

RESEARCH ARTICLE

Exploring factors of live streaming commerce influencing impulse buying behaviour: Empirical research on consumers from an emerging market

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Abstract - This study investigates the factors of live streaming commerce that influence impulse buying behaviour among Vietnamese consumers. It draws upon the Stimulus-Organism-Response (SOR) framework to examine how the five dimensions of social presence (Stimuli) affect impulse buying (Response) through the mediating roles of cognitive assimilation and flow state (Organism). A quantitative approach was employed to test the research model using survey data from 342 consumers in Ho Chi Minh City. Data were analysed using Partial Least Squares Structural Equation Modelling. The results show that most social presence factors positively affect people's organisms, specifically cognitive assimilation and flow state. Notably, flow state is a substantially stronger predictor of impulse buying behaviour ($R^2 = 0.639$) than cognitive assimilation ($R^2 = 0.381$), underscoring the predominantly hedonic nature of LSC purchases. Both cognitive assimilation and flow state influence the behaviour to buy impulsively. However, the social presence of live streaming platforms and telepresence do not have an impact on cognitive assimilation, suggesting that the social presence of other viewers does not affect the flow state. This research explicates the factors that influence impulse buying behaviour, which might have meaningful practical implications for firms and customers.

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1. Introduction

Live streaming commerce (LSC) has emerged as a potent e-commerce model that integrates real-time social interaction with entertainment, driving its rapid global popularity on platforms like TikTok and Facebook (Cai et al., 2018; Cai & Wohn, 2019; Hamilton et al., 2014). This trend is mirrored in Vietnam, where internet penetration has surpassed 79% and over 60% of internet users make weekly online purchases, which has led major e-commerce platforms like Shopee and Lazada to heavily invest in LSC features (Kemp, 2023). According to earlier research, there is a 5% higher chance of impulse purchases happening online than offline (Liu et al., 2013). Consumers may make irrational purchases because they are more receptive to stimuli in the live stream. Live Streaming can encourage greater authenticity and interaction during online purchasing than web-based e-commerce, which in turn can encourage more clients to make impulse purchases.

The Stimulus–Organism–Response (SOR) theory provides a suitable framework where environmental factors (Stimulus) influence internal states (Organism), which in turn drive behavioural responses (Response) (Van Zeeland & Henseler, 2018). Studies have reported the factors that motivate people to participate, such as perceived value, practicality, and satisfaction (Cai et al., 2018; Wongkitrungrueng & Assarut, 2020). Moreover, past research has looked at how system elements like giveaways (Yu et al., 2018) and user interface design (Xu et al., 2020) affect LSC. While prior research has explored purchase intention in other markets, the drivers of IBB within the Vietnamese live-streaming context remain under-examined. Therefore, our study investigates the impact of social presence on impulse buying behaviour (IBB) within the context of LSC platforms by integrating constructs from the Social Presence Theory and the Flow Theory into the Stimulus-Organism-Response (SOR) framework. Specifically, this study advances the literature by conceptualising and empirically testing presence as a multidimensional construct, distinguishing between five key dimensions, and clarifying how flow state and cognitive assimilation function as mediators. Besides, the study aims to clarify how flow state and cognitive assimilation function as mediators. The SOR model is employed to address established research issues. This study involves stimuli (social presence factors) influencing consumer reviews (cognitive assimilation, flow state), which in turn drive consumer responses (IBB).

The research aims to achieve the following research questions (RQs):

RQ1: How do the dimensions of social presence (i.e., presence of the platform, other viewers, the streamer, the product, and telepresence) in LSC influence the internal state (specifically cognitive assimilation and flow state) of adult consumers in Ho Chi Minh City (HCMC)?

RQ2: To what extent do cognitive assimilation and flow state mediate the relationship between social presence dimensions and IBB among adult consumers in HCMC?

