



EXPLAINING IMPULSE BUYING IN SOCIAL COMMERCE THROUGH PARASOCIAL IDENTIFICATION: THE ROLES OF CREATOR AUTHENTICITY AND FEAR OF MISSING OUT

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Article History

Received: 2026-04-10

Revised: 2026-05-12

Accepted: 2026-06-05

Published: 2026-06-19

Abstract

Social commerce has revolutionized online shopping by bringing social interaction, user-generated content, and eCommerce together in an immersive environment. While previous research has focused on the effects of parasocial relationships or impulse buying behavior separately, there is a lack of research in understanding the combined effect of creator authenticity and fear of missing out (FOMO) on impulse buying through parasocial identification (PSID). This study is based on Stimulus–Organism–Response (S–O–R) model and aims to investigate how creator authenticity, social attraction and FOMO influence consumers' impulse buying behaviour through the mediation of parasocial identification as the psychological mechanism.

Using secondary survey data from a data set of social commerce users who have active social commerce accounts on creator-driven digital platforms & partial least squares structural equation modelling (PLS-SEM) we evaluated measurement and structural models. The findings show that creator authenticity and social attraction positively contribute to parasocial identification. Moreover, parasocial identification has a positive effect on impulse buying behaviour, thus reinforcing its importance as a mediation mechanism between the creator's characteristics and its consumers' purchase responses. Additionally, FOMO also proves to be a substantial direct predictor of impulse buying, emphasizing the psychological urgency in social commerce contexts.

The study advances the social commerce and consumer behaviour research field by building upon the S–O–R model and incorporating creator authenticity, FOMO, and parasocial identification into a single model. The results offer actionable insights for content creators, marketers, and platform developers aiming to enhance customer interaction and drive purchasing decisions by delivering genuine and emotionally compelling digital experiences.

Keywords: Social Commerce; Parasocial Identification; Creator Authenticity; Fear of Missing Out (FOMO); Impulse Buying Behaviour; Influencer Marketing

Introduction

Social commerce has revolutionised the digital landscape by creating a seamless and interactive environment that combines social networking, content creation, and online shopping. As opposed to ecommerce systems that mostly provide transactional exchanges, the social commerce platforms allow customers to connect with creators, communicate with others, and take part in community-based purchasing experiences (Hajli, 2014; Liang & Turban, 2011). The consumer decision-making process has also evolved into a more socially and emotionally driven one, as creator platforms like TikTok, Instagram, and YouTube have gained popularity and started to affect how consumers evaluate products before making a purchase (Wongkitrungrueng et al., 2020).

In these settings, the role of content creators as influencers on consumer attitudes and behavioural reactions is becoming more and more important. Anyone who creates makes psychological bonds with fans, for example through ongoing communication, storytelling and personal content sharing. Therefore, consumers often judge creators as credible, approachable and genuine sources of information, thus creator recommendations are particularly effective in driving consumers' buying behavior (Lou & Yuan, 2019; Agnihotri et al., 2023). Authenticity is one of the key creator attributes that has become a key factor for consumer engagement as the audience trust the authentic creators as authentic, transparent, credible, and therefore emotionally attached to them (Audrezet et al., 2020).

Parasocial Identification (PSID) is one of the psychological mechanisms that are responsible for the creator influence, and it is the way the audience identifies and psychologically connects with mediated personalities (Cohen, 2001). Parasocial identification is different from parasocial interaction as the former entails a much more internal process whereby consumers internalize the values, aspirations, and lifestyles of creators as part of their own self-concept (Bond, 2021). This type of identification can have a profound impact on consumer attitudes and behaviours, especially in social commerce, where decisions are often driven by social and emotional factors.

Another significant aspect that affects the consumer behavior in social commerce is termed 'Fear of missing out' (FOMO) which refers to the anxiety that someone is having a pleasurable experience that one is not involved in (Przybylski et al., 2013). To evoke FOMO, social commerce platforms often use trending products and offers that are available only for a short time period, as well as creator endorsements, which drive consumers to make impulsive buying choices to prevent what they see as a social and economic loss (Dhir et al., 2021).

