Research on impulse purchase of live e-commerce platform users based on ELM model in China

Ying Yu*, Ziyang Liu*

*Doctoral course, Dept. of Global Business, Graduate School, Kyonggi University, Suwon, Korea
*Professor, Dept. of Global Business, Graduate School, Kyonggi University, Suwon, Korea

[Abstract]

The purpose of this study is to investigate the influencing factors and mechanism of the characteristics of the live broadcast e-commerce platform and the characteristics of the host on the impulse purchase intention of live broadcast viewers. Based on the ELM model, this study complements existing research content. This study adopts the form of questionnaire survey and conducts empirical analysis using SPSS, AMOS, Mplus and other analysis software for online live broadcast users. The results show that the characteristics of live broadcast platforms have a positive impact on consumers' flow experience and satisfaction; the personal characteristics of anchors have a positive impact on consumers' flow experience and satisfaction; consumers' flow experience and satisfaction have a positive impact on impulse purchase intention has a positive impact, and flow experience and satisfaction have a mediating effect on the characteristics of the live broadcast platform and the personal characteristics of the host.

Key words: ELM model, central path, peripheral path, live broadcast platform, impulse buying

[요 약]

본 연구의 목적은 라이브방송 전자상거래 플랫폼의 특성과 생방송 사업자의 개인적 특성이 생방송 시청자의 충동구매의도에 영향을 미치는 요인과 매개효과를 규명하는 것이다. 본 연구는 ELM 모델을 기반으로 기존의 미흡한 내용을 심층적으로 조사하고자 한다. 본 연구는 온라인 생방송 이용자를 대상으로 설문조사 형식을 채택하고 SPSS, AMOS, Mplus 등 파생 소프트웨어를 이용하여 실증분석을 수행하였다. 그 결과, 생방송 플랫폼의 특성은 소비자의 몰입 경험과 만족도에 의미 있는 영향을 미치고, 엠꺼의 개인적 특성은 소비자의 몰입 경험과 만족도에 의미 있는 영향을 미치고, 소비자의 몰입 경험과 만족도는 의미 있는 영향을 미치는 것으로 나타났다. 충동 구매의도는 의미 있는 영향을 미치고 몰입경험과 만족도는 생방송플랫폼의 특성과 진행자의 개인적 특성에 매개효과가 있다.

Key words: ELM model, central path, peripheral path, live broadcast platform, impulse buying
I. Research Background

The new model of the online live broadcast platform “anchor bringing goods” has begun to enter people’s attention. Online shopping, with its strong interactivity and timely feedback, helps users save consumption decision-making time, improves shopping efficiency, and quickly becomes the most popular online shopping form. Under the background of in-depth collaboration between webcasting and various industries, further exploring the factors and paths that affect the willingness of viewers to consume on live broadcast platforms has become a hot research direction in the business and academic circles. At present, only a few studies have explored the influence of information source characteristics and atmosphere characteristics of live broadcast rooms on the consumption behavior of online live broadcast audiences[1]. As an important platform connecting consumers, brands, and advertisers, the webcasting platform plays an important role in the completion of transactions. Secondly, as a "micro network celebrity", the halo effect of the anchor in the effect of online live broadcast cannot be ignored. At present, there is still a lack of research that integrates the characteristics of the online live broadcast platform and the personal characteristics of the host into the same research framework, and explores the impulse purchase intention of the audience of the online live broadcast platform in an integrated manner. The online live broadcast platform can not only create a good interactive and timely product promotion channel and consumption scene, but also rely on the live broadcast anchor to enrich the online shopping experience of consumers and improve the viewing and purchase conversion rate of live broadcast viewers. The online live broadcast platform highlights the huge advantages generated by the combination of the Internet celebrity economy and Internet technology. At present, the academic community mainly explores from the perspective of the relevant subject behavior of the online live broadcast platform and the operation and management of the live broadcast platform. Specifically, starting from the motivation of online anchors, Tang et al. (2016) concluded that part of the anchors’ live broadcasts are for the purpose of personal brand building, while the other part of the anchors’ live broadcasts are to gain audiences through interviews with anchors in the periscope live broadcast platform social support[2]. Zhao Q. (2017) found that the anchor’s perception of the attractiveness of the live broadcast platform and the level of personal expected performance positively affect their willingness to continue live broadcast[3]. Starting from the factors that affect viewers’ willingness to watch live broadcasts, Törhönen M, Sjöblom M (2018) found that the interaction between the anchor and the audience, the personality charm of the anchor, and the interest and innovation of the live broadcast content all have a positive impact on the viewers’ willingness to watch[4]. Pointed out that in the field of game live broadcast, the group identity in the live broadcast room significantly positively affects the audience’s continuous viewing intention[5]. Further, starting from the mechanism that affects the consumption willingness of live broadcast audiences, Gong Xiaoxiao et al.(2019) found that the atmosphere cues of live broadcast platforms significantly positively affect consumers’ impulsive consumption willingness[1]. Similarly, Meng Lu et al. (2020) pointed out that characteristics such as the professionalism of Internet celebrity anchors ultimately influence consumption willingness through consumers’ perception of actual and hedonic value[6]. Finally, starting from the operation management and ecological governance of the live broadcast platform, Kwang and Ju (2017) believe that the live broadcast platform should make full use of the celebrity effect of the anchor, should continuously update the functions to meet the social needs of users, and be able to respond to user comments in a timely manner. It is recommended to live broadcast the platform effectively manages and purifies the barrage in the live broadcast room by
improving the sensitive word interception technology and enriching the filter word library[7].

