



How Social Media Influencers Shape Online Impulsive Buying: The Mediating Role of Parasocial Interaction

Como os Influenciadores das Redes Sociais Moldam a Compra Impulsiva Online: O Papel Mediador da Interação Parassocial

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Abstract

With the increasing influence of social media, social media influencers (SMIs) have become key players in shaping consumer behavior, particularly in driving online impulsive buying behavior (OIBB). This study investigates how SMIs' interpersonal interaction and social attraction impact followers' parasocial interaction (PSI) and examines PSI's mediating role in OIBB. Using a modified Stimulus-Organism-Response (S-O-R) model, data were collected from 589 participants in Turkey through an online survey. The findings indicate that similarity, likeability, and social attraction significantly influence PSI, which, in turn, encourages OIBB. However, expertise does not play a significant role in fostering PSI. Moreover, PSI mediates the relationships between likeability and OIBB, as well as social attraction and OIBB, but does not mediate the effects of similarity or expertise. These insights suggest that SMIs' ability to form personal and social bonds with followers is more influential in triggering impulsive purchases than their perceived expertise. The study provides strategic implications for marketers seeking to enhance engagement and drive sales through influencer-driven digital marketing campaigns.

Keywords: Digital Marketing; Social Attraction; Parasocial Interaction; Online Impulsive Buying Behavior.

Resumo

Com a crescente influência das redes sociais, os influenciadores digitais (SMIs) tornaram-se figuras-chave na modelação do comportamento do consumidor, especialmente na promoção da compra impulsiva online (OIBB). Este estudo investiga como a interação interpessoal e a atração social dos SMIs impactam a interação parassocial (PSI) dos seguidores e examina o papel mediador da PSI na OIBB. Utilizando um modelo modificado Estímulo-Organismo-Resposta (S-O-R), foram recolhidos dados de 589 participantes na Turquia através de um inquérito online. Os resultados indicam que a similaridade, a simpatia e a atração social influenciam significativamente a PSI, que, por sua vez, incentiva a OIBB. No entanto, a percepção de especialização dos SMIs não desempenha um papel relevante na criação de PSI. Além disso, a PSI medeia a relação entre simpatia e OIBB, assim como entre atração social e OIBB, mas não entre similaridade ou especialização. Estes resultados sugerem que os laços emocionais e sociais com os seguidores são mais eficazes para impulsionar compras do que o conhecimento técnico, oferecendo implicações estratégicas para o marketing digital.

Palavras-chave: Marketing Digital; Atração Social; Interação Parassocial; Comportamento de Compra Impulsiva Online.

1. Introduction

Social attraction refers to an individual's ability to influence others' mental states and gain social acceptance and approval (Serman & Sims, 2020). It involves followers identifying with a brand's values and ideology, seeking communication, and forming close connections (Luo et al., 2023). Meanwhile, impulse buying, a pleasurable and spontaneous purchasing activity, is rooted in the stimulus-response relationship and is characterised by a sudden urge to acquire products immediately (Chen & Yao, 2018). Today, impulse buying behaviour in physical retail environments has largely been replaced by online impulse buying, driven by advancements in internet-based technologies and the growing influence of social media platforms on e-commerce processes.

According to the 2023 report, there are 5.16 billion internet users worldwide. In terms of social media usage, the number of users reached 4.76 billion by 2023 (We Are Social, 2023). With the substantial growth of e-commerce, the prevalence of online impulse buying has significantly increased. It is estimated that approximately 40% of total online consumer spending results from impulsive purchases (Chan et al., 2017). Moreover, these unplanned purchases represent a valuable consumer segment, particularly for online shopping platforms. This is because online shopping sites and social media platforms offer far greater convenience, speed, and ease of use compared to traditional retail stores (Chan, 2017; Guerreiro et al., 2024).

A Business Insider study highlights the importance of brands managing connections with Social Media Influencers (SMIs), with investments projected to range between \$5 billion and \$10 billion in 2022 (Sokolova & Kefi, 2020). SMIs enable users to share and disseminate emotions, ideas, opinions, and information through personal, public, political, and commercial messages, fostering relationships based on mutual interests (Baran & Porto, 2023; Rodrigues et al., 2024).

Actively engaged in social media, SMIs build a substantial following through marketing strategies and online engagement. They seamlessly integrate products into their lifestyles, evaluate them, and provide reviews (Koay et al., 2021, p. 2). Bloggers on YouTube, Instagram, and Facebook showcase products, offering opinions and endorsements. Their posts—including images, videos, and written descriptions—enable marketers to create an engaging shopping experience and extend promotional campaigns at any time.



This approach encourages impulse buying tendencies, driving frequent purchases and higher sales volumes (Chen & Yao, 2018, p. 1249).

Social attraction is the affinity an audience has towards an influencer, influenced by shared interests and compatibility. This connection signifies openness to communication and intimacy with media personalities (Su et al., 2021, p. 5). Influencers with increased social attraction are more effective in fostering social interactions, fulfilling users' social needs for belonging and attachment (Shen et al., 2019, p. 298). Social media influencers (SMIs) have emerged as a new type of social contact, defining one-way interactions between influencers and followers. PSIs hold considerable importance in society for fictional characters and can improve social contact, prolong engagement duration, and strengthen the intimacy and affection of performers (Lin et al., 2021, p. 61). The opinions that followers have about the products and brands they have identified may vary according to their relationships with influencers (Hsu, 2020, p. 2). The influencer, with whom a parasocial relationship is established, can convey their past experiences, recommendations, or suggestions to their followers, making them more likely to believe in them (Lin et al., 2021, p. 56). When the results of past studies in the literature (Arviansyah et al., 2018; Sokolova & Kefi, 2020; Su et al. 2021) are examined, it is shown that parasocial communications can be a driving force for unplanned and spontaneous reactions such as online impulsive shopping behaviours.

