



MEDIA CONNECTION TO MARKET ACTION: ROLE OF PARASOCIAL INTERACTION IN IMPULSE BUYING ON SOCIAL COMMERCE PLATFORMS

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ABSTRACT

Impulse buying, is sudden and emotionally driven purchase decisions, has become increasingly dominant in the internet age, mainly on Social Commerce Platforms (SCPs) such as Facebook, YouTube and Instagram. While traditionally viewed as irrational, recent research recognizes impulse buying as a significant driver of online sales. In the Indian context – marked by rapid digital growth and a projected \$300 billion e-commerce market by 2030 – understanding this behaviour is both timely and relevant. This study fills the gap in the literature by examining the psychological, affective, and para-social triggers of impulse buying among Indian consumers, using the Stimulus-Organism-Response (S-O-R) framework integrated with Para-social Interaction (PSI) theory.

Data was collected from 425 respondents across Punjab and Chandigarh through structured questionnaires. Partial Least Squares Structural Equation Modelling (PLS-SEM) is used for analysis. The findings confirm the reliability and validity of the model and support the hypothesized relationships. PSI significantly influenced Urge to Buy Impulsively (UBI), Impulse Buying Tendency (IMBT), and Actual Impulse Buying Behaviour (AIBB). Strong complementary mediation effects were identified in paths such as $PSI \rightarrow IMBT \rightarrow UBI \rightarrow AIBB$, emphasizing the layered nature of impulsive purchase decisions.

The study offers practical implications for marketers and SCP designers by highlighting the importance of aesthetic appeal, influencer credibility, and emotionally engaging content. It also extends the S-O-R model by mixing PSI, offering a richer understanding of online consumer behaviour in emerging markets. Future research should examine longitudinal effects, platform-specific variations, and cross-cultural comparisons to deepen insights into impulse buying dynamics.

Keywords: Para Social Interaction, Stimulus Organism Response, Urge to Buy Impulsively, Impulse Buying Tendency, Social Commerce Platforms

1. INTRODUCTION

Impulse buying is widely understood as a spontaneous, emotionally driven purchase made with little deliberation or consideration of alternatives (Parboteeah et al., 2009; Rook, 1987). Earlier conceptualizations framed it simply as "unplanned buying," referring to purchases not originally intended (Stern, 1962). Though traditionally viewed as a negative or irrational aspect of consumer behaviour (Kalla & Arora, 2011), impulse buying plays a substantial economic role.

Impulse buying is influenced by different factors that span psychological, emotional, and situational domains. Personality characters and an individual's ability to control itself affect impulsive tendencies, while emotional quotient and the pleasure derived from v heighten the visiting social media increases the chances of spontaneous purchases. Situational elements, such as limited time or the convenience of shopping environments, also play a role. Researchers have explored how impulse buying differs from planned decision-

making and highlighted the influence of positive and negative reactions, as well as cultural norms. Broadly, the motivations behind impulse buying are classified into external factors—like store layout, product displays, and sensory stimuli—and internal factors, such as mood enhancement or stress relief. More recently, boredom and the desire for sensory stimulation have emerged as key intrinsic drivers of impulsive behaviour.

India's e-commerce landscape is undergoing rapid transformation, with the market expected to reach USD 345 billion by 2030 and USD 550 billion by 2035, driven by rising smartphone use, urban adoption, and growing internet penetration. The business on Social Commerce Platforms (SCPs) is evolving as an important growth driver, which is projected to grow and has a potential to reach USD 70 billion by 2030 (IBEF, 2025). Government initiatives of Digital India and the E-commerce Policy are increasing this digital move. As more consumers turn to online platforms, shopping behaviours are changing, with impulse buying becoming more prevalent due to the removal of physical store constraints.

1.1 Para Social Interaction

The idea of Para Social Interaction (PSI), first introduced by Horton and Wohl (1956), denotes the illusion of a reciprocal relationship experienced by media audiences toward media personalities. Initially examined in television and radio contexts (Rubin & McHugh, 1987), PSI has evolved to encompass digital environments, where consumers develop similar one-sided connections with online figures (Fu et al., 2019). In the realm of e-commerce, PSI has been adapted to understand user behaviour on websites (Hoerner, 1999) and the influence of active SCPs users on passive users (Xiang et al., 2016). PSI enhances user connect by creating a sense of association with co-users, experts, celebrities etc., (Rubin et al., 1985; Park & Lennon, 2006), often influencing buying behaviour (Fu et al., 2019). These platforms combine social interaction with business motives, as evident on SCPs, where opinion of fellow users profoundly impact decisions of consumers (Kim & Park, 2013). Earlier studies fail to capture the socially driven nature of SCPs as such models are only based on website content, visuals that are elements

rooted in traditional e-commerce (Parboteeah et al., 2009).

As a result, there is an imperative need for up gradation of theoretical frameworks that should include PSI and social dynamics that would result in better understanding of consumer impulse buying behaviour on social commerce platforms. In India there is dearth of studies on where role of Urge to buy or Impulse Buying Tendency (IMBT) is not explored in detail. The concentration of earlier research work was mainly on demographics and FMCG sector. Additionally, social commerce platforms (SCPs) such as YouTube, Facebook and Instagram are becoming conducive for Social Interaction amongst users, its role in enhancing impulse buying in the Indian context is not much examined. This highlights a critical gap in understanding the psychological and motivational factors behind impulse buying in India's rapidly evolving digital ecosystem. The following objectives are proposed

- 1) To examine the impact of Para Social Interaction (PSI) on Impulse Buying Behaviour.
- 2) To study key mediation effects between Para Social interaction (PSI) and Impulse buying Behaviour

2. LITERATURE REVIEW

2.1 Social Commerce Platforms (SCPs)

A review of existing literature discloses that majority of the research on online impulse buying has engrossed on the influence of website-related stimuli, such as system design (Shen & Khalifa, 2012), navigability (Floh & Madlberger, 2013), usability (Liu et al., 2013), and social cues like the number of likes (Chen et al., 2016). However, very few studies have empirically scrutinized impulse buying on the SCPs, leaving a scope for further research how these platforms affect consumer behaviour. Although prior research has contributed to identifying website features that influence shoppers and tested the applicability of traditional retail theories online, yet inconsistent definitions and measurement approaches have resulted in fragmented insights. Thus, the current study builds on the existing work and advances it by applying a refined theoretical framework to better understand impulse buying in the evolving subject of social commerce.

