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RESEARCH ARTICLE

Immersive Marketing and Impulse Buying in Livestream E-Commerce: Mediating Roles of Perceived Value and Trust of Livestreamer

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ABSTRACT

The world of live streaming is becoming a significant part of e-commerce, and immersive marketing tactics are driving consumer behaviour. This study explores the effect of immersive marketing on the impulse buying of undergraduate consumers in cosmetics livestream shopping, while examining the intermediary role of perceived value and trust of livestreamer. Based on Stimulus-Organism-Response (S-O-R) model, we argue that immersive marketing (S) increases consumers' perceived value/trust of livestreamer (O), which further increases the impulse buying (R) behavior of consumers. The data were gathered from 396 undergraduate students who had previous experience buying cosmetics products from a livestream platform in Guangxi, China. The hypothesized relationships were tested using partial Least Squares Structural Equation Modeling (PLS-SEM). The result shows that there is a significant and positive relationship between immersive marketing and perceived value and trust in livestreamer. Further, the perceived value and trust of the livestreamer have significant mediation effects between immersive marketing and the impulse buying behavior. The results also further expand the S-O-R paradigm to apply to live-stream e-commerce and provide marketing practitioners with practical considerations for how to use immersive approaches to drive consumer engagement and spontaneous buying.

1. Introduction

Livestream e-commerce has revolutionized online shopping by embedding live interaction, immersive product displays, and immediate purchasing opportunities within a unified shopping experience (Luo et al., 2025). Livestream shopping platforms provide a more dynamic and interactive shopping experience than traditional e-commerce platforms, which heavily depend on static product images and text descriptions. Unlike traditional e-commerce platforms, livestream shopping environments provide more interactive and engaging shopping contexts, draw consumers' attention and help them make spontaneous purchasing decisions (Chen & Yang, 2023). In the context of livestream commerce, immersive marketing is one of the most influential strategies that can be implemented to increase consumer engagement and boost the shopping experience (Wu et al., 2026).

According to Muneesawang et al., 2025, immersive marketing is marketing that engages, stimulates, and evokes emotions in the consumers through multi-sensory stimulation, vivid presentation of the content, and participatory engagement. In the realm of live shopping, it looks like a live demonstration of the products, communicating with consumers during the live broadcast, visual presentation of the products, and story-telling that makes consumers feel like they are in the live broadcast. Such immersive elements have been proven to enhance consumers' psychological involvement, emotional engagement, and spontaneous purchase decisions (Yu & Li, 2026).

Even with the increased awareness of how vital immersive marketing has become in the context of livestream commerce, the psychological processes that lead to a shift in buying habits is not well understood. Existing studies have mostly focused on the direct impact of immersive features on consumer responses, with little attention given to the underlying processes, such as cognitive and affective responses, that mediate these relationships (Ambika et al., 2025). Specifically, there has been a lack of research on the role of perceived value and trust of the livestreamer between immersive marketing and impulse buying, and this relationship has not been examined in a single theoretical perspective. These processes represent a crucial gap in the literature on livestream commerce because understanding how these processes work is critical for both growing the theory and developing strategy.

Moreover, undergraduates are a population of utmost pertinence and under-studied within the field of livestream commerce research. Undergraduates are digital natives who are highly susceptible to interacting with digital material and engaging with visually stimulating marketing stimuli, and are more prone to impulse buying than other generations (Qi, 2025). The population of undergraduate consumers is suitable for study because undergraduate consumers have become active participants in cosmetics livestream shopping in emerging regional markets, such as Guangxi, in China (Li & Santirojanakul, 2025).

Hence, this study uses the Stimulus-Organism-Response (S-O-R) model to examine the relationship between immersive marketing and impulse buying behavior with the mediating variables of perceived value and trust of livestreamer. The S-O-R theory offers a solid theoretical foundation to explain the impact of an immersive marketing stimulus on consumers' psychological response (perceived value and trust) and then on their behavioral response (impulse buying). This study attempts to combine these cognitive and affective mediating processes in a single model, to provide a more holistic explanation of the psychological processes associated with impulse buying in the live streaming commerce.

In particular, this study aims to answer the following research questions: Can IM positively affect the perceived value and trust of a livestreamer for undergraduate cosmetic consumers? Is there a positive relationship between perceived value and trust of livestreamer and impulse buying behavior? Is perceived value AND trust of livestreamer playing a mediating role in the association between immersive marketing and impulse buying behavior? This study adds to the literature in several ways by answering these questions. In doing so, it extends the S-O-R framework to the livestream commerce context and is the first study to show that both cognitive (perceived value) and affective (trust) mechanisms can act as mediators. Second, it offers empirical findings regarding the effectiveness of immersive marketing strategies in influencing undergraduate consumers' impulse buying behavior. In addition, it provides actionable guidance for livestream marketers, platform designers, and cosmetics companies looking to improve their consumer engagement and promote spontaneous sales by immersive marketing strategies.