Sokolova & Kefi (2020) found that followers' perceived similarity with influencers is the most influential factor on PSI, including the social attraction effect. Apart from the relationships formed between followers and influencers; all kinds of values and attitudes adopted by both parties can also have a guiding effect on the purchase decision process of followers (Chen et al., 2022, p. 19). In addition to similarity, expertise and likability in personal interaction are other important factors in influencing and guiding followers (Xiang et al., 2016).

Despite numerous studies on celebrity endorsements, research on Social SMIs remains relatively scarce. Although the elements of interpersonal interaction have been extensively explored in relation to OIBB (Arviansyah et al., 2018; Koay et al., 2021; Cui et al., 2022) in countries like Indonesia, Malaysia, and China, there is a noticeable lack of research focused on Turkish SMIs. Additionally, while the influence of social attraction on PSI with influencers has been emphasized (Sokolova & Kefi, 2020; Zheng et al., 2020; Masuda et al., 2022), research using PSI as a mediating factor is rare. In this study, PSI was measured by examining its mediating effect on OIBB for each element of both social attraction and interpersonal interaction. The S-O-R theory was utilized in the study. The study was conducted in Turkey, which has a significantly younger population compared to other countries in Europe and ranks third in online shopping worldwide (We Are Social, 2023).

2. Literature Review

2.1 Stimulus Organism Response Model

The S-O-R model tries to reveal the cognitive and emotional aspects of the external environment and the resulting reactions and behaviors (Chang et al., 2011; Tam et al., 2024). Therefore, it is preferred by researchers in the field of marketing to understand and comment on the behavior of consumers in the purchase decision-making process (Chen & Yao, 2018). The model consists of three components: stimulus, organism and response. In the research, the stimulus triggers impulsive exchanges representing external environmental elements (Xu et al., 2020), while the organism is the element that covers the internal processes between stimulation and response and shows internal actions (Chang et al., 2011). To better understand the cognitive and emotional aspects of individuals and to use them together with elements such as flow experience and pleasure is crucial in explaining the results in impulsive shopping research (Chan et al., 2017). Responses are the outcome of the psychological process within the organism component, and individuals may either approach or avoid them (Lee & Gan, 2020).

This study uses the S-O-R model to study impulse buying in vlogs of influencers. Despite its limited number of studies, the S-O-R framework has proven effective in exploring OIBB. It explores the interplay between environmental stimuli, consumer cognitive and emotional states, and subsequent online behaviors. The study proposes expertise, similarity, and likeability of influencers as stimuli affecting internal affective reactions, referring to PSI organisms. The response investigated is OIBB.

Atmospheric cues have a crucial role in triggering the desired effect in followers that stimulates the followers' sentiments by purposefully designing the communication environment, thus increasing the type of PSI likelihood (Loureiro, 2019). Followers perceive a variety of environmental signals in a social media platform, and experiences with those cues result in a variety of emotional states, which in turn affect followers' intentions to show OIBB after influencers' impressions (Koo & Park, 2017). Additionally, atmospheric cues are effective in drawing followers' attention, eliciting sentimental responses, and encouraging them to spend more time on the social media platform, browsing, and evaluating the marketing offer (Sarah, 2020). Online environment salients trigger favorable or unfavorable sentiments that affect attitudes, purchase intentions, and behaviors that determine followers' purchasing propensity (Wu et al., 2013). Online environment features are categorized into low and high task-relevant



cues (Wadera & Sharma, 2018). High task- relevant signals provide information that helps followers accomplish shopping goals, while low task- relevant cues focus on creating an ambiance that improves the whole shopping experience.

2.1.1 Stimulus

Influencers play a crucial role in attracting viewers through their content, such as vlogs and short videos. By applying S-O-R to influencers' effects on consumers, it's possible to understand how they trigger the PSI factor through interpersonal interaction and social attraction on online platforms. Engaging in social interactions with influencers can satisfy emotional demands (Aytulun & Sunal, 2020) and help individuals develop perceptions and assessments of those communicating with them (Morrison-Smith & Ruiz, 2020). These elements, originally observed in face-to-face interactions, can be applied to online interactions to understand consumer interactive behavior (Liu et al., 2022).

Interpersonal interaction factors are environmental stimuli that influence individuals' evaluations of influencers' interactions in live streamings, vlogs, stories, and short videos. Previous studies such as Xiang et al. (2016), Chen et al. (2022), Cui et al. (2022) have used these factors in online shopping environments. Expertise, similarity, and likeability are three factors affecting PSI (Xiang et al., 2016). Expertise refers to a renowned influencer's professionalism, experience, expertise, qualifications, or skills concerning the promoted product or brand (Rungruangjit, 2022). People tend to perceive experts' viewpoints as more persuasive, leading to more acceptance of their recommendations. In social commerce platforms, influencers with substantial professional expertise can offer valuable suggestions to their consumers (Chen et al., 2022). The authenticity of SMIs as genuine experts is crucial as long as their followers place trust in them. Consumers' views and perceptions of influencers are potentially the most influential elements shaping their attitudes toward a product (Koay et al., 2021). Influencers with varying levels of product knowledge, such as athletes or entertainment influencers, are often perceived as having profound understanding of sports-related products Ki et al. (2020). Expertise is also crucial for influencers in cultivating an emotional bond with their followers, as followers are more likely to develop a parasocial relationship with them when perceived as experts (Taher et al., 2022).

