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Impact of Live Streaming on Purchase Intention A Case Study in Vietnam

Nguyen, Thi Phuong

Department of Business Administration, Dai Nam University, No. 1 Xom Street, Phu Lam Ward - Ha Dong District, Hanoi 100000, Vietnam
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A B S T R A C T

Live streaming e-commerce has emerged as a prominent business model leveraging advanced information technology, particularly gaining significant popularity in Vietnam. This study categorizes interactions within live streaming into three distinct dimensions: interactions for obtaining product information (IPI), interactions for understanding others' purchasing dynamics (IPD), and interactions for receiving monetary incentives (IMI). It presents a comprehensive analytical framework aimed at investigating whether these interactions enhance social presence, consumer conformity, and subsequently influence purchase intentions among consumers. Data from 368 Vietnamese consumers provide key findings indicating that IPI, IPD, and IMI significantly impact both social presence and consumer conformity. Furthermore, they influence purchase intention through their effects on social presence and consumer conformity. This research offers a novel perspective on the dynamics of live streaming e-commerce, highlighting the critical role of interactions in shaping consumer behavior and purchase intentions. By expanding the current literature on live streaming e-commerce, this study provides valuable insights for marketing practitioners aiming to optimize their strategies in this rapidly evolving digital marketplace

Keywords: E-commerce, purchase intention, live streaming, social presence, consumer conformity

1. Introduction

Social media platforms have facilitated the emergence of a vast number of influencers who cultivate sizable followings. These influencers, also referred to as online celebrities, create compelling content to expand their social networks and attract followers (Shan et al., 2020). In contemporary marketing practices, businesses and marketers leverage these influencers extensively to engage potential customers (Martínez-López et al., 2020).

In contrast to conventional text-based posts or pre-recorded video blogs on social media, live streaming has garnered substantial popularity among internet users for its perceived authenticity and immediacy (Ma, 2021). In Vietnam, live streaming has surged in popularity, especially during and after the pandemic. Around a third of viewers spend 15 to 30 minutes per session, while 38% watch for one to three hours weekly. Shopping live streams dominate, with 62% tuning in, followed by entertainment content. Vietnam's live streaming e-commerce market is projected to reach $11 billion by 2026, driven by high viewer engagement and purchasing behavior (Statista, 2023). Live streaming enables influencers to showcase products or services in real-time, facilitating direct interaction with their audience, which enhances perceptions of authenticity, visualization, and interactivity (Hu and Chaudhry, 2020). This symbiotic relationship between influencers and companies fosters a mutually beneficial scenario, resulting in value co-creation (Ma, 2021).

Live stream marketing spans various product categories, encompassing general merchandise, fashion, tourism, dining experiences, makeup tutorials, and talent showcases (Wongkitrungrueng and Assarut, 2018). Influencers' endorsements and strategic marketing efforts play a pivotal role in driving rapid sales for businesses and entrepreneurs (Luo et al., 2021). The scholarly interest in live stream marketing has surged in recent years, focusing predominantly on consumer engagement during online live stream shopping experiences (Ang et al., 2018; Hu and Chaudhry, 2020; Wongkitrungrueng and Assarut, 2018; Wongkitrungrueng et al., 2020). Related research also explores the impact of factors such as gender on consumer decision-making, sponsorship disclosures, emotional engagement, product endorsements, and consumer satisfaction (Todd and Melancon, 2018; Kay et al., 2020; Lim et al., 2020; Park and Lin, 2020; Ma, 2021).

In contrast to other technological advancements aimed at enhancing consumer experiences through one-way communication channels (e.g., intelligent chat assistants, virtual/augmented reality, and service robots), live streaming offers a unique bidirectional interaction between streamers and viewers in real-time. This interactive capability not only provides consumers with an immersive shopping experience but also facilitates emotional connections during interpersonal interactions (Haimson and Tang, 2017; Wohn et al., 2018). Within live streaming environments, streamers employ various formats such as close-ups, modeling demonstrations, and promotional offers to present product information, thereby reducing consumer uncertainty and fostering trust through their personal endorsements (Kozlenkova et al., 2017). Concurrently, consumers enhance their social presence by engaging in real-time interactions with streamers and fellow viewers, which contributes to positive emotional experiences (Chen and Lin, 2018).

Businesses have increasingly adopted live streaming as a pivotal tool in online marketing strategies due to its ability to enhance conversion rates and sales through immediate, interactive engagements (Hu and Chaudhry, 2020). Despite extensive research into the influence mechanisms of live streaming e-commerce on consumer purchase intentions (Wongkitrungrueng and Assarut, 2018; Sun et al., 2019; Park and Lin, 2020; Xue et al., 2020; Ma, 2021), few studies have specifically explored how interactive features within live streaming promote consumer purchase intentions.

This study aims to provide a comprehensive analysis of interaction behaviors in live streaming e-commerce. Previous literature has distinguished two levels of interactivity - person interactivity and machine interactivity (Hoffman and Novak, 1996) - which are both facilitated within live streaming. Person interactivity involves direct communication between streamers and consumers during live sessions, while machine interactivity allows viewers to make purchases through embedded hyperlinks. Building on this foundation, scholars have categorized live streaming interactions (LSI) into streamer-consumer, consumer-consumer, and machine-consumer interactions (Chen and Lin, 2018; Jiang et al., 2019). However, the integration of live streaming with e-commerce has expanded the scope and forms of these interactions, necessitating a reevaluation of how interactions are classified.

This study proposes a novel classification of LSI based on consumer participation motivations, grounded in the computer-mediated communication (CMC) model. CMC theory posits that interactions mediated through digital platforms influence information exchange and emotional transmission (Walther, 1996; Derks et al., 2008; Yao and Ling, 2020). In the context of live streaming e-commerce, consumers engage in interactions to gather product information, understand purchase dynamics, and seek monetary incentives (Wongkitrungrueng and Assarut, 2018; Sun et al., 2019; Xu and Ye, 2020). These interactions contribute to consumers' perceived value, trust, and purchase intentions, thereby shaping their overall shopping experience.

Furthermore, this study integrates product type - differentiating between search and experience products - into its analysis, drawing from Nelson's categorization (1970). Search products, like electronics and books, are evaluated based on objective attributes, whereas experience products, such as clothing and cosmetics, rely more on subjective assessments. LSI in live streaming e-commerce provides detailed product information and peer feedback, particularly beneficial for experience products where traditional online browsing may be inadequate (Moon et al., 2008). Understanding how types of products influence consumer decision-making within live streaming contexts enriches current theoretical frameworks and offers practical insights for marketers.