2.2 Stimulus-Organism-Response (S-O-R) model

Earlier research has extensively applied the Stimulus-Organism-Response (S-O-R) model to examine how environmental cues in online retail environments influence consumers' internal states and drive impulse buying behaviour, including spontaneous urges and unplanned purchases (Abdelsalam et al., Chan et al., 2017; 2020; Redine et al., 2023). Entrenched in environmental psychology (Mehrabian & Russell, 1974), this theory postulates that external factors (S) activate internal mental or emotional responses (O), leading to visible behaviours (R) (Zhou, 2019). In this study, external triggers are presented as Society-Related (SR) socially relevant features such as PSI. These external triggers influence organism-level reactions such as perceived enjoyment (Koufaris, 2002, Sun & Zhang, 2006;). The final output in the form of response in the model is replicated in the impulse buying behaviour of the SCPs users.

2.3 Impulse Buying Behaviour

Impulse buying behaviour is prompted by an unexpected and spur-of-the-moment urges that comes on the surface when a consumer comes across some external factors at the time of shopping (Beatty & Ferrell., 1998; Rook, 1987). The researchers have defined this phenomenon of impulsive buying tendency as a robust factor of impulsive behaviour as compared to actual buying (Dutta et al., 2003). Perceived enjoyment plays a significant role in this process, as consumers who find pleasure in browsing online are more likely to make unplanned purchases (Adelaar et al., 2003). Para-social interaction (PSI), created at the time of watching television can lead to impulsive buying behaviour as the spectator creates a bond with TV personality or celebrity being watched (Stasi, 1988; Park & Lennon, 2006). Additionally, people with a strong degree of impulsiveness are more prone to feel urge to buy impulsively in both offline and online shopping environment (Adelaar et al., 2003, Wells et al., 2011). It highlights the strong relationship of personal traits and emotional engagement resulting in impulse buying behaviour.

PSI helps us keep a grasp of the fact that how cognitive reactions occurs in the minds of users of SCPs when they find reviews ratings and comments of fellow users, friends, experts

and influencers; that ultimately determines their buying behaviour. This understating is essential in the time of fast changing digital environment. The examination of all these factors that how PSI impacts impulsive buying behaviour in India a country full of different cultures and demography will help better understand the present phenomenon. The findings may either strengthen or contest existing theories, and will provide new understandings of the relationship created on SCPs leading to impulse buying behaviour that are triggered by PSI.

3. CONCEPTUAL FRAMEWORK

This study has applied the S-O-R theoretical framework to study how PSI affects cognitive mind and ultimately has an impact on behaviour that leads to online impulse buying. This framework is helpful in scrutinizing how external triggers such as Society-Related factors(S) influences mental process in an individual (O) that results in a behavioural response (R). The paper examines how PSI acts as a stimulus that affects impulse buying tendency and urge to buy leading to actual buying behaviour.

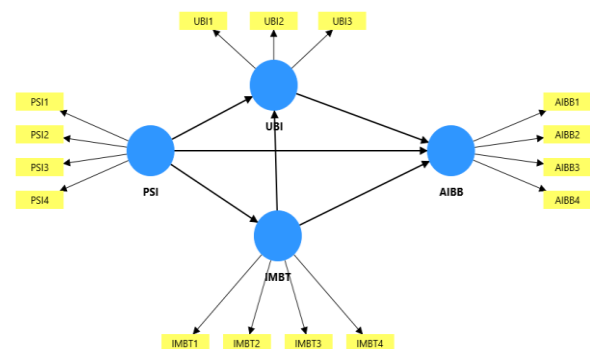


Figure 1: The Conceptual Framework

4. HYPOTHESES

4.1 Effect of Para Social Interaction on Impulsive Buying Tendency and Urge to buy impulsively

Parasocial interaction (PSI), is a one-sided association, that a viewers of digital media forms with TV celebrities or fellow users or influencers. The link has been examined in traditional media. Early research (Grant et al., 1991) exhibited that the presentation skills of TV hosts or celebrities nurtured PSI, leading to impulse buying behaviour. There are confirmation of PSI leading to impulse buying in literature in television shopping environment (Park and Lennon 2004). Similarly, the evidence was found that

different TV shows and engagement of viewers with its host lead to increased impulsive buying (Vazquez et al. (2020). The efforts have also been made to explore this relationship amongst the users of social commerce platforms (SCPs) (Xiang et al., 2016; Arviansyah, 2018). Various studies found that engagement of users on SCPs has lead to increase in forming of Para Social Integrations and ultimately impulsive buying (Lee and Gan (020; Fu and Hsu (2023). Platforms like Instagram and Facebook helps and encourage direct interaction amongst its users as compared to traditional media. It results in a strong relationship of bonding and trust. These feeling prompt users to track and follow other users whom they feel are similar, likeable and have an expertise. This feeling of familiarity leads them towards impulse buying decisions. This puts PSI as a construct in a strong position that is needed to be further examined and explored for understanding impulse buying behaviour. The research has also examined actual impulse buying as ultimate object. Where impulse buying tendencies and urge to buy as other important constructs leading to impulse buying. (Leong et al., 2018; Alizadeh, 2019; Zafar et al., 2020). Keeping in view the same, the following hypotheses are proposed:

- H1: Parasocial Interactions (PSI) of users on social commerce platforms (SCPs) have an impact on their Urge to Buy Impulsively (UBI).
- H2: Parasocial Interactions (PSI) of users on Social Commerce Platforms (SCPs). have an impact on their Impulse Buying Tendency (IMBT).
- H3: Parasocial Interactions (PSI) of users on Social Commerce Platforms (SCPs). have an impact on their Actual Impulse Buying Behaviour (AIBB).