Similarity refers to the degree of similarity among individuals in terms of beliefs, education, social status, and related attributes (Hsu, 2020). It can be classified into external and internal types, with external similarity being easily acquired and internal similarity requiring more profound engagement Fu et al. (2019). Similarity can also be seen as users' perceived ability to find individuals with matching interests, styles, and tastes within a social computing community (Xiang et al., 2016). Social psychology research shows that individuals who share similarities are more likely to engage in interpersonal attraction, leading to improved communication and understanding (Fu et al., 2019). This preference also reduces product information uncertainty in online purchases and contributes to trust-building processes (Matook et al., 2015). Influencers with similar interests and interests can increase cognitive and affective confidence, leading to impulsive purchasing behavior (Chen et al., 2022). Consumers tend to place more confidence in information from influencers with similar interests in online contexts (Cui et al., 2022). The similarity-attraction paradigm supports the role of similarity in social relationships, emphasizing the motivation to establish connections with similar others. Social commerce platforms, like social media, allow influencers to express their unique preferences and identities, highlighting the critical role of similarity in shaping social relationships (Hu et al., 2023).

Likability refers to an individual's perceived friendliness, pleasantness, politeness, and affability (Pulles & Hartman, 2017). It plays a crucial role in social interactions, evoking positive emotional experiences and creating a sense of ease (Bradley et al., 2019). Likability can also be defined as the information receiver's fondness towards the source's physical appearance and personal characteristics. It encompasses attributes like talent, kindness, honesty, and intelligence (Li & Yi, 2018). People perceive likable people as more similar to themselves, making them more likable. A well-known SMI is considered more likable, as consumers view them as role models who can shape attitudes, beliefs, and purchase decisions (Xu et al., 2020).

Recent social psychology research has shown that likability significantly impacts interpersonal interactions. When people encounter someone likeable, they form a positive initial impression, while encountering an unlikeable person leads to an unfavorable impression. Positive traits from a source of information also influence the recipient's perception of the source (Xiang et al., 2016). Likability also fosters a sense of connection with a television personality, influencing the perceived importance of the relationship (Kurtin et al., 2018). It is also believed to enhance advertising effectiveness when transferred from the influencer to the product (Taillon et al., 2020).

Social attraction refers to an individual's ability to influence others' mental states and gain social acceptance and approval (Serman & Sims, 2020). It involves followers identifying with an influencer's values and ideology, seeking communication, and establishing intimate connections. Higher social attraction leads to greater admiration and respect from fans (Luo et al., 2023). Influencers' social skills and shared characteristics with followers foster deeper understanding, leading to enhanced parasocial relationships on online platforms (Su et al., 2021). High social attraction among influencers increases fan intention to follow and emulate their behavior, increasing the likelihood of purchasing endorsed products. High social attraction also contributes to customer loyalty, credibility, and parasocial relationships, influencing the perceived trustworthiness of social media users (Masuda et al., 2022).



2.1.2 Organism

Chan et al. (2017) highlight three key aspects of an organism's online behavior: its desire to investigate its surroundings, its drive to interact and communicate, and its reported satisfaction with its purchasing experience. Impulsive consumer purchases often stem from psychosocial engagements with celebrities, with the persuasiveness of a message largely influenced by the follower's parasocial bond with the celebrity Yue et al. (2023). This concept, known as Parasocial Social Influence (PSI), emerged due to the growing impact of social interaction (Arviansyah et al., 2018). Influencers can create a sense of PSI by adapting their communication, gestures, and mimics, creating an illusion of a two-way connection with their audience. This can lead followers to perceive the influencer as an intimate friend (Xu et al., 2016), even when not directly engaging with the character (Arviansyah et al., 2018).

Social media users who perceive a preferred influencer as a trustworthy friend or advisor may engage in simulated social exchanges, leading to a parasocial relationship with them (Lin et al., 2021). Similarly, Hsun (2020), Chen et al. (2022), and Masuda et al. (2022) concluded that PSI positively affects cognitive trust and emotional trust in their studies in which they tried to find the causes of impulsive buying behavior by using the S-O-R model respectively.

2.1.3 Response

Influencers' followers seek closeness due to their positive experiences, leading to one-sided communication and increased motivation to use or share their products. Unplanned purchases, particularly on online shopping sites, can be potential customers, as they are more convenient and faster than physical store shopping (Chan, 2017). The S-O-R model in this study focuses on online impulsive buying, reflecting followers' approaches to communication and the potential for unforeseen purchases.

