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An Empirical Model of Impulse Purchases in Live Streaming Commerce on the Chinese Economy

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Abstract

In today's fiercely competitive e-commerce landscape, understanding the consumer shopping decision process is crucial. This study takes a management perspective, employing the S-O-R theory (Stimulus-Organism-Response) as a theoretical framework to delve into the key factors influencing impulse purchases in the context of live streaming commerce. Factors such as Authentic Experience, Interactive Experience, Real-Time Experience, Credibility, Enjoyment, and Sense of Immediacy are included in the research scope to reveal their interrelationships and impact on impulsive buying behavior. The study focuses on TikTok users aged 25-34 in the Xuhui district of Shanghai, China, totaling 389,577 individuals. Utilizing Yamane's sampling method, the required sample size was determined to be 399. By distributing 650 questionnaires randomly, 583 were successfully collected, and after data cleaning, 542 valid responses were obtained. The study employs the partial least squares structural equation model, aiming to comprehensively understand impulsive buying behavior and its potential influencing factors in live streaming commerce. Using a cross-sectional design facilitates the swift capture of a large amount of data, providing comprehensive support for in-depth research. After conducting path analysis on key factors such as Authentic Experience (AUE), Interactive Experience (INE), Real-Time Experience (RTE), Credibility (CRE), Enjoyment (ENJ), Sense of Immediacy (SOI), and Impulse Purchase (IPE), the results confirm the validity of all hypotheses, affirming the applicability of the S-O-R theory in the context of live streaming commerce. Specifically, the highest significant positive correlations were found for A2 in AUE, B3 in INE, C2 in RTE, D4 in CRE, E4 in ENJ, F2 in SOI, and G3 in IPE, validating the positive influences of these factors on impulsive buying. The study emphasizes the critical roles of Authentic Experience, Interactive Experience, Real-Time Experience, Credibility, Enjoyment, and Sense of Immediacy in the live streaming commerce environment. These research findings provide profound insights into consumer behavior in the field of management and offer targeted marketing strategy recommendations for businesses. By delving into the mechanisms behind impulsive buying behavior, the empirical results of this study provide valuable insights for the healthy development and ongoing innovation of the e-commerce industry.

Keywords: Empirical Model, Impulse Purchases, Live Streaming Commerce, Chinese Economy

1. Introduction

E-commerce live streaming, as a relatively emerging concept, falls under the category of online broadcasting and not only possesses the characteristics of real-time high-frequency interaction and communication typical of traditional live streaming but also incorporates strong marketing attributes. According to Cai et al. (2018), e-commerce live streaming embeds real-time video

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broadcasting into e-commerce platforms with social attributes, with its primary feature being real-time interaction. As indicated by Tan (2017), e-commerce live streaming conducts network broadcasting through e-commerce platforms, presenting products to consumers in real-time, thus establishing a novel business model. Wu et al. (2017) define e-commerce live streaming as using live streaming systems in e-commerce to provide users with more comprehensive product and service information for marketing purposes. E-commerce live streaming not only possesses the characteristics of traditional e-commerce graphic and textual displays but also attracts consumers through real-time interaction and a sense of immediacy, providing a richer service experience. E-commerce live streaming can be divided into two operational modes: one is where traditional e-commerce platforms introduce live streaming functionality, using it to explain relevant products to consumers, stimulate purchasing desires through real-time interaction, and marketing efforts. The other involves short video platforms with live streaming features incorporating e-commerce functionality. Combining the aforementioned research, this study defines e-commerce live streaming as a marketing communication and commodity trading model with e-commerce as the foundation, live streaming as the means, and anchors as the communicative entities, featuring interactivity and social attributes. Through live streaming, businesses and brands can achieve branding or sales objectives. This innovative business model not only provides consumers with a more intuitive product experience but also offers businesses more marketing opportunities. In e-commerce live streaming, the introduction of real-time interaction and social attributes makes communication between brands and consumers more direct and immersive. With the guidance of anchors, consumers can obtain more information about products in real-time interaction, dispelling doubts during the shopping process, and enhancing the trustworthiness of their purchases. Additionally, the social attributes of e-commerce live streaming enable consumers to share their shopping experiences, forming word-of-mouth communication among users, further boosting product sales. The rise of e-commerce live streaming not only provides businesses with additional sales channels but also offers consumers a more convenient and real-time shopping experience.

Impulse purchase research dates back to the 1940s when DuPont Corporation initiated studies on this phenomenon. The initial exploration suggested that the variance between planned and actual purchases, occurring when consumers buy items not originally included in their shopping plans, constitutes impulse purchases. Katona et al. (1955) employed experimental methods, recording participants' pre-store buying plans and comparing the actual purchase list with the shopping plan, identifying unrecorded products as impulse purchases. However, as research progressed, some scholars began questioning the accuracy of simplifying unplanned purchases as impulsive buying. This skepticism arose because even when certain items are not part of consumers' purchase plans, they may still engage in detailed comparison and consideration of these unplanned products, ultimately deciding to purchase them. Stern's (1962) research indicated that consumers might make unplanned purchases following external stimuli such as time, location, and culture. Recognizing that individual differences among consumers might result in different consumption behaviors under the same marketing stimuli, some scholars proposed more specific definitions. Rook (1987), through interview surveys, defined impulse buying as a behavior occurring when individual pleasure outweighs self-control. Consumers immerse themselves in the enjoyment of a product, lacking rational consideration, and swiftly make purchasing decisions. Additionally, impulse buying often involves the impetus of intense emotional forces. Weinberg (1982) suggested that, influenced by the shopping environment, consumers might experience uncontrollable emotions, desiring immediate possession of a product, leading to impulsive, thoughtless immediate purchase behavior. In summary, despite

slight variations in scholars' definitions of impulsive buying, three common characteristics generally emerge: it is unplanned, influenced by external stimuli, and involves an immediate purchase. Therefore, in the context of e-commerce live streaming, this study defines the intention of impulse purchasing as follows: consumers, stimulated by factors related to e-commerce live streaming, experience a strong desire to purchase, rapidly express their intention to buy by clicking on a link, without having planned to purchase the product before watching the live stream.

In previous research, scholars have uncovered various factors influencing impulse purchases. Discounts are recognized as a significant trigger for impulsive buying, with time-limited promotional activities often stimulating consumers' desires for impulse purchases (Peck et al., 2003). Koufaris' (2012) study suggests that convenient shopping channels similarly incite consumers to engage in impulse buying behavior. Online marketing stimuli encompass not only traditional marketing methods such as price discounts and shopping atmospheres but also include product presentation, birthday gifts for members, and after-sales services. These factors can all potentially stimulate consumers' impulse purchases. Zhang (2019), in investigating impulsive buying behavior, found that time-limited discounts might evoke a psychological sense of "rare opportunities, once missed, gone forever," thereby inducing impulsive purchasing. Malin's (2019) case studies confirm that diverse marketing approaches can trigger consumers' intrinsic emotions, enhance shopping experiences, and consequently impact impulsive buying behavior. Additionally, Huang's (2019) research indicates that promotional incentives and time constraints designed by online retailers may cause significant emotional fluctuations in consumers, accelerating their decision-making process for impulsive purchases. Sun's (2017) empirical research reveals that discount strategies employed by e-commerce platforms contribute to arousing consumers' desires for impulse buying, further facilitating impulsive purchase behavior. In summary, these research findings collectively illuminate the impacts of factors such as discounts, shopping convenience, and diverse marketing approaches on impulsive buying behavior, providing in-depth insights into understanding and explaining consumers' impulsive buying in different contexts.