2. Theoretical Foundations

2.1 The Stimulus-Organism-Response (S-O-R) Framework

In this way, the Stimulus-Organism-Response (S-O-R) model, as originally formulated by Russell and Mehrabian (1974), establishes a theoretical basis for understanding the influence of S-O-R on human responses. This model suggests that outside environmental stimuli (S) evoke the psychoaffective processes (O) within the person and consequently evoke responses (R). In consumer behaviour literature, the S-O-R model has been widely used to describe the influence of retail and online shopping contexts on consumer emotions, thoughts and buying intentions (Mummalaneni, 2005).

The S-O-R framework is especially relevant to livestream commerce in providing insight into how the internal evaluation of the stimuli of an immersive marketing influence the behavioral response of the consumer. In this scheme, immersive marketing is an external factor that attacks the attention and distracts the mind and emotions of the consumer. The internal organismic states of the consumers are expressed in terms of their evaluations of perceived value (cognitive assessment) and trust in the livestreamer (affective assessment). The behavioral response is demonstrated by the impulse purchase behavior, which is the impulsive purchasing decision of consumers (Erensoy et al., 2024).

In recent years, the use of the S-O-R framework in livestream commerce has become increasingly popular. Kawaf and Tagg (2012) proved that live streaming environmental stimuli impacts consumers' impulsive buying behavior with emotional and cognitive responses. In a similar way, Trang et al. (2022) used the S-O-R model to analyze the influence of livestream features on purchase intention by perceived value and trust. On this basis, the present research builds on this research stream, and uses the S-O-R model as its theory, making the immersive marketing experience the stimulus, value and confidence of the livestreamer as organismic states, and impulse buying behavior as the response.

2.2 Immersive Marketing in Livestream Commerce

The concept of immersive marketing is the marketing practices that involve the senses, tell stories, and invite the audience into the process (Yu & Li, 2026). Livestream commerce also integrates with various elements of immersive marketing, such as real-time product demonstrations, chat functionality, highly visual presentations, dynamic storytelling, and interactive product sampling, that allow consumers to engage with a brand to a greater degree than in traditional eCommerce approaches. The key value of immersive marketing is creating a sense of psychological proximity between consumers and products, increasing the state of cognitive immersion, and creating an emotional connection. Immersion in the consumption of livestream shopping consumes significant cognitive and emotional resources for consumers, which leads to an increase in attention, enjoyment, and involvement (Ambika et al., 2025). The state of immersion has been proven to affect consumers' perception of the value of the product, their confidence in the seller, and their desire to buy spontaneously (Hussain & Usman, 2026).

Empirical research in recent years has shown the benefits of immersive marketing to consumers' outcomes in digital commerce environments. Wang et al. (2026) concluded that immersive storytelling in marketing communications has a significant impact on consumers' emotional involvement and brand relationship. According to Chen et al. (2022), immersive elements in live streaming shopping, including interactive demonstrations and visual storytelling, have a significant impact on consumers' perceived value and purchase intention. Likewise, Chen et al. (2023) found that consumers' perceived risk decreases with their immersive involvement in live streaming commerce and their impulsive buying behavior increases. However, the mechanisms of influence of immersive marketing on impulse buying behavior are still not well researched. To fill this gap, the present study explores the mediation of perceived value and trust of livestreamer as the cognitive and affective processes that link immersive stimuli to behavioral outcomes.

2.3 Perceived Value as a Cognitive Mediator

Perceived value is the consumers' general evaluation of the benefits that they receive from a product or shopping experience, considering the price they have paid (Sánchez-Fernández & Iniesta-Bonillo, 2007). The perceived value of livestream commerce consists of several factors, such as functional value (product quality and usefulness), emotional value (enjoyment, pleasure), social value (status, belonging), and experiential value (engagement, immersion). A livestream shopping experience that consumers think that they are getting a lot for is likely to make them feel they have been successful in making purchases and thus more likely to justify an impulse purchase.

