

E-Commerce Marketing Research from the Perspective of Consumer Psychology

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Abstract. With the development of the digital economy and mobile Internet, e-commerce marketing has progressed to a more refined stage. In the Consumption 4.0 era, the psychological needs of consumers have become the main consideration in their decisions. However, the existing research is disorganized and lacks a comprehensive integrated framework. By taking live-streaming commerce, short video marketing and community marketing as research cases, this paper uses literature review and comparative analysis to systematically integrate four psychological factors: solitude state, emotional connection and brand trust, consistency between brand image and live-streaming scenarios, psychological distance and immersive experience, and investigates their effects on consumer behavior. The findings indicate that the combination of these psychological factors forms the basic reasoning for the transformation of e-commerce from "traffic-driven" to "psychology-driven", and the academic world has reached a consensus on the "Stimulus-Psychology-Behaviour" process. Nevertheless, the current research has some shortcomings, such as the insufficient interaction analysis among the factors, the lack of dynamic studies, the homogeneous samples and the lagging research on new technologies. This paper builds an integrated analytical framework to enhance the application of consumer behaviour theory, offer guidance for the improvement of e-commerce towards psychological identification, emotional and value retention and confirms that psychology-based refined marketing is an inevitable trend for the high-quality development of the industry.

Keywords: consumer psychology, e-commerce marketing, solitude state, brand trust, psychological distance

1. Introduction

In the process of extensive development of the digital economy and mobile internet, e-commerce marketing is changing quickly from the conventional method of commodity sale to a new mode which includes the connection between "psychology-emotion-behavior". New forms like live-streaming commerce, short-video advertising and community marketing have become important environments for online purchasing. During the phase of Consumer 4.0, people's demands are no longer limited to the material satisfaction but also include a composite need of "material

consumption plus psychological and emotional consumption plus knowledge services". Psychological factors such as the solitude market, emotional support and self-identification have become the main factors influencing the purchasing decisions. However, the existing researches about e-commerce marketing from the viewpoint of consumer psychology are rather scattered and mainly concentrate on one psychological aspect, unable to provide a comprehensive systematic integration of the main elements and thus failing to build a consistent theoretical system. Therefore, it is necessary to carry out an integrated review to overcome the existing shortcomings.

This research has important implications for both theoretical progress and practical application. From a theoretical point of view, this research combines four aspects-solitude state, emotional bond and brand trust, consistency of brand concept, psychological distance and immersion experience-into a comprehensive system and establishes an integrated analytical structure of "consumption environment-consumer inner psychology-consumer purchasing behavior". It also distinguishes the behavioral differences between positive solitude and negative solitude, elucidates the internal mechanism of consumption influenced by various factors, enhances the utilization of consumer behavior theory in the electronic commerce field, and emphasizes the theoretical significance of the transformation of online marketing from price competition to the construction of emotional connection and trust. In practice, the research can offer effective marketing strategies based on psychology to electronic commerce enterprises, assisting the industry in changing from "price reduction and traffic competition" to "psychological identification, emotional retention and value retention". By classifying users, performing emotional operations and optimizing scenarios, it can increase user's fidelity and the repurchase rate, thus promoting the high-quality development of the electronic commerce industry.

The objective of this research is to establish a comprehensive analytical structure for e-commerce marketing from the viewpoint of consumer psychology. It intends to explain how each psychological element functions, to indicate the current research constraints, and to suggest some suggestions for future research. In short, the aim of the study is to supply a complete theoretical support and practical advice for e-commerce marketing to change from being "traffic-oriented" to "psychology-oriented", at the same time to improve the application of psychology-oriented marketing theory in the innovative development of e-commerce industry.

2. Research on the influence of solitude state on e-commerce consumer behavior

Positive solitude refers to the voluntary state of being alone chosen by people according to their own needs such as relaxation and improvement of themselves, which is characterized by independence and efficiency [1]. In this state, people usually exhibit more ability for logical thinking, greater attention and calm emotional responses, and the impact of external disturbances and social influences on their judgments is significantly reduced [2]. As for the consumer's behavior, they tend to choose appropriate, quick and suitable information suggestions (as shown in Figure 1). Their purchasing motives mainly arise from self-improvement and inner satisfaction, and the emotional stability helps to make more consistent and reasonable decisions [3].