II. Theoretical Basis

The Elaboration Likelihood Model was proposed by Petty and Cacioppo (1984) as a basic theoretical framework for understanding the effectiveness of individual persuasion and attitude change[8]. In this theoretical framework, the intra-individual persuasion process is mainly realized through two information processing paths, namely the central path and the peripheral path.

Information quality refers to the user’s perception of the degree to which the information content provided by the live broadcast platform matches their own needs. The information quality of the live broadcast platform system can affect the user’s cognition and has the effect of content display and persuasion. When the information is highly relevant to the user’s task, when the number is huge, then such information can significantly and positively affect user satisfaction[9]. Information quality is composed of informational value and entertainment value. The entertainment value is mainly reflected in the interface of the system, which can make users have interesting experience and excitement. An important premise for immersion is personal interest and excitement. Live viewers can obtain rich and interesting shopping information and experience through the wonderful live broadcast of the anchor on the live broadcast platform. In this new shopping mode, the audience will feel immersed spontaneously, and at the same time, the satisfaction has also been improved.

System quality mainly reflects the status of the live broadcast platform system itself, including running speed, ease of operation, and visual appeal. Some studies have found that the display form of goods on online shopping websites is conducive to the improvement of visual appeal, and higher visual appeal can stimulate consumers’ arousal state and make them optimistic. Positive and optimistic positive emotions are conducive to the acquisition of flow experience. In addition, Hsu (2012) pointed out that system quality significantly positively affects user satisfaction[10]. Whether it is the network delay of the audience when watching the live broadcast of the anchor, or the shopping function and link settings in the live broadcast platform, it will affect the audience’s in-depth perception and satisfaction. The stable and reliable live broadcast platform system can help the audience to quickly complete the shopping task, and can easily immerse themselves in watching the live broadcast performance of the anchor.

(1) Interactive and flow experience, satisfaction. When virtual community users can quickly get feedback from the system or can easily communicate with other users on the live broadcast platform, it means that users have received enough attention. This attention can make users feel happy and even create a sense of self-esteem. (2) The credibility, flow experience and satisfaction of the anchor. Compared with celebrities in traditional media, celebrities on current online social platforms are considered by audiences to be more reliable sources of information through high-frequency exposure and convenient communication channels established with audiences. Credibility will reduce the perceived risk of customers in the transaction process, so consumers will gradually feel the fun and indulge in participating in online live shopping in a lower-risk virtual field, thereby gaining an flow experience.

(3) The attractiveness, flow experience and satisfaction of the anchor. The attractiveness of online celebrities is mainly measured by the external image perceived by users. The audience gained an immersive aesthetic experience in the virtual live broadcast scene full of audiovisual effects and the good image symbolization of the anchor, found that the attractiveness of Internet
celebrities has a significant positive impact on consumers’ perceived value[6]. In addition, people with a good external image are often more likely to obtain positive evaluations and positive comments from others.

