

Research on the Factors Influencing Impulsive Buying in the Recommendations of Beauty Products

-- An Empirical Study Based on WeChat Official Account Posts

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Abstract

The WeChat official account provides a new platform for product recommendations. Many literatures indicate that product recommendations may lead to impulse buying, but research on this topic is relatively limited. Therefore, based on the consumption values theory and symbolic self-completion theory, this research explores how product recommendations in beauty posts on WeChat official accounts affect users' urge to buy impulsively. Our results show that the urge to buy impulsively is mainly triggered by emotional value, visual appeal and functional value prices also have a part of promotion, and emotional value is caused by visual appeal and functional value prices.

Keywords

WeChat official account; Product recommendation; Impulsive buying.

1. Introduction

As the most used and most popular mobile social network, WeChat has been widely used by friends since its launch in 2011. According to Tencent's financial report for the first quarter of 2021, as of the end of March 2021, the total number of monthly active accounts of WeChat is 1.241 billion [1], covering most people in China. Therefore, WeChat has become an inseparable part of the lives of mobile Internet users. 79.3% of WeChat users follow the WeChat official account according to their own needs and interests [2]. WeChat official account has quickly become a new competitive place for enterprises to conduct online marketing because of this.

Product recommendations on social media affect planned purchases and impulse purchases [3, 4]. Product recommendations can lead to impulse buying. This is a sudden, strong, and continuous impulse, when it is stimulated in the environment, it will immediately buy something [5]. The impulse buying literature shows that the awareness effect of recommendation usually motivates individuals to buy products that they would not have noticed [6, 7]. According to Stern's four types of impulse purchases [7], a user's purchase behavior based on other people's recommendations can be regarded as suggestive impulse buying. This purchase occurs when an individual first sees a product and imagines the need for it [8]. Suggestive impulse buying is the type we studied in this research.

In this research, we define online impulse buying as a strong desire to buy products that are stimulated by a certain kind of stimulation during the process of browsing WeChat official account posts.

The existing literature on product recommendation mainly focuses on planned purchase behavior, and few studies have examined impulse purchase behavior [9]. Although in recent years domestic and foreign related online impulse buying literature has emerged one after another [10, 11, 12]. But they all ignore the new marketing height of WeChat official account.

Therefore, based on the theory of consumption values and symbolic self-completion, this research explores how product recommendations in WeChat official account posts affect consumers' impulse purchases.

2. Concepts and Theories

2.1. Product Recommendation on Wechat Official Accounts

There are some official accounts that specifically recommend products, product-related posts are precisely the reason for attracting users' attention. The value of such official accounts is that they can provide users with product selection suggestions and improve relevant Domain knowledge or satisfy user interest, kill boring time. For example, the very popular official account "Lisa's Beauty Diary". Operators focus on pushing beauty-themed posts, and most of them are recommend products. The content of the post contains detailed information about the recommended product, such as product features, prices, pictures, product experience, usage scenarios, and product strengths and weaknesses. This information is usually presented in the form of the author telling everyone about the experience after using the product, and most of them will be attached with a purchase link for consumers to search and purchase on the designated shopping platform.

2.2. Consumption Values Theory

This theory was proposed by Sheth et al. (Figure 1), which identified five consumer values that affect consumer choice behavior [13]. They are functional value, social value, emotional value, cognitive value and conditional value. Functional value refers to some of the functions of a product or brand that can satisfy the consumer's purpose of using the product [14]. Social value is measured by choosing an image [13]. Emotional value refers to the expression of certain emotions that a product may bring to consumers, such as the love of the product or satisfaction, self-identity, social identity and other positive emotions [13]. Cognitive value refers to the products that consumers choose out of curiosity and curiosity. Conditional value refers to the product that consumers choose under certain conditions and circumstances.

