



The Digital Impulse: Exploring the Role of Positive Emotion and Parasocial Interactions in Shaping Consumer Behavior in Social Commerce

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ABSTRACT

The burgeoning social commerce industry has transformed consumer behavior, particularly in terms of impulsive buying. This study investigates the drivers of such behavior on TikTok, focusing on the interplay between social influence, source attractiveness, and their effects through two key mediating mechanisms: positive emotion and parasocial interaction. While prior research has examined social influence factors and their impact on purchasing decisions, the combined role of parasocial interactions and source attractiveness in influencing impulsive buying remains under-explored. Employing a Stimulus-Organism-Response (S-O-R) framework, this study examines how parasocial interactions and positive emotion mediate the relationship between social influences and the urge to buy impulsively. A quantitative survey of 308 TikTok users was conducted, and the data were analyzed using partial least squares structural equation modeling (PLS-SEM). The results reveal that specific social influence factors, namely observational learning, source credibility, and review quality, foster positive emotions, which, in turn, trigger impulsive buying. Furthermore, parasocial interaction, driven by perceptions of similarity, expertise, and likability with influencers or other sources, significantly contributes to this behavior. These findings underscore the significance of social influence, emotional responses, and parasocial relationships in shaping consumer behavior on TikTok, providing valuable insights for businesses and marketers operating in the social commerce landscape.

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INTRODUCTION

The rapid proliferation of social networking sites has fueled the emergence of social commerce, revolutionizing consumer behavior and creating new avenues for businesses to engage with customers. Platforms like TikTok seamlessly integrate social networking and e-commerce, fundamentally altering consumer decision-making processes through enhanced access to product information and peer engagement (Yang and Ha, 2021). This integration has significantly reshaped the traditional purchasing journey, providing unprecedented opportunities for impulse buying.

In particular, image-sharing social commerce platforms (SCPs), such as TikTok, have revolutionized the way consumers interact with brands and products by leveraging the power of visual content and user-generated content. The platform's short-form video format facilitates a highly immersive and interactive shopping experience, showcasing products and encouraging user engagement (Stephen and Toubia, 2010). The platform's algorithm prioritizes visually appealing and engaging content, exposing users to viral trends, influencer recommendations, and creative product demonstrations. These elements, serving as external stimuli within the S-O-R framework, are posited to contribute to positive emotional responses and increased purchase intent (Chung et al., 2017). Wang and Yu (2017) further elucidate that these interactive visual elements augment engagement levels, therefore promoting impulsive buying behaviors.

Furthermore, the visual nature of TikTok notably facilitates observational learning, wherein the observation of others' product engagement influences consumer behavior. This mechanism, rooted in social learning theory (Bandura and Walters, 1977), is a recognized factor in impulsive buying. By observing others using and enjoying products in real-time, users are more likely to experience a desire for social belonging and conformity, which can further fuel impulsive purchases. This perspective is further supported by Saini et al. (2024), who emphasize the role of social media influencers in shaping consumer trust and purchase intentions through such observational mechanisms. Moreover, the platform's emphasis on authenticity and relatability encourages users to share their experiences and opinions, fostering a sense of community and trust that can significantly impact purchasing decisions (Chu and Kim, 2011), particularly through enhancing perceived source credibility and review quality (Lin et al., 2019).

This heightened sense of community, combined with constant exposure to visually appealing content on platforms like TikTok, has amplified the already well-established phenomenon of impulsive buying (Rook, 1987). Impulsive buying, characterized by unplanned purchases driven by sudden urges, is particularly prevalent on social commerce platforms due to their emphasis on user engagement and the constant exposure to enticing product offerings (Shi and Chow, 2015). Research on impulsive buying in social commerce has evolved to encompass various social influences influencing consumer behavior. Early studies primarily focused on behavior-based interactions, such as observational learning, where the purchasing decisions of others sway consumers (Zhang et al., 2014). However, more recent research has delved into the nuanced role of opinion-based interactions, examining how the perceived similarity, expertise, and likability of other users or influencers shape consumer attitudes and ultimately drive purchase intentions (Guadagno et al., 2013). The concept of source attractiveness, encompassing perceived likability, similarity, and expertise, plays a pivotal role. Consumers are drawn to those they find relatable, trustworthy, and knowledgeable, which translates to a heightened receptivity to recommendations from peers and charismatic influencers (Hu et al., 2019). The complexity of consumer attitudes shaped by such influencer dynamics is further underscored by (Chen et al., 2024).

Furthermore, the unique phenomenon of parasocial interaction (PSI), distinct from reciprocal social influences, is gaining prominence in social commerce. PSI, characterized by one-sided relationships with higher-status figures like celebrities or influencers, is facilitated by social commerce platforms' affordances for interaction and engagement with these figures (Ballantine and Martin, 2005; Stever, 2009). This phenomenon presents a novel avenue for understanding how such one-sided relationships influence consumer behavior in online environments.

Despite growing research on impulsive buying behavior in social commerce, a comprehensive understanding of the complex interplay between multifaceted social influences, positive emotional responses, and the distinct role of parasocial interactions remains underexplored. Existing literature often examines social influences through singular perspectives. For instance, studies have predominantly focused on behavior-based interactions like observational learning (Zhang et al., 2021) or opinion-based interactions emphasizing source

attributes (Hu et al., 2019). While valuable, these approaches have not adequately addressed how these diverse interactive elements collectively shape consumer perceptions and influence purchase decisions in the dynamic social commerce environment. Aragoncillo and Orus (2018) further demonstrate that social media significantly affects impulse buying across various consumer typologies, indicating that a more holistic approach, addressing both the content and context of social influences, is essential to effectively understand impulsive buying in social commerce. Furthermore, parasocial interaction, by its nature as a one-sided relationship with media figures, fundamentally differs from reciprocal social influences, yet its specific mediating role in driving impulsive buying in this context warrants deeper investigation. Yang et al. (2025) also highlight the broader impact of social media on consumer purchasing decisions, reinforcing the need for nuanced exploration.

To address these gaps, this study employs the Stimulus-Organism-Response (S-O-R) framework to unravel the complex mechanisms underlying impulsive buying behavior on social commerce platforms. This model provides a structured approach to understanding how various social stimuli, including social influence factors (such as review quality, source credibility, and observational learning) and source attractiveness (encompassing attributes like likability, similarity, and expertise), impact an individual's internal states (Organism). Specifically, we examine how positive emotion and parasocial interaction mediate the relationship between these social stimuli and the urge to buy impulsively (Response). Research, such as that by Fan et al. (2025), reinforces the applicability of the S-O-R model by demonstrating how different social presences can influence consumer responses, ultimately leading to impulsive buying. Our study posits that social influences positively influence impulsive buying, with this relationship being mediated by positive emotion and parasocial interaction, thereby offering valuable insights into the nuanced dynamics of consumer behavior in social commerce.

The findings will contribute to the growing body of knowledge on consumer behavior in the digital age, providing valuable insights into how social and parasocial interactions influence purchasing decisions. Furthermore, the study's results will offer practical implications for businesses operating on social commerce platforms, enabling them to develop targeted strategies to enhance customer engagement and drive sales (Kim and Park, 2013)

THEORETICAL BACKGROUND

Stimulus-Organism-Response framework

This investigation relies on the Stimulus-Organism-Response (S-O-R) framework, initially introduced by Mehrabian and Russell (1974), to establish its theoretical foundation. The S-O-R framework, a well-established psychological paradigm, is a foundational construct for elucidating the intricate dynamics involving external stimuli, an individual's internal states (the organism), and ensuing behavioral reactions. As delineated by this framework, an individual's emotional state and behavioral responses are directly molded by the environmental stimuli they encounter. The S-O-R framework classifies responses to stimuli into two primary categories: approach and avoidance. Approach responses encompass affirmative actions, such as a thirst for knowledge, business engagement, or impulse buying. Conversely, avoidance reactions signify an individual's reluctance to engage in constructive actions.

