

*Research Article (July – December 2020)***Research on the effect of consumer value co-creation interaction behavior on purchase intention in social media——based on the medium effect of brand identification***Shengxuan Lin,**Chinese Graduate School, Panyapiwat Institute of Management E-mail: 77900418@qq.com**Yue He, Chinese Graduate School, Panyapiwat Institute of Management***Abstract**

Social media has been a key platform of marketing in reality. This paper researched the relationship among consumer value co-creation, brand identification and purchase intention on the logical respective of value co-created service, to announce the importance of consumer in value co-creation. It was hypothesized that consumer value co-creation interaction behavior has a positive effect on purchase intention, and consumer brand identification has medium effect between consumer value co-creation interaction behavior and purchase intention. Questionnaires were issued to Chinese consumer crowd, and a total of 608 valid questionnaires were recovered. SPSS24.0 and AMOS24.0 employed to do reliability analysis, exploratory factor analysis (EFA) and confirmatory factor analysis (CFA). For value co-creation interaction behavior, second order model, correlation and regression analysis were constructed, and check test was employed to validate the hypothesis.

The checked test result showed that consumer value co-creation interaction behavior has a positive effect on purchase intention, and consumer brand identification has medium effect between consumer value co-creation interaction behavior and purchase intention, which validated the hypothesis.

**Keywords:** *Social media; Consumer value co-creation; Purchase intention; Brand identification; Structure equation*

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## Introduction

In the passing years, social media has turned into a new domain for enterprises to serve customers (Kumar ,Chattaraman, Neghina, Skiera, Aksoy, Buoye&Henseler, 2013). Especially in China, where the Internet develops in leaps and bounds, the original business model has undergone revolutionary changes. Social media has constituted a vital part of the virtual brand community, Kao, Yang, Wu & Cheng(2016). Social media originates from the gridding of interpersonal relationships. Everyone is a point on the Internet, and people are closely connected with each other, with customers as the main body and communication being multidirectional, etc, Sawhney, Verona & Prandelli(2005).

Enterprises have been exploiting the role of social media to render it with the function of virtual brand community. Social media is characterized by instant communication, which enables customers to exchange information through contacts and establish sharing relationships (Kaplan & Haenlein, 2010; Kim, Jeong & Lee, 2010); while enterprises participate in the management of different stages of interaction between enterprises and customers, and the interaction between customers and other customers can give rise to new values , Maglio, Vargo, Caswell & Spohrer(2009). On the platform of social media, how to operate social media accounts, promote corporate philosophy, build corporate brand value and enhance customer attention have become the focus of attention of both enterprises and academia.

## Research Methods and Data Collection

Using the method of empirical research, this paper reaches the test results by doing literature review, constructing the research model to solve the practical problems and making relevant hypotheses, and then conducting data collection and data analysis. The specific process is to firstly adopt a mature scale that has been adopted in other network contexts, to revise the items of the measurement scale based on the specific content of this study, and to revise the items of the questionnaire again combined with the participation of 12 brand community users in a series of in-depth interviews. Then, two marketing scholars evaluate and give feedback on the measurement scale, and finally get the final version of the questionnaire suitable for China. The study follows the 5-point Likert scale, which is the most commonly used scale to measure the research structure. The respondents of the questionnaire are principally active social media groups, principally students, enterprise personnel, government agencies, etc., and the data are collected by means of paper questionnaires and online questionnaires. The data was collected from January to May 2019, and the survey area was as wide as possible and the population level covered was as comprehensive as possible. The questionnaire designed in this paper consists of 23 items, 657 of which were submitted and recovered, 607 of

which were valid after excluding invalid questionnaires, with a recovery rate of 92.3%. Finally, SPSS24.0 and AMOS24.0 statistical analysis software were used for data processing.