Immersive marketing is anticipated to help improve the perceived value by giving customers richer, more engaging and more informative shopping experiences. Immersive marketing offers the opportunity to enhance the perception of value for consumers, as they can interactively engage with the product through real-time demonstrations, communication, and engaging visual presentations. Immersive marketing can help to build consumer perception of value through real-time product demonstrations, interactive communication, and engaging visual presentations. Moreover, the experiential and hedonic components of IM (fun, excitement and engagement) lead to emotional value perceptions, in addition to functional value assessments. The empirical results of the study corroborate the positive relationship between immersive marketing and perceived value. The results of the study confirm that there is a positive relationship between immersive marketing and perceived value, as evidenced by empirical findings. Given that the effect of mobile short video shopping immersion experience on perceived value and purchase intention was verified, (Hewei, 2022) concluded that immersion experience in mobile short video shopping had a significant positive impact on perceived value and purchase intention. For live-stream commerce, Zhang et al. (2025) have found that immersive attributes substantially boost the perceived value of products and shopping experiences for consumers.

Moreover, it is hypothesized that perceived value will act as a mediator between IM and impulse buying behavior. If consumers believe they are getting a lot of value from an immersive livestream experience then this thought-based assessment offers justification for an impulsive purchase. When one's perception of value decreases, perceived risk increases and confidence in the purchase decision is also diminished, and so is the likelihood of impulse buying. With the above theory and empirical considerations, the following hypothesis is proposed:

H1: Immersive marketing has a positive effect on perceived value among undergraduate cosmetic consumers in livestream shopping.

H4: Perceived value mediates the relationship between immersive marketing and impulse buying behavior.

2.4 Trust of Livestreamer as an Affective Mediator

Trust of livestreamer is consumers' confidence in the livestreamer's credibility, reliability, integrity and expertise in recommending and demonstrating a product (Wang et al., 2024). The trust in the livestreamer is a key psychological process that mitigates perceived risk and uncertainty, enabling consumers to make purchase decisions in the context of livestream commerce. In cosmetics livestream shopping, consumers are very dependent on livestreamers, who demonstrate, explain, and recommend products to help them determine its quality and suitability.

It is expected that immersive marketing will lead to a better perception of the trustworthiness of a livestreamer as the cues will be more visible and interactive, and will give signals about the competence, professionalism and authenticity of the livestreamer. Immersive marketing allows the audience to witness the livestreamer's expertise, capabilities, and authenticity in real time, fostering interactive experiences for engagement (Zeng & Kim, 2026). The direct observation helps decrease uncertainty and build trust for consumers in the livestreamer's recommendation. Moreover, the emotional involvement and high level of social presence achieved with immersive marketing generate, beyond the cognitive, a relational trust. Recent empirical studies support the positive relationship between immersive experiences and trust in digital commerce contexts. Yu et al. (2025) concluded that consumers' trust in livestreamers is significantly increased because of the immersive features, such as interactive product demonstration and participatory interaction, of livestream shopping. The same, He et al. (2024) found that immersive engagement decreases the perceived risk and increases trust, which in turn affects impulsive purchase behavior.

The effect between immersive marketing and impulse buying behavior is expected to be mediated by trust of livestreamer. The use of trust decreases the amount of cognitive deliberation needed for consumers to make purchases based on the recommendation of the livestreamer, thus allowing the consumer to have confidence in the recommendation. If consumers perceive that the livestreamer is credible, they will be more inclined to act on the instant urge to purchase without much research. If consumers believe that the livestreamer is credible, they will be more likely to follow the impulse to buy without further evaluation. Given these theoretical and empirical considerations, we hypothesize that:

H2: Immersive marketing has a positive effect on trust of livestreamer among undergraduate cosmetic consumers in livestream shopping.

H5: Trust of livestreamer mediates the relationship between immersive marketing and impulse buying behavior.

2.5 Perceived Value, Trust of Livestreamer, and Impulse Buying Behavior

In this study, perceived value and trust of livestreamer are believed to have positive effects on impulse buying behavior as cognitive and affective organismic states. Perceived value establishes a line of thinking which helps consumers to make spontaneous purchases because they believe that the product will provide them with enough benefits when compared to the price that they are willing to pay. Consumers do not have the same amount of cognitive resistance when they perceive high value nor do they have less interest in making unplanned purchases. Consumer trust in livestreamer lowers perceived risk and uncertainty, allowing them to act with confidence and trust in the seller's credibility and reliability, to make quick decisions leading to purchase.