2. Literature Review

2.1 Theoretical Background

2.1.1. Live streaming commerce

According to Hsu et al. (2020), live streaming is a distinct form of online streaming where audio and video content is broadcast and recorded at the same time, allowing viewers to experience it in real-time. Live streaming platforms provide

a space for anyone to become a content creator by offering a wide range of genres, including gaming and daily experiences, and focusing on the variety of talents, such as dancing, singing, painting, and even the freedom to share anything they desire (Hu et al., 2017; Xu et al., 2021). During live broadcasts on their channels, viewers have the flexibility to enter or leave at any point in time (Zhou et al., 2019). Live streaming is now becoming increasingly popular worldwide because of its high entertainment. According to TwitchTracker (2021), by September 2021, Twitch boasted 9 million monthly unique streamers and an average of 2.84 million concurrent viewers. The increasing popularity of live streaming has sparked curiosity within the academic community and among practitioners, leading to a surge in research and practical exploration in recent years. Academic research on live streaming has primarily focused on the e-sports and video game domains by examining viewers' motivations for watching (Sjöblom & Hamari, 2017), gift-giving behaviour (Li & Peng, 2021), and psychological consequences (Kim & Kim, 2020).

The rapid growth of live streaming has led to the emergence of LSC as a new business model. Although LSC cannot fully capture the experience of shopping in a store, it remains undeniably attractive to many by promoting traditional e-commerce dramatically in several ways. Firstly, consumers turn to online reviews as a primary tool to assess the quality of products and services, ultimately guiding their purchasing decisions (Chen et al., 2019; Sun et al., 2020). According to Hu et al. (2017), the emergence of live streaming has immensely broadened the field of computer-mediated communication, allowing users to connect face-to-face using real-time video and sound, going beyond the limitations of text and static images. Live streaming broadcasts show real-time product experiences, functionality, and typical usage of products to foster better product understanding for consumers (Sun et al., 2020; Wongkitrungrueng & Assarut, 2020). Secondly, in traditional e-commerce, online interaction with products primarily occurs asynchronously through review systems placed on product pages. Embedding the Danmaku system also allows LSC to foster real-time engagement (Zhou et al., 2019). It also enables viewers to ask questions directly through comments, which streamers and even other viewers can answer promptly, thus fostering personalised customer service (Sun et al., 2020; Wongkitrungrueng & Assarut, 2020). Thirdly, limited opportunities for face-to-face interaction in traditional e-commerce reduce the perceived presence of sellers for consumers. Live streaming enables sellers to showcase themselves, including their physical appearance, body language, and surroundings, while promoting products (Wongkitrungrueng & Assarut, 2020). This creates a feeling of communicating face-to-face with the live streamer.

Following the advantages of live streaming technology, consumers are more prone to impulse purchases compared to traditional e-commerce. This claim is further bolstered by the significant percentage of impulse buying within LSC (approximately 44%) (China Consumer Association, 2020). According to Amos et al. (2014) and Puri (1996), retailers put a strong focus on the impulse buying phenomenon since they want to attract customers' impulse buying tendencies and thereby boost sales. Therefore, retailers have dedicated significant efforts to developing strategies that encourage and facilitate such behaviour in consumers (Amos et al., 2014; Beatty & Ferrell, 1998). While a few studies have examined engagement and buying triggers within LSC (Sun et al., 2020; Wongkitrungrueng & Assarut, 2020), impulse buying in this context remains largely unexplored. Aligned with the growing interest in live streaming platforms, it is significant to analyse consumer behaviour. This study specifically examines the prevalence and characteristics of IBB in this context.

2.1.2 Online IBB

Stern (1962) defined IBB as "any purchase which a shopper makes but has not planned". It refers to the immediate and sudden buying behaviour made by consumers without deliberate considerations (Karbasivar & Yarahmadi, 2011) due to their irresistible desire for products, which can be regarded as a hedonic behaviour (Parboteeah et al., 2009). In the LSC context, external stimuli, such as the social presence of the platform, other viewers, product, and telepresence, create a rich and interactive environment that can trigger customers' impulse buying intention and behaviour (Cheah et al., 2020). Moreover, impulse purchases are non-planned purchases that are likely to be affected by internal psychological changes (Chen et al., 2022). Prior research also links consumers' psychological emotions to IBB (Souiden et al., 2019). A positive emotional state directly increases the likelihood of impulse buying (Saad & Metawie, 2015). Therefore, this study examines cognitive assimilation and flow state as key internal psychological mechanisms linking these stimuli to impulse buying.