### Literature review and hypothesis presentation

#### 3.1 Correlation between Interactive Behavior of Consumer Value Co-creation and purchase intention

Value co-creation exerts an impact on purchase intention (Blasco-Arcas, HernandezOrtega & Jimenez-Martinez 2014; Algharabat, 2018). The relationship between consumer's interactive behavior for value co-creation of social media and purchase intention is divided into three levels. The first level, social media has the conditions to transmit consumer information. Social media can build a bridge between enterprises and consumers, Hoyer, Chand, Dorotic, Krafft, M, & Singh (2010). In the case study of Starbucks, it is found that the interaction between enterprises and consumers in social media is effective and energetic, and it provides accurate information for enterprises and helps enterprises to plan their development direction. Thus, it is a good environment for enterprise-consumer dialogues, Gallagher & Ransbotham (2010); the second level is the main reason for value co-creation-value co-creation is produced in the process of consumers transmitting and exchanging information. The information transmitted in this process can include: consultation, answer, help, suggestion, etc. These information can strongly influence the purchasing behavior of other consumers, especially, it can produce effects different from the traditional word-of-mouth effect in the Internet feedback mechanism, Dellarocas (2003); on the third level, the deeper the consumers know about a brand, the longer the time and experience they will spend in online reviews, the greater the chance of creating value. The consumer's awareness of the brand is helpful to achieve purchase intention, McAuley & Pervan (2014). Summing up the above three levels, consumer interactive behaviors of value co-creation principally include feedback, advocacy, help and tolerance, Yi (2013). To sum up, the following hypotheses are put forward:

H1: consumer's interactive behavior for value co-creation is positively correlated with purchase intention.

H1a: the help-seeking of consumer's interactive behavior for value co-creation is positively correlated with purchase intention.

H1b: the interpersonal interaction of consumer's interactive behavior for value co-creation is positively correlated with purchase intention.

H1c: the advocacy of consumer's interactive behavior for value co-creation is positively correlated with purchase intention.

### 3.2 Correlation between Consumer's Interactive Behavior for Value Co-creation and Consumer-brand Identification

In the Service-dominant Logic of value co-creation, the establishment of identification relation between individual and brand is emotion, Komiak & Benbasat (2004) holds that the consumer's emotions towards the brand can be reflected in the consumer's participation in social media. The interactive process of consumers can reinforce the brand's influence on consumers themselves, and consumers also exert the effect of enhancing brand awareness when pushing products to other consumers, Ballantyne & Aitken (2007). The process of mutual contact and information interaction between consumers in social media can promote interpersonal relationships, Nambisan & Baron (2009), thus enhancing the identification of consumers. In the process of brand promotion, consumers can reinforce their consumer-brand identification, which attributes to psychological state, suggesting that there is a close connection between consumer behavior and consumer-brand identification, Lam, Ahearne, Mullins, Hayati & Schillewaert (2013). The identification of brand in social media contains rich contents, such as: brand value, brand social status, brand effect, brand identity, quality of brand related products, etc. The more comments consumers make in a brand community, the deeper they feel, the stronger their identification with the brand, the higher their stickiness to the brand, and the more time and energy they will devote to the promotion of the brand, thus giving them a deeper understanding of the brand, McAuley & Pervan (2014). Thus, the process of consumer's consumer-brand identification is the process of value co-creation, and there is a strong correlation between value co-creation and consumer-brand identification. To sum up, the following hypotheses are put forward:

H2: the interactive behavior of value co-creation is positively correlated with consumer-brand identification.

H2a: the help-seeking of interactive behavior of value co-creation is positively correlated with consumer-brand identification.

H2b: interpersonal interaction of interactive behavior of value co-creation is positively correlated with consumer-brand identification.

H2c: the advocacy of value co-creation interaction is positively correlated with consumer-brand identification.