The S-O-R framework is well-suited for understanding consumer behavior in dynamic online environments, such as social commerce platforms. Its strength lies in its ability to model the complex psychological processes that mediate the relationship between external cues and behavioral outcomes, moving beyond simplistic stimulus-response models. This framework provides a robust lens to dissect how diverse online stimuli trigger internal emotional and cognitive states, ultimately influencing purchasing decisions (Xu et al., 2020). Its broad applicability extends beyond traditional psychology into fields such as e-commerce and marketing. It is an ideal choice for capturing the core mechanisms underlying impulsive buying in social commerce. By providing a clear structure for analyzing how external factors influence internal states, which then drive specific behaviors, the S-O-R model enables a comprehensive exploration of the proposed research model.

This study's stimulus component comprises two sets of independent variables: social influence factors (review quality, source credibility, and observational learning) and source attractiveness (expertise, similarity, and likability). The study also examines the role of intermediate variables, specifically positive emotion and parasocial interaction, mediating the relationship between the stimulus and dependent variables. The dependent variable in this study is the urge to buy impulsively, representing behavioral responses related to interest. The S-O-R framework serves as an analytical framework to dissect the complex interrelationships between environmental factors, personal emotions, and the propensity to engage in impulsive buying, as observed on social commerce platforms. Through this analytical approach, the study aims to shed light on the underlying mechanisms governing consumers' urge to buy impulsively and provide valuable insights into human behavior within the dynamic landscape of social commerce (Turley and Milliman, 2000).

Stimuli: Social Influence and Source Attractiveness in Social Commerce

In the dynamic e-commerce landscape, social commerce platforms (SCPs) have emerged as powerful tools for businesses to connect with consumers and drive sales. These platforms leverage the inherent social nature of online interactions to create a more engaging and immersive shopping experience. Two key factors significantly influencing consumer behavior on SCPs, conceptualized as stimuli within the S-O-R framework, are social influence and source attractiveness.

Social influence is a defining characteristic of SCPs, fundamentally differentiating them from traditional offline shopping experiences (Zhang et al., 2021). This dynamic interplay among users encompasses the exchange of knowledge, ideas, and experiences, contributing to the vibrant digital social landscape. Social influence is broadly categorized into two types: opinion-based and behavior-based (Chen et al., 2011). Opinion-based social influence centers on online reviews, where customers candidly share their opinions about products or suppliers (Hennig et al., 2004). These reviews have a significant influence on other consumers' opinions and attitudes, ultimately shaping their purchasing decisions. A meta-analysis by Alalwan et al. (2017) reinforced the impact of online reviews on impulsive purchasing tendencies, highlighting the persuasive power of peer opinions. Behavior-based social influence often involves observational learning, where consumers rely on the actions of others to inform their purchasing decisions. Mimicking the behavior of peers or influential figures, particularly those in a similar social context, can foster feelings of social inclusion or trigger a fear of missing out, leading to impulsive purchasing. Chu and Kim (2011) conducted a cross-cultural study examining the influence of observational learning on impulsive purchasing across diverse cultural contexts, highlighting the universality of this phenomenon. Additionally, Liu et al. (2025) examined the moderating impact of social media use on the relationship between social influence and impulsive buying, revealing how social engagement can influence consumer behavior.

Beyond the structural features of an SCP, the attractiveness of the information source plays a pivotal role in shaping consumer behavior. This concept, often referred to as source attractiveness, comprises three key dimensions: similarity, expertise, and likability. These dimensions are perceived characteristics of the source that collectively contribute to its overall appeal and persuasive power within communication and persuasion theories (Hovland et al., 1953; McCroskey and McCain, 1974). Individuals are more inclined to be persuaded by those they perceive as similar to themselves (Byrne et al., 1971). In social commerce, consumers are more likely to trust and act upon recommendations from fellow users who share common interests, demographics, or values. Consumers naturally place greater trust in information emanating from sources they deem to be experts in a particular domain (Hovland et al., 1953). In social commerce, this translates to trust in reviews from seasoned users or recommendations from influencers recognized as authorities (Erkan and Evans, 2016). Consumers are more readily persuaded by likable and admirable sources (McCroskey and McCain, 1974). In social commerce, this translates to a preference for brands and products endorsed by likable influencers or presented in visually engaging ways (Jin et al., 2019).

The interplay between social influence and source attractiveness is crucial in social commerce. For instance, the quality and credibility of online reviews (forms of social influence) can significantly enhance a source's perceived expertise and trustworthiness (contributing to source attractiveness). Conversely, a highly attractive source can amplify the impact of their social influences, such as their recommendations or shared experiences, by increasing receptivity. This dynamic relationship underscores the multifaceted influence of social media on consumer behaviour, as prior research shows that different dimensions of social media content

and interaction jointly shape consumers' attitudes, engagement, and behavioural intentions (Çil et al., 2023; Kwon et al., 2021).

Organism: Positive Emotion and Parasocial Interaction

Within the S-O-R framework, the Organism component represents the internal psychological states that mediate the relationship between external stimuli and behavioral responses. This study examines two distinct yet complementary organismic states: positive emotion and parasocial interaction. These mediating variables operate through different psychological mechanisms: positive emotion through affective processes and parasocial interaction through relational processes, influencing consumers' urge to buy impulsively.

Positive Emotion

Positive emotion, a key concept in the Organism component of the S-O-R framework, refers to pleasurable affective states that arise in response to environmental stimuli. In consumer behavior research, positive emotions include feelings such as excitement, joy, enthusiasm, and pleasantness that consumers experience during shopping activities (Beatty and Ferrell, 1998).

The significance of positive emotions in shaping consumer behavior has been extensively documented. According to the Affect as Information theory (Clore and Tamir, 2002; Schwarz and Clore, 1983), emotions serve as informational cues that guide decision-making processes. Positive emotions signal that the environment is safe and favorable, encouraging approach behaviors such as product exploration and purchase (Mehrabian and Russell, 1974). In social commerce, positive emotions can be triggered through various social influence mechanisms, including exposure to high-quality reviews, credible information sources, and observational learning from others' positive experiences.

Research consistently shows that positive emotions play a crucial role in impulsive buying behavior. When consumers experience positive affect, they are more likely to make spontaneous purchases without extensive deliberation. (Rook, 1987). This tendency arises because positive emotions reduce cognitive control and increase the appeal of immediate gratification (Mohan et al., 2013).

In social commerce environments, where visual content and social interactions are designed to elicit emotional responses, positive emotions become a key psychological mechanism that links social influence to impulsive buying urges (Xu et al., 2020). Furthermore, positive emotions can enhance consumers' receptivity to marketing stimuli and increase their willingness to engage with products and brands (Dolan et al., 2019). On platforms like TikTok, the short-form video format and algorithm-driven content are specifically designed to maximize emotional engagement, creating an emotionally charged environment that facilitates impulsive purchasing decisions (Hossain et al., 2020). Thus, positive emotion is a critical mediating factor through which social influences trigger the urge to buy impulsively.

While positive emotion represents an immediate affective response to social influence factors (review quality, source credibility, and observational learning), parasocial interaction, as discussed in the following section, operates through a different mechanism: relational bonding with content creators, which similarly influences impulsive buying behavior.

Parasocial Interaction

Parasocial interaction (PSI) is a one-sided relationship that individuals develop with media figures, in which they feel a sense of familiarity and intimacy despite the absence of real reciprocal contact. The concept, initially introduced by Horton and Richard Wohl (1956), aims to elucidate the illusion of a face-to-face relationship with a media personality that individuals experience. Users within SCPs continue to cultivate PSI connections with fellow users, especially notable figures such as celebrities and experts. Moreover, contemporary research suggests that the digital landscape has amplified these PSI relationships, with users forming connections and actively participating in them. For instance, recent studies have shown that users deeply engaged in PSI relationships may express their loyalty through various activities, leading to tangible behavior changes influenced by these connections (Tsiotsou, 2015). While the core concept of PSI, as outlined by Horton and Richard Wohl (1956), still holds, recent scholarship has expanded upon it. Stever (2009) has offered a more comprehensive understanding, encompassing one-sided connections with individuals who may

be familiar to the person, even if they are not personally acquainted. These one-sided relationships often involve individuals viewing media personalities as elevated status figures or role models.

Within the rapidly evolving landscape of social commerce, users continue to idealize media personalities or influencers, regarding them as close friends or role models (Gleason et al., 2017). In this study, PSI is conceptualized as the interaction between consumers and media personalities or influencers on social commerce platforms, manifesting in various forms such as following their content, engaging with their posts, or being influenced by their recommendations and endorsements.