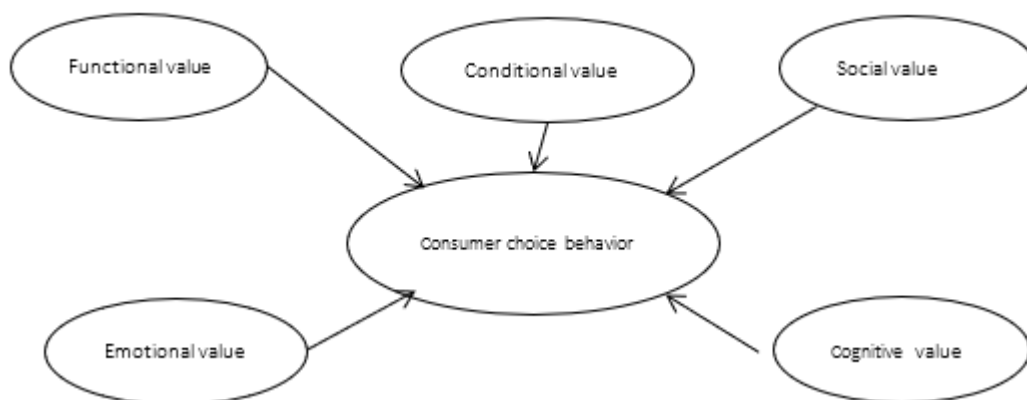


Figure 1. Consumption values theory

2.3. Symbolic Self-completion Theory

Viklund and Galwetzter believe that people obtain and display material signs, and other strategies, to compensate for their perception defects in certain dimensions of their self-concept: they call this process self-completion of signs. "The "symbolic consumption" viewpoint puts forward that consumers not only consume actual products, but even on the contrary, the symbolic meaning of consuming these products. Therefore, purchasing consumer goods is an important factor in constructing and maintaining consumers' self-identity, gaining social status, and striving to make themselves "feel better"[15, 16].

3. Research Model and Hypothesis Development

Based on the above discussion, we propose the research model (Figure 2) and the following hypotheses.

Parboteeah et al. proposed that "visual appeal involves the display of fonts and other visual elements (such as graphics), which can enhance the overall presentation of web pages" [17]. The multimedia elements such as images, audios, videos and graphics presented in product recommendations are very interesting to interested buyers and can stimulate their inner excitement, stimulation or inspiration [18]. In beauty posts, not only is the color matching and layout very beautiful, but also images of the same product used by celebrities are often used as covers or display products. According to the theory of symbolic self-completion, this way of display makes it easy for consumers to realize the appearance difference between themselves and the celebrity, so as to eliminate the self-difference between ideal and reality, build a sense of self-identity, and make impulsive consumption. Therefore, we propose that:

H1: Visual appeal will positively affect emotional value.

H2: Visual appeal will positively affect the urge to buy impulsively.

H3: Emotional value plays an intermediary role in visual appeal and the urge to buy impulsively.

Functional value may come from its characteristics or attributes, such as reliability, durability, and price [13]. In this study, the scale proposed by Jillian et al. was used to measure the functional value price [19]. The measurement items include "reasonable price", "value for money", "a good product for the price", and "economical". Therefore, we define it as a product with higher cost performance. This feature is usually emphasized by highlighting visual stimuli, such as using red to bold "very cost-effective" and adding three exclamation points. This way aroused positive emotions among consumers. Descriptions such as "cost-effective" and "very suitable for travel use" provide readers with sufficient reasons to buy and increase the possibility of impulse buying [20]. Therefore, we propose that:

H4: Functional value price will positively affect visual appeal.

H5: Functional value price will positively affect emotional value.

H6: Functional value price will positively affect the urge to buy impulsively.

H7: Visual appeal plays an intermediary role in the relationship between functional value price and emotional value.

H8: Emotional value plays an intermediary role in the price of functional value and the urge to buy impulsively.

Emotional value refers to the positive emotions such as the love of the product or the joy and self-identification that the product brings to consumers. Many studies have proven that positive emotions can promote impulse purchases [21]. And positive emotional influence can encourage more browsing behavior, which has also been found to lead to higher levels of impulse buying [22, 23]. Therefore, we propose that:

H9: Emotional value price will positively affect the urge to buy impulsively.