2.1.3 Flow theory

The term "flow" describes a state of complete absorption in the present activity (Ghani et al., 1991). Previous research has utilised the Flow Theory to investigate its influence on continuance intention (Lee & Kim, 2017), online impulsive buying (Wu et al., 2020), and buying intention (Kim et al., 2017). Ding (2011) proposed using "flow" as a potential way to evaluate online consumer experience. This research was inspired by Ghani et al. (1991) and focused on two key dimensions of flow: concentration and enjoyment. According to Wu et al. (2016), concentration is achieved when the mind is completely absorbed in a single stimulus, filtering out distractions and irrelevant thoughts. Enjoyment is the inherent satisfaction that one gains from engaging with their environment (Park et al., 2012). According to Koufaris (2002), the concept of enjoyment in e-commerce refers to the positive and pleasurable adventure that individuals have while shopping online, which significantly influences consumer behaviour (Lee & Park, 2014).

2.1.4 Social presence theory

Social presence is characterised by "the degree to which the other person in the interaction is salient, along with the consequential importance of the interpersonal relationships" (Short et al., 1976). Through interaction, users may experience a sense of psychological presence alongside others (Osei-Frimpong & McLean, 2018). In this study, social

presence includes five factors: the social presence of the live stream platform, social presence of other viewers, social presence of live streamers, social presence of the product, and telepresence.

2.1.5 SOR theory (Stimulus-Organism-Response)

This study is grounded in the Stimulus–Organism– Response (SOR) framework, which posits that environmental factors (Stimulus) affect an individual's internal states (Organism), subsequently driving their behavioural responses (Response) (Mehrabian & Russell, 1974). In our model, the dimensions of social presence act as the stimuli; cognitive assimilation and flow state represent the organismic states; and IBB is the final response. According to Song et al. (2021), “stimulus” refers to the environmental factor that triggers internal states in the organism. Previous studies have indicated that viewers' attitudes and behaviours are influenced by the real-time interactions they have with live streamers, which gives them a strong sense of presence and satisfies their needs (Gao et al., 2018). As a result, social presence in LSC is a powerful stimulus to influence prospective consumers' behaviours.

In the model, the term “organism” describes the mental and emotional states that individuals experience between a stimulus and their response. This study employs Cognitive Assimilation and Flow State to investigate viewers' emotional states and their perceptions of a sense of presence in a brand during commercial live streaming. The word “response” refers to an individual's final behavioural decision, which is influenced by their emotional and cognitive states (Sherman et al., 1997). The SOR model has recently been employed by researchers to investigate consumers' online purchasing behaviour in e-commerce. Our study focuses on impulse purchases. The SOR model has been applied in recent studies to analyse online customer behaviours in e-commerce, including intention to purchase (Liu et al., 2018), impulse buying intention, and online repurchase (Zhu et al., 2020). These investigations have strengthened the SOR model's rationale and validated its interrelationships.

2.2. Hypotheses Development

A platform's social presence is defined as the sense of human connection that it facilitates. It can shape a viewer's brand perceptions (cognitive assimilation), while its interactive and immersive features can induce a state of flow (Sun et al., 2019). Thus, we hypothesise:

H1a. The social presence of live streaming platforms exerts a positive influence on cognitive assimilation.

H1b. The social presence of live streaming platforms exerts a positive influence on flow state.

The social presence of other viewers, manifested through real-time chat and interaction, creates a communal shopping atmosphere (Lu et al., 2016). This shared experience allows viewers to gather information and observe social proof from comments (Zhu et al., 2020), thereby influencing their cognitive assimilation of the product's value. Concurrently, the sense of co-presence and active community engagement enhances immersion and enjoyment, including a flow state (Zhu et al., 2020). Thus, we hypothesise:

H2a. The social presence of other viewers has a positive impact on cognitive assimilation.

H2b. The social presence of other viewers has a positive impact on flow state.

The social presence of the live streamer acts as a crucial human anchor in the virtual transaction. Streamers narrow the psychological distance to consumers by showcasing real-time reactions, expressions, and direct interaction (Lu et al., 2016). This perceived closeness and authenticity can build trust and enhance the credibility of product information, thereby facilitating cognitive assimilation. Simultaneously, a charismatic and engaging streamer can captivate viewers' attention, making the experience more entertaining and leading to a flow state (Sjöblom & Hamari, 2017). Thus, we hypothesise:

H3a. The social presence of live streamers is positively related to cognitive assimilation.

H3b. The social presence of live streamers is positively related to flow state.

