Master's Thesis

Impulse buying in social commerce: Driving factors for social commerce and how they differ from in-store buying behavior

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Abstract

This thesis conducts a comparative analysis of impulse buying behaviors within social commerce platforms and traditional in-store settings, focusing on identifying the driving factors that influence spontaneous purchasing decisions in these distinct shopping environments. The study underscores the pivotal role of social media influencers on platforms, with particular focus on Instagram, who significantly drive impulse purchases through their ability to craft engaging, personalized content that resonates deeply with followers, thereby influencing their buying decisions. In contrast to physical stores, where impulse buying is typically stimulated by sensory cues and in-person interactions, social commerce leverages the immediacy of digital interactions and online social connections. Features such as "buy now" buttons and interactive ads seamlessly integrated into the social media interface facilitate spontaneous buying decisions without the physical handling of products.

Employing a quantitative research methodology, the study analyzes the frequency and triggers of impulse purchases across various platforms and their underlying motivations. The findings reveal that influencers have a significant impact on impulse buying decisions in social commerce, utilizing their credibility and engaging content to prompt quick consumer actions. This contrasts with physical stores, which rely more heavily on sensory marketing and in-person experience dynamics to encourage impulse purchases. The methodological approach allows for a detailed comparison between the buying tendencies in digital versus physical settings, providing robust insights into the factors that trigger impulse purchases in the modern digital age.

This research contributes valuable insights into the evolving landscape of consumer behavior, highlighting the growing significance of social commerce. It offers strategic recommendations for businesses aiming to enhance their digital presence and capitalize on the impulsive buying tendencies of the modern online shopper, pointing to the need for further research in this dynamic field.

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1. Introduction

1.1. Status Quo

In recent years, social commerce has revolutionized the online shopping behavior and has created a new channel for online commerce (Boardman, Blazquez, Henninger & Ryding, 2019, p. 2). Social commerce can be defined as the integration of shopping features in social media channels and thus, commercialize them (Stephen & Toubia, 2010, p. 215). This integration created a new and unique experience for the customer which combines social interactions, recommendations, and user-generated content with online shopping (Zhang & Benyoucef, 2016, p. 95). This trend is not limited to large corporations but extends to small and micro enterprises, which leverage social media platforms like Instagram to globally market their products. Instagram, known for its visual-centric content including photos and videos, has introduced features such as the 'Checkout on Instagram' button, aimed at supporting businesses of all sizes by streamlining the online shopping experience directly within the platform (Han, 2023, p. 2).

The platform's ability to facilitate direct product purchases through innovative features like product tags further emphasizes its role in social commerce (Han, 2023, p. 2; Williams, 2019). Digital influencers on Instagram, recognized for their credibility and authenticity, play a crucial role in influencing consumer purchasing behavior. Their endorsements often lead to direct purchases, underlining the impact of social media influencers as key drivers in the social commerce ecosystem (Santiago & Castelo, 2020, p. 34; Liu, De Costa, Yasin & Ruan, 2023, p. 2).

This thesis seeks to thoroughly examine the nuances of impulse buying behaviors, comparing the social commerce shopping environment with traditional in-store experiences. It focuses on identifying the key factors that drive such spontaneous purchases, especially in the context of social commerce where influencers and peer recommendations play a significant role. Additionally, it analyzes the factors that trigger impulse buys in offline retail settings, aiming to highlight both the differences and commonalities in impulse buying stimuli across these shopping venues.

1.2. Problem Statement

This thesis examines the factors that distinguish impulse purchases in social commerce from impulse purchases in physical stores. Developments in the last decade have led to more and more consumers making purchases online, which is why impulse purchases in social commerce have become increasingly important (Zafar, Qiu, Li, Wang & Shahzad, 2021, p. 2).