Negative solitude is usually a state of loneliness, anxiety and emptiness, which is not chosen by people to avoid social contact, but caused by the lack of contact with the outside world [1]. From the psychological aspect, the consumers in negative solitude have a strong desire for emotional comfort, seek companionship from others to reduce their discomfort, and have poor self-control and rationality, thus being easily influenced by external factors [4]. In regard to their purchasing behaviour, these people are more likely to make purchases in an impulsive manner, and their

intention to buy is greatly increased by emotional influences (as illustrated in Figure 1). Emotionally compensated consumption has become an important motive for purchasing [5].

People in positive solitude have more careful choices, are afraid of taking risks and prefer self-improvement as their purpose of consumption [6]. While people in negative solitude act faster in making decisions, are more ready to bear the risks resulting from impulsive consumption and consume mainly for emotional satisfaction and compensation (as illustrated in Figure 1) [7]. Consequently, the marketing strategy suitable for these two kinds of people is certainly different. Positive solitude is more appropriate for accurate recommendations and delivery of rational information, but negative solitude is more suitable for arousing emotions and comforting marketing [8].

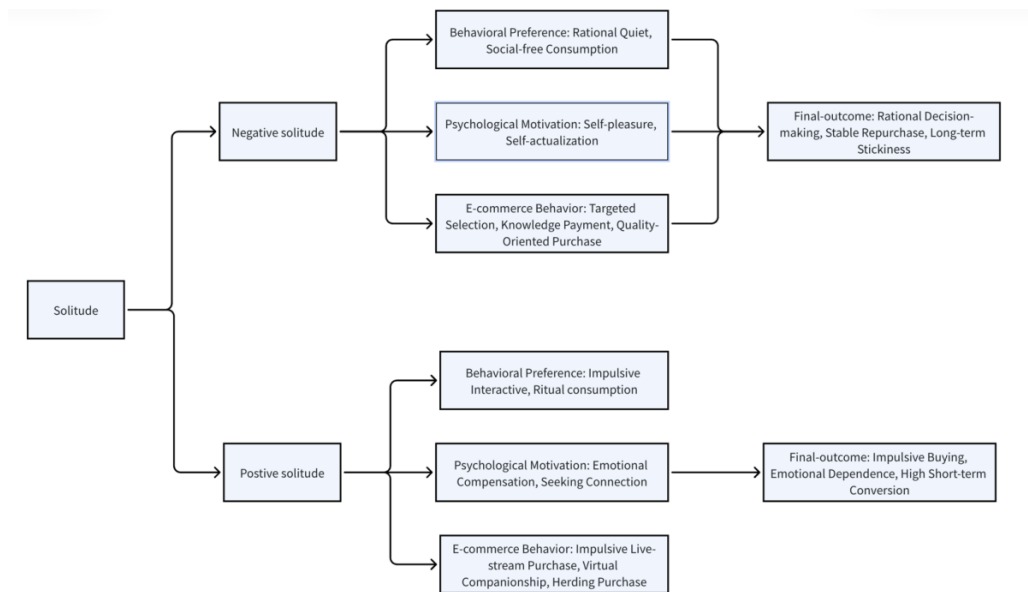


Figure 1. Logic diagram of the influence of solitude state on consumer behavior

3. Research on the mechanism of emotional connection and brand trust in improving user stickiness

The construction of emotional connection mainly depends on three important ways: emotional resonance, value symbiosis and interactive communication (as illustrated in Figure 2). By means of emotional comprehension and recognition, value concept agreement and continuous efficient two-way communication, the psychological gap between the brands and the users is gradually reduced [9].

In live-streaming situations, emotional ties are mainly established by certain points of contact such as the host's description, empathetic content and real-time communication. The host presents personalized and story-based information to provide emotional benefits; when coupled with real-time functions like instant comments and question-answer sessions, it is convenient for the audience to become involved and close, rapidly forming a feeling of familiarity and connection [10]. This kind of absorbing emotional feeling penetrates into the psychological impression of the viewers, increasing their emotional bond towards the brand or host, and enhancing their sense of identity and belonging [3].

Brand trust is not created automatically, it is influenced by several important factors such as product quality, truthful information release, satisfactory after-sale service and favorable mouth-to-

mouth recommendation. Furthermore, the perceived risk and the reputation of the brand affect the users' opinions towards the brand; if the users consider the brand trustworthy and compatible with their values, their trust in the brand will increase.