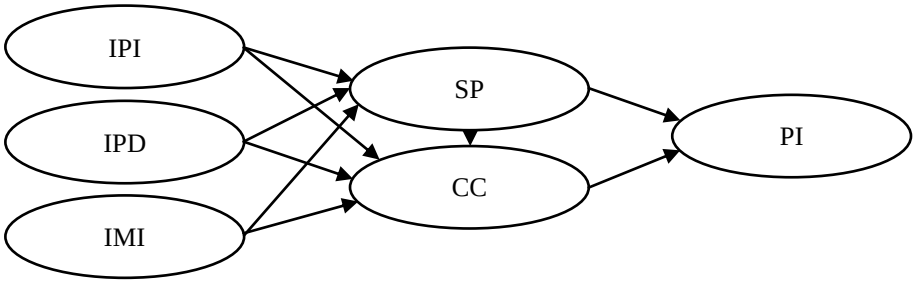
By employing the stimulus-organism-response (S-O-R) theory, used by several recent studies in the online retail marketing domain to understand consumers' online purchasing behavior (Hu and Chaudhry, 2020; Ma et al., 2022; Ming et al., 2021), this study develops a comprehensive research model to investigate how LSI enhances social presence and consumer conformity, ultimately influencing purchase intentions. This approach extends existing literature by proposing three dimensions of interaction - information acquisition, peer influence, and economic incentives - and explores their combined effects on consumer behavior within live streaming e-commerce. The findings contribute to advancing theoretical understanding and offer actionable insights for industry practitioners seeking to optimize marketing strategies through live streaming platforms

2. Model and hypotheses

The S-O-R theory, developed by Mehrabian and Russell (1974), originally aimed to elucidate how environmental stimuli impact human psychological and behavioral responses. The theory posits three essential components: Stimulus (S), representing external factors that trigger reactions; Organism (O), indicating an individual's cognitive and emotional processing of these stimuli; and Response (R), encompassing the resulting behavioral motivations and actions. In the context of this study, employing the S-O-R theory provides a robust theoretical framework for understanding consumer behavior, particularly in e-commerce settings where it has been widely utilized to investigate phenomena such as purchase intentions, online repurchase behavior, and impulse buying (Guo et al., 2021; Zhu et al., 2020; Chen and Yao, 2018).

The application of the S-O-R theory in this research is particularly advantageous for two primary reasons. First, it offers a foundational basis to comprehend how real-time social interactions within live streaming e-commerce platforms influence consumer behaviors. This framework allows for the dynamic exploration of how Live Streaming Interaction (LSI), encompassing dimensions like Information Provision Interaction (IPI), Purchase Dynamics Interaction (IPD), and Monetary Incentive Interaction (IMI), shape customer purchase intentions through their impact on social presence and consumer conformity. Secondly, the S-O-R theory facilitates hypothesis development by illuminating how stimuli from live interactions provoke cognitive and emotional responses that ultimately drive consumer decisions.

Figure 1. Proposed Research Model



Building upon the S-O-R framework, this study hypothesizes that LSI, categorized into IPI, IPD, and IMI, plays a pivotal role in shaping social presence and consumer conformity. Furthermore, it posits that social presence influences consumer conformity, and both factors collectively impact consumers' intentions to make purchases. The study also introduces product type (i.e., search vs. experience products) as a moderating variable to explore how different product characteristics may alter these relationships. Additionally, demographic variables such as age, gender, income, and marital status, … are included as control variables to ensure robustness in the research model.

The proposed research model, depicted in Fig. 1, integrates these theoretical constructs and relationships, aiming to advance understanding of consumer behavior within the context of live streaming e-commerce. This structured approach not only addresses current gaps in literature but also provides practical insights for marketers and platform operators seeking to optimize their strategies in leveraging live interactions to enhance consumer engagement and drive sales.

Purchase intention & Interaction factors

Interaction factors play a crucial role in shaping consumers' purchase intentions, serving as a primary driver in consumer behavior research. This study conducts a comprehensive review of literature examining the linkages between various types of interactions and purchase intentions. The research primarily builds upon two key streams of investigation. The first stream explores the impact of social interactions on consumer purchasing behaviors. For instance, research on group buying highlights how interpersonal information sharing among consumers can benefit sellers (Jing and Xie, 2011). Similarly, a study on Korean consumers suggests that increased social interactions on online platforms can enhance sales performance (Kim et al., 2020). Additionally, Sokolova and Kefi (2020) argue that para-social interactions, such as those observed on platforms like YouTube and Instagram, positively influence customers' purchase intentions.

The second stream of research focuses on interactions aimed at influencing purchase intentions directly. This stream is categorized into two main categories. The first category examines interpersonal interactions between sellers and buyers, where factors such as perceived expertise, similarity, and responsiveness significantly impact consumer purchase decisions (Chen et al., 2021; Kim et al., 2021). The second category investigates interactions among consumers themselves, showing that interaction frequency, interestingness, and reciprocity can enhance purchase intention through the development of cognitive and emotional trust (Chang and Dong, 2016).

The study of Live Streaming Interaction (LSI) and its impact on purchase intentions is motivated by several factors. Firstly, the emergence of live streaming e-commerce as a novel business model has garnered significant attention from both scholars and practitioners. Secondly, the success of live streaming e-commerce heavily relies on dynamic interactions between streamers and consumers, necessitating a thorough exploration of how LSI influences consumer purchase intentions. Thirdly, the multifaceted nature of LSI requires deeper exploration, particularly concerning its effects on consumer behavior in live streaming contexts. Thus, this study seeks to uncover how LSI enhances customers' purchase intentions.

Live streaming interaction

In live streaming e-commerce, interactions between sellers and consumers play a pivotal role in enhancing consumer satisfaction and achieving marketing goals for enterprises (Kostopoulos et al., 2020; Zhang et al., 2020). Previous studies have attempted to categorize interactions from diverse perspectives, including social, human-computer, and information interactions (Steuer, 1992; Burton and Soboleva, 2011; Li, 2019; Xu and Ye, 2020). These classifications have evolved significantly in the context of live streaming e-commerce, reflecting changes in technology and participant roles (Chen and Lin, 2018; Jiang et al., 2019; Xue et al., 2020). Rather than focusing solely on participant classifications, this study proposes a reclassification of LSI into three distinct aspects: Interactions for obtaining product information (IPI), interactions for understanding purchase dynamics (IPD), and interactions for acquiring monetary incentives (IMI). This categorization aims to provide a clearer understanding of how interactions impact consumer behavior in live streaming e-commerce settings.

Social presence (SP)

Social presence originally defined by Short et al. (1976) as "the degree of other people's salience in interactions and the consequent salience of the interpersonal relationship," has evolved in electronic commerce and online consumer behavior research to denote the feeling of being in the company of others during virtual interactions. This sensation fosters a sense of warmth and social connection akin to face-to-face interactions (Hassanein and Head, 2007). In e-commerce contexts, social presence significantly influences consumers' online shopping experiences, which are pivotal in virtual shopping environments (Burton and Soboleva, 2011; Shin and Shin, 2011; Kim, 2015; Ma, 2021b). The social presence conveyed by websites enhances behavioral intentions by increasing perceptions of pleasure and usefulness (Shen, 2012). Furthermore, Pelet et al. (2017) emphasize that social platforms are adept at fostering social presence due to features like perceived interaction, which allow consumers to experience a sense of presence in online settings (Mollen and Wilson, 2010). Interactions on these platforms provide diverse information and facilitate a sense of closeness among consumers, thus enhancing social presence (Jiang et al., 2019).

