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The Impact of the Internet Celebrities' Characteristics on Consumers' Purchase Intention in Live-Streaming E-commerce of Cosmetics

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Abstract:

Nowadays, the increasing trend of cosmetic live-streaming has received widespread attention. Specifically, this phenomenon can be further explored and improved. This essay analysed the effects of different internet celebrities' characteristics on consumers' purchase intention. The results illustrate that both popularity and interactivity have significant positive effects on purchase intention. However, professionalism has no significant impact on purchase intention. Moreover, perceived emotional value serves as a positive mediator between the internet celebrity's popularity and consumers' purchase intention, and the same effect between interactivity and purchase intention. Furthermore, perceived usefulness serves as a positive mediator between the internet celebrity's professionalism and consumers' purchase intention. Therefore, by improving the popularity, interactivity, and professionalism of the internet celebrity, the purchase intention of consumers can be effectively increased by the rising perceived emotional value and perceived usefulness from consumers. By working in this way, more enterprises and firms can reach their business targets and better fulfil customers' needs, which is beneficial for both of them.

Keywords: Purchase Intention, Live-Streaming, Internet Celebrity, Cosmetics

1. Introduction

Live-streaming commerce has become the next explosive sales model after traditional online retail, and its popularity continues to show an upward trend. According to iiMedia Research, the global digital human live-streaming e-commerce market reached $49.28 billion in 2024 and is predicted to grow to $76.79 billion by 2026 [1]. This has led many teenagers and middle-aged people to follow the trend and prefer shopping online or placing orders through live streaming. Additionally, from the China briefing,

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China's cosmetics and personal care industry is forecasted to achieve an impressive $78 billion in market value by 2025 [2]. Therefore, among all the types of goods, cosmetic products are undoubtedly one of the core tracks. As the demand for better appearance increases, more and more beauty bloggers are discovering this phenomenon and choosing to join the live streaming bandwagon to showcase beauty products in a live interactive format, acting like consumers themselves and enticing them to place orders. However, not all cosmetic products sell very well in this competitive consumption category. The characteristics of the internet celebrity largely determine the sales of the product, and enterprises will choose the most suitable live streamers for their sales through their brand positioning and concepts. For example, functional products are suitable for professional internet celebrities, while trendy items are more suitable for charismatic anchors. From the perspectives of popularity, professionalism, and interactivity, different anchors elicit different degrees of emotional trust, perceived emotional value, and perceived usefulness, and all of these factors will affect the consumer's purchase intention to a certain extent. Therefore, this paper adopts the SOR theory, taking the internet celebrity characteristics as the independent variable, perceived emotional value and perceived usefulness as the mediator variables, to study their effects on purchase intention, which is the dependent variable. The exploration of this topic can help people uncover the basic operational model of live streaming sales and discover the reasons why it attracts consumers. Understand why online shopping has become mainstream in today's society, consider the advantages and disadvantages of online shopping compared to offline shopping, and what causes live streaming consumption to become an important diversion in online shopping.

2. Method

2.1 Theoretical Basis

Live-streaming e-commerce merges video streaming with online shopping to create an interactive experience, offering a communication channel for the live streamer to showcase and promote products while answering consumers' questions in real-time [3]. The research dimensions of this topic are basically divided into the personal characteristics of the internet celebrity and the perception of consumers. For the internet celebrity's characteristics, it is divided into popularity, interactivity, and professionalism. For the consumers' perception, it is divided into perceived emotional value and perceived usefulness. All of the above will affect the purchase intention to varying extents.

2.2 Research Design

This research uses Likert Scales to analyze the impact of the internet celebrities' characteristics on consumers' purchase intention in live-streaming e-commerce of cosmetics. Referring to the SOR model, the independent variable is the internet celebrities' characteristics, and the dimensions of the scale include popularity, interactivity, and professionalism. The mediator is perceptions, and the dimensions of the scale include perceived emotional value and perceived usefulness. The dependent variable is purchase intention; the proposed framework is displayed in Fig. 1.