The danger considered is greater, the more stringent the requirements of users for trust indications; and a good fame of the brand can decrease the expense in establishing trust [6]. In addition, there exists a significant mutual influence between emotional connection and brand trust. A steady emotional connection can facilitate and strengthen the formation of brand trust, and a high degree of brand trust can also improve the emotional connection, producing a positive feedback mechanism [7].

User stickiness can be estimated from various aspects such as the intention of re-buying, frequent sharing, persistent attention and the willingness to recommend, indicating the long-term dependency and loyalty of users towards the brand or website [8]. Regarding the action process, emotional relation strengthens the brand trust by increasing users' emotional bond and sense of identity, and this brand trust then solidifies users' opinions and actions, ultimately jointly improving the user stickiness [5].

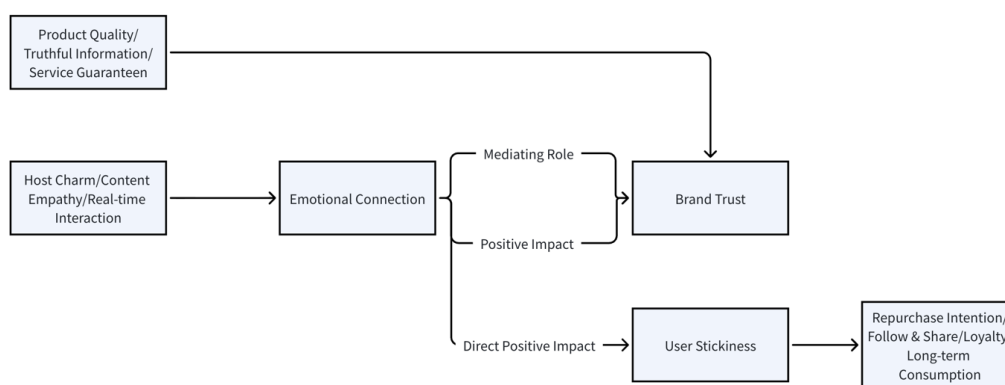


Figure 2. Logic diagram of the effect of emotional connection and brand trust on user stickiness

4. Research on the marketing effect of consistency between brand self-concept and live streaming scenarios

A brand's self-concept, including its values, propositions and image (as shown in Fig. 3), is the main spirit and identity it shows to others. It is also an important means for customers to identify and comprehend the brand [8]. It is not only a one-sided expression; the brand's self-concept is connected to the consumers' own perception of themselves. When it is consistent with their values and what they want to express about themselves, it helps in building and presenting their own identity, thereby establishing deeper psychological connections [7].

In various live-streaming situations, the similarity of a brand's idea can be determined and evaluated in several ways [9]. For instance, the agreement between the host's remarks and attitude and the brand's idea, the appropriateness of the entire atmosphere and visual effect of the live stream to the brand's style, and whether the product explanations, main features and brand positioning are harmonious [10]. All these aspects indicate the consistency of a brand's message during a live stream, which is an important aspect in assessing the performance of the brand [3].

Stable brand message has an effect on the consumption conversion in two aspects: psychologically and behaviorally (as illustrated in Figure 3) [5]. Psychologically, high stability helps people to know the brand better, thereby increasing their identification with it and the feeling of

belonging [8]. Behaviorally, it reduces the effort that users need to spend in making a decision, improves the credibility of the brand and thus encourages their purchase [6]. At present, the user's evaluation of the brand's credibility and their identification with the brand are very important factors - these are the connections between brand consistency and real consumption conversion [7].