4. Research Methodology

4.1. Measurement Development

This study uses questionnaires and structural equation models to check. The questionnaire consists of two parts: the first part includes the demographic information of the respondents, and the second part is composed of all the variable measurement items in the research model. Variable measurement items are adapted from previous research. The seven-point Likert scale is used to measure these items. The questionnaire of this study set up a specific research scenario. After the respondents have read the prescribed posts, they can answer the questions

and set up screening questions. The post is selected from the recommendation of sunscreen products in the popular official account "Lisa's Beauty Diary" in the beauty category. This measure effectively guarantees the quality of the questionnaire responses and prevents the participants' misunderstandings and random filling caused by unmatched and unspecific research scenarios.

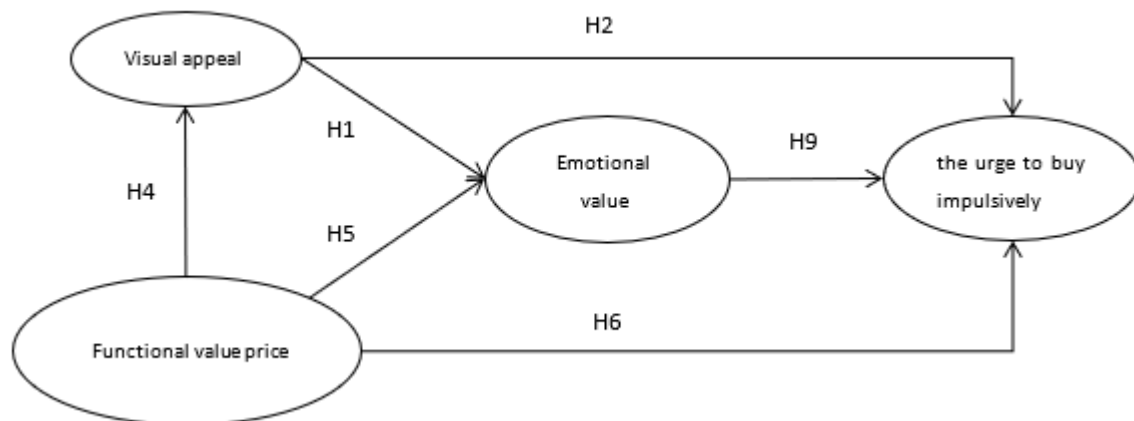


Figure 2. Research Model

4.2. Data Collection and Sample

The data was collected from two channels. One part was collected from WeChat Moments via the online survey platform Sojump, and the other part was obtained from the professional data collection platform credamo. Each questionnaire was set with a two-yuan remuneration. The data was collected in July 2021. A total of 350 research samples were obtained for this study, and 29 people's responses were excluded because they were incomplete or invalid. The final effective sample size was 321. Table 1 shows the demographic information of the subjects.

Table 1. Sample Demographics

Item		Frequency	Percentage
Gender	Male	74	23.1%
	Female	247	76.9%
Age(years)	18-26	116	36.1%
	27-30	129	40.2%
	>30	76	23.7%
Occupation	Student	52	16.2%
	Workers	249	77.6%
	Other	20	6.2%
Number of beauty official accounts subscribed to	1-3	119	37.1%
	4-6	155	48.3%
	>7	47	14.6%
Number of beauty articles read per day	1-3	202	62.9%
	4-6	96	29.9%
	>7	23	7.2%

4.3. Common Method Bias

Because our research data were collected from a single survey, Harman's single-factor test [24] was conducted to test common method bias. Unrotated exploratory factor analysis indicated

that the largest factor explained 40.714% of the overall variance, thus suggesting that common method bias was unlikely to be a significant problem in our study.

5. Analysis and Results

5.1. Measurement Model Assessment

The measurement model was assessed to ensure item reliability and convergent validity. Item reliability was evaluated using Cronbach's α , composite reliability (CR) and average variance extracted (AVE). The test results are shown in Table 2, the Cronbach's α was higher than 0.7, so all constructs has good reliability. All AVE values were higher than 0.5, the CRs were higher than 0.70, and the standard loadings of all items were higher than the desired threshold of 0.7 and significant at 0.001, which indicated a good convergent validity.

