchased them. Online reviews are the consumers buy products published to the evaluation of the product, but the content of online reviews on consumers' subjective feelings, which can be the default, do not comment or write your true feeling seriously, so how much the number of comments can reflect the growing popularity of shops, the quality of online comments that effective comments can reflect the authenticity of the product, The emotional orientation of online reviews indicates consumers'

emotions, and the credibility of the information source of online reviews can be used as a standard for consumers to measure the authenticity of reviews, which means that online reviews can help consumers understand unknown products and reduce uncertainty. Perceived value of consumers refers to consumers' preference and evaluation of products from the psychological perspective in feature attributes, efficacy and experience<sup>[20]</sup>, and is the overall internal feeling of consumers towards products. When consumers browse products, different forms of online comments have different influences on consumers' internal perception. When consumers perceive the benefits they can obtain, they will enhance their perceived value<sup>[21]</sup>. Therefore, the hypothesis of measuring perceived value based on prospect theory is proposed:

H1a: The number of online reviews has a significant impact on consumers' perceived value.



H1b: The quality of online reviews has a significant impact on consumers' perceived value.

H1c: The emotional tendency in online reviews has a significant impact on consumers' perceived value.

H1d: The credibility of information sources in online reviews has a significant impact on consumers' perceived value.

Perceived value is the overall evaluation of the product by consumers, and the purchase intention of consumers reflects the degree of preference of consumers to the product. A higher purchase intention of consumers indicates that they perceive a higher income from the purchase of the product. Perceived value is an important influencing factor for consumers to purchase products<sup>[22]</sup>. Higher perceived value makes consumers recognize products more, thus consumers have stronger purchase intention. Therefore, the hypothesis is proposed:

H2: Consumers' perceived value measured based on prospect theory has a significant impact on their purchase intention.

In summary, hypotheses are proposed as follows:

H3: Consumer perceived value measured based on prospect theory plays a mediating role in the relationship between online reviews and consumers' purchase intention.

# 3.2. The Experiment Design

According to the 47th Statistical Report on The Development of Internet in China released by China Internet Network Information Center (CNNIC) in February 2021, the number of Internet users under 40 years old exceeds 50%, and students account for the largest proportion of Internet users, accounting for about 21.0%<sup>[23]</sup>. Therefore, this study mainly focuses on college students and postgraduates, supplemented by other Internet users. With the development of the Internet, people's demand for mobile phones is gradually increasing. Huawei mobile phones, as the leader of domestic mobile phones, are representative to a certain extent. Therefore, this study takes Huawei P40 as the target commodity stimulus of experimental research. In order to make the subjects feel the real purchasing environment, this paper designed the same online comment interface of Jingdong, and randomly obtained the online comments of four stores of Jingdong, as shown in Figure 3. In this questionnaire option design, Likert five-component scale method was adopted to measure the purchase intention of the four stores in terms of the quantity, quality, emotional inclination and information source credibility of the key online reviews.

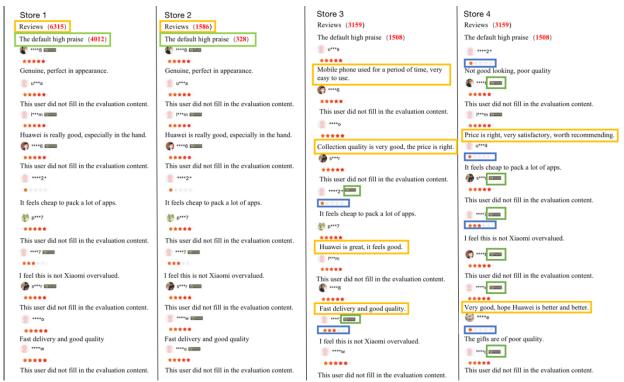


Figure 3 Online review display of four stores



#### 4. DATA ANALYSIS AND CONCLUSIONS

## 4.1. Descriptive Statistical Analysis

In this study, data were collected mainly by issuing questionnaire stars, and 206 questionnaires were collected in total. A total of 190 valid questionnaires were obtained by screening the questionnaires and excluding those with exactly the same options and those whose filling time was less than 40 seconds, with an effective rate of 92%. There was no significant difference in the proportion of male and female in this experiment. Males accounted for 45.8% and females accounted for 54.2%. Only 6.3% of the participants are over 40 years old, which is consistent with the CNNIC report that more than 50% of Internet users are under 40 years old. In this experiment, the educational level of the subjects is concentrated in undergraduate and postgraduate level or above, which is related to the subjects of this questionnaire. The subjects in the valid questionnaire all have online shopping experience, most of them have more than 5 years of online shopping experience, and they browse shopping websites for more than one hour in the last week, and also they have online shopping behavior in the last year. From the characteristics of the whole sample, the subjects in the valid questionnaire meet the requirements of this research.