Live streaming uniquely enhances the social presence of the product by enabling a virtual trial (Vonkeman et al., 2017). When streamers demonstrate a product's features, usage, and tangible qualities in real-time (Sun et al., 2020), they reduce the uncertainty inherent in online shopping, allowing viewers to form a clearer mental model and thus promoting cognitive assimilation (Vonkeman et al., 2017). This interactive and vivid product presentation is also inherently engaging and enjoyable, immersing viewers in the experience and fostering a flow state. Thus, we hypothesise:

H4a. The social presence of the product is positively associated with cognitive assimilation.

H4b. The social presence of the product is positively associated with flow state.

Telepresence refers to the feeling of being psychologically immersed in the virtual environment (Algharabat et al., 2018), which is enhanced by high-quality video and audio (Sun et al., 2019). A strong sense of telepresence can make product information seem more vivid and impactful (Lu et al., 2016), potentially influencing cognitive assimilation. By drawing viewers' attention away from their physical surroundings and into the curated world of the live stream, telepresence is a strong driver of focused attention and enjoyment, thereby significantly contributing to the flow state (Pham et al., 2025). Based on these arguments, we hypothesise:

H5a. Telepresence affects cognitive assimilation positively.

H5b. Telepresence affects flow state positively.

When viewers undergo cognitive assimilation, they integrate product information into their existing knowledge, leading to a favourable attitude. This positive assessment lowers psychological barriers to purchase, as consumers are more likely to buy impulsively when they perceive the decision to be fitting (Rook & Fisher, 1995). As viewers believe the product is valuable and suitable for their needs—often spurred by exclusive, time-limited offers seen during the stream—they are more likely to act on the impulse to buy (Stern, 1962). Thus, we hypothesise:

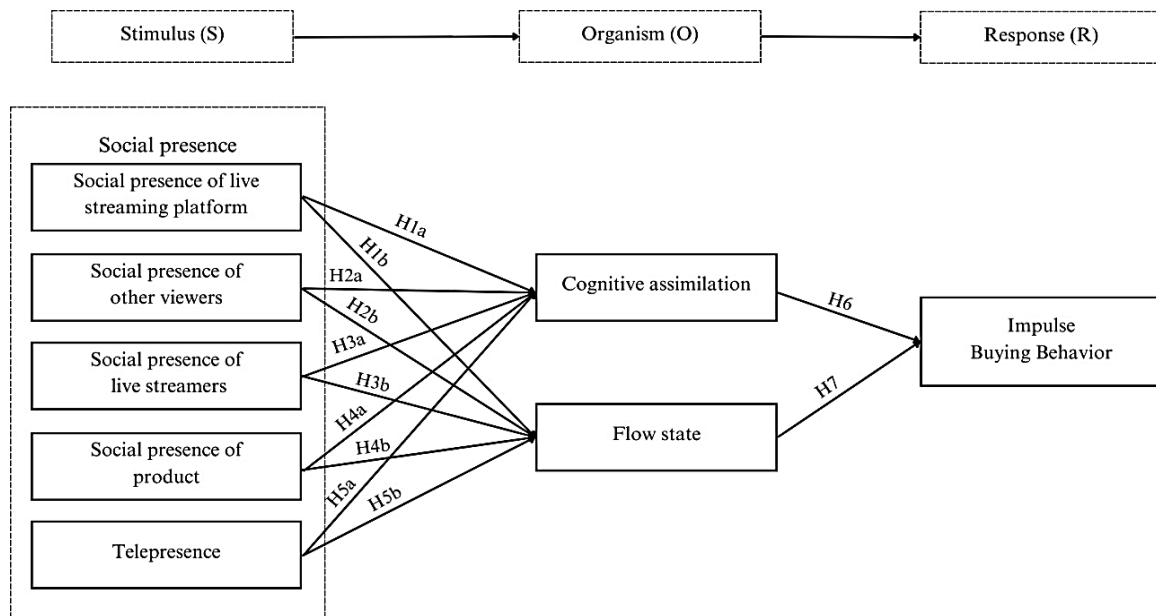
H6. Cognitive assimilation affects IBB positively.

The flow state is characterised by deep absorption and enjoyment, where individuals may experience diminished self-control (Guo & Poole, 2009). This heightened emotional and immersive state is often amplified by promotional activities within the live stream (Xu et al., 2020) and has been shown to directly increase the tendency for impulse buying (Wu et al., 2016, 2020). Thus, we hypothesise:

H7. Flow state affects IBB positively.