H1a: IPI has an impact on SP

In the context of live streaming e-commerce, Interactions for Obtaining Product Information (IPI) play a crucial role in enhancing social presence by enabling consumers to gather detailed product information through live demonstrations and explanations provided by streamers (Xue et al., 2020). Unlike traditional e-commerce methods reliant on text and images, live streaming allows consumers to interact directly with streamers during product presentations, which aids decision-making processes (Dodds et al., 1991). These interactions imbue consumers with a sense of interacting with real individuals, thereby enhancing their perception of social presence (Li, 2019; Sun et al., 2019). Through facial expressions and body language, streamers

can convey comprehensive information, fostering a sense of identity and belonging in virtual space. Moreover, online interactions provide consumers with an immersive experience in a virtual world

(Hamilton et al., 2016; Hudson et al., 2019), simulating face-to-face communication and meeting social needs, thereby facilitating effective communication and presence formation.

H1b: IPD has an impact on SP

Interaction for Grasping the Purchase Dynamics of Others (IPD) involves consumers engaging with fellow viewers within the same live streaming environment. This form of interaction enhances social presence in several ways. Firstly, as proposed by Kim et al. (2013), IPD can strengthen social presence by influencing viewers' perceptions of interdependency and responsiveness in others' purchase behaviors. Secondly, constructive interactions between viewers and streamers can foster trust, thereby enhancing social presence (Gefen and Straub, 2004). Thirdly, real-time discussions among participants in IPD enhance perceived social presence by actively engaging with product content and sellers (Hassanein and Head, 2005; Fang et al., 2018; Sun et al., 2019). Therefore, IPD contributes significantly to the development of social presence in live streaming contexts.

H1c: IMI has an impact on SP

Interactions for Obtaining Monetary Incentives (IMI), such as virtual red packets and special discounts within live streaming sessions, enrich consumer experiences and contribute to social presence. IMI enhances social perception in two main ways: firstly, by offering exclusive discounts or rewards that reinforce a sense of community among participants and encourage consumer engagement (Xue et al., 2020); and secondly, through interactive marketing tools like lucky draws and limited time offers that create a hedonistic atmosphere, further enhancing social presence (Park and Lin, 2020). These immersive experiences in live streaming platforms are more impactful compared to traditional methods, thus intensifying the perceived social presence. Consequently, interactions aimed at obtaining monetary incentives positively influence social presence in live streaming e-commerce.

In summary, interactions in live streaming platforms significantly impact social presence by simulating interpersonal relationships and fostering a sense of community among participants. These interactions - whether for obtaining product information, grasping purchase dynamics, or acquiring monetary incentives - play a crucial role in enhancing consumers' perceptions of social presence in virtual environments, thereby influencing their online shopping behaviors.

Consumer conformity (CC)

Consumer conformity refers to how consumers adjust their product evaluations, purchase intentions, and behaviors based on information about others' evaluations, intentions, and behaviors to align their choices with those of others (Lascu and Zinkhan, 1999). Deutsch and Gerard (1955) distinguish two dimensions of consumer conformity: normative and informational. Normative conformity occurs when individuals conform to meet others' positive expectations, aligning their purchases with group norms. Informational conformity, on the other hand, involves conforming to others' purchase beliefs and decisions due to their perceived knowledge and expertise.

In the context of live streaming e-commerce, normative consumer conformity manifests through behaviors that conform to perceived group expectations. Real-time interactions within live streams enhance consumers' sense of belonging and lead them to internalize group opinions, thereby influencing their engagement in social commerce (Xue et al., 2020). The presence of a "bullet screen" where viewers' comments scroll in real-time fosters a sense of community akin to offline shopping experiences, encouraging consumer conformity (Lu et al., 2016; Wongkitrungrueng and Assarut, 2018). Additionally, the excitement and continuous engagement in live streaming rooms create a compelling shopping environment that promotes conformity to group expectations (Sun et al., 2019).

The informational influence of consumer conformity in live streaming environments is primarily driven by consumers' reliance on others' expertise and evaluations when making purchasing decisions. In online settings, where physical inspection and direct interaction are absent, consumers face uncertainty about product quality and rely on others' purchase behaviors to mitigate risk (Smink et al., 2019). Viewing historical sales volumes and customer reviews provides crucial information that shapes consumer decisions, reinforcing conformity to others' choices (Lascu and Zinkhan, 1999).

H2a: IPI has an impact on CC

In live streaming platforms, consumers primarily rely on two sources for acquiring product information: streamers and fellow viewers. Streamers not only demonstrate and showcase products but also provide purchasing guidance and tips, influencing consumers to conform to the expectations set by others (Park and Feinberg, 2010). Additionally, peer-to-peer communication among viewers serves as a credible source of product information, often perceived as more trustworthy than business-sponsored content (Boush et al., 1993). The absence of physical interaction in virtual marketplaces limits consumers' ability to assess product quality firsthand, leading them to conform to others' purchasing decisions due to their lack of expertise. This study posits that interactions aimed at obtaining product information can encourage consumer conformity, highlighting its influential role in consumer behavior.

H2b: IPD has an impact on CC

During live streams, interactions within the streaming environment allow consumers to observe and evaluate others' purchase behaviors and decisions in real time. This observation helps consumers mitigate risks and gain confidence in their own purchasing decisions by aligning them with group norms (Sun et al., 2019). When consumers' choices harmonize with those of the group, perceived uncertainties and risks associated with online shopping diminish. Furthermore, consumers often gauge the acceptability of their decisions based on societal norms, viewing conformity as a prudent and

economical approach to shopping (Bearden et al., 1989). Thus, this research suggests that interactions aimed at understanding others' purchase dynamics positively impact consumer conformity, influencing consumer behavior within live streaming contexts.

H2c: IMI has an impact on CC

Incentives provided during live streaming, such as exclusive prices, coupons, and gifts (IMI), play a significant role in shaping consumers' purchasing decisions and perceived risks. Firstly, these incentives create a vibrant and inviting atmosphere that fosters collective action among consumers, intensifying conformity behaviors (Huang et al., 2012). Secondly, discounts and promotional offers reduce perceived risks associated with trying new products, thereby increasing consumers' inclination towards conformity (Zhang and Yu, 2020). Consequently, this study posits that interactions involving monetary incentives positively influence consumer conformity, underscoring their impact on consumer behavior during live streaming sessions.

H3: SP has an impact on CC

The concept of social presence within live streaming environments serves to alleviate consumer uncertainties about products, thereby fostering conformity. In such virtual communities, such as live streaming rooms, consumers fulfill their social needs for emotional connection and belonging, akin to participating in a social network (Park and Feinberg, 2010). The interactive nature of live streaming facilitates a warm and communal atmosphere, prompting consumers to conform to group expectations and enhancing consumer conformity (Kim et al., 2004). Additionally, a sense of belonging within a group enhances cohesion, leading consumers to trust the expertise of group members and reducing doubts about products. This trust in turn encourages conformity behaviors among consumers, supporting the hypothesis that social presence positively influences consumer conformity.

