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The Power of Live Social Commerce: Exploring the Roles of Trust and Time Pressure in Impulsive Buying

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Abstract

The advent of live social commerce has revolutionized the e-commerce landscape by combining live streaming with social media functionality, making shopping experiences more dynamic and interactive, thereby keeping consumers engaged in real time. Although live social commerce itself is a still emerging concept, the psychological processes that drive impulsive purchasing in live social commerce have been underexplored. The present study aims at examining the linkages between Live Social Commerce (LSC) and Impulsive Buying Behavior (IBB) for Generation Z, with the analysis of how Trust acts as a mediator and how Time Pressure as a boundary condition affects the relationship between trust and impulsive buying. A quantitative cross-sectional analytical survey was conducted based on responses from 412 Generation Z consumers who had experienced live stream shopping. Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS 4 was used to test the proposed research framework. The empirical findings indicate that live social commerce significantly enhances both consumer trust and impulsive buying behavior. Trust was found to directly promote impulsive buying and partially transmit the influence of live social commerce on purchasing decisions. In addition, time

pressure amplified the positive effect of trust on impulsive buying, while the moderated mediation analysis demonstrated that the indirect influence of live social commerce on impulsive buying through trust became stronger when consumers experienced higher levels of time pressure. These findings extend the literature on social commerce by offering a comprehensive explanation of how relational and situational factors interact to shape purchasing behavior in live-stream shopping environments. The study also delivers practical guidance for the digital marketers and online retailers by highlighting the strategic importance of building consumer trust and employing carefully designed time-sensitive promotional tactics to encourage spontaneous purchasing among Generation Z consumers.
Keywords: Live Social Commerce; Impulsive Buying Behavior; Trust; Time Pressure; Generation Z; PLS-SEM.

Introduction:

Social commerce (SC) is an emerging category within electronic commerce (e-commerce) that holds significant potential (Leong, Hew, Ooi, Hajli, & Tan, 2024). A type of commerce includes the confluence of virtual and in-person environments and is mediated by social media is known as social commerce (Wang and Zhang 2012). A lot of attention has been paid to social commerce as it shapes new online commercial channels (Zhou, Zhang, & Zimmermann, 2013).

For more than seventy years, impulsive buying has been extensively studied and explored in academic research (Clover, 1950). During impulse buying, consumers are unable to form well-thought-out attitudes or intentions and struggle to resist the appeal of the product, as their emotions drive the purchasing decision (Verhagen & van Dolen, 2011). Impulsive purchase was first described by early researchers as unplanned consumption, defined impulsive purchasing as instantaneous, unplanned, and motivated by intense emotional reactions to outside stimuli, since then, additional researchers have defined impulsive purchase by taking into account both external stimuli and the internal emotional states of the customer, Xiao and Nicholson performed an extensive literature review and showed that impulsive buying is characterized by rapid and thoughtless actions exhibited by consumers, who are swayed by certain factors and do not plan in advance before making a purchase (Sun, Zhang, & Zheng, 2023). The term "impulsive buying" describes complex, impulsive, and compelling purchasing behavior that is distinct from planned purchases. Impulsive purchase is characterized by its unexpected, unplanned, and quick nature, there are two situations in which customers make impulsive purchases in the setting of social commerce. Customers actively seek information on social commerce channels and have premediated buying intents in scenario 1. In scenario 2, customers are not intending to purchase anything, but simply they are looking for social media networks for fun (Xu, Gong, & Yan, 2024). Live streaming has revolutionized traditional social commerce in several ways, all of which have contributed to making it a more engaging and effective way to sell products. Unlike the static text and images used in traditional formats, livestreaming platforms allow real-time video demonstrations, enhancing product understanding. Moreover, livestream shopping allows real-time customer queries using the bullet screen feature, where streamers can answer queries live. Such interaction can help foster trust and mitigate doubts about the authenticity of suppliers, while also decreasing the perceived risks of online shopping (Sun, Pelet, Dai, & Ma, 2023). Live streaming that can trigger benefits (hedonic, utilitarian or symbolic) for the customer is likely to positively affect the attitudes (trust, for instance) and behaviors (engaging, for instance) of the customer. In broad terms, "Trust" is conceptualised as a general attitude of believing that another individual involved in the interaction will behave in an ethical, socially appropriate and opportunistic manner (Wongkitrungrueng & Assarut, 2018).