### 3.3 Relationship between Consumer-brand Identification and purchase intention

There are many academic achievements on consumer-brand identification and purchase intention, which can be proved in different contexts. Consumer-brand identification can be classified into two categories: individual and group. The behavior of each individual consumer can imitate the behavior of

group purchase, Belén del Río, Vazquez & Iglesias (2001). Some consumers will be purchase intention because of the imitation of the group's behaviors such as product sales and comments. After consumers identify with the brand products, they will form loyalty to the brand and also reach the purchase intention, Verhoef, Franses & Hoekstra (2001). Due to the convenience of forwarding and pushing functions in the Internet context, consumers are highly willing to recommend brands they identify with to familiar people or share them with people in other brand communities with the same interests through their personal relationships, thus exerting a strong influence on the purchase of other consumers, Hargittai & Shaw (2015). The closeness of the relationship between consumers and enterprises is reflected in the degree of consumer's recognition of the brand, which renders great influence on future purchases, Bone, Fomelle, Ray & Lemon (2015). In conclusion, the consumer's identification of the brand can produce a strong purchase intention the brand products and a high degree of attention to the brand, thus forming loyal users of the brand. To sum up, the following hypotheses are put forward:

H3: consumer-brand identification is positively correlated with purchase intention.

#### 3.4 Intermediary Role of Consumer-brand Identification between the Consumer's Interactive Behavior for Value Co-creation and purchase intention

The interactive process between consumers and enterprises increases consumer's awareness of enterprises. In the study on experience perspective of value co-creation, positive interaction of enterprises can bring additional profits to enterprises, Van Doorn, Mittal, Pick, Pirner & Verhoef (2010). Therein, the consumer contract is formed when the relationship between the consumer and the enterprise is established, and the consumer contract can affect the consumer's purchase intention; more importantly, the antecedent variable of value co-creation is consumer contract, Brodie (2011). Thus, value co-creation can theoretically influence consumer's purchase intention. From the experience perspective of value co-creation, it is proved that the interactive process of value co-creation among consumers will result in different brand identifications due to different genders, educational backgrounds, income statuses and social statuses, thus resulting in different purchase results, Merrillees (2016). The exchange process of interactive information of consumers on social media can affect their own future purchase intention and form a certain influence on the purchase intention of other consumers on the same social media. Thus, this paper puts forward the following hypotheses through the above analysis:

H4: the intermediary role of consumer-brand identification between consumer's interactive behavior for value co-creation and purchase intention.

H4a: the intermediary role of consumer-brand identification between help-seeking of consumer's interactive behavior for value co-creation and purchase intention.

H4b: the intermediary role of consumer-brand identification on interpersonal interaction of consumer's interactive behavior for value co-creation and purchase intention.

H4c: the intermediary role of consumer-brand identification between the advocacy of consumer's interactive behavior for value co-creation and purchase intention.

### Data and Analysis

Basic data information: there are 274 males and 335 females with a sex ratio of 9:11; the majority of them are 25-35 years old, accounting for 54% of the total; their educational level is principally college and undergraduate, making up 65%; their monthly income is principally 4,000-5,000 yuan; most of them are white-collar workers and civil servants, accounting for 59%.

(1) The relationship between consumer's interactive behavior for value co-creation and consumer's purchase intention is tested.  $F(P<0.001)$ ;  $VIF<5$ ,  $R^2$  is 0.359, and the consumer's interactive behavior for value co-creation can be explained with a variance of 35.9%. Thus, Hypothesis H1 has been verified. In the relationship between the three dimensions of interactive behavior of value co-creation, i.e. help-seeking, interpersonal interaction and advocacy, and the consumer's purchase intention respectively,  $F(P<0.001)$ ;  $VIF<5$ ,  $R^2$  is 0.146, 0.318, 0.372 respectively, which can be explained as variation of 14.6%, 31.8%, 37.2% respectively. Thus, Hypothesis H1a, Hypothesis H1b and Hypothesis H1c have been verified.