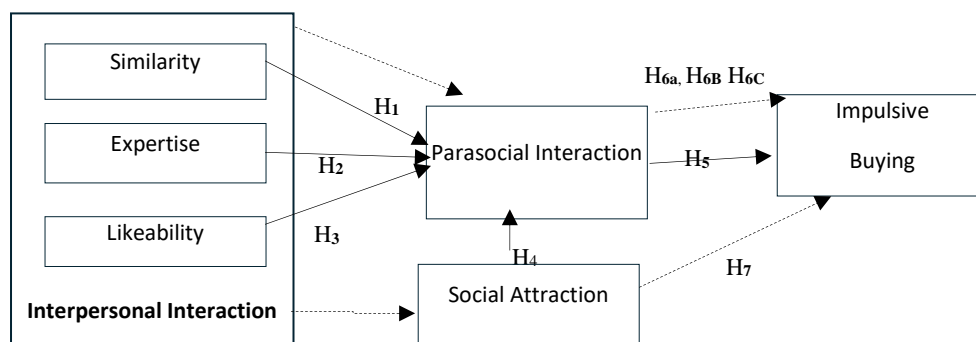
Impulse buying is a sudden desire to buy a product without considering the reasons or necessity behind it (Chan et al., 2017; Arviansyah et al., 2018; Chen et al., 2022). There are various categories of impulsive buying, including reminder, pure, suggestive, and planned purchases (Xiang et al., 2016). Pure impulse purchases are unplanned decisions triggered by exposure to a particular stimulus, often involving novelty buying (Pandey & Bharti, 2019). Reminder impulse purchases occur when consumers buy a product without premeditated planning, especially when household stock is depleted (Chan et al., 2017). Suggestive impulse buying occurs when consumers experience a compelling desire to acquire a product upon initial exposure, lacking any pre-existing desire or prior knowledge (Xiang et al., 2016).

Impulsive purchases are becoming a compulsive habit in the social networking world due to factors like limited operating hours, travel time, and inconvenient store locations (Chan et al., 2017). Influencers may also promote online impulse purchases through social networking. Customers don't develop a craving for online impulse buying behavior before making a purchase, but certain cues influence their browsing behavior (Cui et al., 2022). Impulsive buying stems from a lack of emotional control and cognitive judgment, stimulated by external stimuli and customer emotions and subjective perceptions (Ey, 2021).

3. Research Model

The study investigates the connection between interpersonal interaction and social attraction, their potential impacts on PSI, and OIBB. Four hypotheses are proposed, including the impact of PSI on OIBB and the mediating role of parasocial interaction between OIBB and social attraction. Figure 1 illustrates the connections among recognized dimensions.

Figure 1 - Proposed Research Model



Source: own elaboration



3.2 Interpersonal Interaction and Parasocial Interaction

Previous research suggests that perceived similarity between media personas and viewers influences the formation of social media influencers (Hoffner & Buchanan, 2005; Tian & Hoffner, 2010). This concept, based on Hovland, Janis, and Kelley's "source credibility" in 1953, suggests that individuals believe those who are similar provide personally relevant information, making interactions rewarding and leading to feelings of attraction. Studies in communication and marketing have focused on PSIs between influencers and their followers, with studies (Xiang et al., 2016; Fu et al., 2019; Sokolova & Kefi, 2020)) showing that increased internal similarity can strengthen consumer connections and their intention to engage in social shopping and sharing. While followers' perceived similarity with influencers they admire and closely follow is a more important factor than social attraction, it also emerges as an important factor in livestream shopping (Chen et al., 2022). Expertise can form the basis for establishing PSI type communication. Influencers with higher product knowledge and past experience with the product or brand may be more likely to engage with their followers more frequently and more effectively (Lin et al., 2021). The source's reputation and expertise (Zheng et al., 2022), as well as skill level (Luo et al., 2023), are necessary for the formation of PSI. Likeability, another element of interpersonal interaction, is considered as a reliable indicator of PSI (Collisson and Howell, 2014), and based on this effect, communication between influencers and their followers is strengthened. So, influencers can persuade followers to participate in community events more frequently (Xiang et al., 2016). Moreover, influencers can also influence social media advertisements to be spread and liked by users more quickly (Copeland & Lyu, 2023). Therefore, it is important to understand the interpersonal interaction characteristics of influencers in order to reveal how they can affect PSI in social media interactions. The hypotheses formed in this direction are listed below:

H₁: Perceived similarity of SMI has a positive effect on PSI.

H₂: Perceived expertise of SMI has a positive effect on PSI.

H₃: Perceived likeability of SMI has a positive effect on PSI.

3.3 Social Attraction and Parasocial Interaction

While social attraction is one of the important antecedents of PSI (Masuda et al. 2022), Arviansyah and Hidayanto (2018) found that followers consider themselves an integral part of influencers' lives and that vloggers' social attraction positively affects PSI. Zheng et al. (2020) concluded that social attraction positively influences extraordinary relationships such as friendship levels and PSI within online communities; in parallel, Sokolova & Kefi (2020) claimed that influencers' social attraction directly affects parasocial interaction. Thus, the subsequent hypothesis is developed:

H₄: Social attraction of SMI has a positive effect on PSI.

3.4 Parasocial Interaction and Online Impulsive Buying Behavior

In light of PSI, it is suggested that parasocial relationships between an individual and a celebrity may grant the latter greater persuasive power, more effectively influencing purchase decisions. This can increase users' motivation towards brands (Silva & Costa, 2021, p. 57). So, SMIs' product or brand information can drastically lessen followers' skepticism about products they endorse, alter their perception of these products, and encourage them to buy more products even if they hadn't planned to (Hu et. al., 2023, p. 566). Ey (2021) claimed that PSI by consumers plays a pivotal role in fostering impulsive buying tendencies during live streaming.