## 4.2. Reliability and Validity Test

Reliability analysis can reflect the stability of scale data, and Cronbach's  $\alpha$  coefficient is usually used to analyze the stability of scale. SPSS software was used to analyze the reliability of valid data in the questionnaire, and the results were shown in Table 1. The reliability value of store 1 was 0.874, store 2 was 0.921, store 3 was 0.891, and store 4 was 0.912, indicating high internal reliability and high reliability of the questionnaire.

Validity analysis measures the accuracy of data. When the validity value is higher, the correctness is higher. In order to test whether each variable is suitable for factor analysis, KMO and Bartlett spherical test are performed on the variables and the results obtained by SPSS software are shown in Table 1. The KMO value of online purchase intention of each store is greater than 0.7, which meets the requirements of KMO value, and Bartlett spherical test is 0.000. The significant level of 0.05 indicated that the questionnaire data were suitable for factor analysis. Principal component analysis was used to analyze the online purchase intention factors of each store, and the cumulative variance contribution rates were all greater than 70%, and the factor load of each item was greater than 0.8, indicating that the structure validity of the measurement scale was good.

	Cronbach's Alpha	КМО	Bartlett spherical test	Cumulative variance contribution rate ( % )
Store 1	0.874	0.736	0.000	90.455
Store 2	0.921	0.763	0.000	93.297
Store 3	0.891	0.746	0.000	91.404
Store 4	0.912	0.758	0.000	92.713

Table1. Reliability and Validity Analysis Results

# 4.3. Acquisition of Perceived Value

This paper uses prospect value to measure perceived value based on prospect theory. According to the decision idea of prospect theory, the prospect value of bounded rationality consumers is calculated and then regarded as the perceived value of consumers.

# 4.3.1. The calculation procedure of perceived value

Firstly, the decision-making process needs to be symbolized. Secondly, the reference point, value function and weight function of consumers should be quantitatively analyzed, and then the prospect value can be calculated. Finally, the prospect value is regarded as the perceived value of consumers. Suppose there are malternative stores in the consumer purchase plan, denoted as  $A=\{a_1,a_2,...,a_m\}$ ,  $a_i$  represents the i alternative store,

i=1,2,...,m. There are n decision attributes, denoted as  $S=\{s_1,s_2,...,s_n\}$ ,  $s_j$  represents the j attribute, j=1,2,...,n. The decision weight is denoted as  $W=\{w_1,w_2,...,w_n\}$ ,  $w_j$  represents the decision weight of attribute  $s_j$ ,  $w_j>0$ , j=1,2,..., n. The decision matrix is denoted as  $R=(r_{ij})_{mn}$ , and  $r_{ij}$  represents the attribute value of scheme  $a_i$  regarding attribute  $s_i$ . The operation steps are as follows:

①Decision matrix normalization: Decision attributes include the amount, quality, emotional inclination and source credibility of online comments. In order to avoid the influence of different dimensions on decision making, the decision matrix  $R=(r_{ij})_{mn}$  should be normalized. In this paper, "Min-Max standardization method" is used to normalize the decision matrix, and the new decision matrix is denoted as  $X=(x_{ij})_{mn}$ . The calculation formula is as follows:

$$x_{ij} = \frac{r_{ij} - min(r_{ij})}{max(r_{ij}) - min(r_{ij})}$$

$$\tag{4}$$



② Identify the reference point: In prospect theory, profit or loss should be judged by reference points, so this paper selects the mean value of each attribute as the reference point. Write the reference point as  $C=\{c_1,c_2,...,c_n\}$ ,  $c_j$  is represented as the reference point of attribute  $s_j$ , j=1,2,...,n. The calculation formula is as follows:

$$c_j = \frac{1}{m} \sum_{i=1}^{m} x_{ij}$$
 (5)

③ The calculation of value function and weight function: The degree to which the attribute value  $s_j$  deviates from the reference point  $c_j$  is denoted as  $\triangle x_{ij}$ , and the calculation formula is:

$$\Delta x_{ij} = x_{ij} - c_j \tag{6}$$

According to formula (6) and formula (2), the value function  $v(\triangle x_{ij})$  of scheme  $a_i$  in attribute  $s_j$  can be obtained.