PSI is theorized to emerge as a crucial organismic state (mediator) in response to social stimuli in social commerce. When consumers are exposed to various forms of social influence factors (e.g., observational learning, exposure to credible reviews) and perceive sources as highly attractive (i.e., likable, similar, or expert), they are more likely to develop a sense of connection and intimacy with these figures, leading to the formation of PSI. This one-sided relationship then acts as an internal psychological state that fosters consumer engagement and influences subsequent behavioral responses, including impulsive buying. Recent research in the field has emphasized the dynamic nature of PSI within social commerce. It has explored how the rise of influencer marketing and the proliferation of user-generated content have intensified PSI. These studies have revealed that consumers establish parasocial interactions with traditional celebrities, micro-influencers, and even fellow consumers perceived as experts in niche areas (Ye et al., 2021). Husnain et al. (2025) further emphasize the relationship between parasocial interaction and impulse buying, exploring how consumer interaction with influencers and online personalities drives purchasing behavior through such engagement mechanisms. As consumers form increasingly complex parasocial relationships, the impact of recommendations and endorsements on their propensity to engage in impulsive buying on social commerce platforms is becoming a focal point (Hu et al., 2019).

Response: The Urge to Buy Impulsively

Impulsive buying, a pervasive consumer behavior phenomenon, has been extensively conceptualized and studied. Early research by Rook (1987) defined impulse buyers as individuals who succumb to sudden and irrational temptations, leading to immediate purchases. This foundational definition highlighted the spontaneous and unplanned nature of impulsive buying. Subsequently, Rook (1987) delved deeper into the psychological underpinnings of this behavior, proposing that impulsive purchases are often triggered by unexpected desires that arise when consumers are exposed to specific cues within a retail environment. This notion of environmental stimuli as a catalyst for impulsive buying has become a cornerstone.

Beatty and Ferrell (1998) further refined the concept by characterizing impulsive buying as spontaneous purchases driven by uncontrollable urges and defining the urge to buy impulsively as the condition of desire experienced upon seeing an object in the surrounding environment. This conceptualization aligns with the theory of Parboteeah et al. (2009) on impulsive purchasing, which emphasizes the emotional and cognitive processes underlying impulsive decisions.

In recent years, researchers have increasingly embraced the urge to buy impulsively as a reliable proxy for measuring impulsivity (Dutta et al., 2017; Xiang et al., 2016). This trend is due to the challenges associated with assessing actual impulsive purchases, which often rely on self-reported data and may be subject to recall biases (Luo, 2005). On the other hand, the urge to buy impulsively is considered a more robust indicator of impulsivity, as it captures the immediate desire to purchase before external factors or rational considerations potentially influence it. Understanding this immediate desire is critical for marketers in social commerce, as it provides insights into the initial psychological triggers of unplanned purchases, particularly in dynamic environments like live-streaming shopping, where immediate decisions are prevalent (Huo et al., 2023).

This study follows the established tradition by employing the urge to buy impulsively as a dependent variable, defining it as the consumer's response to internal and external stimuli on social commerce platforms, encompassing the immediate desire to purchase without thorough consideration of needs. This conceptualization aligns with prior research that has used this construct to investigate impulsive buying across various contexts.

RESEARCH MODEL AND HYPOTHESES

Relationship Between Social Influence and Positive Emotion

This section highlights how various elements of social influence on social commerce platforms (SCPs), as stimuli within the S-O-R framework, influence positive emotional responses in consumers (Organism). Each of these constructs – review quality, source credibility, and observational learning – is supported by established literature for its impact on consumer emotions and behaviors.

Review quality, defined as the perceived quality of the information in online reviews (Xu et al., 2020), has been identified as a crucial factor in shaping consumer behavior. Previous research suggests that consumers value detailed and informative reviews, considering them more trustworthy than seller-generated content (Cheung et al., 2009). High review quality is more valuable and persuasive (Cheung et al., 2008), stimulating consumer imagination and evoking positive emotions related to product use (Fiore and Yu, 2001). Moreover, such reviews can enhance consumers' sense of security while shopping online, contributing to a positive overall perception of the platform. The association between social influences and emotional experiences is well-established; individuals with higher socio-emotional skills, as suggested by (Yang et al., 2025), are more likely to engage positively in online interactions, which can enhance their interpretation of reviews and significantly influence their positive emotional responses to products. Furthermore, high-quality content, like detailed reviews, influences consumer perceptions and emotions (Son et al., 2022). Based on these established relationships, the hypothesis is proposed:

H1: Review quality is positively related to positive emotion.

Source credibility, defined as consumers' perception of the expertise and reliability of review sources (Zhang et al., 2021), has been established as a crucial social stimulus influencing online consumer behavior and emotional states. Previous research has shown that reviews from trusted sources are more likely to be perceived as helpful (Cheung et al., 2009) and can enhance a brand's perceived value (Wu and Wang, 2011). Furthermore, credible reviews can contribute to the overall popularity of a social commerce platform and reduce consumers' perceived risk associated with making purchases (Cheung et al., 2009), thereby fostering positive emotional responses. Perceived expertise from online reviews affects purchasing decisions and influences purchase intentions (Filiari et al., 2021), which can enhance emotional responses by increasing consumer confidence and trust. The importance of credible sources in fostering positive consumer emotional responses is illustrated by findings that emotional responses to media can vary significantly based on source characteristics. Based on these findings, the hypothesis is proposed:

H2: Source credibility is positively related to positive emotion.

Observational learning, defined as the extent to which consumers observe the purchasing behavior of others online (Chen et al., 2011), has been identified as a significant social stimulus influencing consumer decision-making and emotional responses. Prior research suggests that individuals are inclined to imitate others' actions, especially when faced with limited information or uncertainty (Bandura and Walters, 1977; Chen et al., 2016). This tendency is amplified in online shopping environments, where consumers may lack direct experience with a product and rely on the cues provided by others to make informed decisions. Wang and Yu (2017) further elucidate how consumers actively rely on their observations of others' purchasing decisions in social commerce environments, enhancing their understanding of products and services, particularly when they witness others enjoying or benefiting from specific offerings. For instance, observing high sales figures or positive reviews can signal product popularity and quality, thereby reducing perceived risk and increasing consumer confidence in their purchase choices, which in turn evokes positive emotions (Zhu and Zhang, 2010). The influence of observational learning on emotions and behaviors is discussed in relevant studies (Punj, 2012), indicating that emotions elicited by social media exposure can lead to increased engagement, reflecting how consumers' observations in social contexts impact emotional experiences (Oh et al., 2021). Based on these theoretical underpinnings and empirical evidence, the hypothesis is proposed:

H3: Observational learning is positively related to positive emotion.

Relationship between Source Attractiveness and Parasocial Interaction

This section articulates how Source Attractiveness, as a Stimulus within the S-O-R framework, influences the formation of Parasocial Interaction (PSI), an Organismic state. The relationships are theorized through the perceived dimensions of similarity, expertise, and likability.

Within the Stimulus component of the S-O-R framework, perceived similarity, as a dimension of source attractiveness, plays a crucial role in fostering parasocial interaction (Organism). Users are more inclined to be persuaded by those they perceive as similar to themselves (Byrne et al., 1971). SCP features like “recommend” and “for you” can facilitate this perception by connecting users with others who share similar goals, interests, and shopping styles. The underlying assumption is that users are likelier to form parasocial interactions with those they perceive as similar, as this sense of connection increases engagement. This principle is further supported by research demonstrating how perceived similarity affects social influences and perceptions, reinforcing that individuals are drawn to those who reflect their interests (Feingold, 1992). Therefore, the hypothesis is proposed:

H4: Similarity is positively related to parasocial interaction.