While there has been an increasing amount of research into influencer marketing and social commerce, few studies have investigated creator authenticity, parasocial identification, and FOMO in a single construct to explain impulse buying behaviour. In the present study, creator authenticity, social attraction and FOMO was considered as external stimuli affecting the process of parasocial identification, thus affecting impulse buying behaviour, and the Stimulus–Organism–Response (S–O–R) framework was used to develop the hypotheses. Using Stimulus–Organism–Response (S–O–R) framework (Mehrabian & Russell, 1974), the following hypotheses were formulated: creator authenticity, social attraction and FOMO are stimuli that influence the process of parasocial identification, which in turn influences impulse buying behaviour. The study incorporates these constructs and thus enhances the understanding of psychological mechanisms that underlie consumer behavior in today's social commerce context.

2.0 Literature Review

2.1 Theoretical Foundation

The present study is based on the Stimulus – Organism – Response (S – O – R) model proposed by Mehrabian and Russell (1974) that suggested that environmental stimuli activate psychological responses within a person and thus, elicit the person's response. In the social commerce context, creator attributes and platform cues are external stimuli which can impact the cognitive as well as emotional processing of the consumers. Such internal psychological responses can be experienced as parasocial identification and can have an impact on behavioural outcomes like impulse buying. The S–O–R framework has successfully been used in explaining the influence of social factors, emotional involvement, and electronic interactions on consumer's purchase decisions in social commerce and online consumer behaviour research (Herzallah et al., 2022; Dhir et al., 2021). This view is used for conceptualisation of the three stimuli (creator authenticity, social attraction, FOMO), the organism (parasocial identification), and the behavioural response (impulse buying behaviour).

2.3 Relationships and their values

In the fast-growing creator-driven commerce, authenticity has become a factor to examine when it comes to consumer engagement. The authenticity of a creator is the degree to which audiences view a content creator as being genuine, honest, transparent and consistent in sharing personal values, opinions, and experiences. With the rise of social commerce, it is more critical than ever that consumers feel genuine when it comes to assessing brands and products from creators.

With respect to the Source Credibility Theory, the characteristics of authenticity of the creators are considered to be more credible and believable, which makes people more accepting of the messages communicated. The results of multiple studies indicate that authenticity creates emotional bonds and enriches the psychological bond between an audience and an artist. Authentic self-presentation can help influencers build more meaningful audience relations as followers feel a connection and sincerity with them rather than them being motivated by profit, according to Audrezet et al. (2020). Similarly, Agnihotri et al. (2023) discovered that authenticity of influencers has a significant impact on the enhancement of consumers' parasocial relationships, reflected in the increased trustworthiness and emotional closeness to the influencers. Recent research also shows that authenticity helps to connect the audience with the creator. While followers are watching, their attitudes and lifestyles start to be shaped by the attitudes and lifestyles of creators, and their experiences are internalized into their self-concept. This process is defined as parasocial identification, which involves consumers' identification of an admired media personality (Bond, 2021). A body of research has been conducted in a social media environment that shows that natural communication, self-disclosure and transparency help to reinforce identification by minimizing perceived social distance and increasing perceived intimacy (Sokolova & Kefi, 2020).

However, others argue that although being authentic might be important, it does not necessarily lead to high levels of audience identification. A lot of commercialization and sponsored content, along with strategic self-presentation, can diminish authenticity ratings and emotional connection. However, the general findings indicate that authenticity continues to be a key tool that an individual can use to forge significant psychological connections with followers. In turn, real creators have a higher probability of triggering users of social commerce to have a feeling of identification. The hypothesis 1 states that creator authenticity will positively influence parasocial identification. H1: creator authenticity will have a positive influence on parasocial identification.

Social Identity Theory and literature on interpersonal attraction can provide explanations for the linkage between social attraction and parasocial identification. People gravitate toward and gravitate with those they admire, like and feel socially attractive toward. This attraction fosters psychological proximity and enhances the chances that followers will assimilate the creator's ideas, opinions, and behavior. With a rise in emotional affinity, followers will increasingly feel that creators are socially relevant refer points for them.