The weight function is jointly determined by the decision maker's risk attitude and objective probability under bounded rationality. Objective probability is the probability that consumers are satisfied with each attribute of a commodity. In this paper, the objective weight  $p_j$  of different attributes is calculated by using the coefficient of variation method. The coefficient of variation is calculated by dividing the average value  $\mu_j$  and standard deviation  $\sigma_j$  of the attributes of different stores by the sum of the coefficient of variation.

$$p_j = \frac{\sigma_j/\mu_j}{\sum (\sigma_j/\mu_j)} \tag{7}$$

(4) Calculation of perceived value: According to formula (1), the prospect value of each store can be calculated.

# 4.3.2. Case calculation of perceived value

①Key information was extracted according to the online comments of the four alternative stores in the preset experimental situation: The information is shown in Table 2:

**Table 2.** Alternative Store Information Table

	quantity	quality	emotional inclination	Source credibility
Store 1	6315	2303	3.8	0.5
Store 2	1586	1258	3.8	0.5
Store 3	3159	1651	4	0.2
Store 4	3159	1651	2.7	0.6

The initial decision matrix R1 can be obtained from the alternative store information table in Table 2. Decision matrix X1 can be obtained after normalization by formula (4).

$$R1 = \begin{bmatrix} 6315 & 1586 & 3159 & 3159 \\ 2303 & 1258 & 1651 & 1651 \\ 3.8 & 3.8 & 4.0 & 2.7 \\ 0.5 & 0.5 & 0.2 & 0.6 \\ \end{bmatrix}$$

$$X1 = \begin{bmatrix} 1 & 0 & 0.33 & 0.33 \\ 1 & 0 & 0.38 & 0.38 \\ 0.85 & 0.85 & 1 & 0 \\ 0.75 & 0.75 & 0 & 1 \end{bmatrix}$$

According to formula (5), the set of reference points under each attribute can be written as C1: C1= $\{0.415, 0.44, 0.675, 0.625\}$ .

According to formula (6), formula (2) and formula (7), the value function  $v(\triangle x_{ij})$  of scheme  $a_i$  in attribute  $s_j$  and the objective weight  $p_j$  of different attributes can be obtained, as shown in Table 3.

**Table 3.** Value Functions of Different Attributes of Each Store

	Quantity	Quality	Emotional	
			inclination	credibility
Store 1	0.624	0.600	0.216	0.160
Store 2	-1.176	-1.238	0.216	0.160
Store 3	-0.291	-0.214	0.372	-1.686
Store 4	-0.291	-0.214	-1.804	0.422
Index weight	0.305	0.283	0.203	0.209

The set of decision weights can be calculated by formula (3). When  $\triangle x_{ij}>0$ , the decision weight is  $\pi^+(p)=\{0.321, 0.309, 0.263, 0.266\}$ , and when  $\triangle x_{ij}<0$ , the decision weight is  $\pi^-(p)=\{0.331, 0.316, 0.259, 0.264\}$ .

The prospect value of each store can be calculated according to Formula (1), and the results are as follows:

According to prospect theory, bounded rational consumers will choose the store with the highest prospect value to buy and they will choose the store 1. The other stores are ranked as store 3, store 4 and store 2 according to the foreground value.

②Randomly change the key information of the online reviews of the four alternative stores: The information is shown in Table 4:



**Table 4.** Changing The Information Table of The Reserve Store

	Quantity	Quality	Emotional inclination	
Store 1	3637	2187	3.8	0.3
Store 2	2958	2347	3.6	0.5
Store 3	3059	1751	4.2	0.3
Store 4	3059	1751	2.7	0.6

The initial decision matrix can be obtained from table 5. After normalization with formula (4), the reference point set under each attribute obtained from formula (5) is recorded as  $C2 = \{0.325, 0.433, 0.583, 0.418\}$ . According to formula (6), formula (2) and formula (7), the value function v ( $\triangle x_{ij}$ ) of scheme  $a_i$  in attribute  $s_j$  and the objective weight  $p_j$  of different attributes can be obtained, as shown in Table 5.

**Table 5.** Value Functions of Different Attributes of Each Store

	Quantity	Quality	Emotional inclination	Source credibility
Store 1	0.708	0.344	0.185	-1.184
Store 2	-0.948	0.607	0.028	0.297
Store 3	-0.550	-1.221	0.185	-1.184

Store 4	-0.550	-1.221	-1.586	0.621
Index weight	0.742	0.626	0.384	0.634

The set of decision weights can be calculated by Formula (3). When  $\triangle x_{ij}>0$ , the decision weight is  $\pi$   $^+(p)=\{0.562, 0.489, 0.362, 0.493\}$ , and when  $\triangle x_{ij}<0$ , the decision weight is  $\pi$   $^-(p)=\{0.620, 0.535, 0.382, 0.541\}$ .

