## Analysis of the Influence of the Internet Celebrity Economy on the Consumption Behavior of College Students in the Self-Media Environment

## Xue Wu

School of Management, Shenzhen Polytechnic, Shenzhen 518055, China wuxue11@szpt.edu.cn

Abstract: With the advancement of Internet information technology, the rapid development of the Internet celebrity economy has had an important impact on the consumption behaviour of college students. The online live broadcast platform caters more to the consumer psychology of college students. College students are more susceptible to its influence and blind consumption occurs. Combining the characteristics of live broadcast platforms in the Internet celebrity economy and the characteristics of college students' consumption psychology and behaviour, this paper selects four variables of media brand, highlights show, interaction & promotion and interest groups as the starting point, uses structural equation model(SEM), and uses AMOS software to carry out structural equation analysis. This paper analyses the influence of the "Internet celebrity economy" marketing model on the actual consumption behaviour of college students. The results show that highlights show and media brands will promote the actual consumption behaviour of college students, while interaction & promotion and interest groups have no significant impact on the consumption behaviour of sample college students. This paper further analyses the reasons for the formation of this situation, and provides reference and suggestions for guiding college students to establish a reasonable consumption view.

Keywords: Internet Celebrity Economy; College Students; Consumer Behaviour; Brand

#### 1. Introduction

The development of Internet technology and new media technology has promoted the development of mobile commerce activities, and new media forms have also emerged. The birth of self-media enables every netizen to "spread information" in this environment, and also completes the transformation of netizens from passively receiving information to actively releasing information. The huge traffic and fan appeal of Internet celebrities have allowed e-commerce industry players to see business opportunities, and the online celebrity with goods was born. With the image of fashionistas and the taste of celebrities as the representative features, it has gathered popularity on social network platforms through recommendation of good things and visual promotion, and carried out targeted marketing relying on a huge fan base.

In recent years, the marketing model of online celebrities with goods has attracted the attention of young consumers and has become the most popular emerging marketing method in the era of online self-media. According to public data, in 2018, the number of Internet celebrity fans was nearly 600 million, and the economic scale of Internet celebrities exceeded 2 trillion CNY; in 2019, with the maturity and routine of short video and live broadcast e-commerce, the number of online shoppers exceeded 1 billion. , the industry penetration is close to 90% [1], and the annual live broadcast e-commerce transaction volume exceeds 440 billion CNY.

Contemporary college students grow up in a period when the self-media is becoming mature and has penetrated into many aspects of life, and their consumption behavior is gradually influenced by the self-media. In 2018, the annual disposable amount of college students reached 381.568 billion CNY, and large expenditures can be purchased independently, which means that college students' consumption autonomy is getting higher and higher. Grasping the influence of Internet celebrity economic development on college students' consumption behavior in the self-media environment is not only of great significance to correctly guide college students' healthy and rational consumption, but also provides theoretical reference for enterprises to find new marketing methods [2].

#### 2. Characteristics and Status Quo of Chinese Self-Media

Self-media has many characteristics, such as immediacy, interactivity, personalization, etc. These characteristics make self-media gradually replace the original traditional media and become the most popular way of information dissemination today. The birth of self-media helped the public to change from the receiver of the original media information to the voice, which not only changed the construction of social discourse power, but also had an impact on the development of the public's social life, production mode, communication mode and consumption behavior mode. From the perspective of consumers, self-media marketing can quickly increase people's attention to a certain brand, improve trust and loyalty, and facilitate customers' consumption and decision-making. From an enterprise's point of view, the low cost of online marketing of self-media marketing is favored by enterprises, and at the same time, it can also bring enterprises and customers closer.

In the self-media environment, consumers' consumption behavior is also deeply affected. It not only shortens the consumption time of consumers, the whole process becomes very efficient, but also affects the consumption psychology of consumers to a certain extent, causing unprecedented changes in their consumption behavior and promoting new consumption trends in today's self-media environment. Starting from the characteristics of consumer behavior in the self-media environment, we deeply study the value formation and realization of each stage in the process of consumption decision-making, and provide reference for the development of marketing in the self-media era [3].

Unlike foreign self-media industries that are monopolized by powerful companies, self-media development environment is relatively relaxed in China. Chinese Internet company giant platforms do not monopolize content and advertising. These platforms have provided technical assistance and policy support for many small self-media enterprises, and made important contributions to the development of these enterprises. In essence, the giant platforms actually use this kind of mutual assistance to obtain more content resources. Based on the two entrances of content production and audience consumption, each platform can obtain maximum benefits. At the same time, for some high-quality original content, it also provides a channel for monetization, and original creators can use the self-media platform to increase economic income.