Social live streaming has already become a worldwide phenomenon, attracting millions of viewers and offering significant profits. The live streaming market has had an impressive valuation of $50.57 billion in 2019, according to a report by Grand View Research (2023). It also shows that the live streaming market is led by Asia Pacific region (Ngo, Bui, Chau, & Tran, 2023)

This study is aimed at consumer trust and time pressure towards consumer purchase decisions across live-shopping channels. It approaches the subject from a fresh angle to identify the factors that are most important to consumer behaviour in this new phenomenon of online shopping. While previous studies have employed trust as a mediator for Millennials, it has yet been explored as a mediator for Generation Z in relation to live-streaming commerce (Makmor, Mohd, Safiyuddin, Abu Baka, & Alam, 2024). Empirical investigations are urgently needed to better grasp the phenomenon, especially in the context of online live-streaming situations with the impact of time pressure. The current studies on impulsive buying behavior have mainly focused on external factors and instead neglected the internal process and mechanisms that underlie impulsive buying behavior (Sun, et al., 2023). According to a recent study by Gallup & Gilani Pakistan, 40% of adult population in Pakistan is currently using social media, with two thirds of the population under the age of 30 actively using prominent social networks including TikTok, Facebook, and Instagram (Tribune, 2024). This research study was conducted on the Gen Z in Pakistan. Research shows that in Pakistan, the age span for Generation Z ranges from 1997 to 2012, with slight variations in the definition depending on the context (Jamal, 2020). For online businesses targeting the Gen-Z generation's purchase intent, it becomes essential to understand the factors driving the customer's purchase intention through live-streaming social commerce in Pakistan.

Literature Review:

The SOR model explicates a sequential interaction where external stimuli trigger internal psychological processes, subsequently culminating in observable behavioral responses. Stimulus represents the external environmental factors that initiate cognitive engagement, organism encapsulates the internal psychological mechanisms of perception and emotional interpretation, and response demonstrates the ultimate behavioral outcomes derived from the difficult interplay between external inputs and internal cognitive processing (Makmor, Mohd, Safiyuddin, Abu Baka, & Alam, 2024). According to Aragoncillo and Orús (2018), a stimulus is composed of two elements: external stimuli (object-related stimuli) and internal stimuli (social and psychological factors). These stimuli directly impact individuals' internal emotional reactions, referred to as the organism, which subsequently influence their behavioral responses, as described in this model (Yusak, Mohd, & Yusran, 2022).

Bandura and Walters (1977) introduced social learning theory, which later served as the foundation for Bandura's (2003) social cognitive theory (SCT). It highlights that knowledge is shaped within a social context, encompassing individuals' cognition, behavior, and environment (Wood & Bandura, 1989). This concept emphasizes the influence of social interactions and suggests that individuals act as responsible custodians of environments through self-efficacy. Moreover, SCT extends the development of self-efficacy to include collective or community efficacy (Bandura, 2003) in (Tao, Alam, Otero, & Mengyuan, 2924). The theory posits that individuals are more likely to engage on social platforms when their trust is recognized, and less likely to do so otherwise. SCT has been applied to research on Internet usage (LaRose & Eastin, 2004). The hypothesis clarifies how an individual's cognitive abilities are

influenced by their surroundings, resulting in behaviors (Hashmi, Attiq, & Rasheed, 2019).