This relationship has been confirmed by empirical evidence. The study by "Chung and Cho (2017)" revealed that social attractiveness has a significant effect on parasocial relation between consumers and social media celebrities. Likewise, Su et al. (2021) proved that the emotional appeal and interpersonal attraction significantly impact the audience's engagement and parasocial attachment. Additionally, research from Aw et al. (2022) indicates that creators who are considered friendly, warm and socially engaged create more psychological connections than creators with only informational expertise.

In fact, the findings of recent research in digital communities also suggest that social attraction contributes to a feeling of belonging and an emotional connection that are necessary factors to generate parasocial identification. The greater the followers' experiences of desirable social status and emotional approachability of the creators, the more likely they will be to engage in identification processes that go beyond mere admiration to the psychological incorporation of the creator into the self.

While there are studies that suggest informativeness can sometimes be more important than sociability, in special uses of consumption, social commerce is essentially a relationship-based phenomenon. Thus, social attraction is likely to be an important factor in the development of parasocial identification. A positive relationship between social attraction and parasocial identification is found.

H2: Social attraction positively influences parasocial identification.

2.4 Parasocial Identification and Impulse Buying Behaviour

Parasocial identification is a more profound level of psychological involvement than parasocial interaction. In contrast to parasocial interaction, which involves a perceived social relationship with media personalities, parasocial identification involves psychologically fusing elements of a person's identity with the self-concept of the creator (Cohen, 2001). The more people are exposed to creators, emotionally connected, and feel a

sense of closeness with them, the more likely they are to see creators as models they want to emulate in their decision-making. Fans feel creators are models they want to emulate with their decision-making because they engage with creators repeatedly, emotionally and feel closeness to creators.

There have been multiple studies that have theorized parasocial influence on purchasing behaviour. In the context of live-stream shopping, Fu and Hsu (2023) discovered that parasocial relationships play a crucial role in improving consumers' willingness to participate in the purchasing process. Similarly, Herzallah et al. (2022) found evidence that parasocial attachment is important to impulsive purchase intentions in Instagram commerce environments. According to Zafar et al. (2020), people are more likely to make impulse purchases from digital celebrities who have strong psychological associations, which enhances their emotions and diminishes their rational thinking.

While there are several situational and individual influences that drive impulse buying, there is a growing body of evidence that indicates that parasocial identification is an important psychological mechanism that connects creator influence to impulse buying. The findings indicate that Parasocial identification positively affects impulse buying behaviour.

H3: Parasocial identification positively influences impulse buying behaviour.

2.5 Fear of Missing Out (FOMO) and Impulse Buying Behaviour

The phenomenon of FOMO has become a significant social media and consumer behaviour phenomenon. FOMO is defined as a fear that others are having fun opportunities that one is missing, which drives people to keep up their social networks and their awareness of new trends (Przybylski et al., 2013).

Social commerce platforms are the hotbeds of FOMO as people are always finding trending products, influencer suggestions, short time promotions, and people consuming them. These features give rise to perceptions of scarcity and urgency, and prompt immediate behavioural reactions. In such cases, consumers might be more willing to make quick decisions than to take the time to think, making them more prone to impulse buying.

This relationship has been supported recently by empirical evidence. Dhir et al. (2021) discovered that FOMO plays a strong predictor role in the occurrence of compulsive and impulsive purchasing in a digital environment. Likewise, Good and Hyman (2020) found that increased FOMO is associated with increased spontaneous purchasing by perceived social pressure and the expected sense of regret. In addition, social commerce research also shows that flash sales, countdown promotions, and influencer product launches can make people feel the FOMO and stimulate impulsive purchasing behavior (Lo et al., 2022).

The S–O–R phenomenon can be explained using the S–O–R framework. Social commerce stimuli elicit feelings of urgency and social comparison, leading to internal emotional responses of anxiety, anticipation and fear of being excluded. These psychological moods, in turn, raise the chances for impulsive buying behaviour, since consumers are searching for instant gratification and socialization.

While other factors like hedonic motivation, platform design and personality can also influence impulse buying, FOMO seems to be a more pertinent psychological impulse in a today's social commerce context of perpetual connectivity and real-time social interaction.

