

The impact of psychological states generated by watching live broadcasts on people's consumption behavior

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Abstract. In today's society, the Internet is becoming more and more popular, and new media technology is also developing rapidly. Live streaming has become an important way of information dissemination and entertainment, which has an increasing impact on consumer behavior. This article provides an in-depth analysis of the various psychological activities that occur when people watch live streaming on the internet in their daily lives and explores how these psychological states affect consumers' decisions and consumption behavior. In the context of online live streaming, consumers not only obtain product information but also experience unique interactions and entertainment experiences. This experience stimulates consumers' various psychological states, including curiosity, crowd psychology, trust psychology, impulsive psychology, etc. These psychological states interact together to shape consumers' willingness to buy and behavior. In summary, the psychological state generated by watching live broadcasts has a significant impact on consumption behavior. Understanding these psychological states and their mechanism of action helps merchants better grasp consumer needs and formulate more effective marketing strategies. At the same time, consumers should also keep rational thinking and avoid blindly following the trend and impulsive consumption.

Keywords: Live streaming with goods; psychological state; consumption behavior.

1. Introduction

Due to the rapid development of the live-streaming e-commerce industry, the question of whether viewers' favorite hosts will increase their willingness to consume has gradually become a hot topic. The progress of modern social science and technology has also been growing, and research on the impact of anchors on consumer willingness is deepening. However, this field still faces many questions and challenges. For this reason, the review of this article aims to comprehensively sort out the current situation of research on the impact of anchors' consumption willingness at home and abroad, this is used to provide some reference for further research in the future.

In recent years, this live-streaming industry has flourished, and live broadcast consumption has become an increasingly common phenomenon. When consumers watch the live broadcast, their psychological state is in a complex and dynamic process of change. This psychological state will directly affect their consumption behavior such as whether to buy, what kind of products to buy, and the quantity they buy. Understanding the impact of these psychological states on consumption behavior is of great significance for merchants to optimize marketing strategies, improve sales performance, and for consumers to consume rationally.

Since the field of live broadcasts first attracted attention, its research has made remarkable progress in theory and practice. However, the changes in society and the continuous advancement of technology have brought about new problems and challenges. At present, some issues need to be addressed in this aspect of live streaming, including what affects consumers' purchasing power and what are the characteristics of online live streaming shopping that affect consumers' spending behavior. Therefore, in-depth exploration of these issues has become an important direction of current research.

In-depth research on whether anchors will increase purchasing power not only helps to reveal the core mechanism in the field of live broadcasts and improve our understanding of live broadcasts but

also provides theoretical support for the application of live broadcasts. In addition, solving the problems in the live streaming field is an important milestone for improving social efficiency and providing a higher prospect for the economy. Therefore, in-depth research is of positive social significance to promote the development of relevant fields.

2. Literature review

2.1. Psychological state

2.1.1. Conformity

In terms of the psychological state of the crowd, its specific manifestation is that when a large number of viewers follow, like, or order products while watching real-time online broadcasts, some viewers will pay attention to the behavior of the public. For example, when live-streaming sales data shows that thousands of people have purchased lipstick, other viewers will think that the lipstick must have its advantages, resulting in the impulse to buy. This point can be referred to Zhu Qin's article on a brief analysis of group psychology - reading Le Pen's "The Crowd of Wuhe - Research on Public Psychology".

Its influence mechanism mainly refers to the social identity theory that people tend to keep their behavior consistent with the group used to obtain feelings that are classified as belonging to the same category and feelings that others identify with them. In the live broadcast scenario, consumers will regard other viewers as a reference group. When the behavior of this group tends to buy a product, individuals tend to follow the purchase to avoid being regarded as an alien.

2.1.2. Curiosity

In terms of curiosity, its specific manifestation is that the novel products or unique display methods promoted by the anchor in online live streaming can easily stimulate consumers' curiosity. For example, some smart home products with innovative functions displayed live in technology, such as lamps that can change color and shape through voice control, will attract consumers to want to learn more and possibly buy. This point can be referred to scholar Liu Zhiting's article "Evaluation Short Video Communication Strategy from the Perspective of Communication Psychology - Take "Dad's Evaluation" as an Example"

Its impact mechanism mainly refers to the fact that according to the stimulus-response theory, the novel elements in the live broadcast can attract consumers' attention and stimulate their desire to explore as a stimulus. This kind of curiosity will prompt consumers to have an in-depth understanding of the functions, characteristics, and other information of the produced items. Once the unique attributes of the product meet their potential needs, it may be transformed into purchasing behavior.