Social commerce includes those purchases that are made via social media platforms, such as Facebook, Instagram, Pinterest, or Tiktok. Impulse purchases include purchases in which consumers buy a product spontaneously and without any specific intention. This type of behavior plays an important role in retail, as it represents an additional source of revenue for companies, and it is now impossible to imagine social commerce without it. With the increasing prevalence of social commerce, i.e., the online sale of goods and services via social networks, the importance of impulse buying in online shopping is becoming more and more important (Zafar, Qiu, Li, Wang & Shahzad, 2021, p. 1). However, it is unclear which specific factors influence impulse purchases in social commerce. However, due to this ever- changing subject matter, there is only a limited number of studies that address the specific factors that influence impulse buying in social commerce shopping environments (Li, 2019, p. 282).

There are a variety of factors that influence impulse purchases in physical stores, such as product placement, price promotions, visual stimuli, and emotional influences. These factors can also play a role in social commerce, but it is unclear which specific factors are relevant here and whether there are differences. Social commerce takes advantage of, among other things, social networking and has the advantage of user-generated content (UGC) features, such as comments, reviews, recommendations, or even user profiles, such as influencers (Li, 2019, p. 282).

As mentioned earlier, in social commerce, digital influencers are a potential motivator for impulse purchases. Influencers are individuals who have a larger, stable number of followers on social networks and thus have some power over the opinions of others. The relationship between influencers and their audience is asymmetrical and can be well described by the concept of social power. This means that an influencer's opinion or recommendations can influence the buying behavior of their audience (Wang, Huang & Davison, 2021, p. 1066).

It is vital to understand the differences between impulse buying in social commerce and physical stores to help companies develop effective strategies to promote impulse buying in both areas. The goal of this paper, therefore, is to identify exactly those factors that drive impulse purchases in social commerce compared to the factors that influence impulse purchases in physical stores.

1.3. Objectives and Research Questions

This work aims to investigate the impulse buying behavior of customers and where the trigger points for impulse purchases lie within this journey.

On one hand, this work focuses on the correlations and differences between impulse purchases in physical stores and those made in the context of social commerce. On the other hand, the motivations, and motives behind impulse purchases in social commerce will be analyzed and explored in more detail. To get to the bottom of these motives, the following research questions were formulated:

Main research question: What driving factors for impulse purchases in social commerce can be identified - in contrast to physical stores?

Building up on this main research question, the following guiding questions can be concluded:

1. What are the peculiarities of impulse buying in social commerce in contrast to physical stores?
2. How must a company proceed in order to trigger impulse purchases via social commerce?
3. To what extent do influencers on Instagram trigger impulse purchases in the context of social commerce?

1.4. Methodological Approach

In this master's thesis, the research design incorporates a quantitative approach, which aims to understand consumer impulsive buying behavior in the environment of retail-stores as well as in social commerce. The methodological approach for this thesis involves a detailed questionnaire designed with a Likert scale to quantitatively assess the impulse buying behavior among consumers who engage with both social commerce platforms and traditional retail shopping.

Participants are aged from 16 years without any age limit, capturing a broad spectrum of the consumer market that is active both online and in traditional retail settings. The study includes both male and female participants to ensure gender diversity and to explore potential differences in impulse buying behaviors across genders.

The questionnaire will be structured around several key domains related to impulse buying, including factors influencing impulse purchases and the emotional and cognitive responses associated with them. Each question will be designed on a Likert scale, typically ranging from "strongly agree" to "strongly disagree," allowing participants to express their degree of agreement with various statements related to impulse buying behavior. The questionnaire will be disseminated through online platforms and social media channels popular among the target demographic, as well as through direct invitations to participate in the study. This approach aims to maximize response rates and ensure a representative sample.

The collected data will be analyzed using the statistical software SPSS to identify patterns, correlations, and significant differences in impulse buying behavior among different segments of the participant group. Special attention will be paid to comparing behaviors in online versus offline shopping environments and analyzing the impact of social media influencers and marketing strategies on impulse purchasing tendencies. This quantitative methodological approach is designed to offer precise, scalable, and analyzable data on consumer impulse buying behaviors. The insights gleaned from this study are expected to contribute valuable knowledge to the fields of consumer psychology, marketing, and e-commerce, with specific implications for optimizing marketing strategies in both social commerce and traditional retail settings.