Flow experience, satisfaction and impulse purchase intention User flow experience will have an impact on consumers’ shopping attitude, especially online loyalty and purchase intention. In addition, in the B2C shopping context, the consumer flow experience partially mediates the relationship between interactivity and impulsive shopping intention, and the user flow experience partially mediates the relationship between information quality, system quality and mobile consumption intention[11]. When consumers are immersed in the shopping live broadcast, they will unconsciously want to participate in this process, so they will make impulsive consumption under the guidance of the anchor.

Website quality is an antecedent variable that affects consumer satisfaction, and satisfaction also significantly positively affects their purchase intention. Satisfaction partially mediates the relationship between information, system and service quality and individual behavioral intentions [12]. When the audience is watching the live broadcast of their favorite anchor, both their emotional needs and their shopping information acquisition needs are met, so they are more likely to be infected by the atmosphere of the live broadcast room and make impulsive consumption.

III. Hypothesis Formulation and Models

According to the theoretical basis sorted out in this study, we constructed the model shown in Figure-1. Information quality, system quality, interaction salience, anchor credibility, and anchor attraction are used as independent variables, live audience flow experience and audience satisfaction are used as mediating variables, and impulse purchase intention is used as dependent variables. At the same time, according to the constructed model, we put forward the following hypothesis.

\[
\text{H1: The quality of information significantly affects the flow experience of live viewers.}
\]

\[
\text{H2: Information quality significantly affects the satisfaction of live viewers.}
\]

\[
\text{H3: System quality significantly affects the flow experience of live viewers.}
\]

\[
\text{H4: System quality significantly affects live broadcast audience satisfaction.}
\]

\[
\text{H5: Interactivity significantly affects the flow experience of live viewers.}
\]

\[
\text{H6: Interactivity significantly affects live broadcast audience satisfaction.}
\]

\[
\text{H7: The credibility of the anchor significantly affects the flow experience of live viewers.}
\]

\[
\text{H8: The credibility of the anchor significantly affects the live broadcast audience and satisfaction.}
\]

\[
\text{H9: The attractiveness of anchors significantly affects the flow experience of live viewers.}
\]

\[
\text{H10: The attractiveness of anchors significantly affects the satisfaction of live broadcast viewers.}
\]

\[
\text{H11: The flow experience of live audiences positively affects their impulse buying intention.}
\]

\[
\text{H12: Live broadcast audience satisfaction significantly and positively affects their impulse purchase intention (H12).}
\]

\[
\text{H13: The flow experience of live viewers mediates the relationship between information quality, system quality, interactivity, anchor credibility, anchor attraction and impulse purchase intention.}
\]
Research on impulse purchase of live e-commerce platform users based on ELM model in China

H14: Live audience satisfaction mediates the relationship between information quality, system quality, interactivity, anchor credibility, anchor attractiveness, and impulse purchase intention, respectively.

IV. Empirical Research

The questionnaire of this paper is mainly divided into two parts: the first part is demographic information, and the second part is research variable items. Among them, the research variables are measured by the Likert 5-point scale. The information quality (IQ) refers to the scale of Hsu et al. (2012), with a total of 4 items [12]; system quality (SQ) refers to the scale of Islam et al. (2017), with a total of 4 items [13]; interaction (IN) refers to the scale of Xiong Wei et al. (2015) [14], with a total of 4 items; broadcaster credibility (BC) refers to the scale of Kim (2018), a total of 3 items [15]; broadcaster attraction (BA) refers to the scale of Yan Daocheng et al. (2018), a total of 4 items; flow experience (FE) refers to the scale of Hsu et al. (2012), with a total of 4 items [12]; satisfaction (SA) refers to the scale of Lin et al. (2005), with a total of 3 items [17], impulse buying intention (IBI) refers to the scale of Beattyse et al. (1998), with a total of 4 items [18]. This research mainly uses the form of online questionnaires for data collection, and the effective respondents are Chinese users who have shopped through the online live broadcast platform. The main reason for choosing this method is that the online questionnaire has the advantages of quick recovery and convenient filling. In the preliminary analysis of the questionnaire results, in order to avoid errors in statistical information, the answers to consecutive multiple questions are regarded as invalid questionnaires. A total of 815 questionnaires were collected during the formal research process of this study. After excluding invalid questionnaires, 736 valid questionnaires were obtained. In the formal survey, the sample distribution of respondents is as follows: Men accounted for 64.87% and women accounted for 35.13%; the respondents under the age of 40 reached 73.42%, which is in line with the audience characteristics of online live shopping; the respondents were mainly teachers and employees of private enterprises, accounting for 53.68%; undergraduate and above Respondents with educational background accounted for 57.45%, and the monthly income was mostly concentrated in 3,000-6,000 yuan, reaching 44.2%.