As consumers engage in PSI with streamers, a sense of trust is established, prompting them to consider the streamer's recommendations and increasing the probability of impulsive purchases. Similarly, within the framework of parasocial relationships, users may adopt the styles of others and adhere to their recommendations, potentially culminating in impulsive purchasing behavior (Xiang et. al., 2016). Arviansyah et al. (2018) also stated that individuals engaging in PSI with vloggers might adopt their lifestyles and feel compelled to make impulsive purchases of the products endorsed by the vloggers. The presence of PSI is likely to contribute positively to the inclination for impulsive buying. In the research of Lee & Gan (2020), it was found that during the purchase engagement via mobile instant messaging, the buyers' PSI with the seller positively influences their impulse buying tendency and impulsive buying behavior.

H₅: Individuals' PSI positively affects their OIBB.

3.5 Mediating Role of Parasocial Interaction

When examining studies on PSI, it is observed that the majority of them employ the source credibility theory. Lee & Watkins (2016) observed that consumers were more inclined to form parasocial relationships with vloggers perceived as relatable and similar to themselves. Hence, this factor helps them change their attitudes, such as unplanned purchases. Lou & Kim (2019) confirms that PSI mediates the link between source credibility (interpersonal interaction elements) and purchase intentions too. In line with



parasocial relationship theory, Ko (2023) stated that the perception of similarity between viewers and a live streamer contributes to the formation of a PSI.

It becomes evident that very few studies have addressed the mediating role of PSI in conjunction with the same interpersonal factors in OIBB. Taher et al. (2022) found that parasocial relationships mediate the relationship between social media influencers' expertise and the intention to purchase beauty products. Ko (2023) also stated that there is a mediating effect of parasocial relationships between live broadcast viewing and perceived similarity. Luo et al. (2023) found that PSI serves as a mediator, influencing the connection between the social attraction of influencers and fans' intentions to make purchases. Arviansyah et al. (2018) claimed that factors related to vloggers, such as social attraction, exert a positive influence on PSI. Also, PSI positively impacts the inclination to make online impulsive purchases. Sokolova & Kefi (2020) specified that the connection established through PSI between influencers and their followers correlates positively with the users' intention to buy a featured product. Similarly, PSI is positively associated with the influencers' social attraction.

H_{6a}: PSI mediates the relationship between influencer's similarity and OIBB.

H_{6b}: PSI mediates the relationship between influencer's expertise and OIBB.

H_{6c}: PSI mediates the relationship between influencer's likeability OIBB.

H₇: PSI mediates the relationship between influencer's social attraction and OIBB.

4. Methodology

The survey questions used to obtain the data in the study consisted of Likert-type questions. Purposive sampling, in which the sample group is aimed at having certain qualifications, was preferred as a sampling approach. After making sure that the sample participants regularly use social media platforms and that they are familiar with the influencers they have listed, they were asked to use the influencers they follow as reference points when evaluating the statements in the survey (Chatzigeorgiou, 2017; Ismail, 2017). In the study, data was collected from a total of 589 participants through social media channels through disseminating the survey link. The research data was collected from students of bachelor's degree and master's degree in Turkey who were at least 18 years old, with the majority being below the age of 21. G*Power software was used to determine the adequacy of the sample size obtained from the participants for analysis using the structural equation model. According to the recommended sample size calculator for SEM (Yadav, et al. 2018), a sample of 108 is sufficient to achieve reliable results with an expected effect size of 0.15, a desired statistical power of 90%, and a significance level of 0.05. Therefore, our sample size was appropriate for further analysis. Turkey was chosen for this study due to its rapid digitalization adoption, high internet usage, and widespread social media usage. With 68 million users, 80% of the population (Statista, 2023), Turkey's e-commerce volume increased by 30.4% in 2022, reaching 381.5 billion TL (ticaret.gov.tr). This growth provides context for examining the effects of social media influencers on consumer behavior. In cultures like Turkey, where power distance is high, individuals are more likely to engage in parasocial relationships with social media influencers (Adapa, 2008; Wen, 2017). Data obtained from participants who did not meet the criteria were not included in the analysis.

A sum of 589 responses were gathered, and most participants, comprising 52.3%, were females, whereas 47.7% were males. Among the respondents, 65.4% were below the age of 21, 24.1% were aged between 21-25, and 10.0% fell in the 26-30 age range. Examining educational levels, most had a Bachelor's degree (88.5%), with just 11.5% holding Master's degrees. In terms of monthly earnings, over half (53.1%) of repliers reported a mean salary between TL6001 and TL8000.

4.1 Measurement

In the study, Zheng et al. (2020) employed scales measuring interpersonal interaction elements: similarity, expertise, and likeability. The social attraction scale was obtained from Su et al. (2021), and the PSI scale, comprising seven statements, was taken from Kim (2022). Finally, the measurement of OIBB was adapted from the five-item scale developed by Goel et al. (2022). Participants expressed their opinions on each statement using a five-point Likert scale ranging from (1) Strongly Disagree to (5) Strongly Agree.