Moreover, Thompson (2015) suggests that impulsive traits in individuals manifest as a lack of self-control, a focus on immediate satisfaction of current needs, a tendency to avoid delayed gratification, and often making responses without deep contemplation. Individuals with high levels of impulsive traits are more susceptible to external environmental influences, undergo greater emotional fluctuations, exhibit a stronger desire for owning a particular product, and are thus more prone to engaging in impulsive buying behavior. Childers' (2001) research indicates that consumers with high impulsive traits are more attracted to pleasurable shopping environments, stimulating internal desires and inclining them towards impulsive purchases. Larose's (2011) study demonstrates that consumers with high impulsive traits are more influenced by visual displays and lottery activities in online shopping environments, thereby increasing their willingness to make purchases. On the other hand, John et al.'s (2011) research finds that consumers with high impulsive traits display different reactions when faced with websites of varying qualities. High-quality websites evoke more positive emotions, fostering a tendency for impulsive purchases; conversely, low-quality websites may induce negative emotions, suppressing the desire to purchase. In Yu et al.'s (2014) study, consumer traits such as impulsive traits, self-control hedonism, and self-assessment all positively impact consumers' willingness for impulsive purchases. Wang (2009), through literature analysis, concludes that consumers' initial impressions of a business affect impulsive purchase decisions through consumers' emotions and cognition. Furthermore, Liu's (2017) research finds that the visual

and interactive aspects of a website can evoke consumers' inner pleasure, while self-control tends to trigger uncontrollable tendencies for impulsive purchases as external stimuli weaken. This implies that by enhancing the visual appeal and interactivity of an e-commerce website, businesses can create a positive shopping experience in consumers' minds, stimulate their feelings of pleasure, diminish the impact of self-control, and make them more susceptible to entering a state of impulsive buying. In summary, the decision-making process for impulsive buying is complex, influenced by individual impulsive traits, external environments, cognition, emotions, and the initial impression of the business. With an in-depth understanding of these factors, businesses can develop more targeted marketing strategies to encourage consumers to actively participate in impulsive buying behavior.

In the realm of research on live streaming commerce, scholars have primarily focused on user participation motivations and consumer behaviors. According to Brundl et al. (2016), the impact of shared experiences and self-efficacy in live streaming commerce on consumers is viewed from the perspective of consumer perception. In this context, interactive engagement and information sharing between consumers and others on the screen are considered active participation, while passive participation involves watching and browsing others' information. This research provides a better understanding of user participation motivations and purposes. Apiradee et al. (2018) study centers on how the value obtained by users influences consumer participation through trust. Empirical results indicate that symbolic value directly affects consumer participation, while instrumental and hedonic values positively impact participation by establishing trust in the live streamers. As research advances, scholars have extended their focus to users' sustained participation. Based on immersion theory, Yu et al. (2017) confirm that the interactivity, visibility, usefulness, and entertainment features of live streaming platforms can immerse consumers in the live broadcasts, thereby influencing their sustained participation. Jinhua et al. (2017) empirical study demonstrates that the vividness, interactivity, and credibility of live streaming commerce influence purchase intentions through the mediating role of consumer trust. Fang's (2018) research confirms that the popularity, professionalism, and product involvement of online hosts have a significantly positive impact on consumers' purchase attitudes. Wang (2020) empirical study analyzes the impact of interactivity, entertainment, promotional stimuli, and opinion leadership in live streaming commerce on consumers' purchase intentions through perceived value and trust. Based on the flow experience perspective, shows that the information content, visual design, and navigational usability of live streaming commerce can influence consumers' purchase intentions (Zhang, 2017).

Liu et al. (2020) conducted a study on consumer purchasing decisions in three stages: attention, interest, and search. They categorized the features of internet celebrity live streaming into incentive mechanisms, interactivity, and content quality. The empirical results revealed that the flow experience plays an intermediary role in this process, with the interaction between hosts and consumers playing a crucial role. Through unstructured interviews, Liu (2020) identified four characteristics of internet celebrities—authenticity, professionalism, interactivity, and attractiveness—which were found to influence purchase intentions through consumers' perceived shopping value. Building on the planned behavior theory and using the flow experience as an intermediary variable, Zhang (2021) investigated the impact of interactivity, entertainment, authenticity, and incentive mechanisms in the context of e-commerce live streaming on purchase intentions. The study verified the mediating role of the flow experience. Han (2021), drawing on grounded theory, extracted five characteristics of hosts—professionalism, interactivity, charisma, attractiveness, and innovativeness. The results indicated that these characteristics influence online purchase intentions. Hu (2020) employed

a similar approach to extract three-dimensional features of hosts—popularity, sociability, and professionalism. The study validated the mediating role of perceived usefulness and social presence in the relationship between host characteristics and purchase intentions. Applying grounded theory, Meng (2012) categorized opinion leader characteristics into host-specific features and recommended information features. The empirical results indicated that trust plays an intermediary role between opinion leader characteristics and purchase intentions. Based on psychological arousal theory, Luo (2020) found that the professionalism, interactivity, credibility, and attractiveness of hosts influence consumer purchase intentions through the mediating effect of social presence, with self-construction acting as a moderating factor. These studies provide a profound understanding of user behavior and motivation in e-commerce live streaming.

Therefore, based on the results of previous literature research, in this study, the researcher focused on exploring the factors influencing impulse purchases, specifically examining Authentic Experience (AUE) and Credibility (CRE), Interactive Experience (INE) and Enjoyment (ENJ), Real-Time Experience (RTE) and Sense of Immediacy (SOI), as well as Credibility (CRE) and Impulse Purchase (IPE), Enjoyment (ENJ) and Impulse Purchase (IPE), Sense of Immediacy (SOI) and Impulse Purchase (IPE). The researcher aimed to establish an empirical model of impulse purchases in live streaming commerce and its impact on the Chinese economy.