Table 2. Construct Reliability

Construct	Item	Standardized Loadings	Cronbach's α	CR	AVE
Emotional value	EV1	0.739	0.853	0.8482	0.528
	EV2	0.69			
	EV3	0.74			
	EV4	0.732			
	EV5	0.731			
Functional Value price	FVP1	0.783	0.787	0.8344	0.5579
	FVP2	0.695			
	FVP3	0.761			
	FVP4	0.746			
Visual appeal	VA1	0.776	0.85	0.8461	0.579
	VA2	0.756			
	VA3	0.737			
	VA4	0.774			
the urge to buy impulsively	IB1	0.708	0.823	0.8174	0.5294
	IB2	0.657			
	IB3	0.8			
	IB4	0.738			

5.2. Overall Model Fit Evaluation

Table 3 shows the results of the model fit. Obviously the overall fits well.

Table 3. Model fit evaluation

Index	Recommended value	Value
χ^2 / df	<3.0	1.402
GFI	>0.9	0.945
AGFI	>0.8	0.926
RMSEA	<0.08	0.035
NNFI	>0.9	0.937
IFI	>0.9	0.981
CFI	>0.9	0.981

5.3. Structural Model Assessment

We used Amos to assess the structural model. The results of the hypothesis are shown in table 4. All of the hypotheses were supported.

Table 4. The results of the hypothesis

hypothesis	Path	Standardized path coefficient	P value	Conclusion
H1	VA-->EV	0.425	<0.001***	Supported
H2	VA-->IB	0.211	0.004**	Supported
H4	FVP-->VA	0.657	<0.001***	Supported
H5	FVP-->EV	0.238	<0.001***	Supported
H6	FVP-->IB	0.258	0.002**	Supported
H9	EV-->IB	0.573	<0.001***	Supported

* $p < 0.05$.

** $p < 0.01$.

*** $p < 0.001$.

5.4. Mediation Analysis

This study uses the Bootstrapping repeated sampling 5000 times proposed by Preacher and Hayes [25] to test the mediation effects. If the 95% confidence interval does not contain zero, then the point estimate of the mediating effect is significant [26]. As the results shown in Table 5, the hypothesis H3, H7, and H8 are all supported.

Table 5. Mediation analysis

hypothesis	Path	Indirect effect	95%confidence interval		Mediation effect
			Lower bound	Upper bound	
H3	VA—EV—IB	0.244**	0.120	0.429	incomplete
H7	FVP—VA—EV	0.279**	0.169	0.454	incomplete
H8	FVP—EV—IB	0.436**	0.295	0.640	incomplete

6. Discussion and Implications

6.1. Discussion of Findings

This study investigated how product recommendations on WeChat official accounts affect impulse purchases. Our empirical research has the following results.

First, visual appeal can arouse consumer excitement, pleasure, self-identification and other emotional values by changing the way of presentation. Second, the functional value price also has a significant positive impact on emotional value. Third, emotional value price positively affect the urge to buy impulsively. Fourth, Visual appeal and functional value price can directly or indirectly arouse the urge to buy impulsively.

6.2. Practical Implications

This research provides some valuable suggestions for social commerce companies and beauty WeChat official account operators. First, this study highlights the role of emotional value in promoting consumer impulse purchases. Everyone wants to be beautiful. Once the product recommendation posts fully arouse the emotional value of consumers, they may make impulse purchases. This research also gives suggestions on how to induce emotional value. First,

improve the visual appeal of recommended product posts. For example, pay attention to color and typesetting methods, combine young people's concerns to introduce products, and use pictures of celebrities using the same product to introduce the effects of using this product to consumers. Second, focus on the functional value price of the product. During the product promotion period, this feature should be emphasized to give consumers the feeling that the opportunity will miss. Given the recommended usage scenarios of the product, and giving consumers a sufficient reason to buy, it will promote impulse buying behavior [20].

6.3. Limitations

First, our research results are limited to the Chinese social media platform WeChat. Second, for other types of products, the results of this study may not be applicable. Future research can examine the factors that influence impulse buying in other product categories.

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