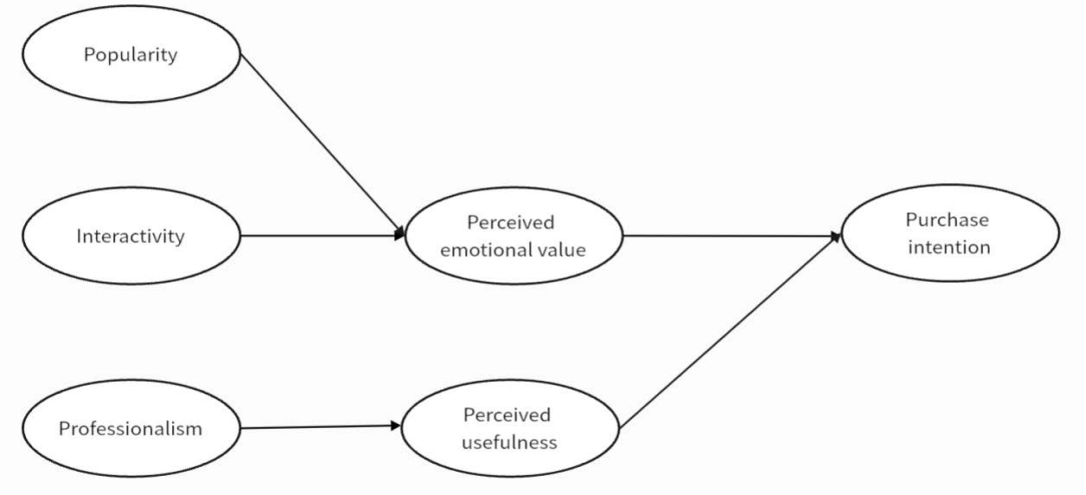

Fig. 1 The model framework.

In live-streaming e-commerce, the popularity of the internet celebrity has a prominent effect on consumers' purchase intention. Research indicates that an influencer's popularity heightens consumers' perception of emotional value in endorsed products, thereby strengthening purchase intention. Similarly, Kowalczyk and Pounders

figured out that emotional trust and perceived emotional value linked to conventional celebrities significantly enhance brand purchase likelihood on social media. Overall, popularity can affect consumer purchase decisions both directly and indirectly by fostering emotional trust and amplifying perceived emotional value [4]. Specifically, some well-known internet celebrities who have a large number of fans may be more likely to attract their fans to purchase the products that they recommend, which enormously increases the sales. Additionally, consumers who are not members of fans may also be fascinated by the high real-time sales, think that those products that are bought by a great proportion of people should have corresponding high quality or functional benefits. Therefore, this group of people may also choose to buy the product, which forms the consumption cycle. As a result, hypothesis 1 is proposed:

H1: The popularity of the internet celebrity has a significantly positive effect on consumers' purchase intention.

Anchoring professionalism in live e-commerce is one of the main factors that influences consumers' willingness to purchase a product. Internet celebrity professionalism reflects the competence of internet celebrities in demonstrating product expertise, sales proficiency, field experience, and the capacity to deliver accurate product information while addressing consumer inquiries. Research indicates that when internet celebrities exhibit greater professional knowledge, consumers are more inclined to accept their recommendations and perceive them as credible sources [5]. Especially for cosmetic products, which involve high participation and carry a high-risk dimension, the professionalism of the anchor—demonstrated through providing a detailed product introduction—can effectively enhance consumer trust and expectations, thereby increasing purchase intention. For example, when discussing efficacy-based cosmetics, the streamer can describe the ingredients in detail, including their functions and the target population for each. As a result, hypothesis 2 is suggested:

H2: The professionalism of the internet celebrity has a significantly positive effect on consumers' purchase intention.

The comparative advantage of live-streaming e-commerce over traditional e-commerce is its real-time interactivity, which can be reflected in the capability to answer customers' questions in real-time through bullet comments and provide corresponding suggestions to specific groups of people [5]. Specifically, it can promptly respond to consumers' questions, which might be related to product quality, and supplement with information about the product's advantages, thereby attracting consumers to purchase the product. In addition, the live-streaming environment can greatly enhance the immersive experience for consumers, giving them a sense of being present and shopping alongside the celebrity. Moreover, certain impassioned language and rhetoric can stimulate customers' desire to consume to a certain extent. Furthermore, counting down the time for adding products to the cart can create a sense of urgency, which speeds up the order speed when consumers are making the final decision. As a result, hypothesis 3 is postulated:

H3: The interactivity of the internet celebrity has a significantly positive effect on consumers' purchase intention.