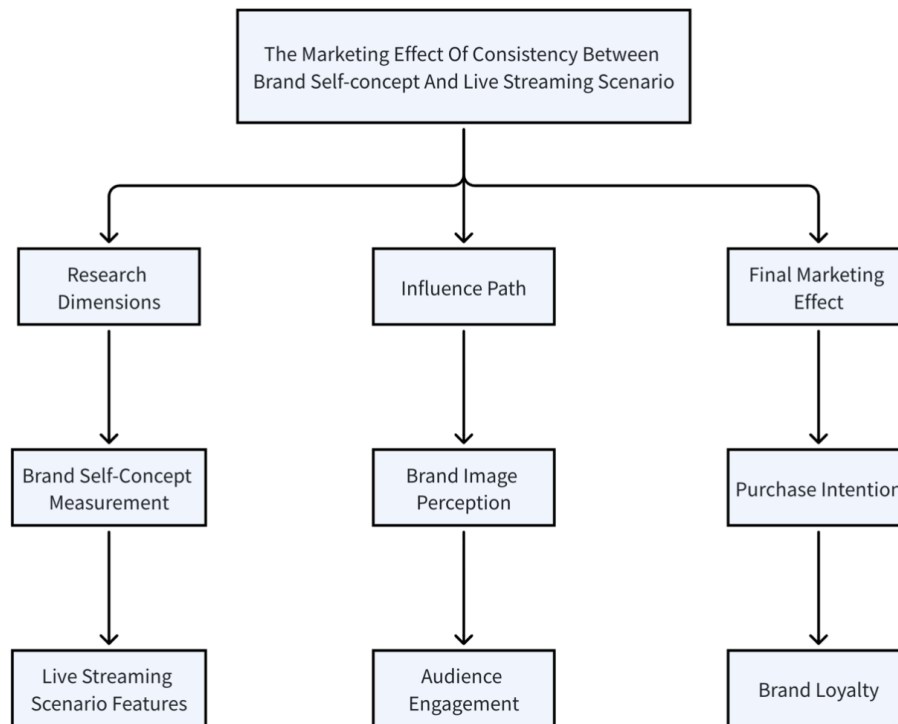


Figure 3. Logic diagram of the marketing effect of consistency between brand self-concept and live streaming scenarios

5. Research on the consumption promotion effect of narrowing psychological distance and enhancing immersive experience

In live-streaming situations, reducing the psychological gap between brands and users mainly relies on continuous interaction, real-time participation and individualized communication. With immediate responses, personal replies and expressions according to the users' requirements, they will be considered cared and understood [9]. Thus, the users become nearer to the host or the brand, and the feelings of social distance and psychological reserve decrease [10]. The reduction of this psychological gap has a significant effect on the intention of purchase; generally, the closer it is, the more the users accept the brand and the greater their desire to buy increases [6].

Deep participation in live streaming is achieved by means of complicated interactive systems, beautiful visual effects, attractive contents and realistic environments. It converts the viewers into active participants, making them feel actual. A good deep participation can attract the attention of the viewers, keep them longer and enhance their sense of reality and involvement [5]. The greater the deep participation, the more actively the viewers become immersed in the scene; they trust the products more and their purchasing desire also increases [7].

Psycho-physical closeness and an absorbing experience are suitable for live-streaming. Decreasing the psycho-physical closeness can increase the users' absorption, and a higher absorption will reduce the gap between the users and the host or the brand, thereby forming a positive cycle

where both benefit each other (as shown in Fig. 4) [6]. But their influences vary in strength and pattern according to different kinds of live-streams, due to the features of the environments [8]. At present, the study in this area is still insufficient; most research focuses on the static effects, ignoring the dynamic variations of psycho-physical closeness and absorbing experience, as well as the impact of their relationship on the conversion of consumption over time [3].

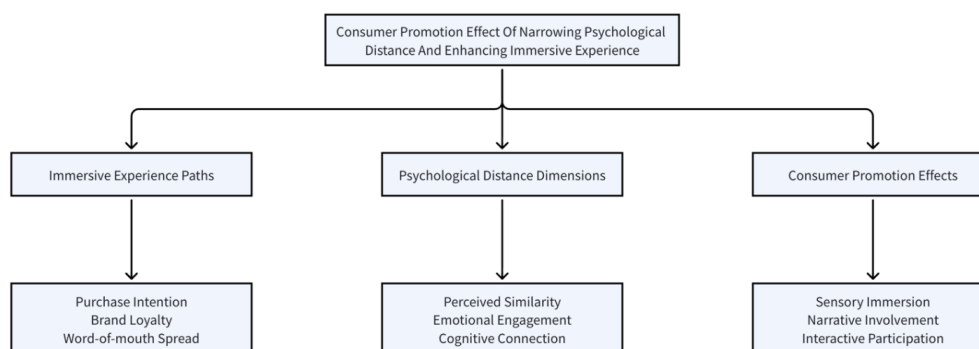


Figure 4. Logic diagram of the consumption promotion effect of psychological distance and immersive experience

6. Application of psychology-driven marketing in different e-commerce scenarios

Taking live-streaming e-commerce as an example, relational psychological contract, immersive experience, psychological distance and the host's qualities such as culture, narration and empathy play important mediating roles. A comprehensive operating method combining content, emotion and interaction can be developed. Story-telling based narration can strengthen the relational psychological contract, scene-based arrangement can increase user's immersion and real-time communication can reduce the existing psychological distance.