2.1.3. Trust psychology

In terms of the psychological state of trust, the specific manifestation is that consumers' trust in anchors is a key factor in live broadcast consumption. When consumers trust the anchor, they have a high chance of accepting the products promoted and sold by the anchor. For example, some well-known beauty bloggers often buy cosmetics recommended by their fans without hesitation, because fans believe in the blogger's professional judgment and integrity. This point can be referred to scholar Wang Jianqi's article "Research on the Formation Mechanism and Evaluation of Online Comments on Consumer Perception Based on SOR Theory"

Its impact mechanism mainly refers to the trust transfer theory that when consumers trust a subject (such as an anchor), this trust will be partially transferred to other things related to the subject (such as recommended products). The anchor's image, professional knowledge, reputation, etc. will affect consumers' trust in it, which in turn will affect their purchasing decisions.

2.1.4. Impulsive psychology

In terms of an impulsive psychological state, its specific manifestation is broadcasting with specified and limited time on site, the snap-up atmosphere, etc. are easy to trigger the impulsive

psychology of consumers. For example, the promotion strategy that emphasizes that "only the first 100 orders can enjoy half price" in the live broadcast will make consumers rush to place orders without thinking enough. This point can be referred to scholar Dong Qianyu's article "Consumption Impulse - Customer Loyalty Relationship Model and Evidence Research"

Its influence mechanism mainly refers to the emotional awakening theory that the tense promotional atmosphere and other stimuli in the live broadcast will arouse consumers' emotions and reduce their rational thinking ability. In this state of high mood, consumers are more likely to make impulsive purchasing decisions.

2.2. The influence of the psychological state on consumption behavior

Acceleration or delay of purchasing decisions

Crowd psychology and impulsive psychology tend to accelerate purchasing decisions. When consumers see a large number of people buying or being stimulated by limited-time discounts, they may place orders quickly without making too many comparisons and thoughts.

If curiosity is not satisfied in time, or consumers' trust in the product is not established, it may delay the purchase decision. For example, if consumers are curious about the product but do not get enough product information in the live broadcast, they will postpone the purchase and wait for further information.

2.2.1. Types of purchased products and brand selection

The psychology of trust will affect consumers' choice of brand. If consumers trust an anchor, the brand recommended by the anchor will dominate the consumer's choice. Current situation: In terms of online celebrity live broadcast, scholar Jiang Jiaqi mentioned in his article "What are the reasons for these reasons, and analyze the factors that make people decide whether to purchase in the context of the live streaming internet celebrity economy? Currently, the scale of online consumption patterns is constantly increasing, the internet celebrity economy is also constantly rising, and online live streaming has become a very powerful and cannot be ignored marketing tool due to the continuous creation of new patterns by technology, which effectively makes up for the shortcomings of the original research [1].

It is the scholar Wang Tong holds a similar view to the scholar Jiang Jiaqi, but his viewpoint, as mentioned in his article, is slightly different from the research on the willingness and direction of the general public to purchase goods through real-time playback on electronic products and the internet. He believes that the research shows that entertainment is having an impact on the value of trust and sensing functions. And the value of the sense of feelings [2].

Scholars Liu Pingsheng and Shi Yongdong also believe that online live-streaming hosts have a significant impact on the purchasing behavior of real-time viewers, and the personal qualities of internet celebrity hosts have a certain influence on the final effect of live streaming [3].

2.2.2. The impact of online live streaming on teenagers

Similarly, online live streaming has a greater impact on young people. Scholars Cui Lijuan and Wang Xiaoye also described it in their articles [4]. Researchers have found a phenomenon. The first is that the bad effects of teenagers' and students' Internet use on their living habits are mainly reflected in their learning and living rules. For example, declining academic performance, irregular sleep and diet, etc. The negative impact of students who are addicted to the Internet is much greater than that of students who do not care about and use the Internet. The second one is that Internet-addicted and non-addictive students believe that the Internet plays a positive role in improving their relationships with classmates and friends. This also reveals that online live broadcasts have a certain psychological state and impact on teenagers.

