The Beauty Makeup Category Mobile Short Video to Cosmetics Impulse Buying Behavior of Consumers Online

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Abstract

With the development of information technology and smart phones, the use of short beauty videos has become the main marketing means of cosmetics enterprises, and many factors promote consumers' online purchasing behavior of cosmetics. Based on the S-O-R theoretical model, this study constructed a research model of the influencing factors of consumers' impulse purchase behavior of online cosmetics in the context of short beauty videos, and put forward relevant hypotheses. By collecting 525 questionnaires of consumers with purchasing behavior, SPSS was used for descriptive statistical analysis, reliability and validity analysis, factor analysis, regression analysis and structural equation model analysis. The results show that marketing stimulus, interaction, key opinion leaders, content, positive emotions and trust have significant positive effects on cosmetics online impulse buying behavior. Positive emotions and trust mediate between marketing stimulus, interaction, key opinion leaders, content and cosmetics online impulse buying behavior.

Keywords: Beauty Makeup, Mobile short video, Buying behavior, Consumers online

Introduction

With the development of 5G, the number of users of online video (including short video) in China reached 934 million by 2022.   In the last two years, promoting product sales through short videos has become the main mode of online trading in China, especially in the cosmetics industry.

With the development of mobile Internet and the change of consumer habits, various domestic and foreign beauty cosmetics brands have successively settled on the e-commerce platform, bringing the online penetration rate of the beauty cosmetics industry to a constant increase. Online sales of cosmetics reached 367.8 billion yuan in 2021, accounting for 39 percent of the total channel share. If online cosmetics sales can maintain a compound growth rate of 25%, under the further popularization of 5G network, the cosmetics sales scale is expected to exceed RMB 400 billion in the next 4-5 years. According to the current research, the rapid development of online cosmetics sales in China mainly uses short videos for communication an promotion. However, with the rapid development of short videos, there are few online studies on the influencing factors of short videos on impulse buying behavior, especially in the cosmetics industry. Faced with the rapid development of online cosmetics sales in China, in order to solve the problems faced by merchants in short video marketing and marketing strategies, researchers applied consumer behavior, marketing, sociology and other relevant theories to study the influencing factors of short video on consumers impulsive online cosmetics shopping behavior.

Statement of the problem

The growth of short beauty videos has spurred online and offline sales of cosmetics in recent years. We need to understand what factors affect consumers' online impulse buying behavior, and verify whether these factors can really improve cosmetic online impulse buying behavior.

Short video marketing is a new problem in e-commerce, it is different from the traditional marketing. If we can make good use of this resource and stimulate consumers online impulse buying behavior of cosmetics, it will bring huge development space for enterprises, especially for a few brands, it will bring huge development opportunities. Bitner, M. J. (1992) points out that SOR model can also explain consumer behavior and psychological activities in the environment of service activities. Based on the theory of SOR and emotion, the author studied the influencing factors of online impulsive buying behavior of cosmetics in the scene of beauty short videos.

Research Objective

Compared with the traditional way of shopping, consumers' shopping behavior under the background of mobile network is more impulsive. The research objectives of this paper are as follows.

1. To study the effect of marketing stimulus, interaction, key opinion leaders, short video content and cosmetics online impulse buying behavior.

2. Explain the mediating role of positive emotions and trust.

3. Help cosmetics companies and related employees to promote online impulse buying behavior through short video marketing of beauty cosmetics.

Research Questions

Adelaar, T. (2003) found that consumers' impulse buying also existed in the online shopping environment, and about 1/3 of online shopping products of consumers were dominated by impulse buying. In order to better study the influencing factors of beauty short videos on impulse buying, the author puts forward the following research questions.

1. What factors will affect consumers online impulse purchase of cosmetics?

2. How do emotion and trust play a mediating role between each influencing factor and online impulse purchase behavior of cosmetics in the context of short beauty videos?