2. Literature Review

2.1 Research Theory

This study is based on the S-O-R theory, which stands for Stimulus-Organism-Response theory. Originally derived from environmental psychology, this theory describes the process where external environmental conditions act as stimulus factors, the organism (individual) generates specific emotions or consciousness under the influence of these stimuli, ultimately leading to a behavioral response. The model, initially proposed by Mehrabian and Russell (1974) and referred to as the M-R model, was developed to explain the reasons behind individual behavior. However, this model overlooked the influence of individual emotional factors. To address this limitation, Donovan (1982) made modifications and improvements to the M-R model, resulting in the widely used S-O-R model. Donovan first applied this model to retail environment research, treating various situational factors as stimulus variables, considering feelings and emotions as the organism or intermediate variables, and viewing final behavior as the response variable. The focus was on studying the impact of the atmosphere on consumer purchasing behavior. In the S-O-R model applied to the study of shopping environments, S serves as the independent variable, representing external environmental stimulus factors in the shopping environment that may induce changes in consumer perceptions and emotions, such as promotional activities, marketing strategies, and store ambiance. O acts as the mediating variable, typically referring to the individual's internal processes of perception, psychology, and thinking that change after receiving stimuli, such as enjoyment and perceived risk. R serves as the dependent variable, indicating the individual's final behavioral response after emotional and psychological changes. This response may include positive behavioral reactions, as well as negative reactions, especially impulsive purchases. The S-O-R model has been widely applied in the study of the relationship between shopping environments, consumer emotions, and consumer behavior. It plays a crucial role in understanding impulsive purchasing behavior.

In previous research, the S-O-R model has been widely applied in traditional shopping environments, and with the rise of e-commerce, this theoretical framework has garnered new attention in the field of online shopping. Eroglu and Machleit (2001) emphasized that the adoption of the S-O-R model in online virtual environments can effectively explain the impact of situational factors on individual states and responses. Online shopping environments differ significantly from traditional physical stores, encompassing specific aspects such as brand representation, website functionality, and design. To attract consumers, businesses also employ means to enhance service quality, convenience, and user experience, contributing to the complexity and diversity of online shopping environments. Against this backdrop, Yang (2009) conducted an online shopping study based on the S-O-R model, discovering that the ambiance and design of online stores positively influenced consumers, significantly boosting purchase intentions. Zhao (2010) applied the S-O-R model to research on impulsive purchasing behavior in online shopping, confirming the crucial role of website environmental features in eliciting emotional responses from consumers, thereby prompting impulsive buying behavior. These studies not only enrich the application scope of the S-O-R model but also provide important clues for a deeper understanding of impulsive purchasing behavior in online shopping environments. Overall, the widespread application of the S-O-R model in online shopping research helps unveil the complex relationships among various factors in online shopping environments, providing a theoretical framework and empirical foundation for further advancing consumer behavior research. As e-commerce continues to evolve, the S-O-R model is poised to play a crucial role in the field of online shopping research, guiding a deeper understanding of consumer behavior and shopping experiences.

In the context of live streaming commerce, although the format revolves around live broadcasts, the actual focus is on the personal characteristics of the hosts. Through professional commentary and interaction with the audience, product sales are achieved. In this process, the personal traits of the hosts become crucial stimuli influencing consumers' impulse purchases. Building on the S-O-R (Stimulus-Organism-Response) model, researchers examine different dimensions of stimuli, cognitive-emotional responses, ultimately impacting consumers' impulse purchase intentions. Huang (2016), within the S-O-R model framework, identifies social capital and content attractiveness as stimuli, peer communication, and immersion as cognitive-emotional responses, ultimately influencing consumers' impulse purchase intentions. This research method delves into the social influence of hosts and the impact of content attractiveness on consumer decisions in live streaming. Zheng (2019), using the S-O-R model, considers e-commerce host interaction types as independent variables, flow experience as organism emotional responses covering pleasure and concentration dimensions, and impulse purchase intention as the dependent variable. The results confirm that relationship-oriented interaction generates more flow experience compared to task-oriented interaction, and flow experience significantly and positively influences consumers' impulse purchase intentions. This study provides a profound explanation of the impact mechanism of host interaction types on consumer flow experience and purchase intentions. Shi (2021) emphasizes the mediating role of flow experience in the perception of professionalism, interactivity, hedonic value, and impulse purchase intentions, particularly in the context of live streaming shopping. Real-time interaction between hosts and consumers generates perceived professionalism, interactivity, and entertainment, triggering flow experience, thereby influencing impulse purchase intentions. This study offers valuable insights into the correlation between host behavior and consumer psychological states.

Gong's (2019) research, based on the SOR (Stimulus-Organism-Response) model, indicates that ambient cues influence consumers' flow experience, thereby impacting impulse purchase

intentions. The creation of ambient cues is particularly crucial in live streaming commerce, as effective ambient cues can guide consumers to generate a more intense flow experience, enhancing their impulse purchase desires. Xin (2021), within the framework of the SOR model, delves into the impact of online celebrity hosts' professionalism, interactivity, credibility, incentive mechanisms, and ambient cues on consumers' impulse purchase intentions. The results suggest that these factors significantly influence consumers' purchasing decisions through the mediating effect of flow experience, providing profound insights into the driving mechanism of host characteristics on consumer purchasing behavior in live streaming commerce. Therefore, these studies collectively emphasize that, in the context of live streaming commerce, the personal characteristics of hosts are crucial stimuli influencing consumers' impulse purchases. Approaching from different perspectives such as social capital, content attractiveness, interaction types, and ambient cues, these studies offer a deep understanding of the associative mechanism between host behavior and consumer responses. They provide effective marketing strategies and directions for optimizing user experiences on live streaming commerce platforms. This not only expands the application scope of the SOR model in live streaming commerce research but also offers robust support for further exploring the impact mechanism of host traits on consumer shopping decisions.

2.2 Research Hypotheses

According to studies by Huang (2016), Zheng (2019), Shi (2021), Gong (2019), Xin (2021), and others, there is a positive correlation between Authentic Experience (AUE) and Credibility (CRE): the literature suggests that authentic experience and credibility often complement each other in consumer perception. Experiences with authenticity often enhance the credibility of a brand or product, creating a more genuine and reliable impression for consumers. This association has been widely validated across various industries and products. When consumers perceive the authenticity of a product or service, they are more likely to establish trust in the brand, leading to a positive buying attitude. Research also indicates that authentic experiences can stimulate consumers to have a deeper understanding of the product or brand at both emotional and cognitive levels, thereby increasing their perceived credibility of the brand. Therefore, in the process of brand building, companies should focus on creating authentic and resonant consumer experiences to enhance brand credibility and stimulate consumer purchasing desires.

There is a positive correlation between Interactive Experience (INE) and Enjoyment (ENJ): the positive relationship between interactive experience and enjoyment has been validated in multiple studies. Through interaction with products or services, consumers are more likely to derive enjoyment, thereby increasing overall satisfaction with the experience. Increased interactivity typically leads to a richer and more personalized experience, stimulating consumer curiosity and excitement, and consequently enhancing satisfaction with the product or service. Research indicates that the positive correlation between interactive experience and enjoyment has a beneficial impact on improving brand image and consumer loyalty. In the digital age, providing diverse interactive experiences through innovative technological means has become a key strategy for attracting consumers. Companies can develop interactive applications, games, or social media platforms to create engaging experiences, deepening consumer enjoyment, and enhancing brand value. In a fiercely competitive market environment, combining interactivity with enjoyment becomes an effective way for businesses to gain a competitive advantage.