Live Social Commerce

Unlike traditional online shopping, live social commerce allows consumers to communicate with streamers, ask product-related questions, receive instant demonstrations, and make purchases during live broadcasts. This interactive shopping environment enhances consumers' engagement, reduces uncertainty, and creates a more immersive shopping experience (Wongkitrungrueng & Assarut, 2020). Previous studies have shown that the entertainment, interactivity, and social presence provided by live commerce significantly influence consumers' purchase intentions and buying behaviors (Sun et al., 2019; Cai & Wohn, 2019). For Gen Z cohort, who are very active on digital platforms, the authenticity, immediacy and personalized communication of live social commerce have made it a marketing channel that has influenced them.

Impulsive Buying Behavior

Rook and Fisher (1995) define impulsive buying as an urge to buy that is characterized by a strong feeling of reaction and a less rational consideration. Promotional offers, scarcity cues, entertainment, and social influence can be factors that trigger impulsive purchases in digital shopping settings. The live social commerce further enhances people's impulsive buying behavior by engaging them in real-time interactions, offering limited time offers, and communicating with them by streamers who provide more persuasive messages for instant purchase decisions (Verhagen & Van Dolen, 2011). Indeed, previous studies have repeatedly shown that younger consumers' impulsive buying rises significantly when shopping from home via the Internet.

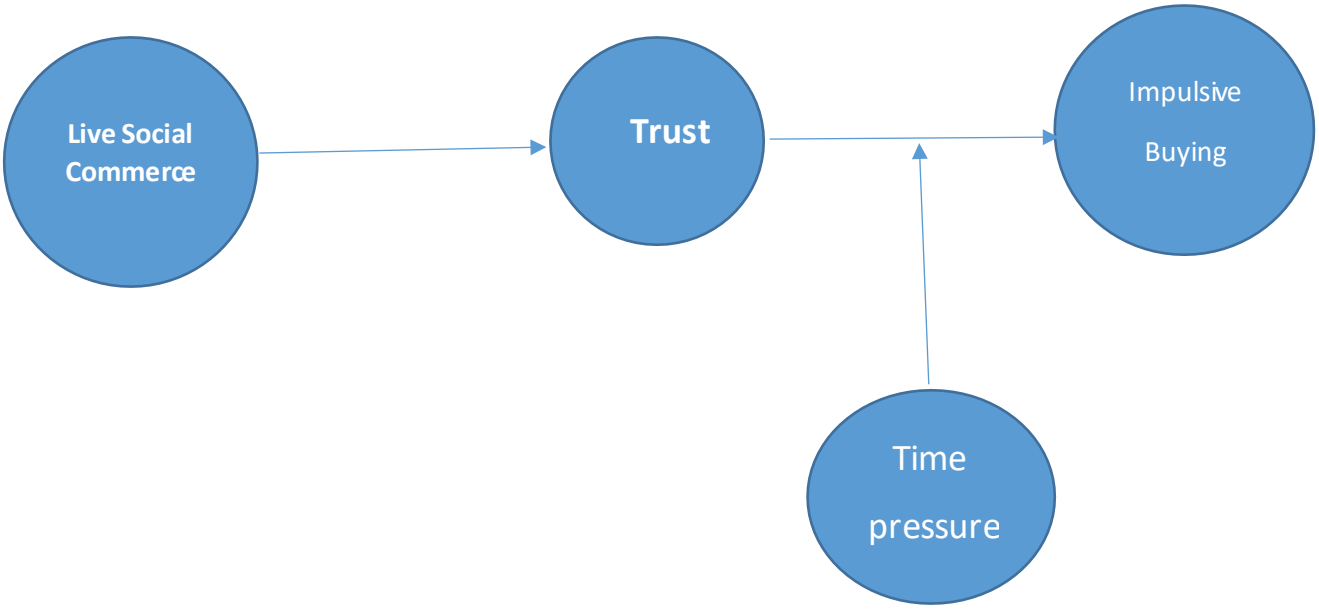
Trust

In the online market, consumer behavior is crucial and the key element is trust and confidence in the business. It is a manifestation of consumers' trust that the sellers will deliver what they promise, accurately inform them about the product, and handle the transaction securely (Gefen et al., 2003). Live social commerce fosters trust by engaging with the streamer, genuine product demonstration, transparency, and immediate answers to customer questions (Wongkitrungrueng & Assarut, 2020).