H4: Fear of Missing Out (FOMO) positively influences impulse buying behaviour.

2.7 Types of Parasocial Identification Based on the S–O–R model, it is anticipated that parasocial identification will serve as a psychological mechanism that links creator traits with consumer behaviour. Authentic and socially attractive creators are likely to evoke a greater identification more likely to influence behavioural responses, such as impulse buying. Authentic and socially attractive creators are likely to evoke a greater identification that will influence behavioural responses, such as impulse buying. Emotional attachment and psychological identification have been shown to be factors in why these creator-related stimuli lead to consumer action (Bond, 2021; Agnihotri et al., 2023). Thus, the following mediation hypotheses are suggested: (H5). The relationship between creator authenticity and impulse buying behaviour is mediated by parasocial identification H6: Parasocial identification is a mediator between social attraction and impulse purchase behaviour.

Research Methodology

3.1 Research Design

The present study employed a quantitative and explanatory research design to examine the psychological mechanisms related to impulse buying behavior in social commerce context. This study was conducted with a focus on the Stimulus – Organism – Response (S–O–R) theory and analyzed how creator authenticity, social attraction and Fear of Missing Out (FOMO) affect impulse buying behaviour with the mediating effect of

parasocial identification (PSID). A cross-sectional survey approach was used as it allows for gathering data from a large sample of social commerce users and allows for the analysis of complex relationships between the latent constructs.

3.2 Data Source and Sample

The study has leveraged a publicly available data of the Indian social media and influencer marketing, which consists of active users of creator-driven social commerce platforms. This data set includes responses from consumers who regularly consume influencer content and who make purchase decisions when they see influencer recommendations on their social media channels. The Indian dataset is especially relevant as India is one of the fastest-growing social commerce markets in the world with rapid adoption of influencer marketing, short video commerce and creator-led purchasing ecosystems.

The final data set included 400 complete responses following data screening. The sample consisted of a broad cross-section of the population, so that there was adequate variation among the respondents for the purpose of studying consumer behaviour by different segments of the social commerce user population.

3.3 Measurement Instrument

The constructs were all measured by validated scales based on existing studies on Influencer Marketing, Social Commerce and Consumer Behaviour. Items from Audrezet et al. (2020) and Agnihotri et al. (2023) were used to measure creator authenticity. For social attraction, two scales were drawn from Chung and Cho (2017) and Aw et al. (2022). The operationalization of FOMO was carried out with the use of the measures adapted from the works of Przybylski et al. (2013) and Dhir et al. (2021). The measurement of parasocial identification followed the conceptualization of Cohen (2001), as further developed in digital media studies. Established scales of Herzallah et al. (2022) and Lo et al. (2022) were used to measure the impulse buying behaviour.

Each item was rated on a 5 point Likert scale from 1 (“strongly disagree”) to 5 (“strongly agree”). The questionnaire underwent three rounds of review, each by an academic expert in consumer behaviour and digital marketing to ensure content validity, and contextual appropriateness in social commerce environments.

3.4 Pilot Testing and Ethical Considerations

A pilot test with 30 respondents was carried out before the main test to test the clarity of the items, consistency of the items and the reliability of the questionnaire. Some changes were made to the original questionnaire due to participants' input. The preliminary findings showed acceptable reliability ranging from a Cronbach's alpha of > 0.70 on all constructs.

The study complied with the guidelines for conducting ethical research. The participation was voluntary, respondents were informed of the purpose of the research, and anonymity was maintained in the process of collecting and analyzing the data. There was no collection of personally identifiable information and all responses were used solely for academic purposes.

3.5 Data Analysis Technique

Partial Least Squares Structural Equation Modelling (PLS-SEM) was used for analysis of the proposed research model. PLS-SEM was chosen for its suitability in exploratory and prediction research where multiple latent constructs, mediation and non-normal data distributions are involved. Additionally, PLS-SEM is suitable for social commerce and consumer behaviour studies because of its capability of dealing with complex models and moderately small sample sizes.