The positive relationship between perceived value and trust and impulse buying behavior is supported by empirical evidence. Fu and Hsu (2023) discovered that perceived value had a significant impact on impulse buying intentions in the context of livestream shopping. In the same way, Yuzwanisa et al. (2026) found that the trust in the livestreamers' brand positively affected the impulse buying behaviour of the consumer by decreasing the perceived risk and increasing the confidence of the consumer in making their purchase. Perceived value and trust are shown to be significant factors for impulsive buying throughout the wider literature on online shopping. For this theoretical and empirical basis, we propose:

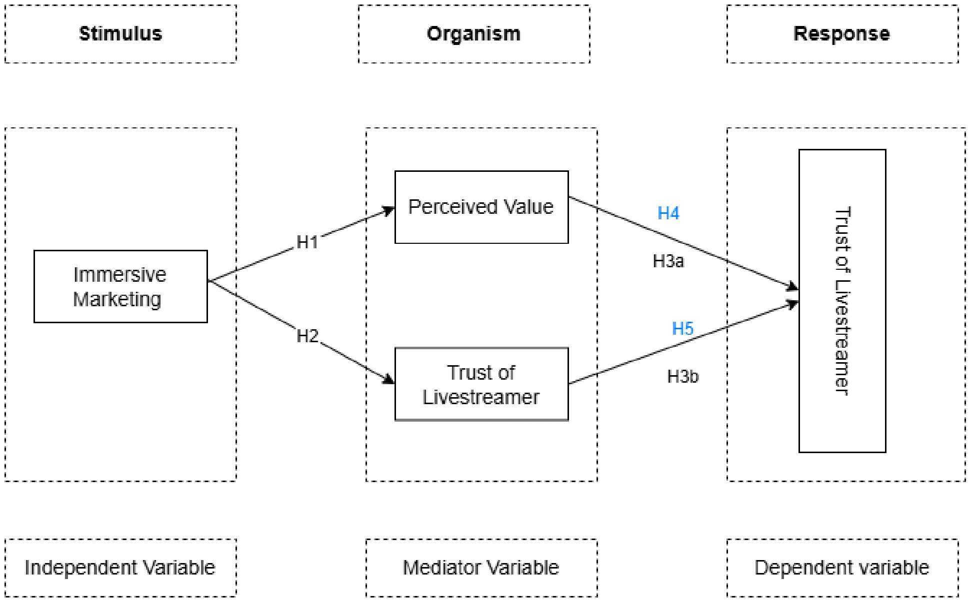
H3a: Perceived value has a positive effect on impulse buying behavior among undergraduate cosmetic consumers in livestream shopping.

H3b: Trust of livestreamer has a positive effect on impulse buying behavior among undergraduate cosmetic consumers in livestream shopping.

2.6 Conceptual Framework

The result of the above theoretical development and hypothesis led to the development of this study conceptual framework based on S-O-R model. In this structure, immersive marketing as the external stimulus, influences internal organismic state O, which in turn comprises perceived value (cognitive evaluation) and trust of livestreamer (affective evaluation). These organismic states, in their turn, affect impulse buying behavior as the behavioral response (R). The framework also assumes that the relationship between immersive marketing and impulse buying behavior is mediated by perceived value and trust of livestreamer.

Figure 1. Conceptual Framework



3. Research Methodology

3.1 Research Design and Sample

For this study, a quantitative and cross-sectional type of research was used. This study adopted a self-administered questionnaire for collecting the data, which included participants with prior experience of watching cosmetics livestreams and purchasing cosmetics products from the livestream shopping platform, in undergraduate students from Guangxi, China. The participants were recruited using purposive sampling from several universities in Guangxi, such as Guangxi University, Guangxi Normal University and Guilin University of Technology.

420 questionnaires were sent out and 396 valid questionnaires were retained for analysis after screening for eligibility and completeness (a response rate of 94.3%). The number of respondents was greater than the recommended number for 95% confidence level and ±5% margin of error of 384 (Krejcie & Morgan, 1970).

The demographic profile of respondents is presented in Table 1. The sample was predominantly female (84.1%), reflecting the gender composition of cosmetics livestream consumers. Respondents' ages ranged from 18 to 24 years, with 44.9% aged 18–20, 32.3% aged 21–22, and 20.5% aged 23–24. In terms of year of study, Year 2 students comprised the largest proportion (25.5%), followed by Year 3 (23.2%), Year 1 (21.7%), Year 4 (18.9%), and Year 5 or above (10.6%). Regarding field of study, 46.2% were in Science/Engineering, 36.4% in Humanities/Social Sciences, and 17.4% in Economics/Management. Monthly disposable allowance was predominantly between RMB 1,000 and 3,000 (86.1%).