Time Pressure

Perceived time constraint decreased consumers' cognitive evaluation and promoted heuristic decision making, resulting in faster purchase decisions (Suri & Monroe, 2003). In a similar vein, Dhar and Nowlis (1999) asserted that subject to time restrictions, consumers are more inclined to rely on affective judgments than to rationally evaluate. In live shopping scenarios, time pressure enhances the power of trust, which encourages consumers to make quick purchases before promotions expire, leading to an increase in impulsive shopping.

Theoretical Model:



Hypothesis

- H1: "Live Social Commerce positively influences Impulsive Buying Behavior."
- H2: "Live Social Commerce positively influences Trust."
- H3: "Trust positively influences Impulsive Buying Behavior."
- H4: "Trust mediates the relationship between Live Social Commerce and Impulsive Buying Behavior."
- H5: "Time Pressure moderates the relationship between Trust and Impulsive Buying Behavior."
- H6: "Time Pressure positively moderates the indirect effect of Live Social Commerce on Impulsive Buying Behavior through Trust (moderated mediation)."

Research Design, Population, and Data Collection

The target population were Generation Z people who had previously experience using live social commerce platforms like TikTok Live, Instagram Live, Facebook Live, and YouTube Live. Because a complete sampling frame was unavailable, a non-probability sampling procedure (convenience sampling) was employed. Structured online questionnaires were used by distributing the questionnaire through Google Forms on different social media and University networks. Forty-one-two (412) valid responses were received and analyzed. The items used for measuring Live Social Commerce, Trust, Time Pressure and Impulsive Buying Behavior were slightly modified from existing validations to fit the context of live social commerce.

Data Analysis:

The collected data were analyzed by using SPSS Statistics 29 and SmartPLS 4. Data screening, descriptive statistics, and reliability analysis were performed using SPSS and measurement and structural models were assessed by using SmartPLS 4 with the approach of Partial Least Squares Structural Equation Modeling (PLS-SEM). The indicator loadings, Cronbach's alpha, Composite Reliability (CR), Average Variance Extracted (AVE), Fornell–Larcker criterion and Heterotrait–Monotrait (HTMT) ratio were used to evaluate the measurement model. The structural model was evaluated using four indicators: path coefficients (β), coefficient of determination (R^2), effect size (f^2), predictive relevance (Q^2), and Variance Inflation Factor (VIF). The direct, mediating, moderating, and moderated mediation effects were investigated using the bootstrapping method with 5,000 resamples. The robustness and reliability of the proposed research model, in this analytical approach, ensured.

Results

Demographic Profile of Respondents

A total of 412 valid questionnaires were used for the final analysis. Table 1. Summary of respondent's demographic data (N = 412)

Table.1

Variable	Category	Frequency	Percentage (%)
Gender	**Male**	**189**	**45.9**
	Female	**223**	**54.1**
Age	**18–20 years**	**118**	**28.6**
	21–23 years	**179**	**43.4**
	24–26 years	**92**	**22.3**
	Above 26 years	**23**	**5.6**
Education	**Undergraduate**	**216**	**52.4**
	Graduate	**148**	**35.9**
	Postgraduate	**48**	**11.7**
Live Commerce Usage	**Less than once/week**	**58**	**14.1**
	1–3 times/week	**201**	**48.8**
	4–6 times/week	**97**	**23.5**

	Daily	**56**	**13.6**
Preferred Platform	**TikTok Live**	**201**	**48.8**
	Instagram Live	**96**	**23.3**
	Facebook Live	**54**	**13.1**
	YouTube Live	**61**	**14.8**

The demographic analysis indicates that females constituted a slightly higher proportion of the respondents (54.1%) than males (45.9%). Most respondents (43.4%) were between 21 and 23 years old, representing the core Generation Z consumer segment. More than half (52.4%) were undergraduate students, while nearly half (48.8%) reported using live social commerce platforms one to three times per week. TikTok Live emerged as the most frequently used live shopping platform (48.8%), highlighting its popularity among Generation Z consumers.