Purchase intention (PI)

H4a: SP has an impact on PI

Purchase intention in live streaming e-commerce hinges significantly on the perceived social presence. Research underscores that a heightened sense of social presence enhances consumers' comfort levels during online shopping, thereby facilitating their purchase decisions (Sun et al., 2019). The reduced perceived social distance between consumers and sellers fosters trust, which further bolsters consumers' intent to make purchases (Lu et al., 2016; Wongkitrungrueng and Assarut, 2018). This positive relationship between social presence and purchase intention is well-established in the literature, affirming the hypothesis that social presence positively impacts purchase intention in live streaming contexts.

H4b: CC has an impact on PI

Furthermore, conformity among consumers plays a crucial role in expediting decision-making processes, particularly in environments where consumers lack sufficient knowledge or time to evaluate product attributes independently (Lee and Park, 2008; Wu et al., 2017). In live streaming e-commerce, where consumers can readily observe others' purchasing behaviors, conformity behaviors are likely to emerge. Such conformity not only validates consumer decisions but also enhances the likelihood of actual transactions taking place. Therefore, the hypothesis that consumer conformity positively influences purchase intention is supported, emphasizing its role as a facilitator of consumer behavior within live streaming e-commerce (H4b).

3. Methodology

Measurements

I developed a survey instrument comprising a five-point Likert scale questionnaire to measure several key constructs within the context of live streaming e-commerce. First, inspired by previous studies (Jiang et al., 2019; Sun et al., 2019; Wongkitrungrueng and Assarut, 2018; Zhou et al., 2021), Live Streaming Interaction (LSI) was operationalized into three dimensions: Interactions for Product Information (IPI), Interactions for Purchase Dynamics (IPD), and Interactions for Monetary Incentives (IMI). Second, Social Presence in live streaming was operationalized to capture the degree of interpersonal relationships felt by consumers, encompassing elements such as human warmth and social communication, drawing from scales adapted from Gefen and Straub (2004), Ye et al. (2020), and Ou et al. (2014). Third, Consumer Conformity was defined through the influence of other consumers' behaviors observed during live streaming on consumers' own purchase decisions and their desire to conform, based on scales adapted from Wu et al. (2017) and Lee and Park (2008). Fourth, Purchase Intention was operationalized as consumers' intent to purchase products through live streaming e-commerce, adapted from scales used in previous studies (Chen et al., 2011; Sun et al., 2019; Park and Lin, 2020).

Data collection

The survey was distributed online to Vietnamese consumers via Google Forms due to the lack of human and financial resources. Participants were selected based on recent shopping experiences through live streaming e-commerce platforms, recruited from several stores in Shopee, Lazada, Facebook, and TikTok. They were informed that the survey aimed to investigate how LSI influences social presence, consumer conformity, and purchase intentions. Participants from various age groups and backgrounds were included, all having recent experience in live streaming e-commerce shopping, ensuring alignment with the survey's objectives. The questionnaire gathered demographic information, details of participants' live streaming shopping experiences, including the platforms used and products purchased.

To ensure the questionnaire's validity and reliability for the Vietnamese context, a standardized back-translation method was employed. Initially, the questionnaire was initially translated into Vietnamese by the author, with 2nd-stage translation assistance and quality control by professional translators

and subsequently back-translated into English by another translator to verify translation accuracy. Discrepancies between the original and back-translated versions were addressed through careful comparison and proofreading. The data collection yielded a high recovery rate (97.61%), with 368 valid responses collected out of 377, meeting the study's minimum requirements for analysis.

Data structure

Table 1: Demographic statistics

Characteristics		**Number**	**Percentage (%)**
Gender	Male	165	44.84
	Female	203	55.16
Age	Below 20	35	9.51
	21 - 30	214	58.15
	31 - 40	78	21.20
	Above 40	41	11.14
Marital status	Single	245	66.58
	Married	123	33.42
Residency	Hanoi	141	38.32
	Ho Chi Minh City	158	42.93
	Others	69	18.75
Platform	Shopee	121	32.88
	Lazada	92	25
	Facebook	63	17.12
	TikTok	92	25
Income	< 10m VND	44	11.96
	10m - 15m VND	70	19.02
	15m - 20m VND	106	28.80
	20m - 30m VND	112	30.43
	30m - 40m VND	23	6.25
	> 40m VND	13	3.53

The dataset exhibits a well-structured composition with a 10.32% disparity between genders, predominantly female. A significant portion, approximately 58%, of respondents fall within the 21-30 age bracket, followed by 21.20% aged 31-40, with 9.51% under 20 and 11.14% over 40, indicating a satisfactory age distribution. Marital status reflects 66.58% single and 33.42% married, mirroring the broader trend in Vietnam where single individuals are more likely to engage in consumption activities, particularly through online platforms. Geographically, the survey includes 38.32% from Hanoi, 42.93% from Ho Chi Minh City, and 18.75% from other cities, aligning with the concentration of economic activity and consumer behavior in these two major cities. Income distribution reveals that the majority (30.43%) earn between 20 to 30 million VND per month, closely followed by 28.80% earning between 15 to 20 million VND, which is consistent with typical income levels in Vietnam. Only a small percentage fell below 10 million VND (11.96%), between 10 and 15 million VND (19.02%), and above 40 million VND (3.53%). Among the 368 valid survey samples, the majority (32.88%) makes their purchases on Shopee, both Lazada and TikTok live streaming attract 25%, and Facebook live stream only accounts for 17.12% of online customers. Overall, the dataset is representative of the Vietnamese consumer population and is suitable for regression analysis.

4. Results

Internal consistency was assessed through the application of Cronbach's alpha (α) and composite reliability (CR), adhering to Nunnally's (1978) criterion that α should surpass 0.7 to ensure reliability. In our study, all CR values reported in Table 2 exceeded 0.8, underscoring strong internal consistency across all constructs. To establish convergent validity, as per Fornell and Larcker's (1981) guidelines, each item's factor loading should

exceed 0.6. As detailed in Table 2, all indicators in our analysis met or surpassed these thresholds. This analysis demonstrated that all pairs of constructs exhibited sufficient discriminant validity, thereby supporting the distinctiveness of each construct within the measurement model.