In this study, SPSS 27.0 software was used for statistical analysis of the primary data collected by the formal survey. The scale in this paper is a Likert 5-level scale, and Cronbach’s alpha coefficient is used to test the reliability of 8 research variables to evaluate the internal consistency of the scale. As shown in Table 1, the minimum value of standardized factor loading of each measurement item under each variable is greater than 0.5. The combined reliability coefficient CR values were all greater than 0.7, and the AVE values were all greater than 0.5. This shows that each measurement item in the scale can significantly affect the corresponding latent variable, and each latent variable has good convergent validity. It can be seen from Table-1 that the Cronbach’s α of all variables is above 0.85, which is greater than the acceptable reliability standard of 0.7, indicating that the scale has a high level of reliability and good internal consistency. The above data analysis results show that this study has high reliability and validity for the measurement of each research variable, and the scale can be applied to this study.
Table 1. Reliability Analysis

<table>
<thead>
<tr>
<th>index</th>
<th>item</th>
<th>Standard factor loadings</th>
<th>Cronbach’s α</th>
<th>CR</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>IQ</td>
<td>IQ1</td>
<td>0.768</td>
<td>0.913</td>
<td>0.857</td>
<td>0.673</td>
</tr>
<tr>
<td></td>
<td>IQ2</td>
<td>0.779</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IQ3</td>
<td>0.866</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IQ4</td>
<td>0.812</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SQ</td>
<td>SQ1</td>
<td>0.799</td>
<td>0.941</td>
<td>0.847</td>
<td>0.653</td>
</tr>
<tr>
<td></td>
<td>SQ2</td>
<td>0.835</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SQ3</td>
<td>0.833</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SQ4</td>
<td>0.789</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IN</td>
<td>IN1</td>
<td>0.821</td>
<td>0.889</td>
<td>0.843</td>
<td>0.665</td>
</tr>
<tr>
<td></td>
<td>IN2</td>
<td>0.745</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IN3</td>
<td>0.788</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IN4</td>
<td>0.723</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BC</td>
<td>BC1</td>
<td>0.806</td>
<td>0.873</td>
<td>0.876</td>
<td>0.816</td>
</tr>
<tr>
<td></td>
<td>BC2</td>
<td>0.844</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>BC3</td>
<td>0.863</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BA</td>
<td>BA1</td>
<td>0.823</td>
<td>0.912</td>
<td>0.884</td>
<td>0.645</td>
</tr>
<tr>
<td></td>
<td>BA2</td>
<td>0.799</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>BA3</td>
<td>0.878</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>BA4</td>
<td>0.778</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FE</td>
<td>FE1</td>
<td>0.767</td>
<td>0.891</td>
<td>0.832</td>
<td>0.701</td>
</tr>
<tr>
<td></td>
<td>FE2</td>
<td>0.818</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>FE3</td>
<td>0.776</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>FE4</td>
<td>0.787</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SA</td>
<td>SA1</td>
<td>0.712</td>
<td>0.913</td>
<td>0.855</td>
<td>0.714</td>
</tr>
<tr>
<td></td>
<td>SA2</td>
<td>0.811</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SA3</td>
<td>0.899</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IBI</td>
<td>IBI1</td>
<td>0.817</td>
<td>0.878</td>
<td>0.889</td>
<td>0.688</td>
</tr>
<tr>
<td></td>
<td>IBI2</td>
<td>0.871</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IBI3</td>
<td>0.803</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IBI4</td>
<td>0.816</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In this study, a confirmatory factor analysis was performed using a competitive surrogate model approach to further illustrate the discriminant validity between variables. According to the connotation and statistical requirements of each variable, this study proposes seven competitive models, and uses RMSEA, CFI, TLI, SRMR and other indicators to discriminate. The eight-factor model gave the best results: x² (chi-square)=830.257 (p<0.001), CFI=0.959, TLI=0.953, RMSEA=0.040, SRMR=0.026. The fit metrics of other competing models are inferior to the eight-factor model. The above test shows that the eight variables involved in this study have obvious discrimination. In other words, the dimensions under the central pathway and the peripheral pathway involved in the theoretical model of this study can be distinguished from each other, and flow experience and satisfaction as mediating variables are two distinct psychological mechanisms.