Measurement Model Assessment

As shown in Table 2, all constructs achieved values above the recommended thresholds.

Table 2. Reliability and Convergent Validity

Construct	**CA**	**CR**	**AVE**
Live Social Commerce	0.912	0.928	**0.682**
Trust	0.901	0.926	**0.714**
Time Pressure	0.873	0.913	**0.678**
Impulsive Buying	**0.918**	**0.935**	**0.742**

All factor loadings ranged between 0.742 and 0.911, exceeding the recommended value of 0.70. Cronbach's Alpha and Composite Reliability values were greater than 0.70, while AVE values exceeded the threshold of 0.50, confirming satisfactory reliability and convergent validity.

Discriminant Validity

Discriminant validity was evaluated using the Fornell–Larcker criterion and the HTMT ratio. The square root of each construct's AVE was greater than its inter-construct correlations, and all HTMT values were below 0.90, confirming satisfactory discriminant validity.

Structural Model Assessment

The structural model was evaluated using bootstrapping with 5,000 subsamples.

Table 3. Hypothesis Testing

Hypothesis	Relationship	β	t-value	p-value	Decision
H1	Live Social Commerce → Impulsive Buying	0.341	6.482	0.000	Supported
H2	Live Social Commerce → Trust	0.687	17.315	0.000	Supported
H3	Trust → Impulsive Buying	0.429	8.514	0.000	Supported
H4	Live Social Commerce → Trust → Impulsive Buying	0.295	7.281	0.000	Supported
H5	Trust × Time Pressure → Impulsive Buying	0.176	3.426	0.001	Supported

H6	**Moderated Mediation**	**0.082**	**2.714**	**0.007**	**Supported**

Direct Effects

The results indicated that Live Social Commerce had a significant impact on Impulsive Buying Behavior ($\beta = 0.341$, $t = 6.482$, $p < 0.001$), which supported the H1. The results indicate that both the virtual reality and live streaming contexts do have a high degree of influence on spontaneous buying behaviour by Generation Z consumers.

Likewise, Live Social Commerce had a strong positive influence on Trust ($\beta = 0.687$, $t = 17.315$, $p < 0.001$) and was found to be a significant predictor of this factor, which is in support of H2. This indicates that interactive live commerce environments enhance consumers' trust toward sellers and products.

In addition, the Trust positively affected Impulsive Buying Behavior ($\beta = 0.429$, $t = 8.514$, $p < 0.001$), thus supporting H3. The results indicate that the more consumers trust the platform, the greater the chance for impulsive buying while in the live shopping mode.

Mediation Analysis

The bootstrapping procedure was used to explore the mediating role of Trust. The indirect relationship between Live Social Commerce and Impulsive Buying through Trust was found to be statistically significant ($\beta = 0.295$, $t = 7.281$, $p < 0.001$). The direct effect and indirect effect were both significant and hence, the relationship between Live Social Commerce and Impulsive Buying Behavior was partially mediated by Trust. As such, H4 was supported.

Moderation Analysis

To examine the moderating effect of Time Pressure, an interaction between Trust and Time Pressure was created. The interaction effect was significant at the 1% level ($\beta = 0.176$, $t = 3.426$, $p = 0.001$), which suggests that the positive relationship between Trust and Impulsive Buying Behavior was enhanced by Time Pressure.

Specifically, the more time presses on consumers' minds during live shopping activities, the more their impulsive buying was affected by the influence of Trust. Thus, it was supported that H5.

Moderated Mediation Analysis

The conditional indirect effect of Live Social Commerce on Impulsive Buying through Trust was explored at the different levels of Time Pressure. H6 was supported by the moderated mediation effect that was statistically significant ($\beta = 0.082$, $t = 2.714$, $p = 0.007$).

Under conditions of high Time Pressure, the mediating role of Trust is increased, as the following results show. This means that consumers who felt the urge to shop more during live shopping were more likely to convert their trust into impulsive buying.