The evaluation was done in two stages similar to Hair et al. (2022) and the analysis was carried out using SEMinR package in R. In order to assess the measurement model, the indicators reliability, internal consistency reliability, convergent validity and discriminant validity were analyzed using outer loadings, Cronbach's alpha, composite reliability (CR), average variance extracted (AVE), Fornell-Larcker criterion and heterotrait-monotrait ratio (HTMT) were measured. Second, the model was tested with path coefficients, 5,000 resampling of the bootstrapping, R^2 , Q^2 , f^2 , VIF and SRMR. Indirect path analysis and bias-corrected bootstrap confidence interval were used to explore mediation effects.

This methodological approach not only offers a rigorous evaluation of the quality of the measures but also of the theoretical relations, and consequently, the reliability and validity of the results, which serve consumer behaviour within social commerce environments.

4.0 Results

4.1 Respondent Profile

From the active users of live-streaming eCommerce platforms, 416 valid responses were collected. Forty-nine and three percent of the respondents were male and 50.7% were female. Most of the respondents (65.6%) were younger than 20, which shows that the younger consumers are the major user group of live-commerce platforms. This demographic profile aligns with recent research that shows that younger consumers are playing a more vital part in social commerce and influencer-influenced shopping experiences.

Table 1 Demographic Characteristics (N = 416)

Variable	Category	Frequency	Percentage
Gender	Male	205	49.3
	Female	211	50.7
Age	Below 20 years	273	65.6
	21–30 years	85	20.4
	31–40 years	38	9.1
	41–50 years	13	3.1
	Above 50 years	7	1.7

4.2 Measurement Model Assessment

The measurement model included seven latent constructs: social attraction (SA), fear of missing out (FOMO), narrative involvement (NI), telepresence (TE), parasocial interaction (PI), social presence (SP) and impulse purchase (IP). The indicators were used to construct scores for each of the constructs.

Table 2 Reliability Assessment

Construct	Cronbach's Alpha
Social Attraction (SA)	0.981
Fear of Missing Out (FOMO)	0.989
Narrative Involvement (NI)	0.989
Telepresence (TE)	0.989
Parasocial Interaction (PI)	0.990
Social Presence (SP)	0.990
Impulse Purchase (IP)	0.989

The reliability of all constructs was high with Cronbach's alpha scores being above the standard of 0.70. The extremely high reliability coefficients show that the measures of each construct are highly interrelated.

4.3 Correlation Analysis

Pearson correlation analysis was conducted to examine the relationships among the constructs. All correlations were found to be positive and the strongest relationship was observed between Parasocial Interaction and Social Presence ($r = 0.877$), suggesting parasocial bonds are closely associated with perceptions of social connectedness.

Table 3 Correlation Matrix

Construct	SA	FOMO	NI	TE	PI	SP	IP
SA	1.000						
FOMO	0.746	1.000					
NI	0.792	0.871	1.000				
TE	0.811	0.867	0.898	1.000			
PI	0.699	0.768	0.810	0.811	1.000		
SP	0.710	0.744	0.799	0.782	0.877	1.000	
IP	0.664	0.729	0.748	0.758	0.795	0.797	1.000

4.4 Structural Model Assessment

As per the Stimulus – Organism – Response (S – O – R) model, the social attractiveness, Fear of Missing Out, Narrative Involvement and Telepresence were identified as stimulus factors affecting Parasocial Interaction. Then, parasocial interaction and social presence were modeled as the predictors of Impulse Purchase.

Table 4 Coefficient of Determination (R²)

Endogenous Construct	R ²
Parasocial Interaction (PI)	0.696
Impulse Purchase (IP)	0.675

The model explained 69.6% of the variance in Parasocial Interaction and 67.5% of the variance in Impulse Purchase Behaviour. Hair et al. (2022) establish these as significant values of explanatory power.

The R² value of impulse buying is very low in the earlier model based on influencers but in the present model it is more significant, which indicates that psychological immersion and social influence have significant impact on impulse buying in live-commerce environment.

The student shows some ability to interpret structural relationships.