A buying decision is directly influenced by perceived value. Perceived emotional value is sometimes conflated with satisfaction and has been studied extensively on a general level, especially in practitioner literature. These constructs are different, though. While pleasure is dependent on the product or service's experience, perceptions of value can be created without actually purchasing or using the product [6]. In live-streaming e-commerce, both the popularity and interactivity of the internet celebrity can enhance consumers' emotional value, which further increases their purchase intention. To be specific, as mentioned before, the internet celebrity, who is a 'Human Brand', that their loyal fans who tend to choose products recommended by the internet celebrity, and they like and support her through purchasing, by conveying positive and proactive values to screen out audiences with the same preference. Interactivity represents real-time two-way communication between the internet celebrity and viewers, which can be the internet celebrity answering simple questions from consumers or through a live stream call-in to provide detailed answers to complex questions. Solving customer problems and providing accurate product information allows the corresponding consumer group to find a product that matches and is most suitable for their characteristics based on their own demands, thereby enhancing consumers' perceived usefulness, making them believe that purchasing the product is beneficial to themselves, and thus increasing consumers' willingness to purchase it. As a result, hypothesis 4 is proposed:

H4: Perceived emotional value serves as a positive mediator between the internet celebrity's characteristics and purchase intention.

H4a: Perceived emotional value serves as a positive mediator between the internet celebrity's popularity and consumers' purchase intention.

H4b: Perceived emotional value serves as a positive mediator between the internet celebrity's interactivity and consumers' purchase intention.

Perceived usefulness (PU), alongside ease of use, serves as a fundamental cognitive driver of information technology adoption within the Technology Acceptance Model framework. Defined as an individual's expectation that using a technology will enhance their task performance and efficiency, this construct originated from Davis's foundational proposition that technology adoption primarily depends on users' performance improvement expecta-

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tions [7]. Specifically, perceived usefulness is reflected in the extent to which consumers believe that live streaming content can effectively address their needs. With professionalism, consumers will believe that the internet celebrity is professional and trustworthy, which will arouse their sense of usefulness as they will think that the information they received is reliable, thereby increasing their purchase intention. Professionalism is also a proof of a broadcaster's ability in the cosmetic field, which can be the transformation of knowledge reliability by using layman's terms to explain technical concepts. Furthermore, visual presentation of skills, such as comparative experiments that show the difference between before and after using the product, can trigger consumers' sense of usefulness. Additionally, the internet celebrity can provide consumers with a rational decision-making basis and capture consumer needs through their professionalism, and give appropriate suggestions, which provides them with value through rational recognition and emotional dependence. As a result, hypothesis 5 is postulated:

H5: Perceived usefulness serves as a positive mediator between the internet celebrity's professionalism and consumers' purchase intention.

3. Result and Data Analysis

3.1 3.1Descriptive Analysis

This questionnaire has a total of 288 samples, including 272 valid samples and 16 invalid samples. Among these 288 samples, 77.08% are females and 22.92% are males, indicating that the target market of cosmetic goods is mostly females. Among all of them, 10.07% are aged 20 and below, 31.25% are between 21 and 30 years old, 44.44% are between the ages of 31 and 40 years old, and 14.24% are aged 41 and above, showing that all age groups have participated in beauty live streaming, with middle-aged women showing the strongest interest in it.

3.2 Reliability analysis

There are a total of six variables in this research, and reliability analysis was conducted for each of them. As shown in Table 1, each of them has a Cronbach's alpha that is higher than 0.8, reflecting high reliability and quality of the data.

Table 1. Data of the Reliability analysis.

Items	Cronbach alpha
Popularity	0.808
Professionalism	0.844
Interactivity	0.836
Perceived emotional value	0.815
Perceived usefulness	0.861
Purchase intention	0.847

3.3 Regression Analysis

For the effects of independent variables on dependent variables, the overall R-squared value is 0.815, which shows that popularity, interactivity, and professionalism can explain 81.5% of the change in purchase intention. Specifically, the regression coefficient of popularity is 0.298 ($t=6.413$, $p=0.000<0.01$), illustrating that popularity has a significant positive effect on purchase intention. That of interactivity is 0.605 ($t=9.571$, $p=0.000<0.01$), demonstrating that interactivity has a significant positive effect on purchase intention. Furthermore, the regression coefficient of professionalism is 0.034 ($t=0.602$, $p=0.548>0.05$), explaining that purchase intention is not significantly affected by professionalism. Therefore, the results show that H1 and H3 are accepted. However, H2 is rejected.