Coefficient of Determination (R^2) Endogenous Construct R^2 Trust 0.472

Impulsive Buying 0.638

The R^2 value for the equation is 0.472, which suggests that 47.2% of the variation in Trust was explained by Live Social Commerce. Moreover, the combination of Live Social Commerce, Trust and interaction between Trust and Time Pressure accounted for 63.8% of the variance in Impulsive Buying Behavior, which is significant.

4.10 Effect Size (f^2) Relationship

	f^2	Interpretation
Live Social Commerce → Trust	**0.895**	**Large**
Live Social Commerce → Impulsive Buying	**0.162**	**Medium**
Trust → Impulsive Buying	**0.251**	**Medium**
Trust × Time Pressure → Impulsive Buying	**0.046**	**Small**

4.11 Predictive Relevance (Q^2)

Construct	Q^2
Trust	**0.318**
Impulsive Buying	**0.451**

All Q^2 values exceeded zero, confirming that the proposed model possessed satisfactory predictive relevance.

Discussion:

Live Social Commerce (LSC) directly impacts on Impulsive Buying Behavior (IBB) of the target audience. There has been a steady stream of research indicating that interactive live-stream shopping environments encourage spontaneous buying by offering interesting, immersive and fun shopping experiences. The results support Sun et al. (2019) and Wongkitrungrueng and Assarut (2020) who stated that real-time interaction, product demonstration and interaction with other people promote consumers to make instant purchasing decisions. The findings also showed that Live Social Commerce has positively enhances the Trust, suggesting that consumers feel more confident in the sellers when they interact with them, the product is presented in a genuine way, and they receive a response right away from the streamer. This result is consistent with the studies of Gefen et al. (2003) and McKnight et al. (2002) which found that trust is a fundamental component of consumer's attitude towards online purchases. In

the same way, Wongkitrungrueng and Assarut (2020) discovered that live-stream shopping places assist in building consumer trust via social connection, and transparency.

The mediation analysis showed that Live Social Commerce has an indirect impact on the Impulsive Buying Behavior through the mediation of Trust. This discovery indicates that not only does live social commerce provide a direct push to impulsive purchasing, but it can also bolster consumer trust, thus indirectly impacting their behavior. The result aligns with the research that live-stream shopping can be a psychological factor influencing purchasing decisions (Wongkitrungrueng & Assarut, 2020).

The moderating analysis also found that Time Pressure intensifies the positive association between Trust and Impulsive Buying Behavior. Consumers feeling more urgency in the live-stream shopper were more likely to turn the trust into a buying decision. These findings aling with previous research by Dhar and Nowlis (1999), and Suri and Monroe (2003) concluded that limited time offers decrease cognitive evaluation and lead to a hasty purchase decision.

Lastly, the indirect role played in shaping the Live Social Commerce on Impulsive Buying via Trust was found to be more pronounced when Time Pressure was high. The study result reveals the two factors of psychological trust and situational urgency to which consumer behavior responds in live social commerce contexts, especially for Gen Z consumers.

Conclusion:

This current study has been designed to investigate the relationship among Live Social Commerce with Impulsive Buying Behavior of Generation Z consumers, with the addition of Trust as a mediating variable and Time Pressure as a moderating variable. The results showed that the social commerce function, which is live, could have positively impact the impulsive buying, both directly and indirectly by means of trust. Credible and reliable live-stream shopping environments provide a greater opportunity to make spontaneous purchasing decisions for consumers.

The study also demonstrated that trust is a key mediator in the association between the use of live social commerce and consumer behavior. Furthermore, the moderating effect of time pressure suggests that the role of trust on impulsive purchasing is increased when the promotions are promoted under time pressure and urgency cues are given. The findings of the significant moderated mediation also show that the indirect effect of live social commerce on impulsive buying via trust is greater for consumers who feel greater time pressure.

References:

[1] Akram, U., Junaid, M., Zafar, A. U., Li, Z., & Fan, M. (2021). Online purchase intention in Chinese social commerce platforms: The role of social commerce constructs and trust. *Current Psychology*, *40*(6), 2874–2887.