Perceived expertise is another dimension of source attractiveness (Stimulus), which enhances the formation of parasocial interaction (Organism). SCPs facilitate this perception through features like “Star Recommendations” and “Trending,” highlighting users or content creators with specialized knowledge in specific areas. Consumers naturally place greater trust in information emanating from sources they deem experts in a particular domain (Hovland et al., 1953), fostering admiration and a sense of reliability. This perceived expertise contributes to a stronger one-sided bond, as users are more likely to interact with knowledgeable individuals about brands and products, thus forming parasocial interactions based on trust and admiration for their expertise. The importance of perceived expertise among influencers in fostering greater PSI is further emphasized in electronic Word-of-Mouth (Yuan et al., 2022), as such expertise contributes significantly to consumer trust and interaction, thereby strengthening the link between perceived knowledge and parasocial engagement. Therefore, the hypothesis is proposed:

H5: Expertise is positively related to parasocial interaction.

Perceived likability, the third dimension of source attractiveness, is also pivotal in developing parasocial interaction. Consumers are more readily persuaded by likable and admirable sources (McCroskey and McCain, 1974), and this preference is amplified in social commerce. Metrics like follower counts or likes often indicate likability, inspiring community engagement and enhancing user interaction. This alignment with findings that online interactions, particularly with positive digital content, can generate a positive emotional contagion (Bottaro and Faraci, 2022), thereby enhancing interactions within online communities and leading to stronger one-sided bonds with likable figures. Research further demonstrates that likability significantly enhances emotional intimacy in PSI (Zhang et al., 2021), and attractiveness, closely linked to likability, positively affect customer responses and engagement levels (Li et al., 2019). The stronger the perceived likability, the more pronounced this effect becomes, as users are more likely to trust and be swayed by those with whom they feel connected (Yang and Ha, 2021). Therefore, the hypothesis is proposed:

H6: Likability is positively related to parasocial interaction.

Relationship between Positive Emotion, Parasocial Interactions, and the Urge to Buy Impulsively

Positive emotions serve as critical organismic states that mediate environmental stimuli and behavioral responses. When consumers on social commerce platforms experience positive emotions such as excitement, pleasure, and joy, these affective states reduce cognitive control and enhance the appeal of immediate gratification (Mohan et al., 2013), thereby increasing their susceptibility to impulsive purchases. Research consistently demonstrates that positive emotions directly correlate with impulsive buying tendencies in social commerce contexts (Hossain et al., 2020; Son et al., 2022). Therefore:

H7: Positive emotion is positively related to the urge to buy impulsively.

Parasocial interactions (PSI), serving as a distinct organismic state, are theorized to exert a strong influence on impulsive buying behavior (Response) (Horton and Richard Wohl, 1956). Xiang et al. (2016) explicitly propose that the influence of parasocial interaction on impulsive consumer buying behavior is more powerful in social commerce environments than in traditional media. Social commerce offers unique opportunities for users to establish deeper, albeit one-sided, connections with celebrities and experts, allowing them to follow their opinions and lifestyles closely. This perceived intimacy encourages users to imitate others' styles and follow their recommendations through these parasocial relationships, eventually leading to impulsive buying. Studies also indicate that emotional expressions in online environments lead to significant changes in consumer behavior, aligning with findings on the ability of parasocial interactions to drive substantial shifts in consumer responses. Based on these insights, the hypothesis is proposed:

H8: Parasocial interaction is positively related to the urge to buy impulsively.

Building on the theoretical foundation established, positive emotion serves as a critical mediating mechanism through which social influence factors trigger impulsive buying urges. High review quality enhances consumer confidence and evokes positive emotions that facilitate impulsive purchases (Cheung and Thadani, 2012; Wang and Yu, 2017). Similarly, credible sources elicit trust and positive affect, increasing receptivity to purchase suggestions (Erkan and Evans, 2016). Observational learning operates through emotional contagion and social proof mechanisms (Bandura and Walters, 1977; Cialdini, 2007) where witnessing others' positive experiences evokes similar emotions that drive impulsive buying. Therefore:

H9a: Positive emotion mediates the relationship between review quality and the urge to buy impulsively.

H9b: Positive emotion mediates the relationship between source credibility and the urge to buy impulsively.

H9c: Positive emotion mediates the relationship between observational learning and the urge to buy impulsively.

Parasocial interaction (PSI) is a crucial mediating mechanism influencing impulsive buying behavior within social commerce. When users perceive similarities with the individuals they engage with, it strengthens PSI, increasing the likelihood of impulsive purchases (Hoffner and Buchanan, 2005). This intensity of PSI directly correlates with the user's tendency to identify with and emulate the influencer's behaviors, including their purchasing decisions. Research indicates that shared attributes in social influences foster strong PSI, potentially leading to impulsive purchasing decisions (Sheikh et al., 2019). The perceived expertise of the influencer also plays a vital role, enhancing their credibility and the perceived value of their recommendations. A strong PSI amplifies this effect, making users more likely to trust the influencer's judgment and act on their suggestions impulsively (Klucharev et al., 2008).

Furthermore, the influencer's likability is a significant factor. Users are more likely to be influenced by the opinions and suggestions of those they find likable. The stronger the PSI, the more pronounced this effect becomes, as users are more likely to trust and be swayed by those with whom they feel connected (Yang and Ha, 2021). The emotional intimacy and trust fostered through PSI can be pivotal in driving purchase intentions in social commerce (Hajli et al., 2017). Based on these insights, the following hypotheses are proposed:

H10a: Parasocial interaction mediates the relationship between similarity and the urge to buy impulsively.

H10b: Parasocial interaction mediates the relationship between expertise and the urge to buy impulsively.

H10c: Parasocial interaction mediates the relationship between likability and the urge to buy impulsively.

A proposed research model is presented, utilizing the SOR (Stimulus-Organism-Response) theoretical framework, which builds upon the aforementioned theoretical foundation and draws inferences from the findings of previous relevant research models (Figure 1).

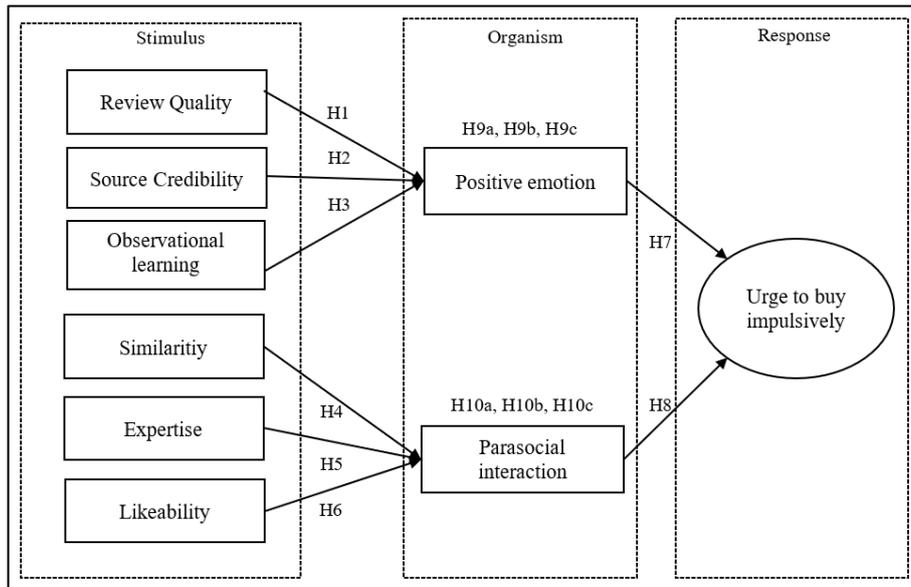


Figure 1 Proposed research model

RESEARCH METHODOLOGY

This study adopted a quantitative, explanatory, and confirmatory research design to investigate the proposed relationships within the Stimulus-Organism-Response (S-O-R) framework, focusing on impulse buying behavior on TikTok.

Measures and Instrument Development

The present study used measurement items adapted from established research and adapted them to the specific context of TikTok as a social commerce platform. The study's constructs were measured using scales adapted from established research to fit the specific context of TikTok as a social commerce platform. Review Quality (RQ, four items), Observational Learning (OL, three items), and Positive Emotion (PE, three items) scales were adapted from Xu et al. (2020). Source Credibility (SC, four items) was adapted from Zhang et al. (2021). For the Parasocial Interaction (PSI, three items) and the Urge to Buy Impulsively (UBI, three items) measures, data were derived from Sihombing et al. (2020). Finally, Expertise (EX, three items), Similarity (SI, three items), and Likability (LI, three items) scales, representing dimensions of Source Attractiveness, were adapted from Xiang et al. (2016). All adapted scales underwent a rigorous back-translation process by independent bilingual experts to ensure semantic equivalence and cultural appropriateness in the Vietnamese context.