There is a positive correlation between Real-Time Experience (RTE) and Sense of Immediacy (SOI): real-time experience and the sense of immediacy are often interrelated. In the experience

of real-time perception, consumers can more rapidly perceive information and stimuli, enhancing their immediate awareness and response to products or services. With the continuous development of technology, the importance of real-time experience is increasingly pronounced, especially in a digitized business environment. Experiences with real-time characteristics enable consumers to engage more immediately in the interaction with a brand or product, leading to a deeper and more authentic sense of experience. Research suggests that the positive correlation between real-time experience and the sense of immediacy plays a significant role in speeding up consumer purchase decision-making and increasing active participation. Companies can meet consumers' desires for instant gratification by providing platforms with real-time information and immediate interaction, thereby stimulating consumers' purchasing desires. This positive real-time experience not only enhances consumer satisfaction but also contributes to establishing a competitive advantage for the brand in the market.

There is a positive correlation between Credibility (CRE) and Impulse Purchase (IPE): credibility and impulse purchase are positively correlated. On one hand, brands or products with high credibility are more likely to evoke consumer trust, thereby facilitating impulse purchases. Consumer trust in a brand or product makes them more willing to make purchasing decisions impulsively, without deep consideration. On the other hand, the credibility of a brand or product also reflects, to some extent, its reputation and quality in the market. The accumulation of such credibility can provide consumers with confidence in their shopping decisions, stimulating their desire for impulse purchases. Therefore, enhancing brand credibility not only helps increase consumer trust but also stimulates a greater inclination toward impulsive buying. This positive correlation provides an effective approach for businesses to strengthen brand credibility. By improving a brand's integrity and reliability, companies can cultivate a stronger impulse to purchase among consumers, especially in competitive markets where building a trustworthy brand image can have a positive impact on impulsive buying behavior.

There is a positive correlation between Enjoyment (ENJ) and Impulse Purchase (IPE): enjoyment and impulse purchase are positively correlated. In enjoyable experiences, consumers are more likely to be driven by impulsive decisions and are willing to quickly complete the purchase process. Enjoyment, as a positive emotional experience, is often intertwined with the satisfaction derived from shopping activities. Research indicates that when consumers experience a sense of enjoyment during the shopping process, they are more inclined to seek the immediate pleasure of purchasing, leading to impulse buying. The formation of this positive correlation can be attributed to the positive impact of enjoyment on consumer shopping attitudes and behavior. The enhancement of the enjoyment of shopping not only turns the act of shopping into a pleasurable and enjoyable experience but also increases the likelihood of impulsive buying. Consumers often become more open to impulsive shopping urges due to the enjoyment they experience during the shopping process, indulging in the pleasure that shopping brings. Therefore, by enhancing consumers' enjoyment during shopping, businesses can more effectively stimulate impulsive purchases, thereby increasing sales and enhancing customer loyalty.

There is a positive correlation between Sense of Immediacy (SOI) and Impulse Purchase (IPE): the sense of immediacy and impulse purchase are positively correlated. The consumer's immediate perception of the need for a product or service is often closely related to impulsive buying behavior. The sense of immediacy, as a psychological state, reflects the consumer's

urgency and desire to satisfy current needs. Research indicates that when consumers experience a strong sense of immediacy, they are more likely to make impulsive purchasing decisions to satisfy immediate desires and needs. The formation of this positive correlation is primarily derived from the direct impact of the sense of immediacy on consumer purchase intentions. When consumers perceive factors such as time urgency, unique opportunities, or limited-time promotions for a product, they are more inclined to make rapid purchasing decisions, leading to impulsive buying behavior. Therefore, emphasizing the immediacy and urgency of products or services in marketing strategies can guide consumers to develop a desire for impulsive purchases, ultimately enhancing sales outcomes. By gaining a deeper understanding of the relationship between the sense of immediacy and impulse purchases, businesses can design promotions more effectively to meet consumers' psychological desires for quickly satisfying their needs.

There is a positive correlation between Authentic Experience (AUE) and Impulse Purchase (IPE): authentic experience and impulse purchase are positively correlated. Experiencing authenticity often triggers a stronger emotional resonance in consumers, prompting them to make impulsive purchases. In authentic experiences, consumers are more likely to establish a sense of trust in a product or brand because authenticity conveys a reliable and honest image. Research indicates that when consumers perceive the quality and features of a product or service through authentic experiences, they are more likely to make immediate purchasing decisions driven by emotions. The underlying significance of this positive correlation reflects the importance of authentic experiences in stimulating consumers' desire for impulsive purchases. Therefore, emphasizing the authenticity of products or services in marketing by providing genuine user experiences, authentic storytelling, or real product demonstrations can effectively enhance consumers' emotional connection, thus driving impulsive buying behavior. By establishing authentic and profound consumer experiences, businesses can better satisfy consumers' pursuit of authenticity, thereby stimulating their desire for impulsive purchases.

There is a positive correlation between Interactive Experience (INE) and Impulse Purchase (IPE): interactive experience and impulse purchase are positively correlated. Through active interaction, consumers are more easily stimulated to have impulsive desires for purchasing. Interactive experiences can create a dynamic and personalized shopping environment, making consumers more engaged, involved, and establishing a closer connection with the product or service. Research shows that when consumers can actively participate in the interactive experience of a brand or product, their shopping experience becomes more enriched and enjoyable. The underlying significance of this positive correlation reflects the promotional role of interactive experiences in stimulating impulsive buying behavior. By providing real-time feedback, personalized services, or entertaining interactive elements in interactive experiences, businesses can increase consumer involvement, guiding them to make purchasing decisions more quickly. Therefore, emphasizing the interactivity of products or brands in marketing strategies through social media, online events, or real-time interactive platforms can effectively steer consumers' impulsive purchasing desires, enhancing the personalization and fun of the shopping experience. This positive interactive experience helps stimulate consumers to make immediate and impulsive purchasing decisions in a short period.

There is a positive correlation between Real-Time Experience (RTE) and Impulse Purchase (IPE): real-time experience and impulse purchase are positively correlated. Immediate experiences often enhance consumers' actual perception of products or services, thereby driving impulsive purchasing. In the modern society that values

immediacy and real-time interactions, consumers' demand for products or services is often immediate and urgent. Real-time experiences provide an opportunity for consumers to quickly perceive the features, advantages, and value of products or services, leading to rapid decision-making. Research indicates that when consumers perceive the uniqueness of a product through real-time interaction, online demonstrations, or immediate experiences, they are more easily stimulated to have impulsive purchasing desires. Businesses can create a compact and engaging shopping environment for consumers by offering real-time product demonstrations, online live broadcasts, or immediate shopping experiences. This up-to-date real-time experience not only increases consumers' trust in products or services but also creates an exciting and urgent atmosphere, helping guide consumers to make immediate and impulsive purchasing decisions under the stimulation of real-time experiences. Therefore, businesses can effectively encourage consumers to quickly respond to the perceived instantaneous advantages of products or services by emphasizing marketing approaches that focus on real-time experiences.