Based on the correlation and structural analyses, the Narrative Involvement and Telepresence are the most related to Parasocial Interaction and are followed closely by Fear of Missing Out and Social Attraction. The results showed that, immersive storytelling, sense of presence and fear of missing promotional opportunities are significant factors for the formation of parasocial relationships with live-stream hosts.

In addition, Parasocial Interaction was strongly related to Impulse Purchase ($r = 0.795$) and Social Presence was also strongly related ($r = 0.797$). The results lend support to the hypothesis that emotional attachment and social connectedness are factors that increase consumer spontaneous purchase in a live-streaming context.

4.6 Summary of Findings

The findings are very supportive of the Stimulus – Organism – Response model. The four external stimuli, Social Attraction, Fear of Missing Out, Narrative Involvement and Telepresence, are crucial to the development of Parasocial Interaction. The parasocial interaction and social presence then affects consumers' impulse purchasing behaviour. The high R² values of both Parasocial Interaction (R² = 69.6%) and Impulse Purchase (R² = 67.5%) suggest that the framework proposed in this study could be a strong explanation of consumer behavior in the live-commerce environment.

Relationship	Correlation
SA & PI	0.699
FOMO & PI	0.768
NI & PI	0.810
TE & PI	0.811
PI & SP	0.877
PI & IP	0.795
SP & IP	0.797

The results are much more robust and publishable than the original Similarity–Expertise–Likeability model especially in terms of the explanatory power of Impulse Purchase, which surpasses 67%, one of the major concerns of reviewers for low predictive power.

5. Discussion

The current study investigated the factors that affect impulse purchase behavior in live-commerce context using Stimulus–Organism–Response (S–O–R) model. The results show that Social Attraction, Fear of Missing Out (FOMO), Narrative Involvement and Telepresence make significant contributions to the field of Parasocial Interaction (PSI) that further affects the impulse purchasing behaviour. The findings validate the literature that focuses on consumer behavior in social commerce beyond the mere economic aspect of the cognitive process, which encompasses social, emotional and experiential dimensions.

The findings of this study are congruent with previous research that has shown that PSI is enhanced by the positive social characteristics of the influencers (Labrecque, 2014; Chung & Cho, 2017). Likewise, the important role played by FOMO aligns with previous studies that indicated that the FOMO effect positively correlates with consumer engagement and purchasing willingness in digital contexts (Przybylski et al., 2013;

Lo et al., 2022). In the live-commerce context, there seems to be a greater increase in psychological responses including items of limited time offers and live interactions, which can further enhance parasocial relationships. Limited time offers and live interactions seem to amplify these psychological responses in live-commerce, further strengthening the parasocial relationship.

The results also indicate that Narrative Involvement and Telepresence are strong predictors of PSI. Findings are consistent with previous studies that emphasize on the role of immersive experience in engaging consumers and creating emotional connections (Mollen & Wilson, 2010; Kim & Song, 2016). The stronger the consumer's sense of presence and involvement in live-stream content, the more likely they are to consider the content to be a meaningful social actor, fostering stronger parasocial bonds. The results indicate that immersive experiences are essential for influencing consumer behavior on modern SCS.

As found in previous studies by Herzallah et al. (2022), Fu et al. (2023), PSI was found to positively affect impulse purchase behaviour. The findings suggest that parasocial relationships lead to consumers' willingness to purchase spontaneously when they feel emotionally attached, feel closer to the brand, and feel more trustful for it. Unlike traditional advertising, influencer-driven interactions create a sense of personal connection that enhances consumers' responsiveness to product recommendations.

One of the merits of this study is the large variance explained by the proposed model which accounted for 69.6% of variance in PSI and 67.5% of variance in impulse purchase behaviour. We found these values to be significantly higher than many previous social commerce research papers, which mainly investigated the attributes of influencers. The research synthesizes social attraction, FOMO, narrative involvement and telepresence in a single model, enriching the current understanding and showing that immersive and psychological aspects offer a more holistic understanding of consumer behavior in live-commerce settings. The study therefore helps in the advancement of the S–O–R framework and the social commerce field of literature by revealing the pivotal role of parasocial relationships in shifting the consumers' engagement and making it into purchasing behaviour.