In addition to teenagers, online live broadcasts also have a great impact on college students. For example, scholar Zhang Ganqun pointed out in his article, that besides teenagers, the main audience for online live streaming is college students, which has a huge impact on them. For example, scholar Zhang Ganqun pointed out in his article "Research" that the actions college students will take when

making a purchase are composed of eight dimensions: showing off, fashion, other-led, publicity of individuality, caution, recklessness and impulse, emotional regulation, diligence, and thrift. Eight different dimensions reflect the differences of college students. The consumer psychology of.[5]

2.2.3. Domestic and foreign scholars analyze the phenomenon

Many people abroad have also studied Chinese online live broadcasts. Jia Ning Li¹, Surachai Traiwannakij², and Kowin Viwathpongpan³ scholars have gradually analyzed the factors affecting this phenomenon through their articles [6].

HongQian Wang* and Zheng Zhang, as domestic scholars, are also exploring this field and topic, studying the reasons that lead to this phenomenon in which aspects [7].

At the same time, Han Xiaoyi and Wu Na, two scholars, respectively believe that the influence of live-streaming sales by internet celebrities on the audience is divided into several categories: anchor attributes, communication style, and influencing consumer concepts and behaviors. Among them, the anchor attribute is characterized by four latitudes, communication style is characterized by the user's communication style, the type of product recommended by the color arrangement, and the tone of the room specifically designed for live streaming. Characteristics that affect consumers' ideas and behaviors are the increasing "fan circle" and the "fan economy" is more popular [8].

Secondly, each scholar has different views on the comprehensive behavior of anchors in online live broadcasts that will affect residents' spending habits and actions and evaluation criteria. Dr. Han Xiaoyi believes that anchor attributes will have an effect on people's purchasing behavior, and Dr. Wu Na believes that the anchor's communication style will change the consumption habits of urban residents [9].

2.2.4. The advantages of live-streaming sales

First of all, the Internet, as a main body for presenting product characteristics, provides consumers with more information about the product under the premise that people who pay for this can only observe what the product looks like and what its function is by watching videos, and cannot touch it at all, endorses the product and provides preferential prices, to guide consumers to explore the characteristics and advantages of the product and stimulate the desire to consume. On the other hand, experienced network anchors are also good at creating a shopping atmosphere a room dedicated to real-time video streaming and sales promotion on a dedicated network, to let people who are buying things complement consumption behavior. Scholar Zhao Liqiang believes that online live streaming can share information in real-time, allowing anchors and viewers to interact in two directions in real-time, so that consumers can immerse themselves in the scene and experience the scene in an immersive way, thus promoting their consumption [10]. Through the interactive way, the audience asks the anchor about product-related information, the anchor answers the audience's questions, and the audience gives feedback in time, it can fully improve the audience's sense of participation, stimulate consumer demand, and is conducive to improving the transaction volume and success rate of products. In summary, the research of these scholars on live broadcasts mainly revolves around the attributes of anchors, which plays a role in the current research in this direction.

3. Methodology

The questionnaire design mainly revolves around the core variables of this study. The first part of the question is designed around demographic variables, including the basic information of age and gender. The second part is to ask the respondents questions about the background of the investigation and research. Only by watching the live broadcast and purchasing live broadcast room products can we further study the impact of the psychological state generated by watching the live broadcast on people's consumption behavior. The third part is generated around independent variables. According to the positive and negative mood scale jointly developed by the famous psychologists Watson and Clark, the scale has a high degree of credibility and can test people's psychological state when watching live broadcasts. The fourth part revolves around the dependent variables and uses the

Rickett scale, which was improved by American social psychologist Rickett in 1932 based on the original total addition scale. The scale consists of a group of statements. Each statement has five answers: very agree, agree, not necessarily, disagree, and very disagree, which are recorded as 5, 4, 3, 2, and 1 respectively. The total score of each respondent is the sum of his answers to each question. This total score can show the strength of his attitude. The different states on this scale are used to measure people's consumption behavior after watching the live broadcast. The fifth part focuses on live broadcasts and consumption to set up open issues to study people's views on the keywords of this study.

3.2 Participants
A total of 119 questionnaires were collected, including 30 males and 89 females, aged between 15-60 years old. The participants in this questionnaire are recruited purposefully, and their social identities are different, including students, those who are working, and those who are engaged in free industry. All participants know that public live broadcasting software, such as TikTok and Weibo, has certain daily purchase needs.