A panel discussion was conducted to ensure the research's content validity and contextual relevance to TikTok as a social commerce platform. This panel comprised five consumers with substantial experience in impulse buying on TikTok, as well as two academic researchers specializing in social commerce. The panel reviewed all questionnaire items for clarity, ambiguity, relevance, and comprehensiveness within the context of TikTok. This discussion led to significant refinements in the phrasing of several questionnaire items and the emergence of an additional source credibility variable: "I feel that people who leave reviews on TikTok are often factual in their evaluations," which was subsequently added to the Source Credibility scale. The panel's insights ensured the instrument's ecological validity and cultural relevance within the TikTok social commerce. Subsequent preliminary quantitative research (a pilot study, detailed in Section 4.2) further fine-tuned the scales based on reliability analyses and participant feedback, resulting in a comprehensive set of 29 observational variables. These variables were measured using a five-point Likert scale ranging from "Strongly Disagree" (1) to "Strongly Agree" (5). Respondents were also asked to indicate their frequency of impulse buying on TikTok. The detailed measurement items and their sources are provided in Appendix A.

Data Collection

This study examined impulse buying behavior on TikTok among customers in Ho Chi Minh City, Vietnam. A non-probabilistic, purposive sampling method was employed to target customers who had engaged in impulse buying on the platform. To ensure this, participants were screened through an initial set of questions at the beginning of the online survey, which verified their active use of TikTok and prior experience with impulse purchases on the platform. This method was chosen because it allowed for the targeted recruitment of participants with specific characteristics relevant to the research objectives, namely active TikTok users with prior experience in impulse buying on the platform. While non-probabilistic, this approach ensured that the sample consisted of individuals who could provide meaningful insights into the phenomena under investigation in this emerging social commerce context.

Data collection occurred in two phases:

Phase 1: A pilot study was conducted with 30 customers who had experience with impulse buying on TikTok to assess the reliability of the research instruments using Cronbach's Alpha. The pilot study confirmed the satisfactory reliability of all research instruments, with Cronbach's Alpha values exceeding 0.70 for all scales, indicating good internal consistency.

Phase 2: The primary quantitative survey was administered online using an official questionnaire, resulting in 308 valid responses.

Table 1 reveals distinct characteristics among the participants. The majority (69.5%) were female, with a significant proportion (62.3%) falling within the 18-25 age range. Most respondents (84.7%) had a college or university education. The most common income range was 4-7 million Vietnamese Dong (VND) (50.5%).

Table 1 Demographic characteristics

Profile of Respondents (n = 308)		Frequency	Percentage (%)
Gender	Male	94	30.5
	Female	214	69.5
Age	18 - 25	192	62.3
	26 - 35	97	31.5
	36 - 45	16	5.2
	45 or above	3	1.0
Education	High school or below	15	4.9
	Vocational Secondary School	13	4.2
	College - University	261	84.7
	Postgraduate	19	6.2
Income	Below 3 million	54	17.5
	4 - 7 million	156	50.5
	8 - 14 million	66	21.4
	15 - 20 million	15	4.9
Time to use TikTok per day	Above 20 million	17	5.5
	Below 10 min	15	4.9
	10 - 30 min	113	36.7
	31 - 60 min	102	33.1
	1 - 2 hours	33	10.7
	3 - 5 hours	27	8.8
	Above five hours	18	5.8

DATA ANALYSIS AND RESULTS

The study utilized SmartPLS, a software developed by Ringle et al. (2015), to perform partial least squares structural equation modeling (PLS-SEM) instead of covariance-based structural equation modeling (CB-SEM). PLS-SEM offers several advantages, including its flexibility in handling non-normal data and small sample sizes for exploratory and predictive research purposes. Consequently, SmartPLS was employed in this study to examine the proposed hypotheses. Following a two-step approach, the measurement model and the structural model were assessed (Anderson and Gerbing, 1988).

Measurement Model Assessment

The measurement model's psychometric properties were rigorously evaluated to ensure its reliability and validity. Internal consistency was assessed using both Cronbach's Alpha (CA) and Composite Reliability

(CR), with values exceeding 0.7 considered indicative of reliability (Leung, 2015). As depicted in Table 2, all constructs surpassed this threshold, demonstrating strong internal consistency.

Convergent validity was examined through Average Variance Extracted (AVE) and individual indicator loadings. All AVE values exceeded the recommended 0.5, and individual indicator loadings were above 0.7, confirming the convergent validity of the constructs (Hair et al., 2013). The table also includes the range of outer loadings for each construct.

Table 2 Reliability and Validity

	CA	CR	AVE	Outer Loadings
EX	0.760	0.861	0.674	0.775 - 0.864
LI	0.747	0.855	0.662	0.782 - 0.846
OL	0.768	0.862	0.677	0.764 - 0.878
PE	0.763	0.864	0.679	0.747 - 0.877
PSI	0.730	0.847	0.649	0.772 - 0.840
RQ	0.829	0.882	0.652	0.759 - 0.830
SC	0.813	0.877	0.640	0.774 - 0.813
SI	0.742	0.853	0.659	0.793 - 0.836
UBI	0.701	0.833	0.624	0.767 - 0.816

Note: CA = Cronbach's Alpha; CR = Composite Reliability; AVE = Average Variance Extracted; EX = Expertise, LI = Likability, OL = Observational Learning, PE = Positive Emotion, PSI = Parasocial Interaction, RQ = Review Quality, SC = Source Credibility, SI = Similarity, UBI = Urge to Buy Impulsively.

Discriminant validity, which ensures that constructs are distinct, was established using the Fornell and Larcker (1981) criterion. As presented in Table 3, the square root of AVE for each construct (diagonal values, bolded) was greater than its correlations with other constructs (off-diagonal values), confirming adequate discriminant validity. Collinearity at the indicator level was also assessed, with all Variance Inflation Factor (VIF) values for individual items well below the standard threshold of 5, indicating no multicollinearity issues within the reflective constructs. The comprehensive assessment of internal consistency, convergent validity, and discriminant validity provides compelling evidence for the reliability and validity of the measurement model, ensuring the robustness of subsequent analyses.

Table 3 Discriminant validity

	EX	LI	OL	PE	PSI	RQ	SC	SI	UBI
EX	0.821								
LI	0.197	0.814							
OL	0.120	0.279	0.823						
PE	0.109	0.157	0.430	0.824					
PSI	0.284	0.389	0.288	0.187	0.806				
RQ	0.019	0.172	0.224	0.266	0.333	0.807			
SC	0.039	0.132	0.310	0.302	0.232	0.319	0.800		
SI	-0.002	0.295	0.295	0.293	0.236	0.347	0.203	0.812	
UBI	0.171	0.249	0.243	0.400	0.245	0.204	0.194	0.189	0.790

Structural Model Assessment and Hypothesis Testing

Before hypothesis testing, the structural model underwent a rigorous assessment to ensure its robustness. Multicollinearity, a potential issue that can affect the validity of regression results, was examined using Variance Inflation Factors (VIFs). As presented in Table 4, all VIF values were well below the commonly accepted threshold of 5 (Hair et al., 2013), confirming the absence of multicollinearity among the predictor variables.

Table 4 Variance Inflation Factor (VIF) Results

	PE	PSI	UBI
EX		1.045	
LI		1.144	
OL	1.128		
PE			1.036
PSI			1.036
RQ	1.135		
SC	1.193		
SI		1.100	
UBI			

The structural model exhibited strong explanatory and predictive power. The coefficient of determination R-squared values indicated that the model explains 23.3% of the variance in Positive Emotion (PE), 21.6% in Parasocial Interaction (PSI), and 19.0% in the Urge to Buy Impulsively (UBI). While these percentages are typical for behavioral research in social sciences, they represent a meaningful portion of explained variance for complex human behaviors, suggesting the model's relevance in understanding these phenomena in social commerce. The model's predictive relevance was further confirmed by Q-squared values above zero for all endogenous constructs (Table 5), indicating that it can effectively predict impulsive buying behavior on TikTok beyond the sample used for estimation, thus enhancing the generalizability of the study's results.