The prospect value of each store can be calculated according to Formula (1), and the results are as follows:

Va1=-0.007, Va2=-0.134, Va3=-1.568, Va4=-1.294.

According to prospect theory, bounded rational consumers will choose the store with the highest prospect value to buy and they will choose the store 1. The other stores are ranked as store 2, store 4 and store 3 according to the foreground value.

# 4.4. Hypothesis Testing

In real life, every consumer cannot obtain objective probability by completely bounded rationality. In this paper, the subjective probability  $w_j$  in the questionnaire is used to replace objective probability  $p_j$ . According to the above calculation method of perceived value, the prospect value of each consumer to each store under different attributes under the prospect theory is calculated as their perceived value. Model 4 in the PROCESS plug-in of SPSS software is used to test whether consumers' perceived value plays a mediating role between online comments and purchase intention. The results are shown in Table 6.

Table 6. Test of Mediating Effect of Perceived Value

		LLCI	ULCI	Effect
Mediation	Constant	-0.0072	0.0118	-
	Independent variable	-0.0081	-0.0011	-
	Constant	6.8523	7.6114	-
Dependent	Mediation	5.4123	11.107	-
variable	Independent variable	-0.1891	0.0893	-
Total	Total effect		0.0536	-0.0878
Direct effect		-0.1891	0.0893	0.0499
Indirect effect		-0.0760	-0.0077	0.1868

As can be seen from Table 6, under 95% confidence interval, independent variables online reviews, including

the historical quantity, quality, emotional orientation and credibility of information source, have a significant linear



relationship with the perceived value of intermediary consumers (LLCI=-0.0081, ULCI=-0.0011, excluding 0). This result verifies the hypothesis hypothesis H1a, H1b, H1c, and H1d. There is a significant linear relationship between the intermediary perceived value and the dependent variable purchase intention (LLCI= 5.4123, ULCI=11.1077, excluding 0), which verifies hypothesis H2. The direct effect of online reviews on consumers' purchase intention is not significant (LLCI= -0.1891, ULCI=0.0893, including 0). The mediating effect of consumers' perceived value is significant (LLCI= -0.0760, ULCI=-0.0077, excluding 0), and the size of the mediating effect is 0.1868, indicating that consumers' perceived value plays a complete mediating role between online comments and consumers' purchase intention. The analysis results verify hypothesis H3.

# 4.5. Analysis of Experimental Results

Based on the mediating effect of perceived value, this study constructed a model of the influence of online comments on consumers' purchase intention. Based on this, hypotheses were put forward for many factors affecting consumers' purchase intention, which were verified through experiments. Through case calculation, psychological changes of consumers were understood and conclusions were drawn: (1) The quantity, quality, emotional orientation and information source credibility of online reviews significantly affect consumers' perceived value. Different factors of online reviews can enable consumers to learn more information about products to a certain extent, and thus significantly affect their perceived value of products; (2) Consumers' perceived value significantly affects their purchase intention. When consumers have a higher perceived value, it indicates that they have a higher degree of preference for the product, and thus have a higher purchase intention; (3) Consumers' perceived value measured based on the prospect theory plays a complete mediating role between online reviews and purchase intention. Consumers view different factors of online reviews and form different perceived values after evaluating the information in online reviews, thus affecting consumers' purchase intention; (4) When online reviews factors change, consumers of psychological reference point changes, consumers through comparison point of reference for the actual attribute values and the psychological assessment of gain or loss of awareness has also changed, resulting in the change of the value function and weight function, so the consumers' perceptions of value, produces different formed different purchase intention.

#### 5. CONCLUSIONS

From the perspective of consumer psychology, this study will be the prospect of the consumer purchase decision value as its perceived value, based on perceived value is constructed under the mediation effect influence customers purchase intention model, studies the online reviews on consumers' perceived value and purchase intention, to explore the perceived value in the intermediary effect between online reviews and purchase intention, Understanding the psychological changes of consumers enriches the theoretical framework of consumer buying behavior research.

However, the experimental situation designed in this study is displayed in the form of pictures, which is different from the real online shopping scene, and may cause some interference to the subjects. Therefore, experiments on simulated shopping websites can be considered in future studies. The commodities selected for study in this paper are too single, and consumers have different perceived values for different categories of commodities. Therefore, the types of commodities can be added as a moderator variable in future studies to increase the universality of research results.

#### **ACKNOWLEDGMENT**

We acknowledge support from National Natural Science Foundation of China Project "Research on Model Detection of Netizens' Negative Emotions in Emergencies" (No.71774084).

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