Through the correlation test for all variables, we found that all coefficients are above 0.6, indicating that the discriminant fitness is acceptable.

4.1 Model Hypothesis Testing

In this paper, a structural equation model is constructed and the basic hypotheses are tested. The results show that under the central path, information quality and system quality can positively promote the audience’s flow experience (H1 and H2), and high-quality information content and an efficient live broadcast platform system are conducive to reducing the difficulty of information processing for users and avoiding other useless information. The quality of information and system quality can positively promote audience satisfaction (H3 and H4), and can provide audiences with timely, accurate and relevant shopping information. And run stably. In a reliable live broadcast platform, consumers can more efficiently and accurately obtain the required product information, quickly complete shopping tasks, and make positive comments on the shopping experience. In the marginal path, interactivity positively affects the audience’s flow experience and satisfaction (H5 and H6). The pleasant interpersonal interaction between the audience and the anchor promotes their flow experience, and the good interactive atmosphere in the live broadcast platform improves the audience. Satisfaction with live shopping: the credibility of the anchors positively affects the audience’s flow experience and satisfaction (H7 and H8). At the same time, trusted anchors can create high-value personal brands at a lower cost to meet the audience’s various needs. At the same time, a professional and reliable anchor can make the audience more relaxed and immersed in live broadcast shopping; the attractiveness of the anchor positively affects the audience’s flow experience and satisfaction (H9 and H10), attractive anchors can stimulate the audience’s positive
emotional arousal and attention, thereby further enhancing their immersion and satisfaction. Further, viewers who gain flow experience and satisfaction will have a positive evaluation of the live-streaming shopping experience, resulting in impulse purchase intention (H11 and H12). From the perspective of consumer shopping experience, when consumers are immersed in watching interesting live shopping, they will get an almost self-absorbed flow experience. In this state, it is easy to be influenced by shopping stimuli, so it is more likely to make impulsive purchase choices, so there is a significant positive relationship between consumers’ flow experience and impulse purchase intention. From the perspective of consumers’ irrational psychology, when consumers are satisfied with the new shopping mode of live-streaming shopping, their shopping decisions are easier to simplify and make impulse purchase choices. The detailed results are shown in Table 2.

4.2 Test of Mediation Effect
In order to analyze the mediating effect of flow experience and satisfaction on information quality, system quality, interactivity, anchor’s credibility, anchor’s attractiveness and impulse purchase intention, this paper uses Mplus7.4 software to test the mediating effect. Since this study has multiple independent variables, mediating variables, and outcome variables, in order to examine the mediating effect more rigorously, this study conducts an overall analysis instead of extracting each mediating path individually. The study found that at the 95% confidence interval level, the confidence interval of each path analysis result after adding the mediation effect did not contain 0, and the indirect effect value was smaller than the direct effect value, indicating that the flow experience and satisfaction are related to information quality, System quality, interactivity, anchor’s credibility, and anchor’s attractiveness play a partial mediating role in the influence of impulse purchase intention. In the live broadcast scene, the influence of the characteristics under the central route and the marginal route on the audience’s impulse purchase intention is because the flow experience and satisfaction are improved. Hypotheses 7 and 9 were verified, and the detailed results are shown in Table 3.