Table 2 - Reliability and validity assessment

Variables	**Items**	**Corrected Item - Total Correlation**	**Cronbach's Alpha if Item Deleted**
IPI Cronbach's Alpha = 0.846	IPI1	0.754	0.776
	IPI2	0.638	0.791
	IPI3	0.829	0.751
	IPI4	0.721	0.787
	IPI5	0.683	0.739
IPD Cronbach's Alpha = 0.863	IPD1	0.655	0.723
	IPD2	0.654	0.697
	IPD3	0.819	0.781
	IPD4	0.704	0.715
	IPD5	0.805	0.678
IMI Cronbach's Alpha = 0.905	IMI1	0.708	0.722
	IMI2	0.641	0.736
	IMI3	0.885	0.805
	IMI4	0.739	0.837
	IMI5	0.777	0.805
SP Cronbach's Alpha = 0.871	SP1	0.844	0.676
	SP2	0.821	0.662
	SP3	0.618	0.655
	SP4	0.890	0.877
	SP5	0.636	0.786
CC Cronbach's Alpha = 0.892	CC1	0.756	0.669
	CC2	0.726	0.846
	CC3	0.586	0.909
	CC4	0.799	0.826
	CC5	0.837	0.823
PI Cronbach's Alpha = 0.870	PI1	0.798	0.746
	PI2	0.852	0.697
	PI3	0.721	0.736
	PI4	0.703	0.689
	PI5	0.699	0.712

The structural equation modeling (SEM) analysis revealed significant path coefficients for all relationships, as indicated in Table 3. Specifically, interactions for obtaining product information (IPI), interactions for grasping the purchase dynamics of others (IPD), and interactions for obtaining monetary incentives (IMI) exhibited path coefficients of 0.373 ($p < 0.001$), 0.326 ($p < 0.001$), and 0.344 ($p < 0.005$), respectively, demonstrating a

significant impact on social presence (SP). These findings provide strong support for hypotheses H1a, H1b, and H1c. Furthermore, all three interactions for obtaining product information (IPI), interactions for grasping the purchase dynamics of others (IPD), and interactions for obtaining monetary incentives (IMI) showed significant positive effects on consumer conformity (CC), with path coefficients of 0.317 ($p < 0.001$), 0.365 ($p < 0.005$), and 0.328 ($p < 0.001$), respectively, thus supporting hypotheses H2a, H2b and H2c. Moreover, social presence (SP) was found to significantly influence consumer conformity (CC) with a path coefficient of 0.315 ($p < 0.001$), confirming hypothesis H3. Finally, purchase intention (PI) was positively influenced by social presence (SP) with a path coefficient of 0.361 ($p < 0.001$) and by consumer conformity (CC) with a path coefficient of 0.427 ($p < 0.001$). These results provide strong empirical support for hypotheses H4a and H4b, respectively, indicating that both social presence and consumer conformity play significant roles in shaping consumers' purchase intentions in the context of live streaming e-commerce.

Table 3 - SEM results

Variables	**SP**	**CC**	**PI**
IPI	0.373***	0.317***	
IPD	0.326***	0.365**	
IMI	0.344**	0.328***	
SP		0.315***	0.361***
CC			0.427***
Adjusted R^2	0.692	0.712	0.610
		** Sig. 5%	*** Sig. 1%

5. Conclusion

The interactions facilitated by live streaming e-commerce platforms offer an innovative approach that addresses the limitations of traditional e-commerce, thereby enhancing consumer engagement. This study investigates the interrelationships among Live Streaming Interactions (LSI), social presence, consumer conformity, and purchase intention, with a specific focus on how product type moderates these dynamics. The research confirms the validity of categorizing LSI into three types: Interactions for obtaining product information (IPI), interactions for grasping the purchase dynamics of others (IPD), and interactions for obtaining monetary incentives (IMI). Empirical findings indicate that all three IPI, IPD, and IMI significantly influence social presence and consumer conformity within the live streaming context. These interactions not only resolve consumer uncertainties regarding products but also foster a sense of community and interpersonal connection among consumers, aligning with previous studies (Jiang et al., 2019). Such positive emotional experiences reinforce group membership perceptions and stimulate conformity behaviors, thereby enriching the overall shopping experience (Tajvidi et al., 2017; Wang et al., 2019). Furthermore, the study integrates social presence, consumer conformity, and purchase intention into a cohesive model. Results indicate that social presence positively affects consumer conformity, which, in turn, enhances purchase intention, consistent with prior research (Li, 2019). This outcome underscores the role of frequent interactions and communication in simulating face-to-face interactions, thereby alleviating consumer doubts and facilitating purchase decisions in live streaming environments. This nuanced understanding offers valuable insights for marketers seeking to optimize their strategies in live streaming e-commerce, enhancing their ability to predict and influence consumer decision-making processes effectively.

References

Alba, J. W., and Williams, E. F. (2013). Pleasure principles: a review of research on hedonic consumption. J. Consum. Psychol. 23, 2–18. doi: 10.1016/j.jcps.2012.07.003

Armstrong, J. S., and Overton, T. S. (1977). Estimating nonresponse bias in mail surveys. J. Mark. Res. 14, 396–402. doi: 10.1177/002224377701400320

Bearden, W. O., Netemeyer, R. G., and Teel, J. E. (1989). Measurement of consumer susceptibility to interpersonal influence. J. Consum. Res. 15, 473–481. doi: 10.1086/209186

Bei, L. T., Chen, E. Y., and Widdows, R. (2004). Consumers' online information search behavior and the phenomenon of search vs. experience products. J. Fam. Econ. Iss. 25, 449–467. doi: 10.1007/s10834-004-5490-0

Botha, E., and Reyneke, M. (2016). "The influence of social presence on online purchase intention: an experiment with different product types," in Looking Forward, Looking Back: Drawing on the Past to Shape the Future of Marketing, eds. C. Campbell and J. Ma (Cham: Springer), 180–183. doi: 10.1007/978-3-319-24184-5_49

Boush, D. M., Kim, C. H., Kahle, L. R., and Batra, R. (1993). Cynicism and conformit as correlates of trust in product information source. J. Curr. Issues Res. Advert. 15, 71–79. doi: 10.1080/10641734.1993.10505004

Burton, S., and Soboleva, A. (2011). Interactive or reactive? Marketing with Twitter. J. Consum. Mark. 28, 491–499. doi: 10.1108/07363761111181473

Byrne, B. M. (2010). Structural Equation Modeling with AMOS: Basic Concepts, Applications, and Programming (Multivariate Applications Series). New York: Taylor and Francis Group.

Chang, Y. P., and Dong, X. B. (2016). Research on the impact of consumer interaction behaviour on purchase intention in an SNS environment: evidence from China. Inf. Dev. 33, 496–508. doi: 10.1177/0266666914556821

Chen, C. C., and Lin, Y. C. (2018). What drives live-stream usage intention? The perspectives of flow, entertainment, social interaction, and endorsement. Telemat. Inform. 35, 293–303. doi: 10.1016/j.tele.2017.12.003

Chen, C. C., and Yao, J. Y. (2018). What drives impulse buying behaviors in a mobile auction? The perspective of the stimulus-organism-response model. Telemat. Inform. 35, 1249–1262. doi: 10.1016/j.tele.2018.02.007

Chen, H., Zhang, S., Shao, B., Gao, W., and Xu, Y. (2021). How do interpersonal interaction factors affect buyers' purchase intention in live stream shopping? The mediating effects of swift guanxi. Internet Res. 32, 335–361. doi: 10.1108/INTR-05-2020-0252

Chen, Y., Wang, Q., and Xie, J. (2011). Online social interactions: a natural experiment on word of mouth versus observational learning. J. Mark. Res. 4, 238–254. doi: 10.1509/jmkr.48.2.238

Chin, W. W. (1998). The partial least squares approach to structural equation modeling. Modern Methods Bus. Res. 295, 295–336.