Table 1. Demographic profile of respondents

Variable	Category	Frequency	Percentage (%)
Gender	Male	63	15.9
	Female	333	84.1
Age	18–20	178	44.9
	21–22	128	32.3
	23–24	81	20.5
	25+	9	2.3
Year of study	Year 1	86	21.7
	Year 2	101	25.5
	Year 3	92	23.2
	Year 4	75	18.9
	Year 5+	42	10.6
Field of study	Economics/Management	69	17.4
	Science/Engineering	183	46.2
	Humanities/Social Science	144	36.4
Monthly disposable allowance	<1000 RMB	13	3.3
	1000–2000 RMB	177	44.7
	2001–3000 RMB	164	41.4
	>3000 RMB	42	10.6

3.2 Measurement Instruments

Multi-item scales were adapted from existing studies and tailored to cosmetics livestream shopping for all constructs in this study. A 5 point Likert scale (from Strongly Disagree to Strongly Agree) was used in rating items.

Based on the items used by Ahmed et al. (2024) to measure Immersive Marketing, five items were adapted to assess the level of immersion, absorption, mental transportation, vivid engagement and loss of time awareness during the experience of livestream shopping for cosmetic products (e.g., "Livestream shopping for cosmetic products creates an immersive experience for me"). Cronbach's alpha was 0.858.

Perceived Value (PV) was measured using 5 items adapted from Elshaer et al. (2025) which included evaluations of seller authenticity, product authenticity, value for money, shopping enjoyment and overall positive impression (e.g., “I think cosmetic products sold through livestreams are worth what I pay”). Cronbach's alpha was 0.861. The trust of Livestreamer (TL) was evaluated by 5 items related to consumers' perceptions of livestreamer enthusiasm, sincerity, product knowledge, professionalism and reliability (e.g., 'I believe that sellers of cosmetics on livestream have professional knowledge on the products they recommend'). Cronbach's alpha was 0.867. Question items included in the measurement of Impulse Buying Behavior (IB) were adapted from De and Thanh (2026) which comprised of seven items: spontaneous buying, impulsive decision making, irresistible urges, unplanned buying, buying because of the bargain, lack of deliberation and inability to prevent from purchasing (e.g., "I sometimes buy cosmetic products that I hadn't planned to buy while doing live-stream shopping"). Cronbach's alpha was 0.894.

3.3 Data Analysis

The data analysis was performed by the Partial Least Squares Structural Equation Modeling (PLS-SEM) technique with SmartPLS 4.0 software. PLS-SEM is especially well suited for complex models with multiple mediating relationships and works well with non-normal data distributions. The analysis was conducted in a two-step manner: firstly, the measurement model was examined to check its reliability and validity and secondly, the structural model was examined to check the hypothesized relationships and the mediating effect. The indicator reliability (outer loadings), Cronbach's alpha and composite reliability, convergent validity (AVE), and discriminant validity (HTMT and Fornell-Larcker criterion) were used in the measurement model assessment. The structural model assessment consisted of tests for collinearity (VIF), coefficient of determination (R^2), predictive relevance (Q^2), and bootstrapping with 5,000 resamples to test the hypotheses.

4. Results and Discussion

4.1 Measurement Model Assessment

The measurement model was validated to guarantee reliability and validity of the constructs. All constructs had acceptable internal consistency ranging from a Cronbach’s alpha of 0.858 to 0.894 which is above the recommended value of 0.70, as stated in Table 2. The internal consistency reliability of the instruments was good with all composite reliability (CR) values being higher than 0.70, ranging from 0.898 to 0.917. The average variance extracted (AVE) ranged from 0.637 to 0.650, which is well above 0.50, thus indicating satisfactory convergent validity.

Table 2. Reliability and convergent validity

Construct	Cronbach’s Alpha (α)	Composite reliability(CR)	Average variance extracted (AVE)
Immersive Marketing(IM)	0.858	0.898	0.637
Perceived Value(PV)	0.861	0.900	0.642
Trust of Livestreamer(TL)	0.867	0.904	0.653
Impulse Buying Behavior(IB)	0.894	0.917	0.612

Outer loadings were used to test indicator reliability. The loadings for all items exceeded 0.70 (range of 0.768–0.835), demonstrating more than 50% of variance accounted for by each indicator in its construct. The model was not altered. Both the Fornell-Larcker criterion and the HTMT ratio were examined to test the discriminant validity. In Table 3, the square root of the AVE for every construct (diagonal values) were higher than the off-diagonal values, which represented the inter-construct correlations, and thus met the Fornell-Larcker criterion. Also, all the HTMT values (Table 4) were lower than the threshold value of 0.85, which indicated that each construct was empirically different from the other.