4.2 Evaluation of the Measurement Model

In the study, reliability and validity tests were conducted to assess the adequacy of the measurement model. The model includes 24 items representing four latent constructs: interpersonal interaction elements (similarity, expectations, and likability), PSI, social attraction, and OIBB. First, it's aimed to test the reliability and convergent validity of the measurement model. For Hair et al.'s (2014) approach, composite reliability (CR) was used, and the threshold for composite reliability was based on 0.70. After the reliability test, factor loadings and average variance explained (AVE) were used to assess convergent validity based on Fornell & Larcker's (1981) study. For each item, factor loadings should be greater than 0.70, and the Average Variance Extracted (AVE) should be above 0.50. Additionally, to confirm discriminant validity, the Maximum Shared Value (MSV) must be lower than the AVE (Hair et al. 2014). As indicated in Table 1, all factor loadings for the corresponding constructs surpassed the 0.70 threshold. Similarly, the



composite reliability values, ranging from 0.80 to 0.953, exceeded the 0.70 benchmark. The AVE values, which ranged from 0.543 to 0.804, also surpassed the 0.50 threshold, demonstrating satisfactory convergent validity (Shrestha, 2021). Additionally, all factors have MSVs that are lower than their AVEs, confirming that convergent validity is met. It is also essential to assess the overall fit of the measurement model. The normalized chi-square value (χ^2/df) should be less than 3. RMSEA needs to be below 0.08, as recommended by Hair et al. (2014). According to Tabachnick & Fidell (2013), NFI and CFI should both exceed 0.9, while AGFI and GFI should be above 0.8. In the evaluation of the current confirmatory factor analysis model, the results showed a χ^2/df of 1.327, an NFI of 0.95, a GFI of 0.92, a CFI of 0.97, and an RMSEA of 0.05. These results indicate that the model has a satisfactory fit.

Table1 - Model Measurements

| Construct | Items | Loading | Cronbach's Alpha | CR | AVE | MSV |
|---------------------------------|-------|---------|------------------|-------|-------|-------|
| Similarity (SM) | SM1 | 0.863 | 0.899 | 0.831 | 0.587 | 0.440 |
| | SM2 | 0.873 | | | | |
| | SM3 | 0.891 | | | | |
| Expertise (EX) | EX1 | 0.861 | 0.893 | 0.800 | 0.570 | 0.441 |
| | EX2 | 0.907 | | | | |
| | EX3 | 0.848 | | | | |
| Likeability (LK) | LK1 | 0.789 | 0.787 | 0.879 | 0.708 | 0.310 |
| | LK2 | 0.883 | | | | |
| | LK3 | 0.848 | | | | |
| Social Attraction (SA) | SA1 | 0.813 | 0.854 | 0.811 | 0.543 | 0.333 |
| | SA2 | 0.834 | | | | |
| | SA3 | 0.854 | | | | |
| Para-Social Interaction (PSI) | PS1 | 0.735 | 0.888 | 0.909 | 0.589 | 0.567 |
| | PS2 | 0.749 | | | | |
| | PS3 | 0.740 | | | | |
| | PS4 | 0.792 | | | | |
| | PS5 | 0.738 | | | | |
| | PS6 | 0.816 | | | | |
| | PS7 | 0.798 | | | | |
| Impulsive Buying Behavior (IBB) | IBB1 | 0.899 | 0.904 | 0.953 | 0.804 | 0.667 |
| | IBB2 | 0.893 | | | | |
| | IBB3 | 0.885 | | | | |
| | IBB4 | 0.883 | | | | |
| | IBB5 | 0.924 | | | | |

$\chi^2/df = 1.327$ NFI= 0.95 CFI= 0.97 GFI= 0.92 AGFI:0.87 RMSEA = 0.05

Note: CR= Composite reliability, AVE = Average Variance Extraction MSV = Max. Shared Variance

The common method variable was used to confirm that common method bias was not a significant issue in this study. Harman's one-factor test with unrotated factor solutions was employed. The results revealed that the total variance extracted by a single factor for the sample was 37.528 %, which is below the recommended threshold of 50% (Podsakoff et al., 2003). Therefore, there were no issues with common method bias.

To assess whether there were any discriminant validity issues in the research measurement model, the square root of the AVE values for each construct should exceed the correlation between constructs, as shown in Table 2. According to Chin (1998), the square root of each AVE (in *italics*) should surpass the inter-construct correlations. The findings presented in Table 2 demonstrate that the discriminant validity of all constructs in the proposed research model can be confidently affirmed.

Table 2 - Factor Correlation Matrix

| | SM | ED | EN | HB | UB | IBB |
|------------|--------------|--------------|--------------|--------------|--------------|--------------|
| SM | 0.766 | | | | | |
| LK | 0.549 | 0.841 | | | | |
| EX | 0.613 | 0.482 | 0.754 | | | |
| IBB | 0.574 | 0.598 | 0.456 | 0.887 | | |
| SA | 0.577 | 0.557 | 0.404 | 0.426 | 0.737 | |
| PS | 0.607 | 0.702 | 0.465 | 0.817 | 0.627 | 0.767 |



The second criterion for discriminant validity is the Heterotrait-Monotrait (HTMT) ratio of correlations (Henseler et al., 2015). This analysis was also conducted, and the results are presented in Table 3.

Table 3 - HTMT Ratio of Correlations

| | EX | SM | LK | SA | PS | IBB |
|-----|-------|-------|-------|-------|-------|-----|
| EX | | | | | | |
| SM | 0.664 | | | | | |
| LK | 0.492 | 0.540 | | | | |
| SA | 0.432 | 0.569 | 0.558 | | | |
| PS | 0.469 | 0.605 | 0.693 | 0.626 | | |
| IBB | 0.467 | 0.573 | 0.594 | 0.665 | 0.627 | |

The HTMT ratios are below the value of 1, satisfying the discriminant validity criteria. These results indicate that the measurement model has no issues with discriminant validity.