3. How do cosmetic companies and relevant practitioners use short video resources to promote consumers online impulse buying behavior?

Conceptual Framework

Donovan, R. J., Rossiter, J. R. (1982) first applied the "S-O-R" model (Stimulus, Organism, Response) to the retail environment. In the application of retail environments, stimulus acts as an antecedent variable, as an element of various scenarios. The intermediate variable (organism) is expressed as perception and emotion, while the outcome variable (response) is expressed as approach or avoidance behavior. In the context of online retail, Eroglu, S. A., Machleit (2003) argue that incentives are the sum of all the incentives that Internet

consumers see and hear. As the mediating state of organism, emotion and perception play a regulating role between stimulus and individual response. This reaction represents the final result, that is, consumer approach is consumer approach or avoidance behavior.

Based on SOR model, combined with the characteristics of short video marketing, the researchers selected four characteristics of short video marketing scenario that may have an impact on consumers' impulsive purchase, namely marketing stimulus, interactivity, opinion leader and content, as independent variables to build the model.
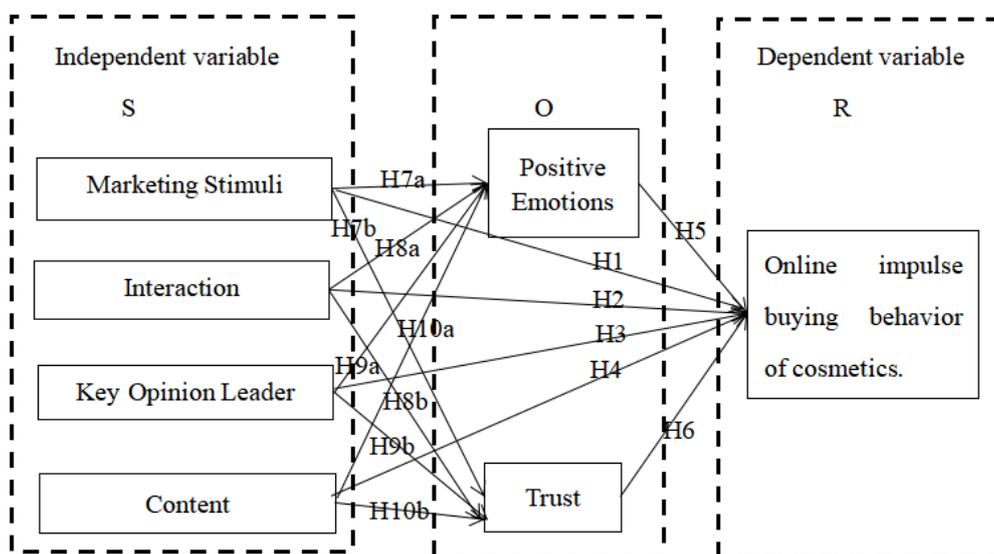

Figure 1. The conceptual model of cosmetics impulse buying of consumers online and positive emotion and trust

Research Hypothesis

H1 Marketing stimuli is positively correlated with online impulse buying behavior of cosmetics.

H2 Interaction is positively correlated with online impulse buying behavior of cosmetics.

H3 Key opinion leader is positively correlated with online impulse buying behavior of cosmetics.

H4 Content is positively correlated with online impulse buying behavior of cosmetics.

H5 Positive emotion is positively correlated with online impulse buying behavior of cosmetics.

H6 Trust is positively correlated with online impulse buying behavior of cosmetics.

H7a Marketing stimuli is positively correlated with positive emotion.

H7b Marketing stimuli is positively correlated with Trust.

H8a Interaction is positively correlated with positive emotion.

H8b Interaction is positively correlated with Trust.

H9a Key Opinion Leader is positively correlated with positive emotion.

H9b Key Opinion Leader is positively correlated with Trust.

H10a Content is positively correlated with positive emotion.

H10b Content is positively correlated with Trust.

H11a Positive emotions play a mediating role in marketing stimulus and online cosmetic impulse buying behavior.