Table 3. Fornell-Larcker Criterion

Construct	IM	PV	TL	IB
IM	**0.798**			
PV	0.422	**0.801**		
TL	0.447	0.472	**0.808**	
IB	0.460	0.452	0.482	**0.782**

Note: Diagonal values are the square roots of AVE; off-diagonal values are inter-construct correlations.

Table4. Heterotrait–Monotrait Ratio (HTMT)

Construct	IM	PV	TL
IM			
PV	0.488		
TL	0.516	0.545	
IB	0.524	0.512	0.545

4.2 Structural Model Assessment

The Variance Inflation Factors (VIF) were used to check for collinearity before the evaluation of the structural model. All the values of VIF were less than 3.0, which mean that there was no problem of multicollinearity. The structural model was then tested using the R^2, Q^2, and path coefficients.

The values of coefficient of determination (R^2) showed that the model accounted for a substantial amount of variance in the endogenous constructs. Immersive marketing and other constructs in the extended model accounted for 25.6% of the variance in perceived value ($R^2 = 0.256$), 28.5% of the variance in trust of livestreamer ($R^2 = 0.285$), and 29.7% of the variance in impulse buying behavior ($R^2 = 0.297$). The values obtained are weak to moderate and this is good enough for consumer behaviour research as far as the level of explanation is concerned because of the complexity of the phenomenon being studied. Stone-Geisser's Q^2, by blindfolding, was used for the assessment of predictive relevance. The Q^2 values of all endogenous constructs were greater than zero: perceived value ($Q^2 = 0.162$), trust of livestreamer ($Q^2 = 0.183$), impulse buying behavior ($Q^2 = 0.179$) which shows that the model has sufficient predictive relevance. The effect sizes (f^2) of the relationships were also analysed. For perceived value, the effects of immersive marketing were small but statistically significant ($f^2 = 0.068$), and with respect to the trust of livestreamer, the effects of immersive marketing were also small but statistically significant ($f^2 = 0.088$). Perceived value ($f^2 = 0.092$) and trust of livestreamer ($f^2 = 0.133$) had small effect on impulse buying behavior with a slightly better effect for the trust of livestreamer.

4.3 Hypothesis Testing

Bootstrapping (with 5,000 resamples) was used to test the direct effects. The results of the hypothesis testing are presented in table 5. As revealed in Table 5, all direct effect hypotheses were accepted. For perceived value (H1), the results showed that there was a significant and positive influence of immersive marketing ($\beta = 0.260$, $t = 4.471$, $p < 0.001$). Immersive marketing also had a significant and positive impact on trust of livestreamer ($\beta = 0.289$, $t = 5.376$, $p < 0.001$), which supported H2. Both perceived value (β = 0.288, t = 4.964, $p < 0.001$) and trust of livestreamer (β = 0.346, t = 6.226, $p < 0.001$) significantly and positively influenced impulse buying behavior, supporting H3a and H3b.

Table 5. Direct effects hypotheses testing

Hypothesis	Relationship	β	STDEV	t-value	p-value	Decision
H1	IM → PV	0.260	0.058	4.471	0.000	Supported
H2	IM → TL	0.289	0.054	5.376	0.000	Supported
H3a	PV → IB	0.288	0.058	4.964	0.000	Supported
H3b	TL → IB	0.346	0.056	6.226	0.000	Supported

4.4 Mediation Analysis

The mediating effects of perceived value and trust of livestreamer were examined using bootstrapping to assess the significance of the indirect effects. The results of the mediation analysis are shown in Table 6. The results indicate that both perceived value and trust of livestreamer significantly mediate the relationship between immersive marketing and impulse buying behavior. For the indirect effect on perceived value, β = 0.075, t = 2.953, p = 0.003, indicating that the effect of this hypothesis was significant and supporting H4. In addition, the indirect effect of livestreamer on the DV through trust was significant (ß = 0.100, t = 3.787, $p < 0.001$) and confirmed the hypothesis H5. Specifically, the effect on impulse buying via trust of livestreamer was somewhat greater than the effect via perceived value, meaning that the affective trust-building process may be a more potent influence on the link between immersive experiences and impulse buying behavior.

Table 6. Mediation analysis

Hypothesis	Indirect	β	STDEV	t-value	p-value	Decision
H4	IM → PV → IB	0.075	0.025	2.953	0.003	Supported
H5	IM → TL → IB	0.100	0.026	3.787	0.000	Supported

5. Discussion

5.1 Key Findings

This study examined how immersive marketing influences impulse buying behavior in cosmetics livestream shopping through the mediating roles of perceived value and trust of livestreamer. The findings support all the hypotheses formulated, in that immersive marketing is a powerful stimulus that influences the cognitive and affective evaluations made by consumers, which are the ones that lead to impulse buying behavior.