4.2 Relationship between Impulsive Buying Tendency and Urge to Buy Impulsively

Impulse Buying Tendency (IMBT) is the degree to which individuals are likely to make spontaneous, unplanned purchases driven by sudden urges and minimal deliberation (Jones et al., 2003; Beatty & Ferrell, 1998). The degree of impulsiveness is different for different individuals and is dependent on personality and other factors in the environment like website quality, visual appeal and store environment (Rook & Fisher, 1995; Flight et

al., 2012). In social commerce platforms (SCPs), such factors have an impact on buying urges, making users with higher degree of impulsiveness more vulnerable to impulsive buying. The following hypotheses is proposed

- **H4: Impulse Buying Tendency (IMBT) of users of Social Commerce Platforms (SCPs) influences their Urge to Buy Impulsively (UBI)**

4.3 Relationship between Urge to Buy Impulsively and Actual Impulse Buying Behaviour

Urge to buy impulsively is a unplanned, spontaneous desire that is activated by coming across a stimuli, and leads to actual impulsive buying. (Beatty and Ferrell 1998). Impulsive buying Behavior is considered as a on the spot decision making without planning and evaluating anything (Karbasivar & Yarahmadi, 2011). Theory of Reasoned Action (Hale et al., 2002), states that human urges and impulsiveness takes precedence over reasoning while encountering something in the shopping environment. The degree of impulsiveness will determine the future action, if degree is stronger the chances are more that decision will be made devoid of any further consideration of merit (Ajzen & Madden, 1986; Venkatesh et al., 2008). Earlier literature has revealed a reasonable correlation between intention and behaviour (Sheppard et al., 1988; Albarracin et al., 2001). Hirschman (1985) suggests that cognitive mind can trigger impulsive tendencies, which quickly spirals to a compelling urge leading to immediate action. This urge is qualified as the antecedent to impulsive buying. Store environment, physical visit to store, increases the urge and thus impulsive purchases (Beatty & Ferrell, 1998). Based on this, the following hypotheses is projected:

- **H5: Urge to Buy Impulsively (UBI) of users' positively influences their Actual Impulsive Buying Behaviour (AIBB) on Social Commerce Platforms (SCPs).**

4.4 Relationship between Impulse Buying Tendency (IMBT) and Actual Impulse Buying Behaviour (AIBB)

Impulse Buying Tendency (IMBT) is an individual's propensity to make spontaneous, instantaneous, and unplanned purchases (Jones et al., 2003), with varying degrees of

impulsivity observed across consumers (Rook & Fisher, 1995; Weun et al., 1998). IMBT gives a degree of likelihood of a person to buy spontaneously without giving further thought. In contrast, impulsive buying behaviour is described as a spontaneous purchase decisions motivated by a stimulating factor or environment, without careful assessment of other options (Karbasivar & Yarahmadi, 2011). Previous studies reveal that people with higher degree of impulsiveness (IMBT) feel stronger urges and are more likely to indulge in spontaneous buying (Dawson & Kim, 2009; Mohan et al., 2013). Various research works have corroborated the positive connection between IMBT and AIBB (Badgaiyan et al., 2016; Cavazos & Máñez, 2022; Chih, 2012; Parsad et al., 2017, 2021). As, IMBT as a construct has been given importance in studying behavioural traits of the people, this study has included it to scrutinize its impact on online impulse buying behaviour on Social Commerce Platforms (SCPs). The present work is an attempt to understand the relationship between buyers impulses or urges on actual buying behaviour.

Accordingly, the following hypothesis is proposed:

- **H6: Impulse Buying Tendency (IMBT) positively affects Actual Impulsive Buying Behaviour (AIBB) on SCPs.**

Other Mediation Hypotheses

- **H7: Urge To Buy Impulsively (UBI) mediates the relationship between Impulse Buying Tendency (IMBT) and Actual Impulsive Buying Behaviour (AIBB) on SCPs.**
- **H8: Urge to Buy Impulsively (UBI) mediates between Para Social Interaction (PSI) and Actual Impulse Buying Behaviour (AIBB).**
- **H9: Impulse Buying Tendency (IMBT) mediates between Para Social Interaction (PSI) and Actual Impulse Buying Behaviour (AIBB).**
- **H10: Impulse Buying Tendency (IMBT) mediates between Para Social Interaction (PSI) and Urge to Buy Impulsively (UBI).**
- **H11: Impulse Buying Tendency (IMBT) and Urge to buy impulsively (UBI) act as serial mediators between the relationship between (PSI) and Actual Impulse Buying Behaviour (AIBB)**

5. RESEARCH METHODOLOGY

The objective of the study is to scrutinize online impulse buying behaviour of users of social commerce platforms. The universe of the study is Global population. However, due to practical constraints, the focus narrows to Indian internet users, forming the sampling frame. As no reliable list of users exists, a non-probability purposive sampling method is employed (Suryani & Herianti, 2023; Wuisan & Handra, 2023) selecting participants based on relevance and experience with social commerce platforms. The sampling strategy uses logical demographic criteria, such as census data and internet user density (Lok Sabha, 2023). Determining the sample size involved the "10-times rule" and power analysis via G*Power, resulting in a final target of 500 participants. Data was collected using a seven-point Likert scale across Chandigarh and six major cities from Punjab's three key regions—Majha, Malwa, and Doaba. Participants were chosen proportionally to district populations and surveyed at major shopping areas markets (Leong et al., 2018; Parsad et al., 2021), ensuring they likely had purchasing power and internet access. A screening question filtered relevant respondents. Out of 790 surveys distributed, 496 responses were received (62.78% response rate), and after data cleaning, 425 valid responses (233 women, 192 men) were included for further analysis.