H11b Positive emotions play a mediating role in Interaction and online cosmetic impulse buying behavior.

H11c Positive emotions play a mediating role in Key Opinion Leader and online cosmetic impulse buying behavior.

H11d Positive emotions play a mediating role in content and online cosmetic impulse buying behavior.

H12a Trust play a mediating role in marketing stimulus and online cosmetic impulse buying behavior.

H12b Trust play a mediating role in Interaction and online cosmetic impulse buying behavior.

H12c Trust play a mediating role in Key Opinion Leader and online cosmetic impulse buying behavior.

H12d Trust play a mediating role in content and online cosmetic impulse buying behavior.

Research Methodology

In order to better study what are the influencing factors of online impulse buying of cosmetics in the context of beauty short videos? In this paper, the author mainly adopts quantitative research method. First, according to the research needs, the characteristics of short video scene, consumer emotional response, trust response and impulsive buying variables are combed. Secondly, the questionnaire was designed and investigated according to the variables. Finally, the questionnaire was collected and data analysis was carried out to draw conclusions.

In order to ensure the accuracy of the survey results, the researcher first conducted a pre-survey, which was conducted in March and April 2021. There are 32 questions were designed and 49 questionnaires were collected. Through the analysis of the pre-survey results, it is found that this scale can be used and become a formal questionnaire. Formal questionnaires will be distributed and collected from May to July,2021, and will be distributed randomly online without geographical restrictions. The questionnaire was mainly distributed to people who like to watch short videos of beauty makeup online and who have impulsively bought cosmetics online. A total of 525 valid questionnaires were collected in this study.

Results

Demographic Data

A total of 525 samples were collected in this survey. For gender, age, Professional, education, income, browsing time, number of online purchases refer to Table 1.

Table 1. Description of the responder (n=525)

Characteristics	Categories	Frequency	Percentage
Gender	Male	281	53.5
	Female	244	46.5
Age	Under 20	15	2.9
	21-30	234	44.6
	31-40	182	34.6
	Over 40	94	17.9
Professional	Students	40	7.6
	Employees of enterprises and Institutions	140	26.7
	A housewife	106	20.2
	Freelancer	239	45.5
Education	Junior college or below	136	25.9
	The university	286	54.5
	Master degree or above	103	19.6
Income	Less than $155	36	6.9
	$156-$309	156	29.7
	$400-$770	206	39.2
	$771-$1549	104	19.8
	More than $1550	23	4.4
You watch short beauty videos every day	Less than 0.5 hours	27	5.1
	1 to 2 hours	286	54.5
	2-4 hours	117	22.3
	More than 4 hours	95	18.1
The number of times you bought cosmetics online in the last three months after watching a short beauty video	zero	210	40.0
	1-3 times	170	32.4
	4 to 6 times	109	20.7
	More than 6 times	36	6.9

Reliability and validity

The researchers used a Likert scale to analyze and measure factors associated with impulse buying of online cosmetics (see Table 2). In this paper, the software program was used to analyze the survey data, and the reliability and validity tests were mainly used for the research. According to the data analysis, the reliability of MS, INT, KOL, CON, POS, TRU and IBO is 0.873, 0.838, 0.868, 0.814, 0.839, 0.846 and 0.86, all of which are greater than 0.7, indicating that the questionnaire has a high reliability. It can be used for subsequent analysis. The KMO value of MS, INT, KOL, CON, POS, TRU and IBO is 0.828, 0.816, 0.733, 0.68, 0.728, 0.814 and 0.821, all of which are greater than 0.6, indicating that the variable has high efficiency and is suitable for factor analysis.