First, the results substantiate the effect of immersive marketing on consumers' perceived value (H1). The study aligns with earlier research that has shown that immersive, interactive shopping experiences enhance consumers' evaluations of product benefits and value (Erensoy et al., 2024). Livestream shopping allows shoppers to experience products in vivid detail and in real time, with interactive experiences and engagement to make them feel more confident about their purchase and perceive greater value. To complement the functional evaluation, experiential and hedonic aspects of immersive marketing, such as enjoyment, excitement and engagement, also add to the value perceived for the emotion generated.

Second, the results support the hypothesis on the effect of immersive marketing on trust of livestreamer (H2). This finding is consistent with previous studies suggesting thatimmersive experiences decrease uncertainty and increase consumer trust in the seller by offering cues to competence, professionalism, and authenticity that can be observed (Cai & Suh, 2025). Immersive marketing helps consumers see, hear, and interact with the knowledge, skills, and authenticity of the person performing the demonstration in real time, which builds trust. Immersive marketing allows people to see, hear and interact with the knowledge, skills and sincerity of the person demonstrating the product in real time, which builds trust. The emotional involvement and social immateriality of the immersive marketing also consolidate relational trust.

Third, the results reveal that perceived value (H3a) and trust of livestreamer (H3b) have positive impacts on impulse buying. This result confirms the theoretical hypothesis that two types of cognitive and affective evaluations are important organismic mechanisms which mediate external stimuli to behavioral responses. Perceived value offers consumers cognitive justification for spontaneous purchases by signaling that products have adequate benefits, compared to the costs. The perceived risk or uncertainty is lessened as the consumer is allowed to purchase quickly without worrying about the credibility of the seller, due to the trust that the livestreamer puts in this process. Interestingly, the trust with livestreamer had a more significant impact on impulse buying than the value perceived, implying that the affective aspect of trust building is more powerful than the cognitive aspect of value assessment in the case of spontaneous buying in the context of livestream commerce.

Fourth, according to the mediation analysis, both perceived value (H4) and trust of livestreamer (H5) significantly mediate between immersive marketing and the impulse buying behavior. This is especially significant because of the psychological processes involved in the way that this immersive marketing affects consumers. The indirect effects are significant on both mediators, which suggests that immersive marketing is not directly responsible for the impulse buying, but rather it is by means of consumers' internal cognitive and affective evaluations. The results indicated that livestreamer had a stronger mediation effect on impulse buying through trust, implying that the influence of immersive marketing on impulse buying was more likely mediated via relational and affective mechanisms than cognitive evaluations. It is evident that there is a need for trust to be built in immersive marketing techniques, especially when selling goods like cosmetics in which the consumer must believe in the knowledge and credibility of the seller.

5.2 Theoretical Implications

This study has some theoretical contributions. First, it extends the application of the S-O-R framework to livestream commerce by demonstrating the dual mediating roles of cognitive (perceived value) and affective (trust of livestreamer) mechanisms. In the past, the S-O-R model has been used in the context of livestream shopping, but not many studies have explored both mediated cognitive and affective pathways in one model. By demonstrating that both pathways are significant, this study provides a more comprehensive understanding of the psychological processes underlying impulse buying in livestream commerce.

Secondly, the work adds to the growing body of research on immersive marketing in digital commerce settings. The study evidences that immersive marketing can drive perceived value, trust and impulse buying, which validates the efficacy of immersive strategies to influence consumer behaviour. This builds on previous immersive marketing research by clarifying the process through which immersive experiences impact consumer outcomes.

Thirdly, the study helps enhance the understanding of the nature of impulse buying behavior by identifying the relative importance of affective and cognitive processes. Thus, the present findings indicate that the push-pull dynamics of trust and perceived value for impulse buying in livestream commerce could be more powerful than that of cognition, implying that the relationship and emotion aspects of commerce could be more important than cognition in the context of spontaneous purchases. It is a discovery that implies that traditional approaches to consumer decision-making models, which focus on the importance of cognitive processing, also need to become more focused on social and relational aspects in interactive consumer shopping environments.