A two-phase pre-testing was carried out to ensure clarity and content validity of the questionnaire, involving 15 experts and 5 potential respondents, followed by revisions and a second round with 5 additional participants. Feedback helped refine the instrument to eliminate ambiguities. A pilot study was then carried out with 50 individuals engaged in online shopping to assess content and test-retest reliability. Cronbach's Alpha and inter-class correlation coefficients both exceeded 0.70, confirming strong internal consistency and reliability of the instrument over time.

This study employs Partial Least Squares Structural Equation Modelling (PLS-SEM) using Smart PLS-4 software, suitable for its exploratory nature and the emerging context of social commerce platforms in India. PLS-SEM is ideal for handling non-normal data, multicollinearity, and missing values, and

follows three steps: estimating latent variable scores, calculating inner weights, and refining estimates. It is chosen over CB-SEM as the focus is on theory development rather than theory confirmation.

6. RESULTS

Reliability is evaluated using factor loadings above 0.708 (Hair et al., 2019; 2022), along with internal consistency and composite reliability, both of which should exceed 0.70 to ensure consistent measurement. Validity comprises two main aspects: convergent validity, measured with the help of Average Variance Extracted (AVE) with a standard value of 0.50, and discriminant validity, determined using cross loadings and the Fornell & Larcker criterion. Together, these indicators confirm that the constructs are both consistently and accurately measured, thereby strengthening the credibility and robustness of the research model.

6.1 Table 1 Assessment of Measurement Model

	Factor Loading	Cronbach's Alpha	Composite Reliability		Average variance extracted (AVE)
			(rho_a)	(rho_c)	
AIBB		0.787	0.788	0.862	0.611
AIBB1	0.774				
AIBB2	0.777				
AIBB3	0.772				
AIBB4	0.803				
IMBT		0.822	0.83	0.882	0.652
IMBT1	0.809				
IMBT2	0.814				
IMBT3	0.767				
IMBT4	0.839				
PSI		0.81	0.811	0.875	0.637
PSI1	0.799				
PSI2	0.795				
PSI3	0.821				
PSI4	0.778				
UBI		0.787	0.787	0.876	0.701
UBI1	0.829				
UBI2	0.852				
UBI3	0.831				

All indicator loadings in the model exceed the 0.708 threshold, demonstrating sufficient indicator reliability (Sarstedt et al., 2017). Internal consistency is established by Cronbach's Alpha values above 0.70 for all constructs (Cronbach, 1951), while composite reliability—assessed via Omega-a (ρ_a) for unidimensional scales and Omega-c (ρ_c) for multidimensional scales—also exceeds 0.70

across the board (Dijkstra, 2014; Dijkstra & Henseler, 2015a, 2015b; Jöreskog, 1971). Convergent validity is confirmed by Average Variance Extracted (AVE) values above 0.50 for every construct (Fornell & Larcker, 1981; Ringle et al., 2023).

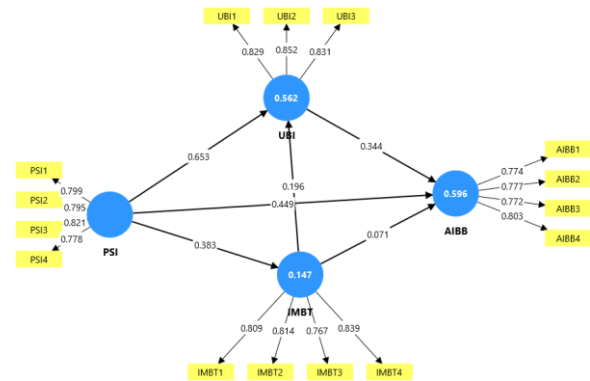


Figure-2 Confirmatory Composite Analysis Results

Discriminant validity is established with the help of cross-loading analyses and the Fornell-Larcker criterion, ensuring that constructs remain distinct (Campbell, 1960;; Rönkkö & Cho, 2020).

Table 2 Discriminant Validity Cross Loadings

AIBB1	0.774	0.246	0.606	0.604
AIBB2	0.777	0.256	0.554	0.544
AIBB3	0.772	0.339	0.542	0.495
AIBB4	0.803	0.401	0.564	0.546
IMBT1	0.302	0.809	0.309	0.356
IMBT2	0.338	0.814	0.297	0.366
IMBT3	0.288	0.767	0.252	0.306
IMBT4	0.346	0.839	0.366	0.403
PSI1	0.542	0.275	0.799	0.553
PSI2	0.595	0.316	0.795	0.597
PSI3	0.618	0.301	0.821	0.597
PSI4	0.560	0.329	0.778	0.573
UBI1	0.612	0.323	0.628	0.829
UBI2	0.569	0.439	0.575	0.852
UBI3	0.582	0.361	0.623	0.831

The table illustrates the association of statements asked and its respective constructs. It reveals that the statements are strongly linked with the constructs which they are proposed to measure. Moreover, different construct shows the weak correlations with other constructs leading to the conclusion that

each construct is different and correctly measured. This leads to establishing discriminant validity.