Table 2. Factor Analysis (n=422)

Factor Analysis Variables and measurement items (Sources)		Measuring Item	Factor Loading Factor	Cronbach α	AVE	CR	KMO
Marketing Stimuli	Yang Jianping and Ma Shuming, (2015)	MS1	.852	.873	.641	.876	.828
		MS2	.844				
		MS3	.829				
		MS4	.822				
Interactive	Ridings et al., (2002)	INT1	.777	.838	.58	.844	.816
		INT2	.788				
		INT3	.798				
		INT4	.815				
Key Opinion Leade	Chen Xi, (2020)	KOL1	.815	.868	.689	.869	.733
		KOL2	.787				
		KOL3	.84				
Content	Netemeyer R. G., Bearden W. O., (1992)	CON1	.79	.814	.613	.824	.68
		CON2	.775				
		CON3	.656				
Positive Emotions	Mehrabian A, Russell J. A., (1974)	POS1	.776	.839	.634	.839	.728
		POS2	.778				
		POS3	.776				
Trust	Pengnate, S. (Fone), Sarathy, R., (2017)	TRU1	.793	.846	.608	.857	.814
		TRU2	.817				
		TRU3	.823				
		TRU4	.782				
Impulse Buying	Niu Chen and Liu Jinping, (2015)	IBO1	.838	.86	.625	.867	.821
		IBO2	.794				
		IBO3	.83				
		IBO4	.82				

The significant of factor loadings are at "p" < 0.01

Model Test

Confirmatory factor analysis

In this paper, structural equation model analysis method is used to conduct confirmatory factor analysis, and the test results are shown in table 3.

Table 3. The Results of Confirmatory Factor Analysis

Model Fit Factor	The Critical Value	Measure Model Factor Values
χ^2/df	<5.00	1.692
RMSEA	<.05	.036
RMR	<.05	.037
GFI	>.90	.974
AGFI	>.90	.925
CFI	>.90	.974
NFI	>.90	.939
NNFI	>.90	.969

Five model fitting indexes were observed: the ratio of chi square value to freedom, GFI, AGFI, CFI and RMSEA. That χ^2/df =1.692, GFI=.974, AGFI=.925, CFI=.974, NFI=.939, NNFI=.969, all greater than 0.9. RMSEA= .036 < .05 indicates that the research model has a good fit. All the five indexes can meet the requirements, which proves that the model has a good degree of fitting.

Hypothesis testing

Above, we tested the reliability and validity of the sample size and obtained good test results. In this section, we continue to test the hypotheses in the theoretical model. According to the test results of the model, all the hypotheses in this paper are valid, and the results are shown in Table 4.

Table 4. Path analysis results

Assuming	Assuming path	path coefficient	SE	CR	p	conclusion
H7a	MS⟶POS	.125	.039	3.207	.001	acceptance
H8a	INT⟶POS	.286	.038	7.486	0	acceptance
H9a	KOL⟶POS	.24	.038	6.393	0	acceptance
H10a	CON⟶POS	.211	.038	5.494	0	acceptance
H7b	MS⟶TRU	.261	.039	6.654	0	acceptance
H8b	INT⟶TRU	.142	.039	3.672	0	acceptance
H9b	KOL⟶TRU	.177	.038	4.675	0	acceptance
H10b	CON⟶TRU	.259	.039	6.684	0	acceptance
H1	MS⟶IBO	.126	.036	3.502	0	acceptance
H2	INT⟶IBO	.145	.036	4.058	0	acceptance
H3	KOL⟶IBO	.164	.035	4.685	0	acceptance
H4	CON⟶IBO	.142	.036	3.935	0	acceptance
H5	POS⟶IBO	.253	.038	6.584	0	acceptance
H6	TRU⟶IBO	.208	.038	5.45	0	acceptance

* p<.05 ** p<.01 Frequency(n)=525

Testing the mediating role of positive emotion and trust.

It can also be seen from Table 4 that β=.211 in the influence of marketing stimulus on impulsive buying behavior before the addition of the mediating variable, β=.178 after the addition of the mediating variable, so there is a mediating effect. Suppose H11 is verified.