Effect sizes (f^2) were also analyzed to quantify the substantive impact of predictor constructs on endogenous constructs. Positive Emotion (PE) demonstrated a medium-sized effect ($f^2=0.159$) on the Urge to Buy Impulsively (UBI) (Cohen, 2013), indicating its crucial and practically significant role in driving impulsive buying behavior on TikTok. Similarly, Parasocial Interaction (PSI) showed a small effect size ($f^2 = 0.038$) on UBI. While the effects of individual predictor variables on PE and PSI were generally minor ($f^2 < 0.02$, with OL on PE being $f^2 = 0.144$), these contributions are still meaningful within the overall model's explanatory power, suggesting that their collective influence and mediation through strong pathways are significant.

Table 5 Model Fit and Predictive Validity

		f^2			R^2	Q^2
		PE	PSI	UBI		
EX			0.062			
LI			0.101			
OL	0.144					
PE				0.159	0.233	0.206
PSI				0.038	0.216	0.187
RQ	0.022					
SC	0.024					
SI			0.026			
UBI					0.190	0.100

Structural Model Testing

The results of the hypothesis testing for direct relationships, as presented in Table 6, provide compelling evidence in support of the proposed relationships in the research model. All eight hypotheses were supported at a 95% confidence level ($p < 0.05$), indicating statistically significant relationships between the constructs. Specifically, the review quality, source credibility, and observational learning positively influence positive emotions. Observational learning exhibited the most substantial effect ($\beta = 0.353$), suggesting that observing others' positive experiences on TikTok significantly contributes to positive emotions.

Table 6 Hypothesis test for main effects

Hypothesis	Path Coefficient (β)	T-Value (t)	P-Value (p)	Result
H1 RQ -> PE	0.140	2.563	0.010	Supported
H2 SC -> PE	0.148	2.449	0.014	Supported
H3 OL -> PE	0.353	6.428	0.000	Supported
H4 SI -> PSI	0.148	2.464	0.014	Supported
H5 EX -> PSI	0.225	3.354	0.001	Supported
H6 LI -> PSI	0.301	4.727	0.000	Supported
H7 PE - UBI	0.366	7.185	0.000	Supported
H8 PSI - UBI	0.178	3.277	0.001	Supported

Furthermore, the results demonstrate that similarity, expertise, and likability all have a positive influence on parasocial interaction. Likability emerged as the most influential factor ($\beta = 0.301$), indicating that consumers are more likely to develop parasocial relationships with TikTokers they find likable. Finally, the results confirm that both positive emotion and parasocial interaction (PSI) have a positive influence on the urge to buy impulsively. Positive emotion displayed a more substantial effect ($\beta = 0.366$) than parasocial interaction ($\beta = 0.178$), suggesting that positive emotions elicited by TikTok content and interactions play a more significant role in driving impulsive buying behavior.

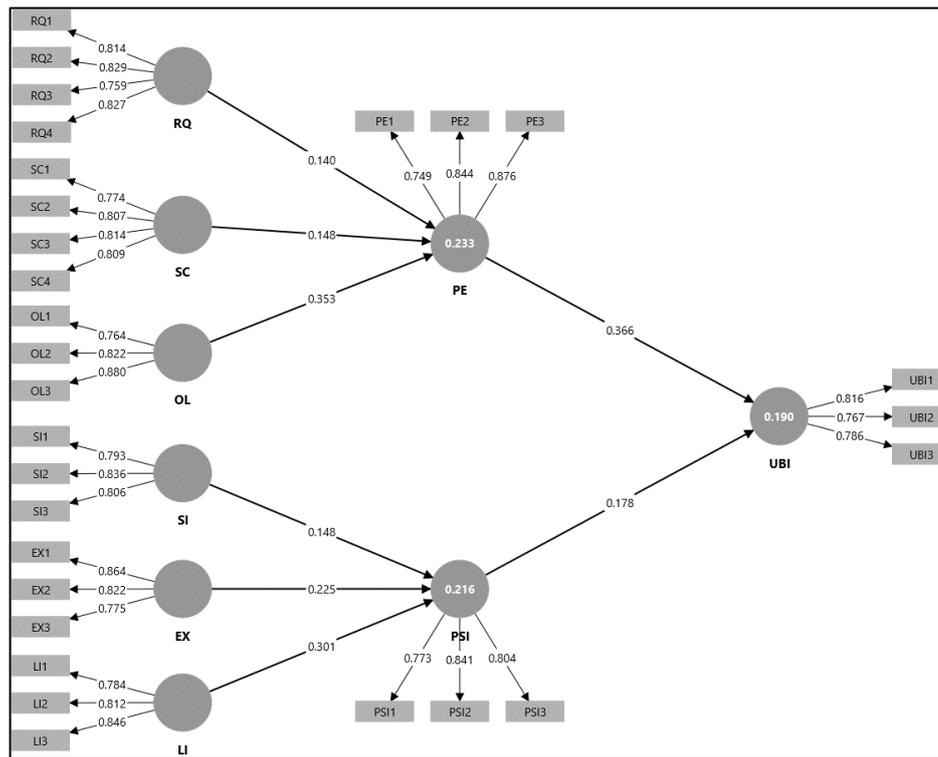


Figure 2 Results of the Research Model

Mediation Effects

A post hoc mediation analysis was conducted following Zhao et al.'s (2010) procedure, employing a Bootstrap Method with 5,000 bootstrapped samples to test the multiple mediator models. (Preacher and Hayes, 2008). This approach is particularly robust for small sample sizes and provides a 95% bias-corrected bootstrap confidence interval to assess the significance of indirect effects.

The analysis revealed significant mediating effects for positive emotions (PE) and parasocial interaction (PSI) within the research model. The findings, presented in Table 7, indicate that the effects of review quality (RQ), source credibility (SC), and observational learning (OL) on the urge to buy impulsively (UBI) are significantly mediated by positive emotions. Notably, the indirect effect for RQ -> PE -> UBI was 0.051 (p = 0.017), indicating a small but significant mediated effect. This finding aligns with prior research on Xu et al. (2020); Zhang et al. (2014), highlighting the importance of positive emotions in driving impulsive purchases. The mediated effect through observational learning was strong (indirect effect = 0.129, p<0.001), underscoring the potent influence of social proof in the context of TikTok.

Furthermore, the results support the mediating role of parasocial interaction (PSI) in the relationship between similarity (SI), expertise (EX), and likability (LI) with the urge to buy impulsively (H10a, H10b, H10c). This finding suggests that users who perceive content creators as similar, expert, and likable are more likely to develop parasocial relationships, increasing their susceptibility to impulse buying. This result aligns with the work of Xiang et al. (2016), who emphasized the role of parasocial relationships in shaping consumer behavior.

Overall, the mediation analysis provides compelling evidence for the complex interplay of social influence, positive emotions, and parasocial interaction in driving impulsive buying behavior on TikTok. The findings underscore the importance of these mediating factors in understanding and predicting consumer behavior on social commerce platforms.

Table 7 Hypothesis test for mediation effects

Hypothesis	Relationship	Original sample	Sample mean	Standard deviation	T statistics	P values	Result
H9a	RQ -> PE -> UBI	0.051	0.054	0.021	2.387	0.017	Supported
H9b	SC -> PE -> UBI	0.054	0.056	0.025	2.196	0.028	Supported
H9c	OL -> PE -> UBI	0.129	0.131	0.028	4.617	0.000	Supported
H10a	SI -> PSI -> UBI	0.026	0.028	0.013	1.982	0.048	Supported
H10b	EX -> PSI -> UBI	0.040	0.041	0.018	2.227	0.026	Supported
H10c	LI -> PSI -> UBI	0.053	0.056	0.023	2.375	0.018	Supported

DISCUSSION

This study aimed to unravel the complex mechanisms underlying impulsive buying behavior on social commerce platforms, specifically TikTok, using the Stimulus-Organism-Response (S-O-R) framework. Our findings provide valuable insights into how social stimuli influence internal emotional and relational states, ultimately driving consumers' urge to buy impulsively. The results in Tables 6 and 7 confirm the significant influence of various factors on consumers' urge to buy impulsively, offering theoretical advancements and actionable insights for practitioners.