Table 3 Discriminant Validity Fornell-Larcker criterion

	AIBB	IMBT	PSI	UBI
AIBB	0.781			
IMBT	0.396	0.807		
PSI	0.727	0.383	0.798	
UBI	0.702	0.446	0.728	0.837

6.2 R Square

R-squared (R^2) is the percentage of variance that is explained in the dependent variable with the help of independent variables. It explain the explanatory power of the model under study. However, it must be understood in the framework and circumstances of each study. It may construe different meaning at different times for example a very high R^2 values may point to over fitting, and may lack generalisation of results. (Hair et al., 2019). This study presents a R^2 value of 59.6%, signifying that the model been explained to a reasonable extent. Both values of R^2 and adjusted R^2 support the fact that the model is able to capture the variance in the data in an adequate manner.

Table 4 R Square

	R-square	R-square adjusted
AIBB	.596	.593
IMBT	.147	.145
UBI	.562	.560

Table 5 Model Fit

	Saturated model	Estimated model	Decision	Citation
SRMR	0.064	0.064	Accepted	Henseler et al., (2014)
d_ULS	0.498	0.498	Accepted	Dijkstra and Henseler (2015b)
d_G	0.193	0.193	Accepted	Dijkstra and Henseler (2015b)
Chi-square	474.529	474.529	Accepted	Dijkstra & Henseler (2015b)

This study make use of variance-based Structural Equation Modelling (SEM), it has evaluated the fitness of the model by

examining the model-implied correlation matrix with the actual correlation in the data. As most of the values are within threshold limits the model is fit.

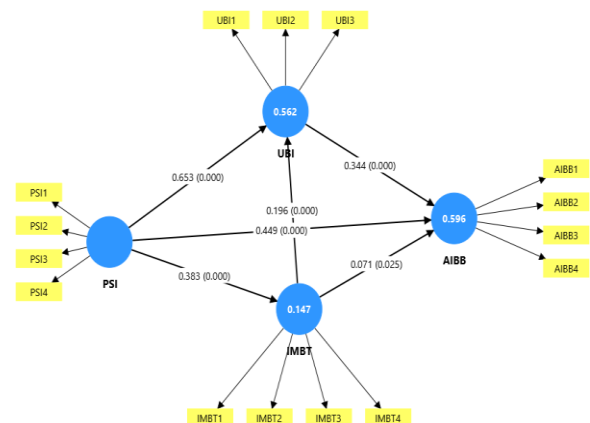
6.3 Assessment of Structural Model

Path coefficients show the power of associations between variables, similar to standardized betas in regression. The accuracy of any path model, especially in PLS-SEM, depends heavily on sound measurement theory. To assess the reliability of results, bootstrapping is used to estimate standard errors and t-values without assuming a specific data distribution, helping determine the significance of model components.

Table 6 Hypotheses Testing

Direct Effect	Original sample (O) Beta (β)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values	hypotheses supported
PSI -> UBI	.653	.027	24.035	0.000	Yes (H ₁)
PSI -> IMBT	.383	.051	7.569	0.000	Yes (H ₂)
PSI -> AIBB	.449	.047	9.559	0.000	Yes (H ₃)
IMBT -> UBI	.196	.032	6.176	0.000	Yes (H ₄)
UBI -> AIBB	.344	.053	6.515	0.000	Yes (H ₅)
IMBT -> AIBB	0.071	0.036	1.955	0.025	supported (H ₆)

Figure 3 Structure Equation Model



6.4 Mediation in the Model

Mediation describes the change in relationship between an independent variable and dependent variable affected by a third variable called a mediator. The mediator acts as a bridge in this relationship, explaining the indirect pathway through which X influences Y (Baron & Kenny, 1986).

Table 7 Mediation Effect

	Effect	Beta (β)	T Stat	P values	Hypothesis Supported	Type of Mediation
IMBT -> AIBB	Direct Effect	0.071	1.955	0.025	Yes (H ₆)	Complementary Partial mediation
IMBT -> UBI -> AIBB	Indirect Effect	0.067	4.433	0.000	Yes (H ₇)	
PSI -> AIBB	Direct Effect	0.449	9.559	0.000	Yes (H ₃)	Complementary Partial mediation
PSI -> UBI -> AIBB	Indirect Effect	0.224	6.073	0.000	Yes (H ₈)	
PSI -> IMBT -> AIBB	Indirect Effect	0.027	1.790	0.037	Yes (H ₉)	
PSI -> IMBT -> UBI -> AIBB	Indirect Effect	0.026	3.662	0.000	Yes (H ₁₁)	
PSI -> UBI	Direct Effect	0.653	24.035	0.000	Yes (H ₁)	Complementary Partial mediation
PSI -> IMBT -> UBI	Indirect Effect	0.075	4.557	0.000	Yes (H ₁₀)	

A significant direct effect is found between IMBT -> AIBB. It is further complemented with significant indirect effect in IMBT -> UBI -> AIBB. Similarly, direct effect in PSI -> AIBB is significant and indirect effect in PSI -> UBI -> AIBB, PSI -> IMBT -> AIBB and PSI -> IMBT -> UBI -> AIBB is also found to be significant leading to conclusion that there is presence of partial mediation. Both direct relation of PSI to UBI and also through IMBT is found to be significant. According to Zhao et al. (2010), this indicates that there is presence of partial mediation. Since the sign of direct and indirect path coefficient is also same it will be termed as complementary partial mediation (Hair et al., 2022).

7. THEORETICAL CONTRIBUTIONS

This study is conducted in Punjab and Chandigarh, provides valuable information regarding the consumer behaviour in emerging markets, as a contrast to earlier research which were concentrated on developed Western countries. It presents a robust and validated model, with a high explanatory power ($R^2 = 59.6\%$), confirming the reliability of its findings. By extending the Stimulus-Organism-Response (S-O-R) framework, the study delivers a complete understanding of impulse buying behaviour on social commerce platforms.

A key contribution is the identification of new direct and mediated paths involving Para-social Interaction (PSI), which significantly impacts the urge to buy impulsively (UBI), impulse buying tendency (IBT), and actual impulse buying behaviour (AIBB). These findings support all hypotheses and mediation pathways emphasizing PSI's pivotal role in shaping online consumer behaviour.