Figure 1

Research framework and hypotheses



3. Methodology

3.1. Measures

All scales used in this study were adapted from established literature. Specifically, the scale for social presence of the live streaming platform was adapted from Lu et al. (2016), while the scales for social presence of other viewers (SPV), social presence of live streamers (SPS), social presence of products (SPP), and IBB (IB) were tailored from Zhang et al. (2023). We also adapted the cognitive assimilation (CA) scale developed by Xu et al. (2020), the telepresence (TE) scale from Sun et al. (2019), and the four-item scale for flow state (FS) developed by Zheng et al. (2023). All items in these scales were measured by 5-point Likert scales ranging from “(1) Strongly Disagree” to “(5) Strongly Agree”. A full list of the measurement items is available in Appendix A.

3.2. Questionnaire Design and Pilot Test

The initial questionnaire was developed based on the measurement items identified from the literature. It was then translated from English to Vietnamese by a bilingual expert and independently back-translated to ensure semantic equivalence. Subsequently, a pilot test was conducted with a focus group of 10 participants (6 students and 4 working professionals) who have experience with live-stream shopping. The purpose of the pilot test was to check the clarity, relevance, and comprehensibility of the questions. Based on the feedback, minor wording adjustments were made to produce the final version of the survey.

3.3. Sample and Data Collection Procedure

The target population for this study was adults (18 years and older) residing in HCMC who had prior experience purchasing products via live streaming platforms. A non-probability convenience sampling method was employed to select the respondents. The final questionnaire was created using Google Forms and distributed online through various social media networks (e.g., Facebook, Zalo). It should be noted that such an approach may inherently limit the

generalisability of the findings and introduce potential bias towards respondents who are more active on these platforms and within the specific geographic area. Data collection was conducted for four weeks. After discarding incomplete or invalid entries, a final sample of 342 valid responses was obtained for analysis.

Table 1

Descriptive statistics results

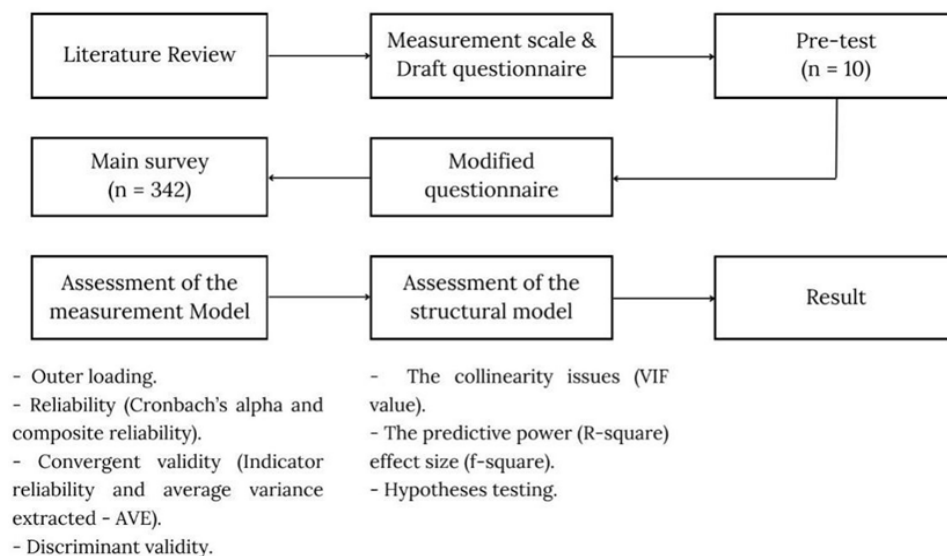
Sample Information	Frequency	Percent (%)
Gender		
Male	127	37.10%
Female	215	62.90%
Age Group		
18-25	102	29.80%
26-35	103	30.10%
36-45	79	23.10%
>45	58	17.00%
Education		
High school	19	05.60%
College	27	07.90%
University	270	78.90%
Master	19	05.60%
Other degree	7	02.00%
Income (VND/month)		
<5,000,000	57	16.70%
5,000,000 VND - 10,000,000 VND	97	28.40%
10,000,000 VND - 15,000,000 VND	88	25.70%
15,000,000 VND - 20,000,000 VND	49	14.30%
> 20,000,000 VND	51	14.90%
Occupation		
Student	75	21.90%
Office staff	202	59.10%
Teacher	35	10.20%
Worker	8	02.30%
Others	22	06.40%