Cho, Y. K. (2015). Creating customer repurchase intention in Internet retailing: the effects of multiple service events and product type. J. Retail. Consum. Serv. 22, 213–222. doi: 10.1016/j.jretconser.2014.11.002

Cui, Y., Mou, J., Cohen, J., and Liu, Y. (2019). Understanding information system success model and valence framework in sellers' acceptance of cross-border e-commerce: a sequential multi-method approach. Electron. Commer. Res. 19, 885–914. doi: 10.1007/s10660-019-09331-0

Cunningham, S., Craig, D., and Lv, J. (2019). China's livestreaming industry: platforms, politics, and precarity. Int. J. Cult. Stud. 22, 719–736. doi: 10.1177/1367877919834942

D'Agostino, R. B., Balanger, A., and D'Agostino, R. B. (1990). A suggestion for using powerful and informative tests of normality. Am. Stat. 44, 316–321. doi: 10.1080/00031305.1990.10475751

Derks, D., Fischer, A. H., and Bos, A. E. (2008). The role of emotion in computer-mediated communication: a review. Am. Stat. 24, 766–785. doi: 10.1016/j.chb.2007.04.004

Deutsch, M., and Gerard, H. B. (1955). A study of normative and informational social influences upon individual judgment. J. Abnorm. Soc. Psych. 51, 629. doi: 10.1037/h0046408

Dodds, W. B., Monroe, K. B., and Grewal, D. (1991). Effects of price, brand, and store information on buyers? product evaluations. J. Marketing. Res. 28, 307-319. doi: 10.1177/002224379102800305

Fang, J., Chen, L., Wen, C., and Prybutok, V. R. (2018). Co-viewing experience in video websites: the effect of social presence on e-Loyalty. Int. J. Electron. Commer. 22, 446–476. doi: 10.1080/10864415.2018.1462929

Fornell, C., and Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. J. Mark. Res. 18, 39–50. doi: 10.1177/002224378101800104

Garnefeld, I., Iseke, A., and Krebs, A. (2012). Explicit incentives in online communities: boon or bane? Int. J. Electron. Commer. 17, 11–38. doi: 10.2753/JEC1086-4415170101

Gefen, D., and Straub, D. W. (2004). Consumer trust in B2C e-Commerce and the importance of social presence: experiments in e-products and e-services. Omega-Int. J. Manage. Sci. 32, 407–424. doi: 10.1016/j.omega.2004.01.006

Ghose, A., and Ipeirotis, P. G. (2010). Estimating the helpfulness and economic impact of product reviews: Mining text and reviewer characteristics. IEEE Trans. Knowl. Data Eng. 23, 1498–1512. doi: 10.1109/TKDE.2010.188

Grondin, F., Lomanowska, A. M., and Jackson, P. L. (2019). Empathy in computermediated interactions: a conceptual framework for research and clinical practice. Clin. Psych. Sci. Pract. 26, e12298. doi: 10.1111/cpsp.12298

Guan, Z., Hou, F., Li, B., Phang, C. W., and Chong, A. Y. L. (2022). What influences the purchase of virtual gifts in live streaming in China? A cultural context-sensitive model. Inf. Syst. J. 32, 653–689. doi: 10.1111/isj.12367

Guo, J., Li, Y., Xu, Y., and Zeng, K. (2021). How live streaming features impact consumers' purchase intention in the context of cross-border e-commerce? A Research Based on SOR Theory. Front. Psychol. 12, 767876. doi: 10.3389/fpsyg.2021.767876

Gupta, A., Su, B. C., and Walter, Z. (2004). An empirical study of consumer switching from traditional to electronic channels: a purchase-decision process perspective. Int. J. Electron. Commer. 8, 131–161. doi: 10.1080/10864415.2004.11044302

Haimson, O. L., and Tang, J. C. (2017). "What makes live events engaging on facebook live," in Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems. Denver, CO. doi: 10.1145/3025453.3025642

Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., and Tatham, R. L. (2006). Multivariate data analysis 6th Edition. J. Abnorm. Psychol. 49, 103–104.

Hair, J. F., Hult, G. T. M., Ringle, C. M., and Sarstedt, M. (2014). A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM). Thousand Oaks: Sage.

Hamilton, M., Kaltcheva, V. D., and Rohm, A. J. (2016). Social media and value creation: the role of interaction satisfaction and interaction immersion. J. Interact. Mark. 36, 121–133. doi: 10.1016/j.intmar.2016.07.001

Hancock, J. T., Gee, K., Ciaccio, K., and Lin, J. M. H. (2008). "I'm sad you're sad: emotional contagion in CMC," in Proceedings of the 2008 ACM Conference on Computer Supported Cooperative Work. p. 295–298. doi: 10.1145/1460563.1460611

Hassanein, K., and Head, M. (2005). The impact of infusing social presence in the web interface: An investigation across product types. Int. J. Electron. Commer. 10, 31–55. doi: 10.2753/JEC1086-4415100202

Hassanein, K., and Head, M. (2007). Manipulating perceived social presence through the web interface and its impact on attitude towards online shopping. Int. J. Hum.-Comput. Stud. 65, 689–708. doi: 10.1016/j.ijhcs.2006.11.018

Hoffman, D. L., and Novak, T. P. (1996). Marketing in hypermedia computer-mediated environments: conceptual foundations. J. Mark. 60,50–68. doi: 10.1177/002224299606000304

Hoyer, W. D., Kroschke, M., Schmitt, B., Kraume, K., and Shankar, V. (2020). Transforming the customer experience through new technologies. J. Interact. Mark. 51, 57–71. doi: 10.1016/j.intmar.2020.04.001

Hsieh, Y. C., Chiu, H. C., and Chiang, M. Y. (2005). Maintaining a committed online customer: a study across search-experience-credence products. J. Retail. 81, 75–82. doi: 10.1016/j.jretai.2005.01.006

Hu, M., and Chaudhry, S. S. (2020). Enhancing consumer engagement in e-commerce live streaming via relational bonds. Internet Res. 30, 1019–1041. doi: 10.1108/INTR-03-2019-0082

Huang, Y., Wang, L., and Shi, J. (2012). How attachment affects the strength of peer influence on adolescent consumer behavior. Psychol. Mark. 29, 558–567. doi: 10.1002/mar.20543

Hudson, S., Matson-Barkat, S., Pallamin, N., and Jegou, G. (2019). With or without you? Interaction and immersion in a virtual reality experience. J. Bus. Res. 100, 459–468. doi: 10.1016/j.jbusres.2018.10.062

Jiang, C., Rashid, R. M., and Wang, J. (2019). Investigating the role of social presence dimensions and information support on consumers' trust and shopping intentions. J. Retail. Consum. Serv. 51, 263–270. doi: 10.1016/j.jretconser.2019.06.007

Jiang, S., Hua, X., and Parviainen, R. (2020). How do popular online streamers influence viewers' purchase intention? Evidence from a mobile game campaign on YouTube. J. Digit. Soc. Media Mark. 7, 332–343.