The hypotheses resulting from an in-depth literature review, sound as follows:

H1: There is a difference in impulse buying tendencies across age groups, particularly with younger individuals exhibiting a higher degree of impulse buying compared to older individuals.

H2: Women are more inclined to engage in impulse buying compared to men.

H3: There is a significant difference in the frequency of impulse purchases made through social commerce platforms compared to traditional retail shops, with a higher frequency of impulse buying expected on platforms such as Amazon, Instagram, and Facebook.

H4: The trust of consumers in social media influencers significantly impacts the likelihood of making an impulse purchase on social commerce platforms.

H5: Positive recommendations by peers on social commerce platforms (such as direct messages or comments in the comment section) significantly impact the likelihood of making impulse purchases among the target demographic.

1.5. Structure of the Paper

This thesis consists of 6 chapters, of which three focus on the theoretical literature review and two more with the empirical research of the topic. The last chapter examines the answers to the research questions and objectives.

It begins with an introduction that establishes the research context, presenting the current dynamics of social commerce and traditional retail, articulating the problem statement, and outlining the research objectives and questions. This section also explains the methodological approach and provides an overview of the thesis structure.

The literature review follows, which delves into the theoretical underpinnings of impulse buying, including various concepts, theories, and models such as the Stimulus-

Organism-Response (S-O-R) framework. This part of the thesis discusses the characteristics of impulse buying in both physical and social commerce settings, emphasizing how different factors influence consumer behavior in each.

In the methodology section, the research design and data collection methods are detailed. This includes a description of the exploratory design, the survey method used for data collection, and the hypotheses that guide the empirical investigation. This section is critical as it lays the foundation for the empirical analysis by explaining how the data was gathered and analyzed.

The results and hypothesis testing section presents the findings from the empirical study. It includes detailed analysis and discussion of the survey results, focusing on how various factors such as age, gender, and platform preference influence impulse buying tendencies. This section tests the hypotheses posited in the methodology section and provides statistical evidence to support the conclusions drawn.

Finally, the conclusion sums up the key findings of the research, answers the research questions posed in the introduction, and discusses the implications of the study. Limitations of the current research are acknowledged, and suggestions for further research are made. This section reflects on the significance of the findings and their implications for both theory and practice.

2. Literature Review

2.1. Impulse buying behavior: Concepts and theories

2.1.1. Impulse behavior definition and implications for impulse buying behavior

Before 1987, there were numerous definitions of behavior lead by psychological impulses, which have been integrated into the definition of impulse buying used in this paper by Rook (1987, p.189). Originally, the investigations on impulse buying behavior focused on the product, from 1982, scientists started to shift the focus towards the individuals, the customers (Hausman, 2000, p. 404). The majority of the human brain operates through impulses, which can be either biochemically or psychologically stimulated. Rook (1987, p. 189) took this information into account when developing a cohesive definition for impulse buying. Previous definitions described the phenomenon of a psychological impulse as “a strong, sometimes irresistible urge; a sudden inclination to act without deliberation” (Rook, 1987, p. 189). These psychological impulses are triggered spontaneously and cannot be planned, however, once they are set off by certain stimuli, they emerge promptly. As soon as the impulse is stimulated, the impulse demands prompt action. This demand may be authorative and persistent and in some cases even irresistible. Nevertheless, not every rapid behavior can be seen as impulse behavior. One exception would be habitual behavior, which may occur automatically, but not does not have to be unintentionally or impulsively. Another exception would be the case of emergency situations, where individuals may act rapidly, but in a more instinctive than impulsive manner (Rook, 1987, p. 189).

This insight into the psychological aspects of individuals lead to a definition which describes impulse buying behavior as the unplanned and immediate purchase without further reflection (Rook, 1987, p. 191).