There are also some shortcomings in the development of China's self-media, mainly due to the influence of technology, economy and business model, and the development of self-media generally has operational difficulties. Some self-media operators insist on operation and development in the market, and insist on the dissemination and promotion of high-quality content, but they are under great pressure in operation. On the other hand, in the online market, information fragmentation, inaccurate positioning, rapid loss of users, and single profit model have caused great pressure on the survival of self-media companies. Throughout the entire market, there are not many self-media companies with good operation and strong promotion.

## 3. Current Situation of Chinese College Students' Internet Celebrity Consumption

The "Internet celebrity economy" refers to the fact that it is dominated by the taste and consumption choices of some beautiful, fashionable and talented Internet celebrities, gathering a large amount of popularity through Internet celebrities, and relying on the fans of the Internet celebrities. The social phenomenon in which traffic is transformed into the purchasing power of fans [4]. Since 2016, with the development of Internet technology and live broadcast platforms, the new generation of Internet celebrities has gradually entered people's field of vision, showing their advantages through live broadcast, WeChat, Weibo and other self-media platforms, attracting public attention, accumulating fans, and converting traffic into purchasing power and improve its own business value.

At present, Chinese college students' online celebrity consumption mainly has several characteristics.

(1) College students are prone to impulse spending

Internet celebrity anchors will create a live broadcast environment that consumers are easily immersed in during the live broadcast. College students who watch the live broadcast will have a more sense of substitution and pursue experiential consumption, which will stimulate consumption desire by the live broadcast. On the other hand, college students lack social experience, do not fully understand the functions of some products, and often buy products just because they like the anchor, which will make college students make impulsive consumption.

(2) College students pursue fashion too much

An important reason for college students to watch online celebrity live broadcasts is to understand the current fashion direction. According to the survey data, more than 50% of college students regard whether a product follows fashion as a very important consideration when purchasing a product, and more than 60% of college students do not pay much attention to the quality and price of a product [5].

#### (3) Various forms of consumption of college students

The most popular forms of college students' attention and acceptance include game live broadcast, travel online celebrity products and marketing, live broadcast rewards, and fashion sharing. According to the survey data, among the online celebrity products purchased by college students, 10% of them said that they would give gifts when watching live broadcasts.

#### 4. Research Design

#### 4.1. Research Method

At present, the marketing model of "Internet celebrity economy" mainly includes three forms: advertising promotion, Internet celebrity e-commerce, and online live broadcast. (1) Advertising promotion means that brand owners negotiate and cooperate with Internet celebrities who have a certain fan base and can drive fans to consume. The Internet celebrities undertake the advertisements of brand owners and conduct brand promotion on their own accounts to guide consumer consumption; (2) Internet celebrity e-commerce refers to the brand or store with a strong fan base on the e-commerce platform to promote and market their products through live broadcast; (3) Internet live broadcast refers to the live broadcast of online games and live singing by Internet celebrities on the live broadcast platform. Get the attention of fans, and convert the tips and gifts given by fans during the live broadcast process into income.

This paper summarizes the influencing factors of the "Internet celebrity economy" marketing model on the consumption behavior of college students as media image, precision marketing, interactive communication and niche circle, as well as the intermediary factor trust. Selecting the four variables of media brand, highlights show, interaction & promotion and interest groups to analyze the influence of the "Internet celebrity economy" marketing model on the consumption behavior of college students.

This paper uses structural equation model to analyze the influencing factors of college students' consumption behavior under the "Internet celebrity economy" marketing model. It can not only analyze the direct impact of each variable on the actual consumption behavior of college students, but also analyze the indirect impact of the internal relationship between the variables on the actual consumption behavior of college students.

Structural equation model is a covariance structural model, including factor analysis and path analysis techniques, suitable for the study of the relationship between multiple variables, has been widely used in psychology, management, sociology and other social science fields, including The measurement model and the structural model are two sub-models.

#### (1) Measurement model

The measurement model represents the covariant relationship between the latent variable and the measured variable, and can be regarded as a regression model, which regresses from the measured variable to the latent variable. The equation can be expressed as:

$$x_i = \Lambda_x \xi_i + \zeta_i, \quad i = 1, \dots, n \tag{1}$$

$$y_i = \Lambda_v \eta_i + \varepsilon_i, \quad i = 1, \dots, m$$

where  $x_i$  represents  $n \times 1$  measured variable,  $y_i$  represents  $m \times 1$  the dependent variable vector,  $\Lambda_x$  is the factor matrix corresponding to the measured variable  $x_i$ ,  $\Lambda_y$  is the factor matrix corresponding to the dependent variable  $y_i$ ,  $w_i$  is the  $n \times 1$  factor score vector,  $\zeta_i$  and  $\varepsilon_i$  are independent error terms.