V. Conclusion and Suggestion
This research focuses on the question of "how consumers’ impulse purchase intentions are formed in the live broadcast scenario". In recent years, issues related to live-streaming shopping have been paid close attention by the academic

<table>
<thead>
<tr>
<th>model</th>
<th>direct effect</th>
<th>SE</th>
<th>95% confidence interval</th>
<th>indirect effect</th>
<th>SE</th>
<th>95% confidence interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>SQ-FE-IBI</td>
<td>0.446***</td>
<td>0.045</td>
<td>[0.359, 0.533]</td>
<td>0.185***</td>
<td>0.045</td>
<td>[0.136, 0.244]</td>
</tr>
<tr>
<td>SQ-SA-IBI</td>
<td>0.446***</td>
<td>0.045</td>
<td>[0.359, 0.533]</td>
<td>0.244***</td>
<td>0.034</td>
<td>[0.187, 0.293]</td>
</tr>
<tr>
<td>IQ-FE-IBI</td>
<td>0.659***</td>
<td>0.041</td>
<td>[0.622, 0.779]</td>
<td>0.254***</td>
<td>0.028</td>
<td>[0.197, 0.290]</td>
</tr>
<tr>
<td>IQ-SA-IBI</td>
<td>0.659***</td>
<td>0.041</td>
<td>[0.622, 0.779]</td>
<td>0.343***</td>
<td>0.032</td>
<td>[0.357, 0.590]</td>
</tr>
<tr>
<td>IN-FE-IBI</td>
<td>0.866***</td>
<td>0.046</td>
<td>[0.797, 0.934]</td>
<td>0.435***</td>
<td>0.042</td>
<td>[0.277, 0.590]</td>
</tr>
<tr>
<td>IN-SA-IBI</td>
<td>0.866***</td>
<td>0.046</td>
<td>[0.797, 0.934]</td>
<td>0.324***</td>
<td>0.039</td>
<td>[0.042, 0.623]</td>
</tr>
<tr>
<td>BC-FE-IBI</td>
<td>0.717***</td>
<td>0.044</td>
<td>[0.681, 0.862]</td>
<td>0.478***</td>
<td>0.043</td>
<td>[0.367, 0.445]</td>
</tr>
<tr>
<td>BC-SA-IBI</td>
<td>0.717***</td>
<td>0.044</td>
<td>[0.681, 0.862]</td>
<td>0.339***</td>
<td>0.046</td>
<td>[0.232, 0.388]</td>
</tr>
<tr>
<td>BC-FE-IBI</td>
<td>0.815***</td>
<td>0.053</td>
<td>[0.805, 0.915]</td>
<td>0.316***</td>
<td>0.048</td>
<td>[0.345, 0.423]</td>
</tr>
<tr>
<td>BC-SA-IBI</td>
<td>0.815***</td>
<td>0.053</td>
<td>[0.805, 0.915]</td>
<td>0.428***</td>
<td>0.051</td>
<td>[0.227, 0.340]</td>
</tr>
</tbody>
</table>

Tabel 3. Test of mediation effect
community. As an emerging form of shopping, it is yet to be determined whether it is due to the factors of the live broadcast platform itself, the attractiveness of the live-streaming anchors, or the individual characteristics of the audience as to how the live streaming of goods induces consumers' impulse purchase intention. Based on the above questions, this paper discusses the influence of live broadcast platform characteristics and host personal characteristics on audience impulse purchase intention on the basis of ELM, as well as the role of audience flow experience and satisfaction in this influencing process, and draws the following conclusions. First, under the central path, information quality and system quality promote the flow experience and satisfaction of live viewers. With the rise of live streaming, a large number of live streaming platforms have emerged. Which live streaming platform consumers choose to use depends to a certain extent on the information quality and system quality of the live streaming platform. Second, in the marginal path, the credibility, attractiveness, and interaction with the audience will increase the flow experience and satisfaction of the live audience. In addition to the characteristics of the live broadcast platform, the characteristics of the anchors themselves will also affect the audience's flow experience and satisfaction. Network anchor is a new type of self-employment occupation in recent years. People usually think that popular anchors are often charming, professional and reliable. This paper examines the three characteristics of the anchors with goods, including credibility, attractiveness, and interactivity. The research results show that they all promote the audience's flow experience and satisfaction. Third, the flow experience of live broadcast viewers positively affects their impulse purchase intention, and the live broadcast audience satisfaction also positively affects their impulse purchase intention. It is worth noting that satisfaction plays a more important role in impulsive consumption willingness than the audience's flow experience. It shows that whether it is the information clues from the central path or the information clues from the peripheral path, it is necessary to make consumers have a positive evaluation of the shopping experience, so that consumers are more likely to generate impulse purchases. Fourth, the flow experience and satisfaction of live viewers have a partial mediating role in the relationship between information quality, system quality, interactivity, anchor credibility, anchor attraction and impulse purchase intention. This shows that neither the information clues of the central path nor the peripheral path clues can directly affect the audience’s impulsive shopping willingness, but requires the audience to process the received information to obtain the corresponding shopping experience and feedback, and finally through its Internal psychological state to generate shopping intention.