It can also be seen from Table 5 that β=.211 in the influence of marketing stimulus on impulsive buying behavior before the addition of the mediating variable, β=.152 after the addition of the mediating variable, so there is a mediating effect. Suppose H12 a, H12 b, H12 c, and H12 d is verified.

Table 5. The Intermediary Role of positive emotion

Item	c	a	b	a*b	c'	conclusion
MS	.211**	.125**	.268**	.033	.178**	partial mediation
INT	.246**	.286**	.268**	.077	.170**	partial mediation
KOL	.260**	.240**	.268**	.064	.196**	partial mediation
CON	.249**	.211**	.268**	.057	.192**	partial mediation

* p<.05**p<.01

Table 6. The Intermediary Role of trust

Item	c	a	b	a*b	c'	conclusion
MS	.211**	.261**	.225**	.059	.152**	partial mediation
INT	.246**	.142**	.225**	.032	.215**	partial mediation
KOL	.260**	.177**	.225**	.04	.221**	partial mediation
CON	.249**	.259**	.225**	.058	.190**	partial mediation

* p<.05**p<.01

Conclusions and Discussion

Based on the existing researches on impulse buying and combined with the characteristics of short videos, this study constructs the online impulse buying model of cosmetics short videos. Taking impulsive buying behavior as the dependent variable, independent variables were selected from four aspects of marketing stimulation, interactivity, key opinion leaders and content, and the mediating variables were positive emotion and trust. This model is in line with the theory, combined with the characteristics of beauty makeup short videos, supported by theory and practice.

According to the results of model testing, the following conclusions are drawn. (1) The effect between marketing stimulus and cosmetics online impulse buying, positive emotions, and trust. Li Xuesong (2000) believes that marketing stimulus is an external factor acting on consumers purchasing behavior, which will promote customers to complete the purchasing decision and produce purchasing behavior. The conclusion of this study is consistent with the research results of some scholars. (2) The effect between Interaction and cosmetics online impulse buying, positive emotions, and trust. Chu (2013) confirmed that consumers attitude towards website interaction has an important impact on consumers trust and behavior. (3) The effect between key opinion leaders and cosmetics online impulse buying behavior, positive emotions, and trust. Konstantopoulou A, Rizomyliotis L, Konstantoulaki K, et al. (2019) survey found that in the field of cosmetics, users are more likely to trust cosmetics recommended by experienced makeup artists or professional dermatologists. (4) The effect between content and cosmetics online impulse buying behavior, positive emotions, and trust. Qimei Chen, Shelly Rodgers (2006) believe that fun refers to the characteristics of information that are interesting, attractive and bring people a sense of pleasure. (5) The mediating role of positive emotions and trust. Fu, S., Yan Q, Feng (2018) found that the higher the emotional state of consumers, the more likely they are to buy spontaneously. Wu. L, Chen K.W, Chiu M.L (2016) verified the important role of trust in impulse buying behavior.

Research Suggestion

Based on the research conclusion of this paper, some management suggestions can be put forward to the beauty short video businesses and related practitioners, so as to improve the conversion rate of consumers and improve the sales performance. (1) Cosmetics enterprises or related employees should continue to make short videos of cosmetics, and mobilize consumers' positive emotions and sense of trust by displaying products and selling strategies online in an all-round way. The use of promotional preferential policies, to carry out a variety of promotional incentives to stimulate consumers to buy cosmetics online impulse behavior. (2) Cosmetics enterprises or related employees pay attention to strengthening the interaction with consumers. Stimulate consumers to forward, comment, like and other activities through preferential offers, so that more people can actively participate in the product promotion and enhance the influence of the brand. (3) Enhance the sense of trust in consumption. This paper has verified that trust has a significant positive effect on online impulse buying. Therefore, in order to enhance consumers' sense of trust, the content design of short videos of beauty makeup should pay attention to professionalism, real and reliable preferential activities, real and credible interactive evaluation, and timely after-sales service.

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