5. Results

The AMOS 25 software was used to perform hypothesis tests, produce coefficients, evaluate the relationships between variables in the research model, and finally determine the model fit index values of the factors in the research model. Table 4 shows that all model fit indices for the structural model are at acceptable levels, indicating that the overall model fit is satisfactory.

Table 4 - Structural Model Fit Measures

| Measure | Estimate | Threshold |
|-------------|----------|-----------|
| χ^2 | 337.908 | |
| df | 241 | |
| χ^2/df | 1.402 | 1-3 |
| NFI | 0.931 | >0.90 |
| CFI | 0.962 | >0.90 |
| GFI | 0.909 | >0.80 |
| AGFI | 0.858 | >0.80 |
| RMSEA | 0.055 | <0.08 |

The findings from Table 5, which presents results of path analysis, reveal that hypotheses H₁, H₃, H₄, and H₅ are statistically significant and thereby supported. On the contrary, hypotheses H₂ did not achieve statistical significance, indicating that it is not supported. Similarity ($\beta = 0.220$, $t = 2.045$, $p = 0.041$) exerted a positive significant effect on PSI. Unlike similarity, expertise ($\beta = 0.04$, $t = 0.038$, $p = 0.973$) did not employ any impact on PSI. Likeability ($\beta = 0.419$, $t = 4.363$, $p < 0.001$) and social attraction ($\beta = 0.295$, $t = 3.113$, $p = 0.002$) have positive impacts on PSI. Furthermore, PSI positively affects OIBB ($\beta = 0.826$, $t = 9.438$, $p < 0.001$).

Table 5 - Path Analysis Results of Structural Equation Modelling

| Hypotheses | Relations | Std. Estimate | S.E. | C.R. | p | R ² |
|----------------|------------|---------------|-------|-------|-------|----------------|
| H ₁ | SIM->PSI | 0.220 | 0.084 | 2.045 | 0.041 | 0.143 |
| H ₂ | EX->PSI | 0.004 | 0.070 | 0.038 | 0.973 | |
| H ₃ | LK ->PSI | 0.419 | 0.067 | 4.363 | *** | 0.265 |
| H ₄ | SA ->PSI | 0.295 | 0.075 | 3.113 | 0.002 | 0.166 |
| H ₅ | PSI ->OIBB | 0.826 | 0.116 | 9.438 | *** | 0.302 |

*** $p < 0.001$



Table 6 presents the results of the mediation effect of PSI. It shows t-values, p-values, confidence intervals with lower and upper bounds, standardized coefficients, and standard error values. The user-defined estimand was used to analyze the mediating effects of PSI on the relationship between interpersonal interaction elements and OIBB, as well as between social attraction and OIBB. In the study, a 95% confidence interval was generated using 5,000 bootstrap samples (Hair et al., 2014). The results indicate that PSI does not have any significant mediation effect between similarity, expertise, and impulsive buying behavior, whereas it has significant mediation effect between both likeability, social attraction, and impulsive buying behavior. As a result, H_{6a} and H_{6b} were not accepted, but both H_{6c} and H_7 were accepted.

Table 6 - Analysis of Mediator Effects

| <i>Hypotheses</i> | <i>Path</i> | <i>S. Beta</i> | <i>S. E</i> | <i>t-values</i> | <i>P</i> | <i>CI: [LL-UL]</i> | <i>Result</i> |
|-------------------|-------------------------|----------------|-------------|-----------------|----------|--------------------|------------------|
| H_{6a} | SIM-> PSI ->O IBB | 0.182 | 0.107 | 1.700 | 0.077 | 0.011 – 0.359 | Not Supported |
| H_{6b} | EX-> PSI ->O IBB | 0.003 | 0.084 | 0.036 | 0.951 | -0.132 -0.137 | Not Supported |
| H_{6c} | LK-> PSI ->OIBB | 0.346 | 0.068 | 5.088 | 0.008 | 0.240 –0.471 | supported |
| H_7 | SA -> PSI ->O IBB | 0.244 | 0.077 | 3.168 | 0.010 | 0.121 – 0.391 | Supported |

S.Beta= Standart Coefficient; S.E= Standart Error; CI = Confident Interval; LL = lower bound; UL = upper bound

Note: bootstrap analysis with a 95% confidence interval is used to test for mediation, unstandardized coefficients reported. Values in parentheses are t-values. Bootstrap sample = 5,000 with replacement.

6. Discussion

The research findings indicate that five out of seven proposed hypotheses were supported, while two were not. Among the influencer dimensions examined, likeability exhibited the highest average value, reinforcing prior research (Collisson & Howell, 2014; Xiang et al., 2016; Copeland & Lyu, 2023). Likeability strengthens parasocial interaction (PSI), and younger social media users are particularly susceptible to forming PSI with likable influencers, thereby accelerating impulse buying tendencies.

The study also confirms that similarity positively influences OIBB, aligning with findings by Fu et al. (2019), Sokolova & Kefi (2020), and Chen et al. (2022). However, expertise—while often considered crucial—did not significantly affect PSI. This suggests that Turkish social media users may prioritise popularity and relatability over an influencer's knowledge or credibility. As previous studies (Arviansyah & Hidayanto, 2018; Zheng et al., 2020; Masuda et al., 2022) suggest, there is a strong positive correlation between social attraction and PSI. Followers often develop friendship-like relationships with influencers they regularly engage with, leading to higher trust and increased likelihood of impulsive purchases. This aligns with research by Hu et al. (2023), Xiang et al. (2016), and Ey (2021), which found that PSI fosters emotional connections that drive spontaneous buying decisions.