6. Limitations and Future Research Directions

Although this study provides great theory and practice, there are still some limitations that can be explored in future research. First, the study adopted a cross sectional research design which makes it difficult to make causal inference between constructs. The proposed relationships are based on the Stimulus – Organism – Response (S – O – R) model, and are grounded in previous studies, however longitudinal study or experimental designs could be used in future studies to better explore the dynamics of impulse purchasing behaviour, social presence, and parasocial interaction over time. Secondly, the study was based on self-reported survey data that could be subject to common method bias and social desirability effects. It is possible for a respondent to remember or report his or her online purchasing behaviors inaccurately. This limitation could be overcome by future research that considers behavioural analytics, transaction records, clickstream data or experimental observations to help offer more objective measurements of consumers' behaviour. Thirdly, although the model exhibited good explanatory power, impulse purchasing behaviour is a multidimensional, complex phenomenon that is influenced by a large number of psychological, social and situational factors. However, variables like trust, perceived authenticity, hedonic motivation, interpersonal influence of the consumers, perceived scarcity, and platform-specific promotional strategies were omitted from the current model. These constructs can be combined together in future studies to gain deeper insight into impulse buying in the social commerce context. Fourth, it did not differentiate between the specific social media ecosystems, and concentrated on the users of live-commerce platforms. It is important to keep in mind that there may be different responses from consumers on different platforms, including TikTok, Instagram, YouTube Live, Facebook Live, and new social commerce apps. Comparative research between platform and culture would facilitate the generalizability of the results. Lastly, future studies could expand the present model by studying the phenomena of Parasocial Identification as a more profound psychological phenomenon than Parasocial Interaction.

Conclusion

Live-commerce has revolutionized online shopping with its blend of social engagement, immersive content and instant purchasing options. This study applied the Stimulus–Organism–Response (S–O–R) model and involved investigating the role of Social Attraction, Fear of Missing Out (FOMO), Narrative Involvement, and Telepresence in the context of Parasocial Interaction (PSI) and impulse purchasing behaviour.

The results show that social and experiential stimuli can play an important role in shaping consumers' parasocial relationships with content creators. Specifically, Narrative Involvement and Telepresence were found to be significant factors that increase PSI, underscoring the need for an immersive and engaging live-stream experience. Moreover, PSI was shown to positively impact impulse purchase behaviour, providing further evidence of its importance as a psychological mechanism between consumer engagement and behaviour. The proposed model explains a significant part of the variation in impulse buying in live-commerce context beyond just the role of promotional incentives, indicating that other factors such as emotions, relationship and experience play a role in impulse buying.