Discussion of Key Findings

Our findings consistently demonstrate that social influences (review quality, source credibility, and observational learning) positively impact positive emotions. This finding aligns with previous research highlighting the role of social cues in shaping emotional responses in online environments (Xu et al., 2020; Zhang et al., 2014). Specifically, the strong positive effect of observational learning ($\beta=0.353$) on positive emotions suggests that consumers on TikTok are highly susceptible to emotional contagion and social proof. Witnessing others' positive experiences with products significantly enhances their positive emotional state, consistent with social learning theory (Bandura and Walters, 1977) and recent findings on emotional responses to social media content (Oh et al., 2021; Son et al., 2022). Loureiro et al. (2020) further corroborate this by demonstrating how consumer-generated media stimuli create emotional connections with brands, reinforcing our assertion of emotional contagion in social commerce environments. These findings highlight the impact of user-generated content and peer influence in shaping an emotionally charged shopping environment on TikTok.

Furthermore, this study highlights the critical role of source attractiveness (similarity, expertise, and likability) in fostering parasocial interaction (PSI). Our results confirm that all three dimensions have a positive influence on PSI, with likability exhibiting the most substantial effect ($\beta = 0.301$). Our results are consistent with established literature on source attractiveness (McCroskey and McCain, 1974) and its role in fostering one-sided relationships (Zhang et al., 2021). The strong influence of likability on PSI suggests that consumers are more likely to develop parasocial relationships with TikTok creators they find personally appealing, aligning with findings that positive digital content can generate emotional contagion and enhance interactions (Bottaro and Faraci, 2022). The significant effects of perceived expertise and similarity on PSI are consistent with research showing that consumers are drawn to knowledgeable and relatable sources (Yuan et al., 2022). Chen et al. (2024) further support these findings, emphasizing how influencer attributes like attractiveness and expertise relate to consumer purchase intentions through the mediating role of PSI. This indicates that for TikTok creators, cultivating a relatable and expert persona, alongside being likable, is crucial for building strong parasocial bonds with their audience.

The study's core findings confirm that positive emotion ($\beta = 0.366$) and parasocial interaction ($\beta = 0.178$) have a positive influence on the urge to buy impulsively. The more substantial effect of positive emotion highlights its primary role as an internal driver of impulsive purchases, aligning with theories that emphasize the immediate, affect-driven nature of impulse buying (Mohan et al., 2013). Dolan et al. (2019) reinforce this by discussing how emotional engagement through social media directly affects consumer behavior and fosters connection with brands, thereby strengthening the link between positive emotions and impulsive purchasing. This finding is particularly relevant for TikTok, where the highly visual and engaging content is designed to evoke immediate emotional responses. While PSI's direct effect is negligible, its significance confirms its contribution to impulsive buying, consistent with previous work emphasizing the persuasive power of one-sided relationships in social commerce (Husnain et al., 2025; Xiang et al., 2016). Zhu et al. (2021) directly tie back to our findings by investigating how characteristics of digital influencers influence consumer behavior, utilizing parasocial interaction as a mediated variable in the relationship between influencer attributes and consumer impulse purchasing in live-streaming. This underscores that PSI is a vital psychological mechanism through which influencer attributes translate into concrete consumer actions.

The mediation analysis identifies two distinct psychological pathways through which social commerce stimuli influence impulsive buying behavior on TikTok. The first pathway involves positive emotion functioning as an affective mediator that connects social influence factors to impulsive purchases (H9a-c). Variables such as review quality ($\beta = 0.051$, $p = 0.017$), source credibility ($\beta = 0.054$, $p = 0.028$), and

observational learning ($\beta = 0.129$, $p < 0.001$) all significantly trigger impulsive buying through positive emotional responses. Notably, the more substantial mediation effect of observational learning indicates that behavioral cues—such as witnessing others' purchases—evoke more intense emotional responses than informational cues like reviews and credibility in TikTok's visual environment. This finding aligns with the Affect-as-Information theory (Schwarz and Clore, 1983), which suggests that positive emotions signal desirability, thereby reducing cognitive deliberation and facilitating impulsive decision-making.

The second pathway involves parasocial interaction acting as a relational mediator, linking the attractiveness of a source to impulsive buying behavior (H10a-c). Factors such as similarity ($\beta = 0.026$, $p = 0.048$), expertise ($\beta = 0.040$, $p = 0.026$), and likability ($\beta = 0.053$, $p = 0.018$) influence impulsive buying through parasocial relationships with content creators. In contrast to the temporary nature of positive emotion, parasocial interaction fosters enduring connections that build trust and identification with influencers (Horton and Richard Wohl, 1956). The smaller effect sizes associated with parasocial interaction reflect its cumulative nature, which develops gradually through repeated exposure but can result in longer-lasting impacts on consumer loyalty.

These two pathways are complementary rather than competing. Positive emotion generates immediate, stimulus-driven responses, while parasocial interaction offers a relationship-driven influence. Together, they create a synergistic system where emotional engagement strengthens relational bonds, and established relationships enhance emotional responses. This dual-pathway model expands the theoretical understanding of social commerce mechanisms, suggesting that effective strategies should integrate emotional engagement techniques and relationship-building approaches to maximize impulsive buying through both affective and relational channels.

Theoretical Implications

This study offers several significant theoretical contributions to the literature on impulsive buying behavior in social commerce.

Firstly, by employing the Stimulus-Organism-Response (S-O-R) framework, this research provides a robust theoretical lens to dissect the complex mechanisms underlying impulsive buying on social commerce platforms. Specifically, this study enriches the S-O-R framework by identifying and empirically validating a unique set of digital-age stimuli and their specific impact mechanisms within social commerce. It highlights that within this context, stimuli such as observational learning, review quality, and source credibility from social influences, along with the perceived dimensions of source attractiveness (similarity, expertise, and likability), are particularly potent in initiating the S-O-R process. Furthermore, our findings illuminate the distinct roles of positive emotion and parasocial interaction (PSI) as critical organismic mediators. The research empirically demonstrates how these internal states—positive emotion as a primary affective response, and PSI as a unique one-sided relational bond—effectively transform the influence of diverse social stimuli into consumers' urge to buy impulsively. By delineating these specific S-O-R pathways in the novel context of TikTok, this study extends the framework's explanatory power to complex social commerce phenomena, providing a more granular understanding of how social stimuli translate into consumer behavior.

Secondly, the study significantly extends previous work by explicitly demonstrating the mediating roles of positive emotion and parasocial interaction in driving impulsive buying. The mediation analysis provides compelling evidence that positive emotion mediates the relationship between review quality, source credibility, and observational learning with the urge to buy impulsively. Our mediation analysis elucidates a critical pathway: social influences on TikTok first evoke positive emotional responses, which serve as a key psychological trigger for impulsive purchases. This alignment with research emphasizes the crucial role of positive emotions in shaping consumer behavior on social commerce platforms (Hajli et al., 2017; Hossain et al., 2020; Sihombing et al., 2020).

Thirdly, the research uniquely highlights the mediating role of parasocial interaction in the relationship between source attractiveness (in terms of similarity, expertise, and likability) and the urge to buy impulsively. This contribution addresses a significant gap in the literature by demonstrating how the perceived attributes of content creators can foster one-sided relationships, serving as a crucial psychological conduit for impulsive buying. This finding enriches our understanding of the persuasive power of influencers and content creators in social commerce, moving beyond mere direct influence to reveal the underlying relational dynamics.

Ultimately, this study contributes to the growing body of literature on impulsive buying, particularly in the context of TikTok. By focusing on this rapidly growing platform, which has received limited academic attention despite its immense popularity, the research offers valuable insights into its unique characteristics that contribute to impulsive buying, such as the emphasis on short-form videos, the prevalence of influencer marketing, and the highly interactive nature of the platform.

Practical Implications

The findings of this study provide several actionable insights for businesses, marketers, and platform designers operating on social commerce platforms, such as TikTok, aiming to enhance customer engagement and drive sales responsibly.