Credibility (CRE) as a mediator between Authentic Experience (AUE) and Impulse Purchase (IPE): credibility plays a mediating role between authentic experience and impulse purchase. Experiences with high credibility often enhance authenticity, indirectly influencing impulsive purchasing behavior. Consumers tend to trust brands or products with high credibility because this credibility instills greater confidence in the authenticity and quality of the product or service. During authentic experiences, if the experience itself has high credibility, consumers are more likely to accept and strongly believe that the experience is genuine and reliable. The combination of this sense of trust and authenticity makes consumers more prone to trusting the product or service, thereby increasing their confidence in impulsive purchasing decisions. Therefore, credibility plays a crucial mediating role between authentic experience and impulsive purchase. Businesses can stimulate consumer purchasing desires and facilitate impulsive buying by emphasizing brand credibility, providing genuine product experiences, and building trust relationships. While creating authentic experiences, focusing on enhancing credibility contributes to a more robust mediating effect, guiding consumers to make impulsive purchases on the foundation of authenticity and reliability.

Enjoyment (ENJ) as a mediator between Interactive Experience (INE) and Impulse Purchase (IPE): enjoyment serves as a mediating factor between interactive experience and impulse purchase. Positive interactive experiences often contribute to increased enjoyment, influencing impulsive buying behavior. Interactive experience involves active engagement between consumers and products, services, or brands, and this interaction is often characterized by a relaxed and enjoyable atmosphere. During positive interactions with products or brands, consumers frequently experience pleasure and enjoyment, and this positive emotional experience plays a significant role throughout the entire shopping process. By enhancing the feeling of enjoyment, consumers are more likely to provide positive evaluations of interactive experiences and translate these positive emotions into actual purchasing decisions. Therefore, enjoyment acts as a mediating factor between interactive experience and impulse purchase. When designing interactive experiences, businesses need to focus not only on the depth and breadth of interactions but also on creating a relaxed and enjoyable atmosphere for consumers to maximize the generation of enjoyment. By emphasizing the pleasure in interactive experiences, businesses can effectively guide consumer emotions, encouraging them toward impulsive purchasing decisions.

Sense of Immediacy (SOI) acts as a mediator between Real-Time Experience (RTE) and Impulse Purchase (IPE): the sense of immediacy serves as a mediating factor between real-time experience and impulse purchase. Immediate perceptions enhance the practical understanding of products or services, indirectly influencing impulsive buying behavior. In a real-time experience, consumers can rapidly and intuitively perceive various aspects of products or services, including features, advantages, and actual effects. The immediate perception resulting from this intuitive understanding makes consumers more prone to experiencing a sense of urgency and an immediate need for the product. The perceived immediacy affects their purchasing behavior, particularly in impulsive buying situations. Therefore, the sense of immediacy may act as a mediator between real-time experience and impulsive purchase. When providing a real-time experience, businesses should focus on enabling consumers to quickly obtain information, generate practical perceptions, and develop a desire to purchase within a short period. By reinforcing the sense of immediacy, businesses can better stimulate consumers' impulsive buying desires, prompting rapid decision-making and purchasing behavior. This underscores the crucial role of the sense of immediacy in facilitating impulsive purchasing processes, especially in real-time experience scenarios such as online shopping.

Therefore, in this study, the researcher proposes the following hypotheses:

H1: *Authentic Experience (AUE) has a positive correlation relationship with Credibility (CRE) in live streaming commerce on the Chinese economy.*

H2: *Interactive Experience (INE) has a positive correlation relationship with Enjoyment (ENJ) in live streaming commerce on the Chinese economy.*

H3: *Real-Time Experience (RTE) has a positive correlation relationship with Sense of Immediacy (SOI) in live streaming commerce on the Chinese economy.*

H4: *Credibility (CRE) has a positive correlation relationship with Impulse Purchase (IPE) in live streaming commerce on the Chinese economy.*

H5: *Enjoyment (ENJ) has a positive correlation relationship with Impulse Purchase (IPE) in live streaming commerce on the Chinese economy.*

H6: *Sense of Immediacy (SOI) has a positive correlation relationship with Impulse Purchase (IPE) in live streaming commerce on the Chinese economy.*

H7: *Authentic Experience (AUE) has a positive correlation relationship with Impulse Purchase (IPE) in live streaming commerce on the Chinese economy.*

H8: *Interactive Experience (INE) has a positive correlation relationship with Impulse Purchase (IPE) in live streaming commerce on the Chinese economy.*

H9: *Real-Time Experience (RTE) has a positive correlation relationship with Impulse Purchase (IPE) in live streaming commerce on the Chinese economy.*

H10: *Credibility (CRE) has a mediating effect between Authentic Experience (AUE) and Impulse Purchase (IPE) in live streaming commerce on the Chinese economy.*

H11: *Enjoyment (ENJ) has a mediating effect between Interactive Experience (INE) and Impulse Purchase (IPE) in live streaming commerce on the Chinese economy.*

H12: *Sense of Immediacy (SOI) has a mediating effect between Real-Time Experience (RTE) and Impulse Purchase (IPE) in live streaming commerce on the Chinese economy.*

2.3 Conceptual Framework

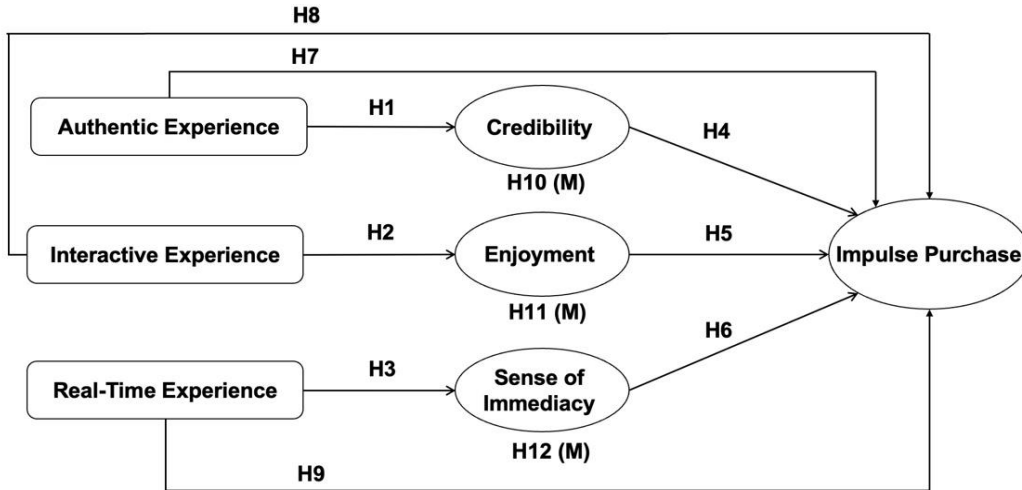


Figure 1: Conceptual Framework.

Source: Design by the Researcher (2023).