Today, with the rapid advancement of information technology, webcasting is a "double-edged sword". On the one hand, it provides consumers with diversified shopping channels, and on the other hand, there are potential problems such as false propaganda. In this context, this article explores how the impulse buying intention of webcast viewers is formed, and draws three suggestions. First, from the perspective of the training of online celebrities and anchors, the fundamental purpose of consumers choosing to watch anchors live and bring goods is to buy their favorite products at fair prices. Therefore, the first requirement of a streamer is his warm attitude and honest quality. Secondly, it is also very important to improve the business ability of the anchor and its own charm. This requires the anchors to improve their eloquence and skills in an all-round way. At the same time, it also requires the anchors and their teams to carry out in-depth cultivation in professional fields such as selection of products in the early stage, understanding of user needs, and docking with merchants. Finally, the audience can enjoy a different shopping experience through the wonderful live broadcast performance of the anchor and the unique sales pitch shaped
according to their personality or personality. Second, from the perspective of online live broadcast platform operation, the live broadcast platform should optimize and upgrade its internal functions and product supply chain, and at the same time strengthen cooperation with merchants to provide rich product selection information. The reason why the live streaming platform can become an efficient marketing channel and a hot consumption scene is also closely related to its convenient shopping function design. Therefore, the live broadcast platform should use advanced Internet technology to further improve the information quality, system quality and operational efficiency within the platform. For example, a more realistic shopping scene can be built with the help of VR technology. In addition, the live broadcast platform should actively carry out in-depth cooperation with Internet celebrity anchors to push the Internet celebrity marketing model to a new stage of development. The strong attractiveness of Internet celebrity anchors can attract and promote the live broadcast platform, allowing users to actively participate in the online community of the live broadcast platform, improving their trust, satisfaction and other positive emotions, and ultimately guiding the completion of the transaction. The high interaction between internet celebrity anchors and users also makes it possible for live broadcast platforms to collect user preference information. Through the collected information, the live broadcast platform can profile users and realize more accurate and effective shopping information push through big data analysis technology. Third, as far as government regulation is concerned, as the market gradually becomes more rational, problems such as the exaggerated propaganda of the anchors and the untimely after-sales service of the platform may surface. Therefore, government regulatory authorities need to strengthen the constraints on anchors, and at the same time regulate the business activities of platform merchants. For example, specific guidelines should be issued for the words and deeds of anchors to guide and restrain the group of anchors; for the service operation of live broadcast platforms, corresponding management regulations and regulatory policies should be issued to supervise platform companies. Finally, through the joint cooperation of the government, live broadcast platforms and anchor groups, a good online shopping environment is created for consumers.

This research adopts the method of empirical research, and there are still many deficiencies. First of all, from the research object, we only pay attention to consumers of online live broadcast in China, and only do research on China’s e-commerce live broadcast platforms and anchors. Secondly, in terms of details, there are many types of live broadcast platforms, and this study is only a general research. Based on the above research shortcomings, when conducting new research in the future, the scope of research should be expanded and the research object should be expanded, not only limited to China, but also from the perspective of comparing China and South Korea. In addition, the selection of platforms should also be more subdivided.

REFERENCES


Authors

Ying Yu graduated from Shenyang Normal University in 2013 with a master's degree in education. In 2020, she entered Kyonggi University to study for a doctorate in Global Business.

In 1999, she worked as an associate professor at Anshan Normal University. Currently, she is focusing on international business research and teaching economic management research.

Ziyang Liu Received the B.A. degree in Management from Army superintend institute of shijiazhuang PLA ,China, in 2006, M.A. degree and Ph.D. degree in Management from Kyonggi University, Korea, in 2010 and 2013. Dr. Liu joined the faculty of the Global Business Kyonggi University in 2015. He is currently a Professor in the Global Business Kyonggi University. He is interested in Big data & Business, International economics, E-business, Global Business etc.