5.3 Practical Implications

Based on this research, there are some practical implications for the livestream marketer, platform designer, and cosmetic brand. First, it is important for first time users of the livestream to think about using immersive marketing methods to make use of consumer engagement and inspire impulse purchases. It requires them to invest in quality product demonstration, interactive communication elements, colorful visual presentations and storytelling that pique the interest and participation of consumers. The results indicate that the immersion experiences not only increase enjoyment but also improve consumers' value and trust perceptions, both of which are important factors influencing spontaneous purchases. Secondly, marketers should understand the need for trust in immersive marketing. The greater mediation effect via trust of livestreamer shows that consumer trust should be at the heart of livestream marketing strategies. In order to build trust, methods are needed that show a level of expertise by knowledgeable product presentations, be transparent and authentic in product presentation, answer consumer queries in a sincere manner, and develop a professional and credible communication style. Platforms can help by offering the tools necessary to enable trustworthy interaction like Q&A in real time, authentication badges for products and clear seller information.

Third, the results demonstrate that perceived value continues to be a meaningful link between immersive experiences and impulse purchase. Therefore, marketers need to make sure that their immersive presentations convey the product benefits, quality and its functionality to improve the value perception of consumers. This entails highlighting product features, showing effectiveness, giving comparative information and emphasising value-for-money propositions. Value-enhancing information together with the immersive experience has a synergistic effect that enhances a consumer's cognitive justification for spontaneous purchase. Fourth, the undergraduate consumer, who is very digitally literate and enjoys immersive and interactive content, marketers need to create the livestream content to maximize engagement and value perception. This can entail gamification, peer influence, exclusive promotions, or even creating engaging and informative content that is appealing to younger audiences. Undergraduate consumers' demographic characteristics should be taken into account when developing an immersive marketing strategy for this group.

5.4 Limitations and Future Research

While this study provides valuable insights, several limitations should be acknowledged. First, the sample was only composed of undergraduate students from Guangxi, China, and this may limit the generalizability of the results to other consumer groups or culture contexts. For future research, the study can be replicated with various samples of different ages, regions, and cultures to improve external validity. Second, this cross-sectional research design does not allow for causal links to be drawn. The hypothesized relationships are theoretically based but in need of stronger evidence for causality, via longitudinal or experimental designs. Experimental techniques could be used in future studies to manipulate immersive marketing elements and study their causal effects on perceived value, trust, and impulse buying.

Third, this study has been limited to cosmetics livestream shopping, which might constrain the generalizability of the study results to other product categories. Cosmetics are experiential products that have strong visual and sensory attributes, and can be more susceptible to immersive marketing. Future research is needed to determine if the identified relationships are applicable for other product categories, like electronics, fashion, or food products. Fourth, self-reported measures were used, and may have been subject to social desirability bias and common method variance. While procedural and statistical tools were used to address these concerns, future study could include behavioral measures, such as actual purchase records or clickstream data in addition to self-reported measures. Fifth, perceived value and trust were explored as mediators in this study, but other psychological constructs could also be important mediators in this relationship between immersive marketing and impulse buying. Further research might investigate other mediators like emotional arousal, flow experience, consumer engagement, and perceived risk and other moderators like product involvement, prior experience, and personality traits.

6. Conclusion

This study aimed to explore the mechanism of how immersive marketing affects impulsive buying behavior in the cosmetics livestream shopping of undergraduate students in Guangxi, China. Using the S-O-R model, the study suggested that immersive marketing would increase consumers' perceived value (cognitive evaluation) and their trust of the livestreamer (affective evaluation), leading to impulse buying.

The findings provide robust empirical support for all hypothesized relationships. Immersive marketing significantly and positively influences both perceived value and trust of livestreamer. In turn, both perceived value and trust of livestreamer significantly and positively influence impulse buying behavior. Moreover, the relationship between immersive marketing and impulse buying is mediated by perceived value and trust of livestreamer; the mediating effect of trust of livestreamer is greater. The results broaden the scope of the S-O-R model to include livestream commerce and reveal the dual mediation of cognitive and affective mechanisms. They also help build the nascent body of literature on immersive marketing by setting out the psychological mechanisms by which immersive marketing drives consumer behaviors. In practical terms, the results indicate that more immersive approaches that increase the perceived value and consumer trust are more likely to adequately increase the impulse buying behavior of consumers, especially undergraduate consumers, in the context of a live stream marketing.

In conclusion, this study advances understanding of the mechanisms underlying impulse buying in livestream commerce and provides evidence that immersive marketing, through its effects on perceived value and trust of livestreamer, serves as a powerful driver of spontaneous purchasing behavior in cosmetics livestream shopping.

Ethics Approval and Consent to Participate

Permissions were obtained from all participants, and they agreed to take part in the research. The study was conducted in accordance with research ethical guidelines, without any conflicts of interest, and with proper ethical clearance.

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Conflict of Interest

The authors declare that there are no conflicts of interest regarding the present research, authorship, or publication of this article.

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