Firstly, the significant influence of social influences on positive emotions and subsequent impulsive buying underscores the importance of fostering a positive and engaging online environment. Marketers should prioritize strategies to enhance review quality (e.g., incentivizing detailed and authentic reviews, implementing review verification mechanisms) and cultivate source credibility (e.g., partnering with verified experts and highlighting user testimonials). Furthermore, leveraging observational learning through visually compelling product demonstrations and showcasing user engagement (e.g., high view counts, popular challenges) can evoke positive emotions and stimulate impulsive purchases.

Secondly, the crucial role of parasocial interaction underscores the need for businesses to cultivate relationships with their audience through strategic partnerships with content creators. Marketers should focus on identifying and collaborating with influencers or creating brand content that emphasizes likability, expertise, and similarity to the target audience. By fostering these perceived attributes, businesses can build stronger one-sided relationships with consumers, enhancing trust and increasing susceptibility to impulsive buying. This strategic emphasis implies a shift towards relationship-centric marketing strategies on social commerce platforms.

Finally, the study's emphasis on positive emotion as a key mediator suggests that strategies designed to evoke joy, excitement, and pleasantness are paramount. Platform designers and content creators should focus on creating highly engaging, entertaining, and aesthetically pleasing content that elicits immediate positive emotional responses. Businesses can develop more effective marketing strategies to enhance customer engagement and responsibly drive sales on platforms like TikTok by understanding and strategically leveraging social influences, fostering positive emotions, and cultivating parasocial relationships. Therefore, marketers should adopt a holistic strategy that synergistically combines efforts across social influence enhancement, emotional resonance, and parasocial relationship building for optimal effectiveness.

CONCLUSION

This study offers a comprehensive understanding of the factors that drive impulsive buying behavior on social commerce platforms, with a particular focus on TikTok. It contributes to the existing literature by providing empirical evidence for the significant influence of observational learning, source credibility, review quality, parasocial interaction, and positive emotion on the urge to buy impulsively. The findings highlight the unique role of positive emotions and parasocial relationships as crucial organismic states that drive impulsive purchases on platforms like TikTok.

Specifically, this research extends previous work by demonstrating the direct impact of parasocial interaction on impulsive buying, a relationship that has not been extensively explored in prior studies. Additionally, the study identifies positive emotion as a key mediator in the relationship between the predictor variables and impulsive buying, further elucidating the underlying mechanisms of this behavior. The mediation analysis revealed that the effects of the review quality, source credibility, and observational learning on the urge to buy impulsively are mediated by positive emotions. Furthermore, the results support the mediating role of parasocial interaction in the relationship between similarity, expertise, and likability, as well as the urge to buy impulsively.

Furthermore, the study addresses a gap in the literature by examining impulsive buying behavior, specifically on TikTok. This platform has gained immense popularity in recent years, but has received limited attention in academic research. The findings provide valuable insights into the unique characteristics of

TikTok that contribute to impulsive buying, including the emphasis on short-form videos, the prevalence of influencer marketing, and the platform's interactive nature. Overall, this study offers a comprehensive understanding of the factors that drive impulsive buying behavior on social commerce platforms, with a particular focus on TikTok. The findings have significant implications for academics and practitioners, providing a foundation for future research and informing the development of effective marketing strategies to promote responsible consumer behavior in the digital era. The study's results also provide valuable insights for marketers and platform designers, highlighting the importance of leveraging social influences, fostering positive emotions, and cultivating parasocial relationships to enhance customer engagement and drive sales on platforms like TikTok. Ultimately, this research reinforces the utility of the S-O-R framework in comprehensively understanding how social stimuli translate into complex consumer behaviors through mediating psychological and relational processes in the context of social commerce.

Limitations and Future Research

This study's findings provide valuable insights into the dynamics of impulsive buying behavior on social commerce platforms, yet several limitations and avenues for future research warrant consideration.

Firstly, the sample, which is primarily comprised of respondents aged 18-25 and predominantly university students in Ho Chi Minh City, may not accurately represent the broader population. This demographic skew, particularly the gender imbalance (69.5% female) and age concentration, limits the generalizability of the findings and potentially introduces bias into the results. Future research should replicate this model with a larger and more diverse sample, incorporating various age groups, genders, and demographics, to enhance the generalizability of the findings.

Secondly, while the current study focused on assessing the urge to buy impulsively, it did not directly observe actual impulsive buying behaviors. Subsequent research could employ observational or experimental methods (e.g., tracking in-app purchases, A/B testing of content) to examine real-time impulsive buying actions on social commerce platforms, thus providing a more comprehensive understanding.

Thirdly, the research model was applied explicitly to TikTok. Future studies could extend the model to other social commerce platforms, such as Instagram or Facebook, to investigate whether the relationships identified in this study hold across different platforms and to explore platform-specific nuances in impulsive buying behavior.

Fourthly, while the study incorporated established scales from prior research, it could be enhanced by developing and validating a new scale specifically tailored to measure impulsive buying behavior on social commerce platforms. Though validated in general retail contexts, current scales may not fully capture the unique nuances of impulsivity driven by the highly visual, interactive, and influencer-centric nature of social commerce platforms like TikTok. A new scale could better account for context-specific triggers and psychological states unique to this environment, thus enabling a more precise and contextually relevant assessment of this phenomenon.

Ultimately, future research could investigate the underlying mechanisms by which positive emotions and parasocial interaction influence impulsive buying behavior. Such exploration could involve exploring the role of specific emotions, such as excitement or joy, or investigating the different types of parasocial relationships that consumers form with content creators. Additionally, future studies could explore the moderating roles of individual differences (e.g., self-control, impulsivity traits) or situational factors (e.g., time pressure, product scarcity) on the proposed relationships.

By addressing these limitations and pursuing these avenues for future research, we can gain a more comprehensive and nuanced understanding of impulsive buying behavior in social commerce's dynamic and rapidly evolving landscape.

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APPENDIX

Appendix A Measurement Items

All items were measured on a 5-point Likert scale:

1 = Strongly Disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5 = Strongly Agree

Construct	Item	Content
Independent variables (Stimulus)		
Social Influence Factors		
Review Quality (RQ)	RQ1	I feel that people who leave reviews on TikTok are reliable.
	RQ2	I feel that reviews from other members on TikTok are objective.
	RQ3	I feel that reviews from other members on TikTok are accurate.
	RQ4	I feel that reviews from other members on TikTok are complete.
Source Credibility (SC)	SC1	People who leave reviews on TikTok know how to evaluate product quality.
	SC2	People who leave reviews on TikTok are experts in evaluating product quality.
	SC3	People who leave reviews on TikTok are experienced in choosing brands and products.
	SC4	I feel that people who leave reviews on TikTok often provide factual evaluations.
Observational Learning (OL)	OL1	I can easily notice the number of people who buy the same product on TikTok.
	OL2	I can observe a large number of products that have been sold on TikTok.
	OL3	I observed that many people buy TikTok products.
Source Attractiveness		
Expertise (EX)	EX1	TikTok can help me find members who are knowledgeable about brands and products.
	EX2	TikTok can help me identify members who are experts on brands and products.
	EX3	TikTok can help me identify members with much experience choosing brands and products.
Similarity (SI)	SI1	TikTok can help me find members who share the same values.
	SI2	TikTok can help me identify members who have the exact needs.
	SI3	TikTok can help me identify members who have the same interests.
Likability (LI)	LI1	TikTok can help me find likable members.
	LI2	TikTok can help me identify kind members.
	LI3	TikTok can help me identify popular members.
Mediator variables (Organism)		
Positive Emotion (PE)	PE1	When shopping on TikTok, I feel excited.
	PE2	When shopping on TikTok, I feel pleasant.
	PE3	When shopping on TikTok, I feel happy.
Parasocial Interaction (PSI)	PSI1	TikTok lets me know what other users like, especially some celebrities I am interested in.
	PSI2	When using TikTok, I feel comfortable interacting with members, especially some celebrities, with whom I have almost no contact.
	PSI3	When using TikTok, I can compare my opinions on products and brands with other members, especially some opinions from celebrities.
Dependent variable (Response)		
Urge to Buy Impulsively (UBI)	UBI1	I often feel urged to buy items other than my initial shopping goals when using TikTok.
	UBI2	I often buy items that are unrelated to my initial shopping goals when using TikTok.
	UBI3	When using TikTok, I tend to buy items outside my initial shopping goals.