Moreover, for the effects of independent variables on the mediators, firstly, for perceived usefulness, the overall R-squared value of the model is 0.835, indicating that popularity, interactivity, and professionalism can explain 83.5% of the changes in perceived usefulness. To be specific, the regression coefficient of popularity is 0.308 ($t=7.060$, $p=0.000<0.01$), attesting that popularity has a significant positive effect on perceived usefulness, and the regression coefficient of interactivity is 0.518 ($t=8.725$, $p=0.000<0.01$), corroborating that interactivity has a significant positive effect on perceived usefulness. Similarly, the regression coefficient of professionalism is 0.117 ($t=2.173$, $p=0.031<0.05$), proving that professionalism has a significant positive effect on perceived usefulness. After that, for perceived emotional value, the overall R-squared value of the model is 0.845, indicating that popularity, interactivity, and professionalism can explain 84.5% of the changes in perceived emotional value. To be more specific, the regression coefficient of popularity is 0.193 ($t=4.885$, $p=0.000<0.01$), showing that popularity has a significant

positive effect on perceived emotional value. In a similar way, the regression coefficient of interactivity is 0.660 ($t=12.266$, $p=0.000<0.01$), confirming that interactivity has a significant positive effect on perceived emotional value. While that of professionalism is 0.028 ($t=0.583$, $p=0.561>0.05$), verifying that perceived emotional value is not significantly affected by professionalism. Furthermore, for the effects of mediators on dependent variables, the overall R-squared value is 0.748, confirming that perceived usefulness and perceived emotional value can explain 74.8% of the change in purchase intention. Specifically, for perceived usefulness, the regression coefficient value is 0.610 ($t=6.672$, $p=0.000<0.01$), substantiating that perceived usefulness has a significant positive effect on purchase intention. At the same time, for perceived emotional value, the regression coefficient value is 0.386 ($t=4.091$, $p=0.000<0.01$), validating that perceived emotional value has a significant positive effect on purchase intention. Therefore, perceived usefulness and perceived emotional value both have a significant positive effect on purchase intention, which indicates that H4a, H4b, and H5 are accepted.

To conclude, from the data, the middle-aged women between 31 and 40 have the strongest interest in beauty live streaming, and younger consumers who are under or equal to 30 are also participants. The possible reasons might be that women in their 30s-40s have greater disposable income and stronger beauty maintenance demands. Younger consumers may have more leisure time to watch live streams. The low male percentage aligns with conventional cosmetic market trends. All constructs have a Cronbach's alpha higher than 0.8, which indicates that the data have high reliability. Additionally, it can show that the questionnaire is well-designed with clear wording and logical structure, and there are strong correlations between each question. The reason that professionalism does not act as a significant factor for the purchase intention can be that it does not provide evident perceived emotional value to the customers, which has a comparative disadvantage compared with the other two factors in a live-stream circumstance.

4. Suggestions

The data above provides useful information to enterprises. To be specific, by knowing that middle-aged women buy most cosmetics, the firms can indicate middle-aged women as the target audience, and try to investigate them in order to launch more related products that satisfy their interests. For example, companies can use questionnaires to find out their favorite colors and styles, or habits. In this way, the possibility of higher sales might increase, which helps the firms earn more profit and reach their business purpose. Additionally, although the recent research indicates that purchase intention is not significantly affected by professionalism, with the further developments in the cosmetic industry, it may identify professionalism as an influential factor. Furthermore, improvements such as trying to find out purchasing behavior across age groups can be considered. For example, which age group buys more premium products? This can help the sellers and enterprises to better understand various consumer preferences in the purchasing field for consumers in different age groups, to raise the perceived usefulness of them. In addition, expand sample diversity, for example, consider the younger generation.

5. Conclusion

To sum up, from all the research above, this article uses the SOR model to build up the relationships between different variables and constructs the related tables of variables. The data are all collected by using the questionnaire in Likert Scale style. The results illustrate that the target audiences of the cosmetic live-stream are predominantly middle-aged women. From the regression analysis, both popularity and interactivity have significant positive effects on purchase intention. However, professionalism does not have a substantial impact on purchase intention. Similarly, both popularity and interactivity have notable positive effects on perceived emotional value, but that in professionalism does not. Additionally, all three of them have pronounced positive effects on perceived usefulness. These results can effectively guide the related enterprises and sellers to improve their ways of selling in online live-streams. To be specific, they have to improve the popularity of the online celebrity whom they employed, or choose to find more popular promoters initially. Furthermore, the online celebrity should actively communicate with audiences in order to attract their attention and raise their perceived emotional value, and further incentivize their purchase intention. Moreover, even though the above research demonstrates that professionalism is not a significant factor for both perceived emotional value and perceived usefulness, in the future evolution, it is possible that more consumers become aware of the importance of perceived usefulness, which increases the connection between that and their purchase intention. Therefore, further investigation between professionalism and purchase intention can be conducted in the future.

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