Note(s): n = 342

Source(s): Author's own creation

Figure 2

Research process



3.4. Data Analysis Methods

The collected data were analysed using Partial Least Squares Structural Equation Modelling (PLS-SEM) via the SmartPLS 4 software. This method is well-suited for predictive and theory-building research and is widely used in the field (Hair, 2014), particularly when compared to covariance-based SEM. It is also consistent with prior studies in information management and consumer behaviour, such as Wang et al. (2025). The analysis followed a two-step approach as recommended by Hair (2014). First, the measurement model was assessed for reliability and validity, including convergent and discriminant validity. Second, the structural model was evaluated to test the hypothesised relationships. A bootstrapping procedure with 5,000 resamples was used to determine the statistical significance of the path coefficients. An online survey was administered to 342 participants who met the inclusion criteria. The data were then coded and used as input for further analysis in SPSS, following collection and categorization. Table 1 presents the demographic profile of the 342 respondents.

4. Findings

4.1 Measurement Model Assessment

The measurement model was evaluated for reliability and validity. As shown in Table 1, all constructs demonstrated strong internal consistency, with Cronbach's alpha and composite reliability values exceeding the 0.7 threshold (Hair, 2014). Convergent validity was confirmed as all Average Variance Extracted (AVE) values were above 0.5. Discriminant validity was established as the Heterotrait-Monotrait Ratio (HTMT) values fell below the conservative maximum level of 0.9 (Henseler et al., 2015). Common method bias was assessed and found not to be a significant concern, with all VIF values being below the threshold of 3.3 (Hair, 2014).

Table 2

Inner VIF values

Hypothesis	VIF
CA → IB	1.390
FS → IB	1.390
SPLP → CA	1.639
SPLP → FS	1.639
SPP → CA	1.453
SPP → FS	1.453
SPS → CA	2.059
SPS → FS	2.059
SPV → CA	1.614
SPV → FS	1.614
TE → CA	1.453
TE → FS	1.453

Source: Analysis results from SmartPLS software by the authors.

Table 3

Reliability, composite reliability, average variance extracted, and Heterotrait-Monotrait Ratio (HTMT)

	CA	FS	IB	SPLP	SPP	SPS	SPV	TE	Composite reliability (rho_a)	Composite reliability (rho_c)	extracted (AVE)	Cronbach's alpha
CA									0.917	0.941	0.800	0.917
FS	0.60								0.864	0.906	0.707	0.861
IB	0.65	0.88							0.897	0.934	0.826	0.894
SPLP	0.5	0.59	0.59						0.936	0.95	0.793	0.935
SPP	0.51	0.74	0.70	0.49					0.857	0.911	0.774	0.853
SPS	0.63	0.80	0.84	0.66	0.61				0.867	0.910	0.772	0.852
SPV	0.47	0.61	0.69	0.30	0.31	0.56			0.820	0.893	0.735	0.820
TE	0.27	0.52	0.48	0.11	0.30	0.37	0.63		0.867	0.906	0.707	0.861

Source: Analysis results from SmartPLS software by the authors.

The structural model's predictive power was substantial, explaining 63.9% of the variance in IBB ($R^2 = 0.639$). The hypothesis testing results were obtained via a bootstrapping procedure (5000 resamples) and supported 11 out of the 12 hypotheses, as shown in Table 5.