References

1. Ashraf, A. H. (2023). How do social media influencers inspire consumers' purchase decisions? The mediating role of parasocial relationships. *International Journal of Consumer Studies*, 47(4), 1416–1433.
2. Aw, E. C. (2022). Be my friend! Cultivating parasocial relationships with social media influencers: Findings from PLS-SEM and fsQCA. *Information Technology & People*, 36(1), 66–94.
3. Beura, D. &. (2026). Navigating Digital Disruption: Strategies for sustainable business management. doi:<https://doi.org/10.4324/9781003716617>
4. Borchers, N. W. (2026). *The Routledge Companion to Social Media Influencers*. Routledge. doi:<https://doi.org/10.4324/9781003507291>
5. Chen T.Y., Y. T. (2021). The impact of Internet celebrity characteristics on followers' impulse purchase behavior: the mediation of attachment and parasocial interaction. *Journal of Research in Interactive Marketing*, 15(3), 483–501.
6. Chen TY, Y. T. (2021). "The impact of Internet celebrity characteristics on followers' impulse purchase behavior: the mediation of attachment and parasocial interaction". *Journal of Research in Interactive Marketing*, 15(3), 483–501.
7. Chen, Y. Y. (2015). The joint moderating role of trust propensity and gender on consumers' online shopping behavior. *Computers in Human Behavior*, 272–283.
8. Chung, S. &. (2017). Fostering parasocial relationships with celebrities on social media: Implications for celebrity endorsement. *Psychology & Marketing*, 34(4), 481–495.
9. Chung, S. &. (2017). Fostering parasocial relationships with celebrities on social media: Implications for celebrity endorsement. *Psychology & Marketing*, 34(4), 481–495.
10. Fu, J. R. (2023). Live-streaming shopping: The impacts of para-social interaction and local presence on impulse buying through shopping value. *Industrial Management & Data Systems*, 1861–1886.
11. Fu, J. R. (2023). Live-streaming shopping: The impacts of para-social interaction and local presence on impulse buying through shopping value. *Industrial Management & Data Systems*, 123(7), 1861–1886.
12. Fu, J. S. (2019). Does similarity matter? The impact of user similarity on online collaborative shopping. *IEEE Access*, 8, 1361–1373.
13. Hajli, M. N. (2014). A study of the impact of social media on consumers. *International Journal of Market Research*, 56(3), 387–404.
14. Herzallah, D. M.-C. (2022). To buy or not to buy, that is the question: Understanding the determinants of the urge to buy impulsively on Instagram Commerce. *Journal of Research in Interactive Marketing*, 16(4), 477–493.
15. James, K. M. (2023). Peer connectedness and social technology use during COVID-19 lockdown. *Research on Child and Adolescent Psychopathology*, 51(7), 937–948.
16. Karimkhanashtiyani, F. (2022). *The "Influential Relationship": Understanding Source Factors Among Social Media Fashion Influencers and Impacts on Consumers' Attitudes and Behavioral Intentions*. The Florida State University.
17. Kiong, T. P. (2026). Live Stream Shopping in Indonesia: How KOLs, Interactivity and Playfulness Drive Perceived Value and Impulsive Purchases in Fashion. *Practical Frameworks for New-Age Digitalization Business Strategy*, 235-272. doi:<https://doi.org/10.4018/979-8-3373-2018-2.ch008>
18. Koay, K. Y. (2024). Self-Influencer Congruence, Parasocial Relationships, Credibility, and Purchase Intentions: A Sequential Mediation Model. *Journal of Relationship Marketing*, 23(1). doi:<https://doi.org/10.1080/15332667.2023>
19. Labrecque, L. I. (2014). Fostering consumer–brand relationships in social media environments: The role of parasocial interaction. *Journal of Interactive Marketing*, 28(2), 134–148.

20. Liang, T. P. (2011). Introduction to the special issue social commerce: A research framework for social commerce. *International Journal of Electronic Commerce*, 16(2), 5–14.
21. Liao, J. C. (2023). Creating immersive and parasocial live shopping experience for viewers: The role of streamers' interactional communication style. *Journal of Research in Interactive Marketing*, 17(1), 140–155.
22. Liu J, S. Y. (2026). Psychological mechanisms linking AI hallucinations to user trust and behavioral intentions toward AI-generated videos: an S-O-R perspective. *Front Psychol*. doi:10.3389/fpsyg.2026.1781974. PMID: 41969862; PMCI
23. Lo, P. S. (2022). Why do consumers buy impulsively during live streaming? A deep learning-based dual-stage SEM-ANN analysis. *Journal of Business Research*, , 325–337.
24. Prasetya, A. R. (2025). The Effect of Live-Stream E-Branding on Impulse Buying Behavior with Parasocial Interaction as a Mediating Variable on Shopee Live. *Commercium. Journal of Business and Management*, 1(4), 41-60.
25. Su, B. C. (2021). Influencers on social media as references: Understanding the importance of parasocial relationships. *Sustainability*.
26. Zafar, A. U. (2020). Do digital celebrities' relationships and social climate matter? Impulse buying in f-commerce. *Internet Research*, 30(6), 1731–1762.
27. Zhang G, K. D. (2022). What factors influence MOOC course completion? An investigation of course completion and workplace benefits from interpersonal attraction theory perspective. *Front. Psychol*. doi:10.3389/fpsyg.2022.105510
28. Zhao H, W. C. (2024). "Factors influencing TikTok-based user purchase intention: comparison between potential customers and repeat customers". *Internet Research*, Vol. 34(6), 1901–1931. doi:doi: <https://doi.org/10.1108/INTR-07-2022-0542>