8. PRACTICAL CONTRIBUTIONS

This study offers some suggestions for encouraging impulse buying on Social Commerce Platforms (SCPs), particularly in emerging markets. It highlights the importance of user-generated reviews, comments, and advice to enhance the shopping experience. SCPs significantly influence purchase decisions, with users often making impulse purchases based on shared content. To take advantage of this, marketers should join forces with influencers and incentivize users to contribute valuable content through rewards like coupons or status upgrades. A novel contribution of the study is the role of Para-social Interaction (PSI), which directly impacts urge to buy impulsively (UBI), impulse buying tendency (IMBT), and actual impulse buying behaviour (AIBB). Online marketers are advised to improve visual appeal of their portals, platform features, and relevant content to take advantage of PSI and stimulate consumer impulses.

9. LIMITATIONS & DIRECTION FOR FUTURE RESEARCH

This is an exploratory investigation, that focused on select aspects of SCP usage and user's emotional interaction, meaning broader behavioural dimensions remain unexplored. The findings are engrossed the S-O-R framework and may not generalize across other theoretical models which could yield different insights. Additionally, the study's geographic scope is limited to one state and union territory that restricts generalizability, hence, generalising the results to other regions or cultures should be done with caution. Future research should include a other variables, such as design of online SCPs, detailed demographic features of the

respondents, and individual motivational factors. This inclusion will enhance the comprehensiveness and explanatory power of the model, offering a deeper comprehension of the dynamics driving impulse buying behaviour.

10. CONCLUSION

This study explores the factors driving impulse buying on Social Commerce Platforms (SCPs), focusing on users in Punjab and Chandigarh. The study adopted Stimulus-Organism-Response (S-O-R) model, to examine the PSI-related influences on actual impulse buying behaviour (AIBB). The model, tested using PLS-SEM, explains 59.6% of the variance in AIBB, confirming strong predictive validity. Key findings show that para-social interaction (PSI) significantly influence urge to buy impulsively (UBI), and impulse buying tendency (IMBT), which in turn drive AIBB. PSI emerged as a distinct and powerful factor, showing how emotional connections with influencers or peers impact buying decisions. Serial mediation paths (e.g., through IMBT and UBI) were also validated. The study enhances understanding of online impulse buying in emerging economies like India and suggests marketing strategies such as influencer partnerships, engaging visuals, and improved mobile applications. It also notes limitations, including its cross-sectional nature, and encourages future longitudinal research and broader variable inclusion.

REFERENCES

- Abdelsalam, S., Salim, N., Alias, R. A., & Husain, O. (2020). Understanding online impulse buying behavior in social commerce: A systematic literature review. *IEEE Access*, 8, 89041–89058.
- Adelaar, T., Chang, S., Lancendorfer, K. M., Lee, B., and Morimoto, M. (2003). Effects of media formats on emotions and impulse buying intent. *Journal of Information Technology*, 18(4), 247-266.
- Ajzen, I., & Madden, T. J. (1986). Prediction of goal-directed behavior: Attitudes, intentions, and perceived behavioral control. *Journal of experimental social psychology*, 22(5), 453-474.
- Albarracín, D., Johnson, B. T., Fishbein, M., & Muellerleile, P. A. (2001). Theories of reasoned action and planned behavior as models of condom use: A meta-analysis. *Psychological Bulletin*, 127(1), 142–161.
- Alizadeh, H. (2019). Analysis of the effect of para-social interactions on impulse buying behavior in social commerce: Case study of baby clothing stores. *Asian journal of management sciences & education*, 8(2), 113-122.
- Arviansyah, Dhaneswara, A. P., Hidayanto, A. N., & Zhu, Y. Q. (2018). Vlogging: Trigger to Impulse Buying Behaviors. *PACIS*, 249.
- Badgaiyan, A. J., Verma, A., & Dixit, S. (2016). Impulsive buying tendency: Measuring important relationships with a new perspective and an indigenous scale. *IIMB Management Review*, 28(4), 186–199. doi:10.1016/j.iimb.2016.08.009
- Ballantine, P. W., and Martin, B. A. (2005). Forming parasocial relationships in online communities. *ACR North American Advances*.
- Baron, R. M. and Kenny, D. A. (1986), "The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic and Statistical Considerations", *Journal of Personality and Social Psychology*, Vol. 51 No. 6, pp. 1173-1182.
- Beatty, S. E. and Ferrell M. E. (1998), "Impulsive Buying: Modeling Its Precursors", *Journal of Retailing* Vol. 74 No. 2, pp. 169-191
- Campbell, D. T. (1960). Recommendations for APA test standards regarding construct, trait, or discriminant validity. *American Psychologist*, 15(8), 546–553. <https://doi.org/10.1037/h0048255>
- Cavazos-Arroyo, J., & Máyne-Guaderrama, A. I. (2022). Antecedents of online impulse buying: An analysis of gender and centennials' and millennials' perspectives. *Journal of theoretical and applied electronic commerce research*, 17(1), 122-137.
- Chan, T. K., Cheung, C. M., & Lee, Z. W. (2017). The state of online impulse-buying research: A literature analysis. *Information & Management*, 54(2), 204-217.
- Chen, J. V., Su, B. C., and Widjaja, A. E. (2016). Facebook C2C social commerce: A study