Table 4*Coefficient of determination (R^2)*

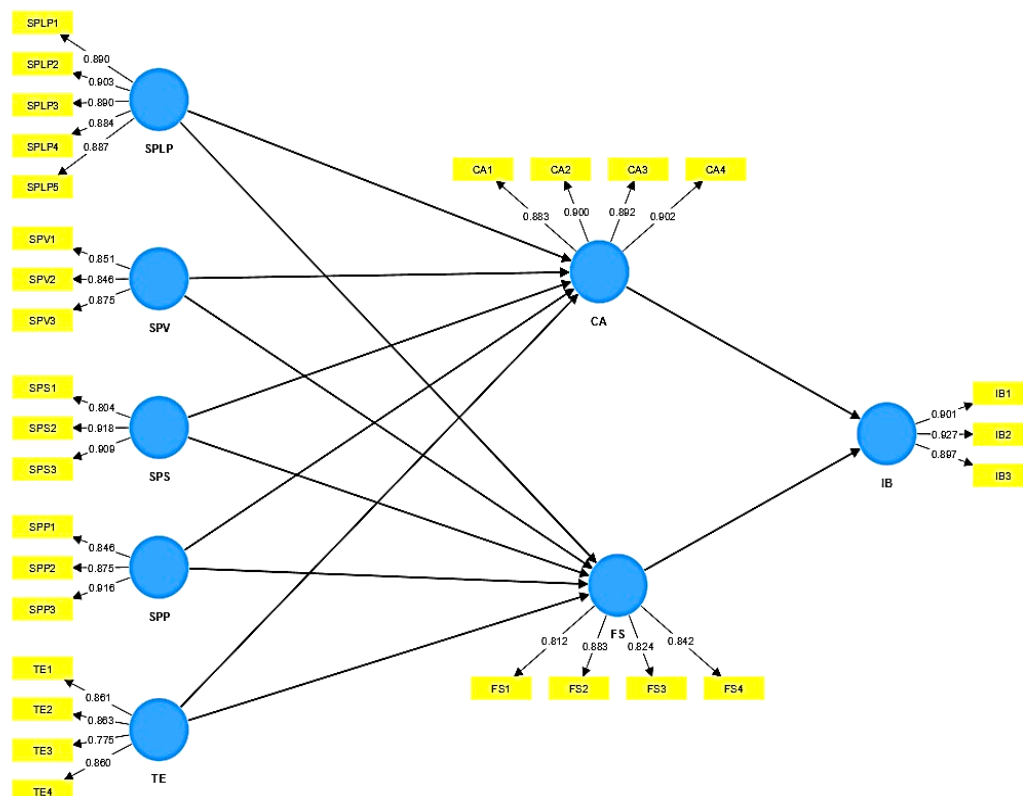
Variables	R-square	R-square adjusted
CA	0.391	0.381
FS	0.659	0.654
IB	0.641	0.639

Source: Analysis results from SmartPLS software by the authors.

For enhanced statistical rigor, we report the β , p-value, and f^2 (see Table 5), such as: Flow State ($\beta = 0.636$, $p < 0.001$) was a strong positive predictor of IBB. All five dimensions of social presence demonstrated a significant positive influence on flow state. In contrast, the path from Telepresence to Cognitive assimilation was not significant ($\beta = -0.020$, $p = 0.676$).

Table 5*Hypothesis testing results*

Path	β	P-values	f^2	Results
CA $\rightarrow$ IB	0.255	0	0.131	Supported
FS $\rightarrow$ IB	0.636	0	0.811	Supported
SPLP $\rightarrow$ CA	0.160	0.004	0.026	Supported
SPLP $\rightarrow$ FS	0.155	0	0.043	Supported
SPP $\rightarrow$ CA	0.185	0	0.039	Supported
SPP $\rightarrow$ FS	0.333	0	0.223	Supported
SPS $\rightarrow$ CA	0.286	0	0.065	Supported
SPS $\rightarrow$ FS	0.300	0	0.128	Supported
SPV $\rightarrow$ CA	0.193	0	0.038	Supported
SPV $\rightarrow$ FS	0.150	0.007	0.041	Supported
TE $\rightarrow$ CA	-0.020	0.676	0	Not supported
TE $\rightarrow$ FS	0.175	0.001	0.062	Supported