For short-video marketing, immersive experience, psychological intention and credibility together serve as main factors. Improvement of narrative structure and visual effects, increase in the truthfulness of product information and utilization of psychological intention's mediative function can enhance the impulse purchasing intention. Short-video marketing can promote consumers' impulse buying behaviour by means of the successive mediation of online immersion and psychological intention.

In community marketing, herd mentality, social identity and psychological contracts are the main aspects; the community interaction and value resonance play the role of the fundamental ties. A word-of-mouth communication system can be established according to the consumers' herd mentality, enhancing their identification with the community by means of emotional interactions, and gradually forming stable and lasting psychological contracts for relationships.

For manufacturers, the platform cooperation models such as consignment or resale can be changed according to the commission rates and the efficiency of community marketing. The aim is to obtain the highest returns. Although it is not difficult, these aspects are important.

From the view of luxury marketing by Internet celebrities, enhancing the psychological contract through fans' emotional identification by utilizing the hosts' personal charm and personality is the main strategy. The methods mainly include extending the duration of live-streams and changing the types of interactions. According to the consistency between self-brand and social identity as well as

the needs for different products, prices and channels, appropriate strategies can be developed to meet the psychological differences among various age and gender groups.

7. Research review and future prospects

7.1. Summary of existing research

Current investigations have established a relatively perfect analytical framework for the study of e-commerce marketing based on consumer psychology. They have identified the relationships among important factors such as psychological contract, solitary state, immersive experience, brand consistency and psychological distance and the consumer's behavioural tendencies, and have also elucidated the basic logical process of "Stimulus-Psychology-Action". Most academic opinions agree that relational psychological contracts, pleasant immersive experiences and self-consistency with the brand can effectively enhance consumers' purchasing intention and brand fidelity. On the contrary, the influences of solitary state and herd mentality are different in various e-commerce environments. These research results also provide some psychological-based suggestions for the planning of live broadcast contents, the arrangement of scenes and the management of community operations.

7.2. Limitations of existing research

Present investigations do not concentrate on the interactive connections among different psychological aspects, and a complete multi-dimensional research structure has not been established yet. Longitudinal studies investigating the continuous modifications in consumer psychology are also insufficient. The majority of the current research uses limited research samples, which do not provide a thorough examination including cultural backgrounds, age classifications and various product kinds. Little attention has been paid to the effects of new technologies such as AI streamers and virtual scenes on consumer psychology and their behavioral preferences. Moreover, effective marketing strategies for individuals in adverse solitary situations are still lacking, and there is not enough systematic investigation about the procedures of psychological contract violation and its recovery.

7.3. Future research directions

Research in the future may establish combined theoretical frameworks including various psychological elements, investigating their cooperative influences and limiting situations in order to improve the theoretical structure of e-commerce marketing based on consumer psychology. Continuous observation studies might investigate the changing process and lasting effects of consumer psychology, as well as the formation, maintenance, breach and restitution of psychological agreements. From a multi-faceted viewpoint, subsequent research is required to detect psychological variations among different populations, kinds of products and environments, and to explore how new technologies like AI virtual hosts and VR/AR modify consumers' psychological views, belief establishment and action choices.

Attention must be given to the negative psychological states, marketing risk prevention and the establishment of trust repair mechanisms. It is also required to carry out localized theoretical innovation according to the social e-commerce context of China in order to improve the applicability of the relevant research. For practical purposes, comprehensive and reproducible marketing

strategies based on psychology should be established to facilitate the conversion of theoretical results into real applications.

8. Conclusion

From a consumer psychology viewpoint, this paper comprehensively summarizes the current research on e-commerce marketing, concentrating on five main psychological elements: psychological contract, solitary condition, emotional tie and brand trust, consistent brand self-concept and psychological distance with immersive experience. It explains the processes by which these elements affect consumer perception, opinions and actions, and integrates the psychological impacts in specific e-commerce situations like live-streaming commerce, short-video promotion and community marketing, thus forming a consistent and comprehensive research structure.