- of online impulse buying. *Decision Support Systems*, 83, 57-69.
- Chih, W. H., Wu, C. H. J., & Li, H. J. (2012). The antecedents of consumer online buying impulsiveness on a travel website: Individual internal factor perspectives. *Journal of Travel and Tourism Marketing*, 29(5), 430-443
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *psychometrika*, 16(3), 297-334.
- Dawson, S., & Kim, M. (2009). External and internal trigger cues of impulse buying online. *Direct Marketing: An International Journal*, 3(1), 20-34. <http://dx.doi.org/10.1108/17505930910945714>
- Dijkstra, T. K. (2014). PLS' Janus face-response to professor Rigdon's 'rethinking partial least squares modelling: In praise of simple methods. *Long Range Planning*, 47(3), 146-153.
- Dijkstra, T. K., & Henseler, J. (2015a). Consistent partial least squares path modeling. *MIS Quarterly*, 39(2), 297-316.
- Dijkstra, T. K. and Henseler, J. (2015b). Consistent and Asymptotically Normal PLS Estimators for Linear Structural Equations, *Computational Statistics & Data Analysis*, 81(1): 10-23.
- Dutta, R., Jarvenpaa, S., Tomak, K., March, S., Massey, A., & DeGross, J. (2003). Impact of feedback and usability of online payment processes on consumer decision making. In *Proceedings of the 24 the international conference in information systems* (pp. 15-24).
- Flight, R. L., Rountree, M. M., & Beatty, S. E. (2012). Feeling the urge: Affect in impulsive and compulsive buying. *Journal of Marketing Theory and Practice*, 20(4), 453-466.
- Floh, A., & Madlberger, M. (2013). The role of atmospheric cues in online impulse-buying behavior. *Electronic Commerce Research and Applications*, 12(6), 425-439.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research*, 18(1), 39-50.
- Fu, S., Xu, Y., & Yan, Q. (2019). Enhancing the parasocial interaction relationship between consumers through similarity effects in the context of social commerce: evidence from social commerce platforms in China. *Journal of Strategic Marketing*, 27(2), 100-118.
- Fu, J. R., & Hsu, C. W. (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.
- Grant, A. E., Guthrie, K. K., & Ball-Rokeach, S. J. (1991). Television shopping: A media system dependency perspective. *Communication Research*, 18(6), 773-798.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E., (2019), *Multivariate data analysis*, (8th ed.), Cengage Learning: London
- Hair, J.F., Hult, G.T.M., Ringle, C. and Sarstedt, M. (2022), *A Primer on Partial Least Squares Structural Equation Modelling (PLS-SEM)*, 3rd ed., Sage, Thousand Oaks, CA.
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European business review*, 31(1), 2-24.
- Hale, J. L., Householder, B. J., & Greene, K. L. (2002). The theory of reasoned action. *The persuasion handbook: Developments in theory and practice*, 14(2002), 259-286.
- Hirschman, E. C. (1985). Scientific style and the conduct of consumer research. *Journal of Consumer Research*, 12(2), 225-239.
- Hoerner, J. (1999). Scaling the web: A parasocial interaction scale for world wide web sites. *Advertising and the world wide web*, 99, 135-147.
- Horton, D., & Richard Wohl, R. (1956). Mass communication and para-social interaction: Observations on intimacy at a distance. *psychiatry*, 19(3), 215-229.

- IBEF (2025) 'E-Commerce' https://www.ibef.org/download/1744101792_E-Commerce-February-2025.pdf
- Jones, M. A., Reynolds, K. E., Weun, S., & Beatty, S. E. (2003). The product-specific nature of impulse buying tendency. *Journal of business research*, 56(7), 505-511.
- Jöreskog, K. G. (1971). Simultaneous factor analysis in several populations. *Psychometrika*, 36(4), 409-426.
- Kalla, S. M., and Arora, A. P. (2011). Impulse buying: A literature review. *Global Business Review*, 12(1), 145-157.
- Karbasivar, A., & Yarahmadi, H. (2011). Evaluating effective factors on consumer impulse buying behavior. *Asian Journal of Business Management Studies*, 2(4), 174-181.
- Kim, S., and Park, H. (2013). Effects of various characteristics of social commerce (s-commerce) on consumers' trust and trust performance. *International Journal of Information Management*, 33(2), 318-332.
- Koufaris, M. (2002). Applying the technology acceptance model and flow theory to online consumer behavior. *Information systems research*, 13(2), 205-223.
- Lee, Y. Y., & Gan, C. L. (2020). Applications of SOR and para-social interactions (PSI) towards impulse buying: the Malaysian perspective. *Journal of Marketing Analytics*, 8, 85-98.
- Leong, L.-Y., Jaafar, N. I., & Ainin, S. (2018). The effects of Facebook browsing and usage intensity on impulse purchase in f-commerce. *Computers in Human Behavior*, 78, 160-173.
- Liang, T. P., Ho, Y. T., Li, Y. W., and Turban, E. (2011). What drives social commerce: The role of social support and relationship quality. *International Journal of electronic commerce*, 16(2), 69-90.
- Liu, Y., Li, H., & Hu, F. (2013). Website attributes in urging online impulse purchase: An empirical investigation on consumer perceptions. *Decision support systems*, 55(3), 829-837.
- Lok Sabha (2023) Government of India, Ministry of Communications, Department of Telecommunications. Internet Connectivity in Rural Areas <https://sansad.in/getFile/loksabhaquestions/annex/1711/AU2351.pdf?source=pqals>
- Mehrabian, A., and Russell, J. A. (1974). *An approach to Environmental Psychology*. The MIT Press.
- McGoldrick, P. J., Betts, E. J., & Keeling, K. A. (1999). Antecedents of spontaneous buying behavior during temporary markdowns. *Advances in Consumer Research*, 26(1), 26-33.
- Mohan, G., B., Sivakumaran, & Sharma, P. (2013). Impact of store environment on impulse buying behavior. *European Journal of Marketing*, 47(10), 1711-1732. doi:<http://dx.doi.org/10.1108/EJM-03-2011-0110>
- Parboteeah, D. V., Valacich, J. S., & Wells, J. D. (2009). The influence of website characteristics on a consumer's urge to buy impulsively. *Information systems research*, 20(1), 60-78.
- Park, J. H., & Lennon, S. J. (2004). Television apparel shopping: Impulse buying and parasocial interaction. *Clothing and Textiles Research Journal*, 22(3), 135-144.
- Park, J., & Lennon, S. J. (2006). Psychological and environmental antecedents of impulse buying tendency in the multichannel shopping context. *Journal of Consumer Marketing*, 23(2), 56-66.
- Parsad, C., Prashar, S., & Tata, V. S. (2017). Understanding nature of store ambiance and individual impulse buying tendency on impulsive purchasing behaviour: an emerging market perspective. *DECISION*, 44(4), 297-311. doi:10.1007/s40622-017-0168-2
- Parsad, C., Prashar, S., Vijay, T. S., & Kumar, M. (2021). Do promotion and prevention focus influence impulse buying: The role of mood regulation, shopping values, and impulse buying tendency. *Journal of Retailing and Consumer Services*, 61, 102554.
- Redine, A., Deshpande, S., Jebarajakirthy, C., & Surachartkumtonkun, J. (2023). Impulse buying: A systematic literature review and future research directions.