[2] Cai, J., & Wohn, D. Y. (2019). Live streaming commerce: Uses and gratifications approach to understanding consumers' motivations. *Proceedings of the 52nd Hawaii International Conference on System Sciences*, 2548–2557.

[3] Chen, C. C., & Lin, Y. C. (2018). What drives live-stream usage intention? The perspectives of flow, entertainment, social interaction, and endorsement. *Telematics and Informatics*, *35*(1), 293–303.

[4] Dhar, R., & Nowlis, S. M. (1999). The effect of time pressure on consumer choice deferral. *Journal of Consumer Research*, *25*(4), 369–384.

[5] Gefen, D., Karahanna, E., & Straub, D. W. (2003). Trust and TAM in online shopping: An integrated model. *MIS Quarterly*, *27*(1), 51–90.

[6] Hajli, N. (2015). Social commerce constructs and consumer's intention to buy. *International Journal of Information Management*, *35*(2), 183–191.

[7] Hajli, N. (2017). The role of social support on relationship quality and social commerce. *Technological Forecasting and Social Change*, *87*, 17–27.

[8] Huang, Z., Benyoucef, M., & Chen, J. (2022). Consumer behavior in live-streaming commerce: A systematic literature review. *Electronic Commerce Research*, *22*(4), 1245–1278.

[9] Li, Y., Li, X., Cai, J., & Ashraf, A. R. (2023). Understanding consumers' impulsive buying behavior in live-streaming commerce: The role of social presence and trust. *Journal of Retailing and Consumer Services*, *71*, 103214.

[10] Liu, X., Min, Q., & Han, S. (2020). Understanding users' continuous purchase intention in social commerce: The role of trust and social support. *Electronic Commerce Research and Applications*, *44*, 101008.

[11] Ma, L., Gao, S., & Zhang, X. (2022). How social interaction influences consumers' purchase intention in live-streaming commerce: Evidence from China. *Journal of Retailing and Consumer Services*, *68*, 103041.

[12] McKnight, D. H., Choudhury, V., & Kacmar, C. (2002). Developing and validating trust measures for e-commerce: An integrative typology. *Information Systems Research*, *13*(3), 334–359.

[13] Park, E. J., Kim, E. Y., Funches, V. M., & Foxx, W. (2012). Apparel product attributes, web browsing, and e-impulse buying on shopping websites. *Journal of Business Research*, *65*(11), 1583–1589.

[14] Rook, D. W., & Fisher, R. J. (1995). Normative influences on impulsive buying behavior. *Journal of Consumer Research*, *22*(3), 305–313.

[15] Sun, Y., Shao, X., Li, X., Guo, Y., & Nie, K. (2019). How live streaming influences purchase intentions in social commerce: An IT affordance perspective. *Electronic Commerce Research and Applications*, *37*, 100886.

[16] Suri, R., & Monroe, K. B. (2003). The effects of time constraints on consumers' judgments of prices and products. *Journal of Consumer Research*, *30*(1), 92–104.

[17] Verhagen, T., & Van Dolen, W. (2011). The influence of online store beliefs on consumer online impulse buying: A model and empirical application. *Information & Management*, *48*(8), 320–327.

[18] Wongkitrungrueng, A., & Assarut, N. (2020). The role of live streaming in building consumer trust and engagement with social commerce sellers. *Journal of Business Research*, *117*, 543–556.

[19] Xu, X., Wu, J. H., & Li, Q. (2020). What drives consumer shopping behavior in live streaming commerce? *Journal of Electronic Commerce Research*, *21*(3), 144–167.

[20] Zhang, M., Qin, F., Wang, G. A., & Luo, C. (2020). The impact of live video streaming on online purchase intention. *Service Industries Journal*, *40*(9–10), 656–681.

[21] Zheng, X., Men, J., Yang, F., & Gong, X. (2019). Understanding impulse buying in mobile commerce: An investigation into hedonic and utilitarian browsing. *International Journal of Information Management*, *48*, 151–160.