Previous research has proved that the consumer psychology is an important endogenous factor influencing the results of e-commerce marketing. Psychological contracts, especially the relational ones, play a crucial role in establishing emotional ties between consumers and brands, and in increasing the user's trust and loyalty. Different kinds of consumption motives are differentiated through two routes (positive and negative): positive solitude usually stimulates rational and quality-oriented purchasing, while negative solitude generally results in compensatory consumption from emotions. The emotional linkage and brand trust can enhance user's persistence, and at the same time, mediate the connection between marketing communications and the consumer's behavioral reactions.

The agreement between the brand's own concept and the live-stream situations improves the cognitive match and emotional identification of the consumers, thus increasing the conversion efficiency. Reducing the psychological gap and enhancing the immersion experience both enhance the consumers' feeling of presence and decrease their psychological defensiveness, consequently facilitating both impulse and continuous consumption. These psychological factors work together to form the basic principle for the change of e-commerce from a traffic-based growth model to a model guided by psychology.

Nevertheless, the present studies have some drawbacks: they mainly concentrate on individual psychological factors and lack the investigation of the combination of various variables and their interrelated mechanisms; they attach too much importance to the examination of short-term stable conditions, ignoring the dynamic procedures like the change of consumer psychology, psychological contract violation and the establishment of user loyalty; the sample and situation used in the research are relatively limited, thus preventing a thorough analysis of the diversity and the development of specific theories; furthermore, the reaction to the modification of consumer psychology due to new technologies such as AI anchors and virtual environments is not adequate enough.

Future work should be directed towards building comprehensive multi-factor theoretical frameworks, carrying out continuous survey studies to perform a dynamic analysis of consumer psychology, and investigating the heterogeneity among various groups, product types and contextual situations. At the same time, it is important to advance the leading research in digital technologies, and to deepen the investigation of negative psychology, marketing risk controls and trust restoration methods, in order to improve the theoretical interpretative ability and practical guiding significance of the related research.

Overall, marketing strategies which are well-organized, emotionally appealing and considerate of value should be the trend for the advancement of high-quality e-commerce. This area will still be an important topic in the fields of marketing, communication and consumer behavior research.

Authors contribution

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

References

- [1] Hou, J.W., Liu, F.J. and Meng, L. (2024). Solitude and Its Manifestations and Psychological Mechanisms in the Field of Marketing. *Advances in Psychological Science*, 32(4), 677-688.
- [2] Wang, J.F. (2020). Discussion on Luxury Goods Marketing Strategy Based on Consumer Psychology. *Journal of Commercial Economics*, (6), 70-72.
- [3] Huang, M.X. and Lv, L.X. (2022). Review and Prospect of Intelligent Product Marketing Research from the Perspective of Psychological Fit. *Economic Management Journal*, (7), 193-208.
- [4] Gao, S.H., Hao, Z.H., Wang, X.J. et al. (2024). Selection of Manufacturer Community Marketing and Platform Cooperation Mode Considering Consumers' Herd Mentality. *Systems Engineering*, 42(4), 77-89.
- [5] Kong, K. and Dong, H. (2024). The Influence of Short Video Marketing on Consumers' Impulsive Purchase Intention—Based on the Mediating Effect of Online Immersion and Psychological Intention. *Journal of Commercial Economics*, (14), 59-62.
- [6] Huang, X.Y. (2024). The Influence of Live-streaming E-commerce Marketing Availability on Consumers' Online Impulse Purchase—Chain Mediating Effect of Psychological Distance and Mental Accounting Flexibility. *Journal of Commercial Economics*, (11), 68-71.
- [7] Chen, L.C. (2025). Host Marketing Discourse and Consumers' Impulsive Buying Behavior in E-commerce Live Streaming—Mediating Effect Based on Psychological Contract Regulation. *Journal of Commercial Economics*, (3), 82-85.
- [8] Zhang, M.M. (2021). Dynamic Relationship among Internet Celebrity Brand IP Marketing, Consumption Psychology and Consumption Willingness. *Journal of Commercial Economics*, (5), 83-85.
- [9] Wei, J.Q. and Chen, J. (2022). From Commercial Sales to Emotional Connection: Research on Publishing Live Streaming Marketing from the Perspective of Psychological Contract. *China Publishing Journal*, (24).
- [10] She, S.X., Xu, H.R. and Xu, D.Y. (2022). Psychological Contract between Consumers and Live Streaming Anchors in Live Marketing: Scale Development and Its Dynamic Evolution. *Collected Essays on Finance and Economics*, (6).