Figure 3*Results of hypothesis testing*

5. Discussion

5.1 Discussion of Main Findings

The results of this study affirm the robustness of the SOR model in explaining impulse buying in LSC, with the model accounting for a substantial 63.9% of the variance in behaviour. Meanwhile, Vietnam is an emerging market (based on high social media engagement) and its e-commerce sector is on the rise, thereby providing a comprehensible context for impulsive buying behaviour and serving as relevant reference evidence for other dynamic markets in Southeast Asia. A key finding is the non-significant path from telepresence to cognitive assimilation. While an immersive environment enhances enjoyment and absorption (flow state), this result suggests that viewers' cognitive processing—their evaluation of information and changes in belief—is more critically dependent on informational and social cues rather than simply the technological sensation of being there. This insight distinguishes the hedonic pathway to engagement from the cognitive one. Regarding the state of the organism, both cognitive assimilation and flow state were significant predictors of IBB. However, the analysis reveals that flow state ($f^2 = 0.811$) has a substantially stronger effect on impulse purchases than cognitive assimilation ($f^2 = 0.131$). This underscores the predominantly hedonic and affective nature of impulse buying in this context; viewers who are “in the zone” often absorb and enjoy the experience and are more likely to make unplanned purchases. This aligns with research that highlights the role of emotion and mood in such decisions (Atulkar & Kesari, 2018).

5.2 Implications

5.2.1 Theoretical implications

This study primarily extends the literature on live-streaming commerce by shifting the focus from general viewer motivations to the specific phenomenon of impulse buying. While prior research has focused on viewer motivations such as satisfaction and interaction (Cai et al., 2018; Wang & Wu, 2019), the phenomenon of impulsive purchasing in the live-streaming context remains under-explored. Therefore, this study contributes significantly to the literature on the live-streaming market and fills a research gap by analysing the underlying factors that impact impulse purchasing behaviour. Secondly, this study advances the literature review by conceptualising and empirically testing presence as a multidimensional construct. While prior research has often treated presence as a unidimensional concept (Algharabat et al., 2018; Gao et al., 2018; Lu et al., 2016), this study distinguishes between five key dimensions (social presence of the platform, other viewers, streamer, the product, and telepresence) to demonstrate how these distinct dimensions differentially influence impulse buying through the mediating pathways of cognitive assimilation and flow state. This offers a more nuanced and comprehensive theoretical model of presence in live-streaming commerce.

5.2.2 Practical implications

The findings of this research have significant implications for e-retailers and live streamers in the digital age. First, the empirical study demonstrates that five types of presence have a significant impact on live-streaming commerce. Real-time interactions can foster a sense of presence by reducing the physical and psychological distance between live streamers, viewers, and products (Wang & Wu, 2019). The main advantage of live-streaming commerce over traditional e-commerce is its high level of interaction. To capitalise on this differentiation, live streamers must provide an engaging environment and encourage viewers to engage with them. Additionally, e-retailers can better sell their products by choosing live streamers with a strong on-screen presence, exceptional sales skills, and effective communication abilities. Second, the findings show that IBB is positively impacted by cognitive assimilation and flow state. Viewers are more likely to focus during an engaging and reliable livestream, which may result in impulse purchases. To boost the viewer experience during live shopping broadcasts, live streamers and e-commerce merchants should be careful when choosing background music that encourages calm, eye-catching images, and ensures a well-organised set.

5.3 Limitations and Further Research

This study has several limitations that warrant attention. Firstly, the sample was limited to adults in HCMC and did not employ stratified sampling, which may affect the generalisability of the findings. Future research should replicate this study in other major Vietnamese cities to validate the results across different regions, which would significantly enhance external validity. Secondly, this study utilised a non-probability convenience sample of 342 respondents. While sufficient for PLS-SEM analysis, this modest sample size may limit the statistical power and representativeness of the results. Future studies would benefit from employing larger and more diverse samples, ideally through panel data or a multi-stage cluster sampling design, to enhance the representativeness of the results. Finally, due to the nascent state of live streaming research in Vietnam, this study relied on established measurement scales adapted and translated from international literature. Although a back-translation process was used to ensure accuracy, reliance on adapted scales presents a potential limitation regarding cultural nuances. A significant contribution for future research would be the development and validation of culturally and linguistically tailored scales specifically for the Vietnamese e-commerce context.

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Declaration of Competing Interests

The authors declare no conflicts of interest.

CRedit Authorship Contribution Statement

This research was completed by sole author, The Hung Nguyen.

Availability of Data and Materials

The data supporting this study's findings are available on request from the corresponding author.

Ethics Declarations

This study did not involve human or animal participants, nor did it require ethical approval.

Generative Artificial Intelligence Declarations

The authors claim that artificially intelligent technologies in the form of generative AI were not used to generate content, ideas, or theories. AI was only used to enhance readability and refine the language. This was used with extreme human control and oversight. The authors take full responsibility for reviewing and approving the content.

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