## (2) Structural model

The structural model part represents the structural relationship between latent variables, and can also be regarded as a regression model, in which the endogenous latent variables are used to regress the linear terms of several endogenous and exogenous latent variables. Expressed in equations as:

$$\eta_i = M_A \eta_i + M_B \xi_i + \delta_i, \quad i = 1, \dots, n \tag{2}$$

where  $\eta_i$  and  $\xi_i$  are  $m \times 1$  and  $n \times 1$  latent variables respectively, the correlation parameter

matrix  $M_A$  describes the relationship between the endogenous latent variables, the correlation parameter matrix  $M_B$  describes the influence of the exogenous latent variables on the endogenous latent variables,  $\delta_i$  is the error term.

## 4.2. Survey Design

In order to explore the influence of the "Internet celebrity economy" marketing model on the consumption behavior of college students, college students in Shenzhen were selected as the survey objects, and data was obtained through questionnaires. This paper sets five latent variables related to the actual consumption behavior of college students: media brand, highlights show, interaction & promotion, interest groups and college students' consumption behavior, and trust as mediating variables.

The survey content part of the questionnaire contains a total of 10 measured variables, the first to third are the measured variables reflecting the media brand, the fourth to fifth are the measured variables reflecting the highlights show, the sixth to eighth are the measured variables reflecting the interaction & promotion, and the ninth to the tenth are the measured variables reflecting the interest groups, shown by Table 1.

Latent variables	Measured variables		
	The choice of platform affects my purchase desire $x_1$		
Media brand $\xi_1$	The personal image of the anchor affects my desire to buy $x_2$		
	The talent of the anchor affects my desire to buy $x_3$		
Highlights show	The anchor can display the highlights of the product $x_4$	0.54	
$\xi_2$	Product highlights boost my desire to buy $x_5$	0.77	
Interaction & promotion $\xi_3$	A full range of product display let me know the information of the product $x_6$		
	The interaction of the anchor can meet the emotional needs of my products $x_7$		
	The promotion of the anchor increases my desire to buy $x_8$	0.76	
	Professional labels for interest groups give me more confidence $x_9$	0.42	
Interest groups $\xi_4$	Cultural labels for interest groups that meet my emotional needs $x_{10}$	0.39	
Т4	The good quality of the goods reassures me	0.80	
Trust	The anchor's word of mouth reassures me	0.76	
Consuming	Consuming Change my consumption pattern $y_1$		
behavior $\eta_i$	Increase my desire to buy $y_2$	0.74	

Table 1: Questionnaire design.

The research was conducted in four universities in Shenzhen, and the sample was selected by random sampling. A total of 512 questionnaires were recovered, including 497 valid questionnaires and 15 invalid questionnaires, with a valid questionnaire rate of 97.1%. Among the 497 valid questionnaires, there were 260 male respondents and 237 female respondents; 90 respondents had a monthly online shopping consumption of less than 100 CNY, 179 respondents were from 100 to 300 CNY, 140 respondents were from 300 to 500 CNY, and there are 88 respondents over 500 CNY.

# 5. Empirical Analysis of the Influence of the Internet Celebrity Economy on the Consumption Behavior of College Students

## 5.1. Model checking

According to the structural equation model(SEM), two kinds of relationships are constructed: the first is the direct causal relationship between the four variables of media brand, highlights show, interaction & promotion, and interest groups and consumer behavior; The second is the mediating relationship between the four variables of media brand, highlights show, interaction & promotion, and interest groups and consumer behavior through the trust variable, as shown in Figure 1.

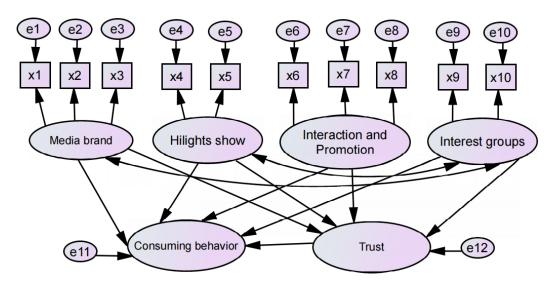


Figure 1: Influencing factor model.

#### 5.2. Empirical Result

Data were processed using SPSS 24.0 software and AMOS 21.0 software. The model fit is  $df(\chi 2) = 1.87 < 2$ , NFI = 0.92 > 0.90, GFI = 0.94 > 0.90, CFI = 0.94 > 0.90, TLI = 0.95 > 0.90, RMSEA = 0.03 < 0.05, shown by Table 2. The result shows that all indicators have reached a good adaptation standard, and the model is well adapted.