4. Result and discussion

4.1. Current situation of watching live broadcasts

As shown in the figure, when it comes to whether or not people will watch live broadcasts, the vast majority of people will do so. The reason for this may be that online live broadcasts have their characteristics and value, such as real-time interactivity: viewers can interact with the host in real time, ask questions, comment, or participate in discussions. Diversified content: covering various fields to meet different interests and needs. Social experience: Feel the atmosphere of the community and communicate with other viewers. Convenience: You can watch anytime, anywhere through your phone or computer. Authenticity and closeness: a more direct understanding of the product or host. Information dissemination: Quickly transmit various types of information. Entertainment and leisure: providing rich entertainment content. Business opportunity: Promote sales and marketing. Social Connection: Enhancing the connection between people. Skill learning: Live streaming in certain fields can impart knowledge and skills. Information dissemination: It can transmit various information in real time, including news, knowledge, skills, etc. Social interaction: Provides users with a platform for interactive communication and enhances social connections. Business marketing: becoming an effective marketing tool to promote product sales. Educational Learning: Used for online education, facilitating students' remote learning. Personal presentation: giving individuals the opportunity to showcase their talents and share experiences. Because of these characteristics and values, people are more willing to spend time watching live broadcasts as shown in Figure 1.

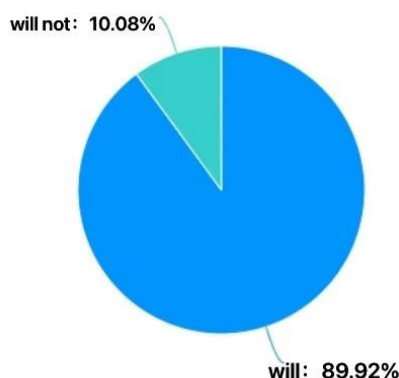


Fig 1. Frequency of Watching Live Streams.

4.2. Online purchasing behavior

As shown in the picture, online shopping dominates the issue of whether to purchase products offline or online when watching live broadcasts and whether to prefer offline or online purchases

since the rise of live streaming. Firstly, the real-time interactivity of live-streaming sales provides consumers with a more convenient and three-dimensional shopping experience. With the rapid development of mobile Internet and online video technology, both brand businesses and personal spokesmen can interact with consumers in real-time through live broadcasts to show them the use methods, characteristics, and advantages of goods. This almost face-to-face interaction not only allows shoppers to timely obtain product-related information and answer questions but also allows them to personally feel the anchor's true attitude and emotional emotions towards the product, thereby enhancing their shopping desire. Compared to cold product images and text descriptions, live-streaming sales can help consumers better understand the products, thereby improving the efficiency of purchasing decisions. Secondly, live-streaming sales greatly enhance the attributes of social interaction and sharing. During the live broadcast, shoppers can not only quickly communicate with the host and other viewers through bullet comments, but also establish a closer interactive relationship with the host through likes, gifts, and other forms. This social shopping experience not only brings the distance between the anchor and the audience closer but also makes shopping more interesting and entertaining. In addition, viewers often share their shopping experiences and insights through social media platforms after live broadcasts, attracting more consumers to their social circle and expanding the reach of product sales. This word-of-mouth communication model is more guiding and contagious compared to traditional physical store shopping, and therefore more sought after by people. Furthermore, the reason why live streaming e-commerce is popular is that it brings consumers a more economical and affordable shopping experience. As is well known, brand merchants often offer more discounts, gifts, and other benefits through cooperation with hosts. Moreover, during the live broadcast, the anchor will occasionally introduce shopping benefits such as limited-time discounts and discounts, which will create a sense of urgency among the audience to make purchases and promote sales. Compared to traditional physical store shopping, the advantage of live streaming sales is not only that the prices are more competitive, but also that consumers can enjoy such discounts at home without having to bear additional costs such as transportation and catering, making it more economical. Live streaming sales continue to enrich shoppers' shopping pleasure. Compared to traditional physical store shopping, live streaming sales have gradually become a way of shopping entertainment. Anchors bring consumers a more diverse shopping experience through various forms of performances, interactions, and even gamified shopping activities. With the special charm of live-streaming sales, shoppers are no longer just bored with purchasing goods but are intoxicated by a relaxed and pleasant shopping atmosphere through live-streaming. This sense of pleasure and shopping pleasure makes consumers more willing to choose live-streaming sales to meet their shopping needs.