3. Research Methodology

3.1 Research Methods

Quantitative research methods offer significant advantages in studying impulsive purchasing behavior in the context of live streaming e-commerce. Prior literature on impulsive buying and research on live streaming e-commerce provide valuable theoretical foundations for the researcher. Through quantitative research, the researcher can gain a deeper and more systematic understanding of this phenomenon. Quantitative research allows for the quantification of relationships between variables, providing the researcher with more objective and measurable data to validate or expand existing theories. Live streaming e-commerce, as a novel shopping method, exhibits pronounced impulsive buying behavior, yet its influencing factors and mechanisms are not fully understood. Through quantitative research, the researcher can quantify user behaviors and responses in the live streaming environment, thoroughly explore various factors leading to impulsive purchases, including but not limited to anchor characteristics, live interaction, and product attractiveness. This aids in forming a more scientific and comprehensive model, offering a deeper understanding of impulsive purchasing behavior. Through large-scale quantitative surveys, the researcher can collect rich data samples, making the research results more persuasive. The aim of the study is to establish an empirical model for the influencing factors of impulsive buying in live streaming, and quantitative research will provide more precise correlational and causal analyses, better addressing the research questions.

3.2 Research Design

This study adopts a cross-sectional design, aiming to capture impulsive purchasing behavior and its potential influencing factors among respondents at a specific point in time. The advantage of a cross-sectional design lies in its ability to collect and analyze a large amount of data within a relatively short time, providing the researcher with an instantaneous snapshot of

impulsive buying in live streaming e-commerce. This design allows for the rapid acquisition of data on respondents' shopping behaviors and attitudes in the live streaming environment, capturing moments of shopping behavior and presenting a more vivid and authentic picture for the study. In the research design, the researcher primarily focuses on the relationship between impulsive purchasing behavior and key factors in live streaming e-commerce. Through a systematic questionnaire design, the researcher gains insights into respondents' perceptions and attitudes toward these key factors, revealing how these factors influence consumer shopping decisions in the live streaming environment. The rationality and systematic nature of the questionnaire design ensure that the obtained data is comprehensive and reliable, laying the foundation for an in-depth analysis of impulsive purchasing behavior in the study.

3.3 Research Sampling

The participants in this study were TikTok users aged between 25 and 34 in the Xuhui District of Shanghai. Yamane's sampling method was employed, specifying a required sample size of 399 individuals. To ensure ample sample coverage, 650 questionnaires were randomly distributed during the actual study, resulting in 583 successful responses. After data cleaning and screening, a total of 542 valid questionnaires were obtained. The selection of this large sample provided a more extensive and comprehensive data foundation for the study, enhancing the representativeness and credibility of the research results. By employing this method, the aim was to encompass diversity among TikTok users, ensuring the study's findings are more generalizable and facilitating a thorough analysis of impulsive purchasing behavior and its underlying factors in live streaming e-commerce. With an abundance of data and diversity, the study aimed for a more accurate interpretation and understanding of consumer shopping behavior in the context of live streaming platforms.

4. Data Analysis

4.1 Descriptive Analysis

A total of 650 questionnaires were distributed and 583 recovered, 542 valid. The characteristics of gender, educational background and monthly income in the sample are diversely distributed, reflecting the share and tendency of different categories of participants. The analysis of these characteristics is helpful to further understand the background and influencing factors of the survey result.

Table 1: Basic Information.

		n	%
Gender	Male	256	47.2
	Female	270	49.8
	Prefer not to answer	16	3.0
Educational background	Diploma	254	46.9
	Bachelor's degree	133	24.5
	Master's degree	147	27.1
	Ph.D. or higher	8	1.5
Monthly income	5,500 yuan or lower	87	16.1
	,501-9,500 yuan	169	31.2
	9,501-15,000 yuan	166	30.6
	15,001 yuan and higher	120	22.1
	Total	542	100.0

4.2 Variable Descriptive Analysis

The perception of live streaming among participants indicates an overall high rating, but there are some differences in enjoyment, sense of immediacy and impulse purchase. The analysis result offers reference for the further understanding of the psychological and behavioural responses to live streaming among participants.

Table 2: Result of Variable Descriptive Analysis.

Variable	Measured item	Mean	SD	S	K
Authentic experience	A1	3.54	0.760	0.331	-0.156
	A2	3.61	0.710	0.033	-0.116
	A3	3.68	0.801	0.110	-0.552
	A4	3.87	0.795	-0.139	-0.562
Interactive experience	B1	3.78	0.816	0.010	-0.704
	B2	3.67	0.838	-0.086	-0.241
	B3	3.79	0.847	-0.226	-0.424
	B4	3.81	0.810	-0.189	-0.439
Real-time experience	C1	3.87	0.755	-0.292	0.072
	C2	3.98	0.759	-0.370	-0.093
	C3	3.92	0.718	-0.336	0.019
	C4	3.90	0.825	-0.361	-0.430
Credibility	D1	3.71	0.798	0.100	-0.716
	D2	3.78	0.794	-0.005	-0.703
	D3	3.75	0.809	-0.117	-0.451
	D4	3.52	0.889	0.038	-0.448
	D5	3.43	0.913	0.090	-0.406
	D6	3.45	0.928	0.015	-0.433
Enjoyment	E1	3.51	0.963	-0.170	-0.320
	E2	3.73	0.802	-0.073	-0.339
	E3	3.76	0.844	-0.333	0.018
	E4	3.71	0.897	-0.204	-0.380
	E5	3.78	0.827	-0.107	-0.683
	E6	3.76	0.733	-0.354	0.344
Sense of immediacy	F1	3.85	0.850	-0.453	0.194
	F2	3.79	0.911	-0.287	-0.423
	F3	3.63	0.951	-0.209	-0.264
	F4	3.60	0.866	-0.247	0.216
	F5	3.59	0.831	-0.442	0.645
Impulse purchase	G1	3.65	0.913	-0.141	-0.537
	G2	3.61	0.927	-0.125	-0.588
	G3	3.54	0.968	-0.198	-0.330
	G4	3.60	0.948	-0.338	-0.186
	G5	3.82	0.753	-0.258	-0.209
	G6	3.73	0.829	-0.169	-0.360

4.3 Reliability Analysis

The reliability analysis result of the questionnaire demonstrates that the data have a high intrinsic consistency and reliability, thus laying a solid data foundation for a reliable subsequent research, supporting the conclusions on sample characteristics analysis and descriptive statistical analysis, providing strong support for further data analysis and model construction, thus facilitating the understanding of the attitudes towards, perceptions of and behaviour to live streaming among participants.

Table 3: Reliability Analysis Result.

Variable	Item	Cronbach's α
Authentic experience	4	0.828
Interactive experience	4	0.833
Real-time experience	4	0.824
Credibility	6	0.866
Enjoyment	6	0.867
Sense of immediacy	5	0.842
Impulse purchase	6	0.905

4.4 Validity Analysis

1) Convergent validity

Three indicators can be used to test the convergent validity of a measurement tool: factor loading, composite reliability (CR) and average variance extracted (AVE). The measurement tools in this study have a good convergent validity, reliability, and stability. Therefore, they can be used for further data analysis and research to delve into the attitudes towards, perceptions of and behaviour to live streaming in terms of authentic experience, interactive experience, real-time experience, credibility, enjoyment, sense of immediacy and impulse purchase among participants. The result has laid a solid data foundation for this study, increasing the reliability and validity of this study.