Table 2: Model fit.

df(χ2)	NFI	GFI	TLI	RMSEA
1.87	0.92	0.94	0.95	0.03

Table 3: Standardized regression coefficients for each path.

Path	Latent variables	Measured variables	β	ι
1	Trust	Media brand	-0.08	-0.57
2	Trust	Highlights show	0.37	2.74 (p<0.01)
3	Trust	Interaction and promotion	0.29	2.84 (p<0.01)
4	Trust	Interest groups	0.12	1.87
5	Consuming behavior	Media brand	0.36	2.83 (p<0.01)
6	Consuming behavior	Highlights show	0.37	2.87 (p<0.01)
7	Consuming behavior	Interaction and promotion	0.08	0.73
8	Consuming behavior	Interest groups	0.16	1.37
9	Consuming behavior	Trust	-0.03	-0.43

The specific influence relationship between the variables in Table 3 is as follows:

- (1) According to the calculation results of the model, the p>0.05 of path 6 and path 7 indicate that interaction & promotion and interest groups have no significant promoting effect on actual consumption behavior;
- (2) There is a path for the impact of the highlights show on the actual consumption behavior of college students, and the resulting path coefficient is 0.37, indicating that the highlights show is positively correlated with the actual consumption behavior of college students. The highlights show is indeed providing accurate information updates and searching keywords. And product information to meet the needs of college students, so that college students have the desire to consume;
- (3) There is a path for the influence of media brands on the actual consumption behavior of college students, and the path coefficient is 0.36. It shows that the media brand is positively correlated with the actual consumption behavior of college students. It indicates that the brand effect of the platform and the anchor plays an obvious role in meeting the needs of college students to pursue fashion.

#### 6. Conclusion

At present, with the penetration of self-media into many aspects of life, the Internet celebrity economy has penetrated into all walks of life. As the main consumer in the new era, college students have become the focus of the Internet celebrity economy, which has had a positive or negative impact on the consumption behavior of college students. This paper adopts the structural equation model analysis method, after importing the data operation analysis, according to the relevant indicators, the following conclusions are drawn:(1) The generation of Internet celebrity consumption behavior of college students is mainly affected by media brands and highlights. Therefore, under the "Internet celebrity economy" marketing model, various forms of display methods can be flexibly used to further promote the brand effect of the media and increase the purchasing desire of college students; (2) Although interactive promotion and interest groups have no significant impact on the actual consumption behavior of college students' Internet celebrity marketing, they are an important part of Internet celebrity marketing. Internet celebrity marketing is inseparable from the interaction between anchors and fans and promotions and discounts, and they will have a non-significant indirect impact.

In view of the current uneven product quality and service level of Internet celebrities, colleges should strengthen and guide students to form a correct consumption concept, Internet celebrity platforms should improve their own management mechanisms, and the government should strengthen supervision of Internet celebrity platforms to create a good self-media consumption environment for the growth of college students.

## Acknowledgements

We thank the anonymous reviewers for their very constructive comments. This work was supported by Guangdong Provincial Educational Science Planning Project under Grant 2022JKDJ49 and Shenzhen Polytechnic Party Building and Ideological and Political Education Research Project under Grant 2022YB12.

#### References

- [1] Qiao, R.Y., Zhang, Y.H. and Wu, Y.Q. (2022) An Empirical Study on the Influence of Online Celebrity Marketing Model on College Students' Willingness to Consume. Operation and Management, 4, 38-42.
- [2] Zheng, L.L. and Gui, L. (2020) Analysis of the Influence of the Fan Economy on the Consumption Behavior of College Students-Taking the School of Economics and Technology of Anhui Agricultural University as an Example. Journal of Chizhou University, 34(1), 55-58.
- [3] Zhang, M. (2018) Research on Consumer Behavior and Marketing Strategy of Mobile Internet Advertising Audience. Master thesis, Capital University of Economics and Business, China.
- [4] Wang, Y., Cui, C., Gao, S.J. and Qian, X.L. (2016) The Leap from "Internet Celebrity" to "Internet Celebrity Economy"-Take Papi Sauce as an Example. Modern Economic Information, 8, 370-371.
- [5] Wei, J.F., Yang, J.Y. and Chen, W.W. (2021) Research on the Influence of the Internet Celebrity Economy in the New Era on the Consumption Behavior of College Students. Chinese Business Theory, 21, 48-50.