As shown in Figure 2, by calculating the scores of people's positive and negative emotions while watching live broadcasts, it can be concluded that people are in a positive and satisfied psychological state when watching live broadcasts. The reason for this may be that viewers can participate in real-time discussions, interact with hosts and other viewers during live broadcasts, and gain a sense of participation and belonging. Secondly, straight



Fig 2. Shopping method selection and purchase intention when watching live broadcasts.

As shown in the figure, by studying whether consumers will purchase live-streaming products when excited and recommend them to family and friends, this study found that the positive psychological state generated when watching live streaming is positively correlated with consumer behavior, that is, the more excited one is when watching live streaming, the more it promotes consumption. Viewers can interact in real-time with other viewers while watching live broadcasts, and sharing shopping experiences and insights. This social interaction not only increases the fun of shopping but also makes consumers more susceptible to the influence of others when making purchasing decisions. Especially when sharing one's purchasing experience and recommendations with family and friends in the live broadcast room, this sense of trust and word-of-mouth effect will further drive consumer purchasing behavior. The study also found that nearly half of people will buy things they don't particularly need in the live broadcast room. The study infers that consumers are often attracted by the host's recommendations and limited-time discounts when watching live broadcasts, and can directly click on the link to complete the purchase, saving the search, comparison, and waiting time in traditional shopping. This instant gratification shopping experience makes it easier for consumers to make impulsive purchases, especially when they are in a high mood and excited state, making it easier to make purchasing decisions. Anchors usually recommend products or services that are suitable for their audience based on their interests and needs. This personalized recommendation method makes it easier for consumers to find their desired products, improves shopping satisfaction and loyalty, and further enhances consumers' willingness to purchase as shown in Figure 3.

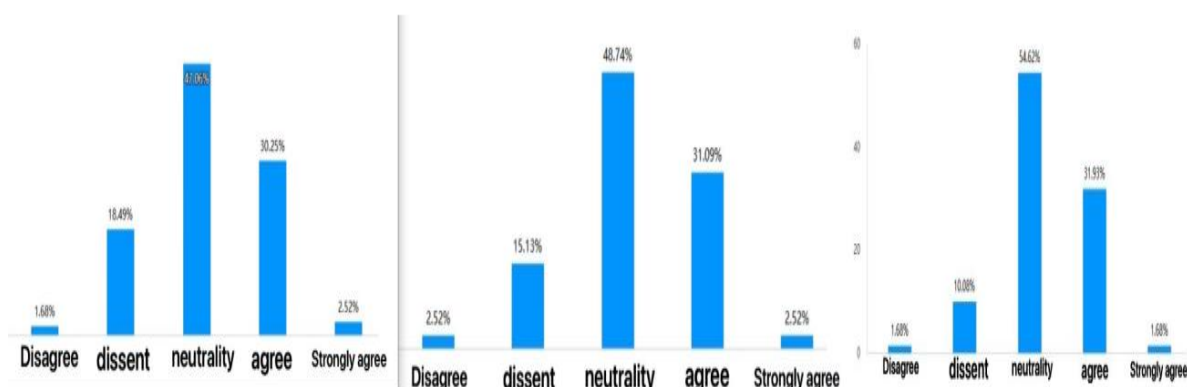


Fig 3. Analysis of purchasing behavior in live streaming rooms.

5. Discussion

Live shopping has become a popular shopping method due to its unique advantages of real-time interactivity, diverse content, social experience, convenience, authenticity, and closeness, as well as the economic benefits and shopping pleasure it brings to consumers. The positive correlation between the positive psychological state generated during live streaming and consumer behavior further proves the enormous potential of live shopping in promoting consumption. In the future, with the continuous development of technology and changes in consumer demand, live shopping is expected to continue its strong growth momentum, bringing consumers more diversified and personalized shopping experiences.

In the current consumer market, live shopping has demonstrated its enormous potential and influence. However, this is only the starting point of the development journey of live shopping. With the continuous innovation of technology and the continuous evolution of consumer preferences, we have reason to believe that live shopping will usher in a broader development space and infinite possibilities in the future.

Firstly, technological advancements will drive a comprehensive upgrade of the live shopping experience. With the popularization and application of cutting-edge technologies such as 5G and VR/AR, the real-time, interactive, and immersive nature of live shopping will be further enhanced.