Interestingly, despite an influencer's expertise or similarity, participants did not necessarily display OIBB unless PSI was present. This underscores PSI's crucial mediating role in the relationship between likeability, social attraction, and OIBB. The findings suggest that influencers with high likeability and social attraction trigger impulse purchases, while those perceived as merely knowledgeable or similar do not necessarily have the same effect. The research further highlights that social media users often follow influencers for reasons beyond product recommendations. Even if followers are not explicitly seeking product information, their connection with the influencer makes them more likely to purchase endorsed products. Thus, SMIs serve as a catalyst for impulse buying, providing valuable insights for digital marketers and social media strategists to develop more effective influencer marketing strategies.

7. Conclusion and Implications

This study examined the impact of social media influencers (SMIs) on online impulsive buying behaviour (OIBB), with a specific focus on interpersonal interaction, social attraction, and parasocial interaction (PSI). The findings confirm that likeability, similarity, and social attraction significantly influence PSI, which in turn drives impulse buying tendencies. However, expertise does not play a significant role in PSI formation, suggesting that emotional and social connections outweigh professional knowledge or authority in influencing purchasing decisions.



The research also demonstrates that PSI serves as a crucial mediator between likeability/social attraction and OIBB but does not mediate the relationship between similarity/expertise and OIBB. This suggests that emotional appeal is more effective than factual credibility in prompting impulse purchases.

Furthermore, this study reinforces the strategic role of SMIs in digital marketing. Their ability to communicate authenticity, trustworthiness, and emotional appeal enhances brand relationships, consumer trust, and long-term engagement. Previous research (Schünke et al., 2021) has shown that collaborations with SMIs boost brand recognition, social media engagement, and product sales. In industries such as hospitality, the quality of influencer testimonials plays a key role in shaping consumer trust and encouraging bookings (Pontes & Ramos, 2023).

Given the increasing impact of social media-driven purchasing behaviours, brands should carefully evaluate influencers based on their emotional relatability rather than just product knowledge. Aligning branded content with an influencer's values and social appeal can strengthen PSI and consumer trust, ultimately leading to higher engagement and conversion rates.

7.1 Theoretical Implications

This study contributes to the literature on social media influencers (SMIs) and online impulsive buying behaviour (OIBB) by expanding the application of the Stimulus-Organism-Response (S-O-R) model to the social commerce context. The findings confirm that likeability, similarity, and social attraction significantly influence PSI, which in turn drives impulse buying. However, contrary to prior studies, expertise does not significantly impact PSI, suggesting that in certain cultural and consumer contexts, relatability and social appeal may be more influential than professional credibility.

Additionally, this study confirms that PSI acts as a mediator between likeability/social attraction and OIBB, but not between similarity/expertise and OIBB. This refines the para-social relationship theory, demonstrating that impulse buying is primarily driven by emotional and social factors rather than informational credibility. These insights provide a foundation for future research on influencer marketing, particularly regarding how cultural contexts and consumer demographics shape the effectiveness of influencer characteristics.

7.2 Practical Implications

The findings have significant implications for brands, advertisers, and social media strategists aiming to enhance their influencer marketing campaigns. Since likeability and social attraction play a pivotal role in driving PSI and OIBB, businesses should prioritise influencers who foster emotional and social connections with their audience rather than focusing solely on their expertise.

Concerning the influencer selection strategy, brands should collaborate with relatable, likeable, and socially engaging influencers who can foster a sense of authentic connection with followers, rather than prioritising technical expertise or professional authority. Influencer marketing campaigns should emphasise engagement-driven content, including storytelling, interactive posts, and user-generated content, to strengthen PSI and encourage spontaneous purchases. Marketers should leverage social attraction and emotional appeal in advertising strategies, using influencers who can establish a trust-based and aspirational connection with their followers. E-commerce platforms and brands should integrate real-time influencer interactions, such as live-stream shopping and influencer-led product showcases, to capitalise on PSI's effect on impulse buying. Since expertise did not significantly affect PSI in this study, brands should assess how regional or cultural differences shape consumer perceptions of influencers. In some markets, credibility may stem from relatability and aspirational social connections rather than professional knowledge.

Brands implementing these strategies can enhance consumer engagement, increase conversion rates, and optimise their social media marketing. These insights also highlight the potential for brands to refine their influencer marketing models by considering not only product-influencer alignment but also the emotional and social appeal of SMIs to drive sales effectively.

8. Limitations and future studies

While the research investigates the effects of SMI on its followers, it focuses on influencers on common social media platforms in Turkey and their followers living in Turkey. Therefore, when generalizing the research results, it's important to consider that the data may vary among influencers and their followers with different cultural or economic characteristics. In the study, utilizing additional factors, such as familiarity, reliability, and interaction, as well as control variables specifically tailored to certain social media platforms and product types, will help achieve clearer and more comprehensive results. Additionally, In future studies, identifying specific product and/or service categories (such as cosmetics, fashion, accessories, and accommodation) and measuring the OIBB impact of SMIs on their followers through concrete examples may yield more meaningful and reliable results.

Declaration of competing interest: None



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