(2) The relationship between consumer's interactive behavior for value co-creation and consumer-brand identification is tested.  $F(P<0.001)$ ;  $VIF<5$ ,  $R^2$  is 0.346, the consumer's interactive behavior for value co-creation can be explained as variation of 34.6%. Thus, Hypothesis H2 has been verified. In the relationship between the three dimensions of consumer's interactive behavior for value co-creation, i.e. help-seeking, interpersonal interaction and advocacy, and consumer-brand identification,  $F(P<0.001)$ ;  $VIF<5$ ,  $R^2$  is 0.123, 0.237, 0.382 respectively, and the consumer's interactive behavior for value co-creation can be explained as variation of 12.3%, 23.7%, 38.2%. Help-seeking is  $P=0.015$  and interpersonal interaction and advocacy is  $P<0.001$ . Thus, Hypothesis H2a, Hypothesis H2b, Hypothesis H2c have been verified.

(3) The test of the relationship between consumer-brand identification and consumer's purchase intention.  $F(P<0.001)$ ;  $VIF<5$ ,  $R^2$  is 0.425, and consumer-brand identification can be explained as variation of 42.5%. The regression coefficient of consumer-brand identification ( $P<0.001$ ) is significant. Thus, Hypothesis H3 has been verified.

(4) In social media, consumer-brand identification plays an intermediary role in consumer's interactive behavior for value co-creation on Purchase intention. Then analyzes the second-order model analysis, and the expression rate of the second-order model is 99.9% of that of the first-order model as exhibited in Figure 1: the structural equation model of intermediary role of consumer identification.

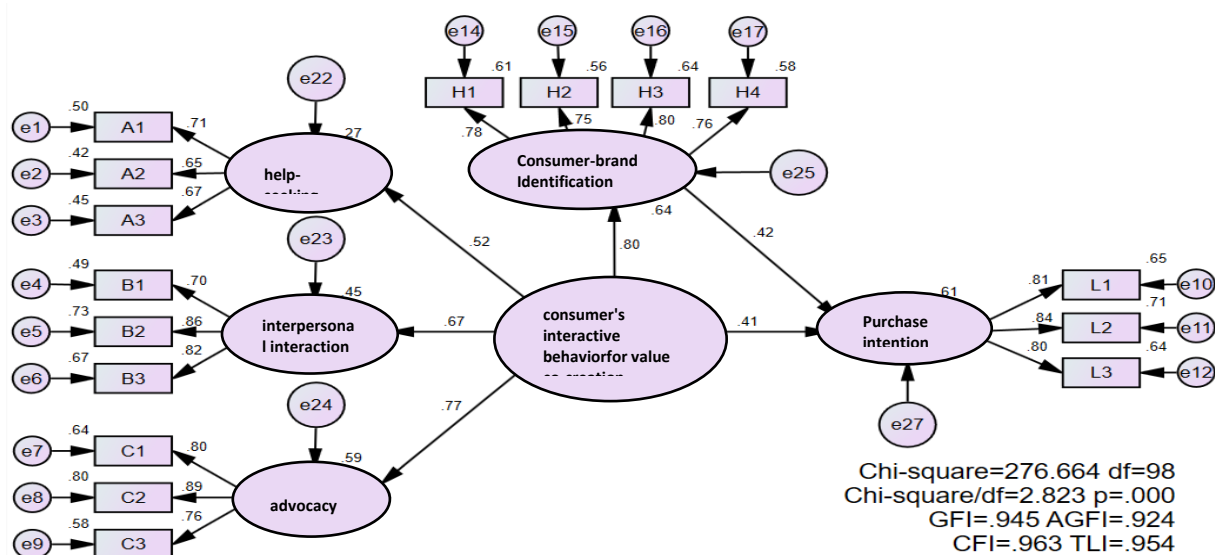


Figure 1 Structural Equation model of Intermediary Effect of Consumer Identification

The fitting index of the structural model presents an acceptable level (Bourne(2001)). After AMOS 24.0 test, the author collated the data:  $\chi^2=276.664$ ,  $df = 98$ ,  $\chi^2/df = 2.823$ , NFI, FRI, IFI, TLI, CFI are all greater than 0.9. This suggests that the model is in line with the basic requirements, and can be employed. SRMA is equal to 0.046 (less than 0.08), RMSEA is equal to 0.0431, which both conform to the requirements.