Consumers can not only see product details more clearly, but also experience product usage scenarios through virtual reality technology, making more informed purchasing decisions.

Secondly, the content of live shopping will be more diverse and abundant. In addition to traditional product display and sales, future live shopping will place greater emphasis on content innovation and differentiation. Broadcasters will no longer be limited to single product recommendations but will combine their characteristics and advantages to create live content with unique style and appeal. This will make live shopping not only a way of shopping but also an entertainment and social experience.

In addition, with the increasing demand for personalization among consumers, live shopping will also place more emphasis on personalized recommendations and customized services. Through big data and artificial intelligence technology, platforms can analyze consumers' interests and needs more accurately, providing them with personalized product recommendations and customized shopping plans. This will greatly improve consumers' shopping satisfaction and loyalty, and promote the sustainable development of live shopping.

At the same time, we also need to pay attention to the problems and challenges that live shopping may face in its development process. For example, how to ensure product quality and consumer rights, how to regulate anchor behavior and live content, how to strengthen supervision and crack down on illegal activities, etc. Only by addressing these issues and challenges can live shopping truly achieve healthy, orderly, and sustainable development.

In summary, live-streaming shopping, as an emerging shopping method, has demonstrated its enormous potential and influence. With the continuous advancement of technology and changing consumer demands, we have reason to believe that live shopping will continue to thrive in the future, bringing consumers more diverse and personalized shopping experiences. At the same time, we also need to pay attention to and address the problems and challenges that it may face in its development process, to promote its healthy, orderly, and sustainable development.

6. Conclusion

The psychological state generated by watching live broadcasts deeply affects people's consumption behavior. With its immediacy, interactivity, and entertainment, the live broadcast stimulates the audience's curiosity, crowd psychology, trust psychology, and the impulse to buy. Strategies such as the anchor's vivid explanation, on-site trial, or limited-time discount constantly stimulate the audience's impulse to buy, so that people can unconsciously join the consumption army while enjoying entertainment. However, there are still limitations in research in this field: such as limited research fields, single research angles, imperfect research models, and limitations in sample selection. In addition, the social attributes in the live broadcast also prompt the audience to buy specific goods to gain group identity or a sense of belonging. Consumption behavior in this psychological state is often more rapid and the decision-making process is greatly simplified, reflecting the immediate satisfaction and social orientation in modern consumption culture. Therefore, understanding and making reasonable use of these psychological states is an important means for merchants to improve sales and enhance user stickiness.

Authors Contribution

All the authors contributed equally and their names were listed in alphabetical order.

References

- [1] Jiang Jiaqi. Analysis of the impact factors of live broadcast on consumers' purchasing decisions under the Internet celebrity economy [D]. Beijing University of Posts and Telecommunications, 2019
- [2] Wang Tong. Research on consumer willingness to buy in the context of e-commerce live broadcast [D]. Central University for Nationalities, 2020

- [3] Liu Pingsheng, Shi Yongle. The impact mechanism of live streaming marketing model on consumer purchasing decision-making [J]. China's Circulating Economy (October 2020, Volume 34, Issue 10)
- [4] Cui Lijuan and Wang Xiaoye. Research overview on the impact of the Internet on the psychological development of adolescents [J]. Psychological Science, 2003, Volume 26 (3 issues): 502
- [5] Zhang Ganqun. Research on the Consumption Behavior of College Students [D] Suzhou University, 2004
- [6] Jia Ning Li¹, Surachai Traiwannakij², Kowin Viwathpongpan³. The Factors Influencing Chinese Consumer Purchase Intention through Webcast Transaction[D], University Y of Merdeka Malang, September 15, 2023
- [7] HongQian Wang* and Zheng Zhang. Exploring How Consumers' Purchasing Behavior Is Influenced in Mobile Webcast Shopping Context [D]Business School, University of Shanghai for Science and Technology, 2022
- [8] Han Xiaoyi. Research on the mechanism of the role of e-commerce anchor attributes on consumers' online behavior intentions [D]. Jilin University, 2020, 167.
- [9] Wu Na. The influence of anchor communication style on the willingness to buy in live marketing [D]. Central South University of Finance, Economics and Law, 2021.
- [10] Zhao Liqiang and Huang Zeyong. Research on the impact of online live streaming on young people's consumption concepts and behaviors (Sichuan Academy of Social Sciences, Chengdu, Sichuan 610071)