Table 4: Convergent Validity Analysis Result.

Variable	n	Factor loading	CR	AVE
Authentic experience	A1	0.764	0.887	0.663
	A2	0.862		
	A3	0.835		
	A4	0.794		
Interactive experience	B1	0.798	0.889	0.666
	B2	0.828		
	B3	0.845		
	B4	0.793		
Real-time experience	C1	0.801	0.885	0.659
	C2	0.836		
	C3	0.835		
	C4	0.773		
Credibility	D1	0.744	0.900	0.600
	D2	0.776		
	D3	0.787		
	D4	0.798		
	D5	0.790		
	D6	0.750		
Enjoyment	E1	0.708	0.903	0.608
	E2	0.839		
	E3	0.798		
	E4	0.816		
	E5	0.766		
	E6	0.743		
Sense of immediacy	F1	0.772	0.888	0.614
	F2	0.841		
	F3	0.798		
	F4	0.711		
	F5	0.791		
Impulse purchase	G1	0.797	0.927	0.680
	G2	0.872		
	G3	0.873		
	G4	0.837		
	G5	0.777		

2) Discriminant validity

Fornell-Larcker criterion can evaluate the differentiation between variables by comparing the AVE square root and the correlation coefficient of variables. If the AVE square root of a variable is greater than its correlation coefficient with other variables, it indicates that the intrinsic correlation between the variables is greater than the extrinsic correlation, meaning there is a good differentiation. According to the Fornell-Larcker criterion result, it can be concluded that each variable in the model has a good differentiation on live streaming, indicating this study can accurately and reliably differentiate these variables and study their respective influence on the perception and behaviour among participants, laying a solid foundation for subsequent data analysis and research.

Table 5: Fornell-Larcker Criterion Result.

	AEE	IEE	RTE	CRE	ENJ	SOI	IPE
AEE	0.814						
IEE	0.466	0.816					
RTE	0.442	0.551	0.812				
CRE	0.467	0.512	0.481	0.774			
ENJ	0.525	0.528	0.501	0.534	0.780		
SOI	0.385	0.485	0.487	0.514	0.620	0.784	
IPE	0.554	0.604	0.596	0.590	0.627	0.603	0.825

4.5 Common Method Biases

According to Harman's single-factor test result, it can be confirmed that the influence of common method biases in the valid sample data collected in this study are not significant, and this study can explain the data more accurately and reliably, without under the significant influence of common method biases.

Table 6: Common Method Biases.

Component	Initial eigenvalue			Extraction sums of squared loadings		Extraction sums of squared loading(rotated)		
	Total	% of variance	Cumulative %	Total	Cumulative %	Total	% of variance	Cumulative %
1	13.570	38.771	38.771	13.570	38.771	3.702	10.577	10.577
2	1.975	5.642	44.413	1.975	5.642	3.657	10.448	21.025
3	1.845	5.270	49.683	1.845	5.270	3.542	10.119	31.144
4	1.715	4.901	54.584	1.715	4.901	3.324	9.497	40.640
5	1.369	3.911	58.495	1.369	3.911	2.988	8.536	49.176
6	1.330	3.800	62.295	1.330	3.800	2.960	8.458	57.634
7	1.198	3.422	65.717	1.198	3.422	2.829	8.083	65.717

4.6 Structural Equation Model

4.7 Model Fitting

This study tested the goodness of fit and predictive power of the model with GoF, R2 and Q2. In Partial Least Squares Structural Equation Modelling (PLS-SEM), the criterion for assessing model predictive capacity is typically referred to as Q², which is used to measure the model's predictive accuracy and explanatory power.

Table 7: Model Fitting.

Constructs	R ²	adj-R ²	Q ²
Credibility	0.218	0.217	0.128
Enjoyment	0.278	0.277	0.166
Sense of immediacy	0.237	0.236	0.144
Impulse purchase	0.609	0.604	0.408

4.8 Direct Effect Test

This study selected a resampling sample with a size of 5000 with Bootstrapping algorithm in SmartPLS3.0 to test the original data. Then this study analysed the path test result of the model, to obtain the path coefficient and CR of the structural equation model. The critical proportion, T value, can determine whether the regression coefficient is significant or not.

Table 8: Direct Effect Test Result.

Path correlation	β	SE	T-value	P
AEE -> CRE	0.467	0.039	12.008	0.000
IEE -> ENJ	0.528	0.040	13.201	0.000
RTE -> SOI	0.487	0.038	12.864	0.000
CRE -> IPE	0.155	0.045	3.480	0.001
ENJ -> IPE	0.158	0.050	3.176	0.002
SOI -> IPE	0.190	0.046	4.118	0.000
AEE -> IPE	0.165	0.040	4.108	0.000
IEE -> IPE	0.172	0.040	4.352	0.000
RTE -> IPE	0.182	0.044	4.105	0.000

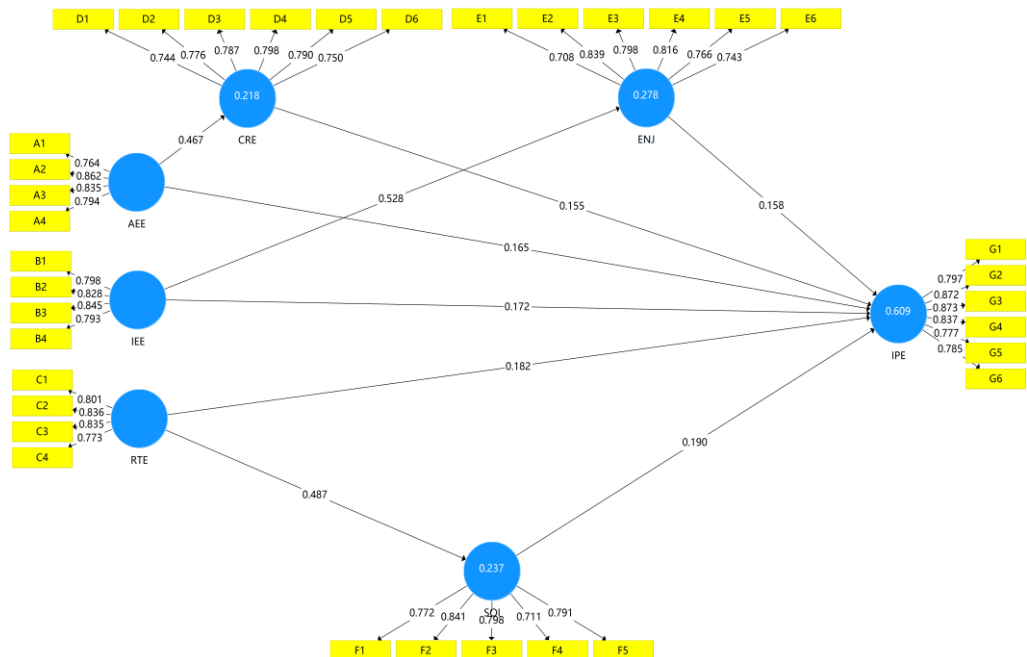


Figure 3: Adjust Model.