Jing, X., and Xie, J. (2011). Group buying: a new mechanism for selling through social interactions. Manage. Sci. 57, 1354–1372. doi: 10.1287/mnsc.1110.1366

Kaiser, H. F. (1974). An index of factorial simplicity. Psychometrika 39, 31–36. doi: 10.1007/BF02291575

Kang, K., Lu, J., Guo, L., and Li, W. (2020). The dynamic effect of interactivity on customer engagement behavior through tie strength: evidence from live streaming commerce platforms. Int. J. Inf. Manage. 56, 102251. doi: 10.1016/j.ijinfomgt.2020.102251

Kim, D., Park, S. P., and Yi, S. (2021). Relevant and rich interactivity under uncertainty: Guest reviews, host responses, and guest purchase intention on Airbnb. Telemat. Inform. 65, 101708. doi: 10.1016/j.tele.2021.101708

Kim, H., Suh, K. S., and Lee, U. K. (2013). Effects of collaborative online shopping on shopping experience through social and relational perspectives. Inf. Manage. 75, 169–180. doi: 10.1016/j.im.2013.02.003

Kim, J. B. (2015). The mediating role of presence on consumer intention to participate in a social commerce site. J. Internet Commer. 14, 425–454. doi: 10.1080/15332861.2015.1092067

Kim, J. J., Kim, S., and Choi, J. (2020). Purchase now and consume later: do online and offline environments drive online social interactions and sales. J. Bus. Res. 120, 274–285. doi: 10.1016/j.jbusres.2019.09.021

Kim, W. G., Lee, C., and Hiemstra, S. J. (2004). Effects of an online virtual community on customer loyalty and travel product purchases. Tourism. Manage. 25, 343-355. doi: 10.1016/S0261-5177(03)00142-0

Kock, N. (2015). Common method bias in PLS-SEM: a full collinearity assessment approach. Int. J. e-Collab. 11, 1–10. doi: 10.4018/ijec.2015100101

Kohler, C. F., Rohm, A. J., De Ruyter, K., and Wetzels, M. (2011). Return on interactivity: the impact of online agents on newcomer adjustment. J. Mark. 75, 93–108. doi: 10.1509/jm.75.2.93

Kostopoulos, I., Magrizos, S., Carrigan, M., and Lazell, J. (2020). Fostering sustainability through technology-mediated interactions: conviviality and reciprocity in the sharing economy. Inf. Technol. People. 33, 919–943. doi: 10.1108/ITP-10-2018-0474

Kozlenkova, I. V., Palmatier, R. W., Fang, E., Xiao, B., and Huang, M. (2017). Online relationship formation. J. Mark. 81, 21–40. doi: 10.1509/jm.15.0430

Kunnan, A. J. (1998). An introduction to structural equation modelling for language assessment research. Lang. Test. 15, 295–332. doi: 10.1177/026553229801500302

Laporte, L., van Nimwegen, C., and Uyttendaele, A. J. (2010). "Do people say what they think: Social conformity behavior in varying degrees of online social presence," in Proceedings of the 6th Nordic Conference on Human-Computer Interaction: Extending Boundaries, New York, NY: ACM Press, 305–314. doi: 10.1145/1868914.1868951

Lascu, D. N., and Zinkhan, G. (1999). Consumer conformity: review and applications for marketing theory and practice. J. Market. TheoryPract. 7, 1–12. doi: 10.1080/10696679.1999.11501836

Lee, Y. J., and Park, J. K. (2008). "The mediating role of consumer conformity in e-compulsive buying," in Advances in Consumer Research, Association for Consumer Research, eds, Lee, A. Y. and Soman, D., vol. 35, p. 387–392.

Li, C. Y. (2019). How social commerce constructs influence customers' social shopping intention? An empirical study of a social commerce website. Technol. Forecast. Soc. Chang. 44, 282–294. doi: 10.1016/j.techfore.2017.11.026

Liu, C., Bao, Z., and Zheng, C. (2019). Exploring consumers'purchase intention in social commerce: an empirical study based on trust, argument quality, and social presence. Asia Pac. J. Market. Logist. 31, 378–397. doi: 10.1108/APJML-05-2018-0170

Liu, Q., Huang, S., and Zhang, L. (2016). The influence of information cascades on online purchase behaviors of search and experience products. Electron. Commer. Res. 16, 553–580. doi: 10.1007/s10660-016-9220-0

Lu, B., Fan, W., and Zhou, M. (2016). Social presence, trust, and social commerce purchase intention: an empirical research. Comput. Hum. Behav. 56, 225–237. doi: 10.1016/j.chb.2015.11.057

Luan, J., Yao, Z., Zhao, F., and Liu, H. (2016). Search product and experience product online reviews: An eye-tracking study on consumers' review search behavior. Comput. Hum. Behav. 65, 420–430. doi: 10.1016/j.chb.2016.08.037

Ma, Y. (2021). Elucidating determinants of customer satisfaction with live-stream shopping: an extension of the information systems success model. Telemat. Inform. 65, 101707. doi: 10.1016/j.tele.2021.101707

Ma, Y. (2021). To shop or not: understanding Chinese consumers' live-stream shopping intentions from the perspectives of uses and gratifications, perceived network size, perceptions of digital celebrities, and shopping orientations. Telemat. Inform. 59, 101562. doi: 10.1016/j.tele.2021.101562

Mehrabian, A., and Russell, J. A. (1974). An Approach to Environmental Psychology. Cambridge, MA: MIT Press.

Men, J., and Zheng, X. (2019). "Impact of social interaction on live-streaming shopping websites," in Proceedings of the Eighteenth Annual Pre-ICIS Workshop on HCI Research in MIS.

Mollen, A., and Wilson, H. (2010). Engagement, telepresence and interactivity in online consumer experience: reconciling scholastic and managerial perspectives. J. Bus. Res. 63, 919–925. doi: 10.1016/j.jbusres.2009.05.014

Moon, J., Chadee, D., and Tikoo, S. (2008). Culture, product type, and price influences on consumer purchase intention to buy personalized products online. J. Bus. Res. 61, 31–39. doi: 10.1016/j.jbusres.2006.05.012

Mou, J., Shin, D. H., and Cohen, J. F. (2017). Trust and risk in consumer acceptance of services. Electron. Commer. Res. 17, 255–288. doi: 10.1007/s10660-015-9205-4

Nelson, P. (1970). Information and consumer behavior. J. Polit. Econ. 78, 311–329. doi: 10.1086/259630

Nunnally, J. C. (1978). Psychometric Theory. New York: McGraw-Hill.