- International Journal of Consumer Studies, 47(1), 3-41.
- Ringle, C. M., Sarstedt, M., Sinkovics, N., & Sinkovics, R. R. (2023). A perspective on using partial least squares structural equation modelling in data articles. *Data in Brief*, 48, 109074.
- Rönkkö, M., & Cho, E. (2020). An Updated Guideline for Assessing Discriminant Validity. *Organizational Research Methods*, 109442812096861. doi:10.1177/1094428120968614
- Rook Dennis(1987) ,“The BuyingImpulse andtried todifferentiate impulsive buying and unplanned buying”, *Journal of consumer research* Vol. 14 0 September 1987.
- Rook, D. W., and Fisher, R. J. (1995). Normative influences on impulsive buying behavior. *Journal of consumer research*, 22(3), 305-313.
- Rubin, A. M., Perse, E. M., & Powell, R. A. (1985). Loneliness, parasocial interaction, and local television news viewing. *Human communication research*, 12(2), 155-180.
- Rubin, R. B., & McHugh, M. P. (1987). Development of parasocial interaction relationships.
- Sarstedt, M., Ringle, C.M., Hair, J.F., (2017). Partial least squares structural equation modelling. In: Homburg, C., Klarman, M., Vomberg, A. (Eds.), *Handbook of Market Research*. Springer, Heidelberg, pp. 1-40.
- Shen, K. N., & Khalifa, M. (2012). System design effects on online impulse buying. *Internet Research*, 22(4), 396-425.
- Sheppard, B.H., Hartwick, J. and Warshaw, P.R. (1988), “The theory of reasoned action: a metaanalysis of past research with recommendations for modifications and future research”, *Journal of Consumer Research*, Vol. 15 No. 3, pp. 325-343.
- Stasi, D. (1988). Interactive electronic home shopping: an update on the telaction approach. *NCTA Technical Papers*, National Cable & Telecommunications Association, Washington, DC, 22-8
- Stern, H. (1962). The significance of impulse buying today. *Journal of marketing*, 26(2), 59-62.
- Sun, H. and P. Zhang. 2006. The role of affect in IS research: A critical survey and a research model. P. Zhang, D. Galleta, eds. *Human-Computer Interaction and Management Information Systems—Foundations I*. M. E. Sharpe, Inc., Armonk, NY, 295-329.
- Suryani, A., & Herianti, E. (2023). Purposive Sampling and Ordinary Least Square Analysis: Investigating the Relationship between Managerial Overconfidence, Transfer Pricing and Tax Management in Indonesian Stock Exchange-Listed Firms. *International Journal of Professional Business Review*, 8(8), 1-23.
- Vazquez, D., Wu, X., Nguyen, B., Kent, A., Gutierrez, A., & Chen, T. (2020). Investigating narrative involvement, parasocial interactions, and impulse buying behaviours within a second screen social commerce context. *International Journal of Information Management*, 53, 102135
- Venkatesh, V., Brown, S.A., Maruping, L.M. and Bala, H. (2008), “Predicting different conceptualizations of system use: the competing roles of behavioral intention, facilitating conditions, and behavioral expectation”, *MIS Quarterly*, Vol. 32 No. 3, pp. 483-502.
- Wells, J. D., Parboteeah, V., & Valacich, J. S. (2011). Online impulse buying: understanding the interplay between consumer impulsiveness and website quality. *Journal of the Association for Information Systems*, 12(1), 32-56.
- Weun, Seungoo, Michael A. Jones, and Sharon E. Beatty. (1998). "The Development and Validation of the Impulse Buying Tendency Scale." *Psychological Reports*, 82:1123-11
- Wuisan, D. S., & Handra, T. (2023). Maximizing online marketing strategy with digital advertising. *Startuppreneur Business Digital (SABDA Journal)*, 2(1), 22-30.
- Xiang, L., Zheng, X., Lee, M. K. O., & Zhao, D. (2016). Exploring consumers' impulse buying behavior on social commerce

- platform: The role of parasocial interaction. *International Journal of Information Management*, 36(3), 333-347.
- Zafar, A. U., Qiu, J., & Shahzad, M. (2020). Do digital celebrities' relationships and social climate matter? Impulse buying in f-commerce. *Internet Research*, 30(6), 1731-1762.
- Zhao, X., Lynch, J. G. and Chen, Q. (2010), "Reconsidering Baron and Kenny: Myths and Truths about Mediation Analysis", *Journal of Consumer Research*, Vol. 37 No. 3, pp. 197-206
- Zhou, T. (2019). Understanding User Social Commerce Usage Intention: A Stimulus-Organism-Response Perspective. *Information Resources Management Journal (IRMJ)*, 32(4), 56-71.