All the test results in the path analysis of mediating effect of consumer identification are significant. (H1,  $\beta = 0.199$ ,  $p < 0.001$ ; H2,  $\beta = 0.098$ ,  $p < 0.001$ ; H3,  $\beta = 0.226$ , respectively  $p < 0.001$ ). The consumer's interactive behavior for value co-creation is also provided with the functions of help-seeking, interpersonal interaction and advocacy. Customer's interactive behavior for value co-creation influences Purchase intention through consumer-brand identification, the influence of interactive behavior of consumer value on Purchase intention decreases from 1.655 to 0.418, which indicates that consumer-brand identification plays an intermediary role between interactive behavior of consumer value and Purchase intention, and the robustness of the constructed intermediary effect model has been tested. Thus, Hypothesis H4, Hypothesis H4a, Hypothesis H4b and Hypothesis H4c have been verified.

## Result & Discussion

### 5.1 Summary of Testing Results of Hypotheses

This paper designs 4 general hypotheses, 9 sub-hypotheses, totally 13 hypotheses. Upon empirical verification, all the 13 hypotheses in this paper have passed the hypothesis test, and the test conclusions are summarized in Table1.

**Table 1** Summary of Results of Research Hypothesis Tests

N.O.	hypotheses	Inspection results
H1	consumer's interactive behavior for value co-creation is positively correlated with purchase intention.	passed
H1a	the help-seeking of consumer's interactive behavior for value co-creation is positively correlated with purchase intention.	passed
H1b	the interpersonal interaction of consumer's interactive behavior for value co-creation is positively correlated with purchase intention.	passed
H1c	the advocacy of consumer's interactive behavior for value co-creation is positively correlated with purchase intention.	passed
H2	the interactive behavior of value co-creation is positively correlated with consumer-brand identification.	passed
H2a	the help-seeking of interactive behavior of value co-creation is positively correlated with consumer-brand identification.	passed
H2b	interpersonal interaction of interactive behavior of value co-creation is positively correlated with consumer-brand identification.	passed
H2c	the advocacy of value co-creation interaction is positively correlated with consumer-brand identification.	passed
H3	consumer-brand identification is positively correlated with purchase intention.	passed
H4	the intermediary role of consumer-brand identification between consumer's interactive behavior for value co-creation and purchase intention.	passed
H4a	the intermediary role of consumer-brand identification between help-seeking of consumer's interactive behavior for value co-creation and purchase intention.	passed



H4b	the intermediary role of consumer-brand identification on interpersonal interaction of consumer's interactive behavior for value co-creation and purchase intention.	passed
H4c	the intermediary role of consumer-brand identification between the advocacy of consumer's interactive behavior for value co-creation and purchase intention.	passed

## Discussion

This paper proves the influence process of consumer's interactive behavior on consumer's Purchase intention from the research on service-dominant logic of value co-creation. The theoretical model with customer's interactive behavior for value co-creation as an independent variable, Purchase intention as a dependent variable and consumer-brand identification as an intermediary variable is verified. This result renders a certain reference value for enterprises to expand the rising space and develop with high quality. Enterprises should open up the market and build an all-round marketing platform. Enterprises should create a fairly good social media environment, which enables consumers to devote more time and energy to social media. Next, enterprises should guide consumers to participate in social media, increase consumer's identification with brands, and then cultivate purchase consumer groups doing repeated and cross-purchases for enterprises. In this way, enterprises will acquire the thinking mode of Internet marketing. The fission transmission unique of the Internet highlights its characteristic of low cost, which creates a brand-new platform for product promotion of enterprises. Enterprises should make the most of social media resources to accurately push the connotation of enterprises to become the new normal. Social media is characterized by acquaintance socializing and high credibility. On the one hand, communication between consumers is based on the premise that most of them build trust in their real life. Enterprises can deliver enterprise brands and products in an efficient and high-quality manner through the interpersonal network system between consumers; on the other hand, if consumers and friends have the same level of understanding, they are more likely to accept the same level of products. This offers conveniences for enterprises to find target consumers.

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