Ou, C. X., Pavlou, P. A., and Davison, R. M. (2014). Swift guanxi in online marketplaces: the role of computer-mediumted communication technologies. MIS Q. 38, 209–230. doi: 10.25300/MISQ/2014/38.1.10

Park, H. J., and Lin, L. M. (2020). The effects of match-ups on the consumer attitudes toward internet celebrities and their live streaming contents in the context of product endorsement. J. Retail. Consum. Serv. 52, 101934. doi: 10.1016/j.jretconser.2019.101934

Park, J., and Feinberg, R. (2010). E-formity: consumer conformity behaviour in virtual communities. J. Res. Interact. Mark. 4, 197–213. doi: 10.1108/17505931011070578

Pelet, J. É., Ettis, S., and Cowart, K. (2017). Optimal experience of flow enhanced by telepresence: evidence from social media use. Inf. Manage. 54, 115–128. doi: 10.1016/j.im.2016.05.001

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., and Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. J. Appl. Psychol. 88, 879. doi: 10.1037/0021-9010.88.5.879

Royston, B. (1991). SG3.5: Comment on SG3.4 and an improved D'Agostino test. Stata Tech. Bull. 3, 23–24.

Sasaki, M. U., and Ohbuchi, K. (1999). Conflict processes on computer-mediated communication. Tohoku Psychol. Folia 58, 50–55

Shen, J. (2012). Social comparison, social presence, and enjoyment in the acceptance of social shopping websites. J. Electron. Commer. Res. 13, 198.

Shin, D. H., and Shin, Y. J. (2011). Consumers' trust in virtual mall shopping: the role of social presence and perceived security. Int. J. Hum. Comput. Interact. 27, 450–475. doi: 10.1080/10447318.2011.552060

Short, J., Williams, E., and Christie, B. (1976). The Social Psychology of Telecommunications. New York: Wiley.

Smink, A. R., Frowijn, S., Van Reijmersdal, E. A., Van Noort, G., and Neijens, P. C. (2019). Try online before you buy: how does shopping with augmented reality affect brand responses and personal data disclosure. Electron. Commer. Res. 35, 100854. doi: 10.1016/j.elerap.2019.100854

Sokolova, K., and Kefi, H. (2020). Instagram and YouTube bloggers promote it, why should I buy? How credibility and parasocial interaction influence purchase intentions. J. Retail. Consum. Serv. 53, 101742. doi: 10.1016/j.jretconser.2019.01.011

Steuer, J. (1992). Defining virtual reality: dimensions determining telepresence. J. Commun. 42, 73–93. doi: 10.1111/j.1460-2466.1992.tb00812.x

Sun, Y., Shao, X., Li, X., Guo, Y., and Nie, K. (2019). How live streaming influences purchase intentions in social commerce: an IT affordance perspective. Electron. Commer. Res. Appl. 37, 100886. doi: 10.1016/j.elerap.2019.100886

Tajvidi, M., Wang, Y., Hajli, N., and Love, P. E. (2017). Brand value Co-creation in social commerce: The role of interactivity, social support, and relationship quality. Comput. Hum. Behav. 115, 105238. doi: 10.1016/j.chb.2017.11.006

Walther, J. B. (1996). Computer-mediated communication: impersonal, interpersonal, and hyperpersonal interaction. Commun. Res. 23, 3–43. doi: 10.1177/009365096023001001

Walther, J. B., Loh, T., and Granka, L. (2005). Let me count the ways: The interchange of verbal and nonverbal cues in computer-mediated and face-to-face affinity. J. Lang. Soc. Psychol. 24, 36–65. doi: 10.1177/0261927X04273036

Wang, W., Chen, R. R., Ou, C. X., and Ren, S. J. (2019). Media or message, which is the king in social commerce? An empirical study of participants' intention to repost marketing messages on social media. Comput. Hum. Behav. 93, 176–191. doi: 10.1016/j.chb.2018.12.007

Wohn, D. Y., Freeman, G., and McLaughlin, C. (2018). "Explaining viewers' emotional, instrumental, and financial support provision for live streamers," in Proceedings of the 2018 CHI conference on Human Factors in Computing Systems, Montreal QC, 474. doi: 10.1145/3173574.3174048

Wongkitrungrueng, A., and Assarut, N. (2018). The role of live streaming in building consumer trust and engagement with social commerce sellers. J. Bus. Res.117, 543–556. doi: 10.1016/j.jbusres.2018.08.032

Wu, J. J., Shu-Hua, C., and Kang-Ping, L. (2017). Why should I pay? Exploring the determinants influencing smartphone users' intentions to download paid app. Telemat. Inform. 34, 645–654. doi: 10.1016/j.tele.2016.12.003

Xu, X., Wu, J. H., and Li, Q. (2020). What drives consumer shopping behavior in live streaming commerce? J. Electron. Commer. Res. 21, 144–167.

Xu, Y., and Ye, Y. (2020). Who watches live streaming in China? Examining viewers' behaviors, personality traits, and motivations. Front. Psychol. 11, 1607. doi: 10.3389/fpsyg.2020.01607

Xue, J., Liang, X., Xie, T., and Wang, H. (2020). See now, act now: how to interact with customers to enhance social commerce engagement? Inf. Manage. 57, 103324. doi: 10.1016/j.im.2020.103324

Yao, M. Z., and Ling, R. (2020). "What is computer-mediated communication?" - An introduction to the special issue. J. Comput.-Mediat. Commun. 25, 4–8. doi: 10.1093/jcmc/zmz027

Ye, S., Lei, S. I., Shen, H., and Xiao, H. (2020). Social presence, telepresence and customers' intention to purchase online peer-to-peer accommodation: a mediating model. J. Hosp. Tour. Manag. 42,119–129. doi: 10.1016/j.jhtm.2019.11.008

Zhang, H., Lu, Y., Gupta, S., and Zhao, L. (2014). What motivates customers to participate in social commerce? The impact of technological environments and virtual customer experiences. Inf. Manage. 51, 1017–1030. doi: 10.1016/j.im.2014.07.005

Zhang, X., and Yu, X. (2020). The impact of perceived risk on consumers' cross-platform buying behavior. Front. Psychol. 11, 592246. doi: 10.3389/fpsyg.2020.592246

Zhang, Y., Lu, B., and Zheng, H. (2020). Can buzzing bring business? Social interactions, network centrality and sales performance: An empirical study on business-to-business communities. J. Bus. Res. 112, 170–189. doi: 10.1016/j.jbusres.2020.02.034

Zhou, M., Huang, J., Wu, K., Huang, X., Kong, N., and Campy, K. S. (2021). Characterizing Chinese consumers' intention to use live e-commerce shopping. Technol. Soc. 67, 101767. doi: 10.1016/j.techsoc.2021.101767

Zhu, B., Kowatthanakul, S., and Satanasavapak, P. (2020). Generation Y consumer online repurchase intention in Bangkok: based on stimulus-organism-response (SOR) model. Int. J. Retail Distrib. Manag. 48, 53–69. doi: 10.1108/IJRDM-04-2018-0071