4.9 Mediating Effect Test

According to the Bootstrapping algorithm result, it can be concluded that credibility, enjoyment, and sense of immediacy plays a respective mediating effect on authentic experience, interactive experience, real-time experience, and impulse purchase.

Table 9: Mediating Effect Test Result.

Indirect path	β	SE	T value	LLCI	ULCI	P
AEE -> CRE -> IPE	0.072	0.022	3.220	0.033	0.119	0.001
IEE -> ENJ -> IPE	0.083	0.027	3.135	0.031	0.135	0.002
RTE -> SOI -> IPE	0.092	0.025	3.727	0.046	0.143	0.000

5. Discussion and Conclusion

5.1 Discussion

In this study, the researcher conducted an in-depth investigation into the factors influencing impulsive purchasing behavior in e-commerce live streaming using Partial Least Squares Structural Equation Modeling (PLS-SEM). Drawing on the results from Chapter Four, key conclusions were derived regarding Authentic Experience (AEE), Interactive Experience (IEE), Real-Time Experience (RTE), Credibility (CRE), Enjoyment (ENJ), Sense of Immediacy (SOI), and Impulse Purchase (IPE). The study's hypotheses were validated through path analysis and mediating effect analysis. The following is a detailed discussion of these results. Firstly, within Authentic Experience (AEE), the highest value for A2 was 0.862, indicating the significant impact of authentic experience on consumers. This aligns with previous literature, emphasizing that an emphasis on authenticity in e-commerce live streaming contributes to building user trust, thus promoting impulsive purchasing behavior. Authentic experiences, by creating genuine and relatable scenarios for users, enhance perception and increase the likelihood of impulsive purchases. Secondly, in Interactive Experience (IEE), the highest value for B3 was 0.845, highlighting the importance of interactive experiences in impulsive purchasing. This result is consistent with past research, indicating that robust user-host interactions on e-commerce live streaming platforms can stimulate user purchasing decisions. Through interaction with hosts, users are more likely to develop interest and trust in products, thereby increasing the tendency for impulsive purchases. In Real-Time Experience (RTE), the highest value for C2 was 0.836, emphasizing the positive influence of real-time experiences. Real-time experiences in e-commerce live streaming enable users to rapidly access information, improving their shopping decision efficiency. The immediacy of the experience makes users more aware of product features and advantages, enhancing the immediacy and urgency of the shopping experience. For Credibility (CRE), the highest value for D4 was 0.798, underscoring the importance of credibility in influencing impulsive purchases. Highly credible hosts or products are more likely to gain user trust, making users more willing to make impulsive purchases. This result emphasizes the critical role of building a credible brand image in e-commerce live streaming to facilitate user shopping decisions. Within Enjoyment (ENJ), the highest value for E4 was 0.816, indicating a significant positive impact of enjoyment on impulsive purchases. Users are more easily attracted to products or services in enjoyable experiences, increasing their inclination for impulsive purchases. Enjoyable experiences enhance user satisfaction during the shopping process, influencing their shopping decisions.

Sense of Immediacy (SOI), with the highest value for F2 being 0.841, emphasizes the importance of immediacy in e-commerce live streaming. Users' immediate perception of product or service needs often guides them toward impulsive purchases. The enhancement of SOI makes users more attentive to the immediacy of shopping, driving shopping behavior. Finally, Impulse Purchase (IPE), with the highest value for G3 being 0.873, demonstrates the comprehensive impact of the aforementioned factors on impulsive purchases. By considering factors such as Authentic Experience (AEE), Interactive Experience (IEE), Real-Time Experience (RTE), Credibility (CRE), Enjoyment (ENJ), Sense of Immediacy (SOI), users are more likely to make impulsive shopping decisions. In conclusion, this study, through quantitative research methods, combined with path analysis and mediating effect analysis, comprehensively and deeply explored the influencing factors of impulsive purchases in e-commerce live streaming. By validating hypotheses, the study provides targeted improvement suggestions for e-commerce live streaming platforms, offering substantial references for enhancing user experiences and promoting sales growth. These research findings have theoretical and practical significances for the further development of the e-commerce live streaming industry and improving user shopping experiences.

5.2 Conclusion

By conducting a comprehensive study on the influencing factors of impulsive purchasing in live streaming e-commerce, this study aims to gain a deeper understanding of consumer buying behavior in this specific environment. In this study, the researcher utilized the S-O-R theory, as well as research methods such as Partial Least Squares Structural Equation Modeling (PLS-SEM), to conduct a detailed exploration of key factors such as Authentic Experience (AUE), Interactive Experience (INE), Real-Time Experience (RTE), Credibility (CRE), Enjoyment (ENJ), Sense of Immediacy (SOI), and Impulse Purchase (IPE). Firstly, guided by the S-O-R theory, the researcher examined the relationships between different experiential factors. Authentic Experience (AUE) was found to be positively correlated with Credibility (CRE), indicating that the experience of authenticity in the context of live streaming shopping is often accompanied by an increase in the credibility of products or services. Additionally, there was a positive correlation between Interactive Experience (INE) and Enjoyment (ENJ), emphasizing that positive interactive experiences can enhance the overall enjoyment of the shopping experience. Real-Time Experience (RTE) was positively correlated with Sense of Immediacy (SOI), revealing that in real-time experiences, consumers perceive information and stimuli more rapidly, enhancing their immediate cognition and response to products or services. Based on these findings, the researcher further conducted structural equation modeling analysis, validating the establishment of multiple hypotheses through path analysis and mediating effect analysis. The relationships between various experiential factors and Impulse Purchase (IPE) were further confirmed, providing a more comprehensive and in-depth understanding of impulsive purchasing behavior. Specifically, the structural equation model yielded a series of important path coefficients. In AUE, A2 obtained the highest value of 0.862, further confirming the positive correlation between authentic experience and impulsive purchasing. In INE, B3 reached the highest value of 0.845, emphasizing the positive association between interactive experience and enjoyment. In RTE, C2 achieved the highest value of 0.836, confirming the positive relationship between real-time experience and a sense of immediacy. D4 in CRE reached the highest value of 0.798, highlighting the positive impact of credibility on impulsive purchasing behavior. E4 in ENJ reached the highest value of 0.816, emphasizing the positive drive of enjoyment on impulsive purchasing. F2 in SOI reached the highest value of 0.841, revealing the significant positive correlation between a sense of immediacy and

impulsive purchasing. Finally, in IPE, G3 reached the highest value of 0.873, highlighting the overall impact of various experiential factors on impulsive purchasing behavior. In conclusion, through the analysis of the structural equation model, all previously proposed research hypotheses were successfully validated. These results not only expand the applicability of the S-O-R theory in the context of live streaming e-commerce at the theoretical level but also provide substantial guidance for practical marketing and consumer behavior. In the future, further exploration of each experiential factor can be strengthened to better understand the complex mechanisms of consumer behavior in live streaming e-commerce. Through a deeper exploration of impulsive purchasing behavior, more accurate marketing strategies and consumer services can be provided for the e-commerce industry.

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