> Rook defined that impulse buying occurs when a consumer experiences a sudden, often powerful and persistent urge to buy something immediately. The impulse to buy is hedonically complex and may stimulate emotional conflict. Also, impulse buying is prone to occur with diminished regard for its consequences. (Rook, 1987, p. 191)

The purchase is described as *unintended* since the individual decided to purchase the product while shopping and was not looking for this product in the first place or had it on their shopping task, e.g., shopping for a gift, and still bought it. Unintended buying is linked to the sudden desire to purchase a product while shopping. Impulse buying is described as *unreflected*, since the decision-making process of the customer whether to buy the product or not, skips the evaluation-stage. Customers who buy products impulsively are less likely to examine the consequences that this purchase may carry. Lastly, the time passing by between noticing and purchasing the product are notably short and immediate. Additionally, the individual is highly unlikely to postpone the purchase, compare the product or seek more information. (Weun, Jones & Beatty, 1998, p.1124).

Beatty and Ferrell (1998, p. 170) expand the definition by Rook (1987, p.191) by including the aspects of the individual's shopping intentions. According to Beatty and Ferrell (1998, p.170), individuals who commit an impulse purchase, have no "pre-shopping intentions", meaning they do not enter the store with the desire to purchase the product or with a pre-defined buying task. The impulse purchase happens after experiencing the immediate and sudden desire to buy the product and does not consist of reminder-product purchases, such as daily goods that are purchased on the regular and are just out of stock (Beatty & Ferrell, 1998, p. 170).

Due to criticism and confusion around the term *"unplanned"*, literature evolved four distinct types of impulse purchases: pure impulse buying, reminder impulse buying, suggestion impulse buying, and planned impulse buying. Pure impulse buying happens when a consumer makes an unusual or spontaneous purchase that deviates from their usual pattern of buying. Reminder impulse buying occurs when a consumer notices a product and remembers that they need to restock it or recalls an advertisement and a prior decision to purchase that item. Suggestion impulse buying takes place when a consumer sees a product for the first time and recognizes a need for it. Lastly, planned impulse buying happens when consumers shop with a specific list in mind but also have the anticipation and intention to make additional purchases influenced by promotions and discounts (Rook, 1987, p. 191)

This consumer behavior plays a vital role for the strategies of companies and their marketers. Earlier research has proven the significance of the point of contact in combination with impulse purchases. Therefore, the strategy of many companies has shifted towards in-store promotions and offers to stimulate the consumer towards more spontaneous purchases. Impulse purchases have become a key component to boost the company’s sales throughout the year (Parsad, Prashar, Vijay & Sahay, 2019, p. 2).

2.1.2. Implication of the Stimulus-Organism-Response (S-O-R) theory for impulse buying behavior

For the foundation of this paper, the Stimulus-Organism-Response (S-O-R) framework, originally put forward by the researchers Mehrabian and Russell in 1974 (refer to Figure 1), is used to explain impulse purchasing behavior. This model is structured around three key elements: stimulus, organism, and response. The 'stimulus' refers to factors that impact a person's internal state, thereby inciting a reaction. 'Organism' relates to the intermediate emotional or attitudinal changes triggered in an individual by these stimuli. Finally, the 'response' is the observable behavior exhibited by the individual as a consequence of these processes (Parsad, Prashar, Vijay & Sahay, 2019, pp. 3-4).

The Stimulus-Organism-Response (SOR) model in environmental psychology posits that different environmental factors (S), including both physical and non-physical elements of a retail setting, can influence people's internal states and organismic experiences (O). These experiences encompass perceptual, physiological, emotional, and cognitive activities. In turn, these internal states drive behavioral responses (R), such as customer satisfaction, store patronage, purchase intentions, the number of items bought, and the total expenditure in the store. Numerous studies have shown the impact that both retail and website design elements have on consumer behavior. Researchers argue that the retail environment is key in creating cognitive and emotional assessments, which then lead to behavioral responses (Li, 2019, p. 283).

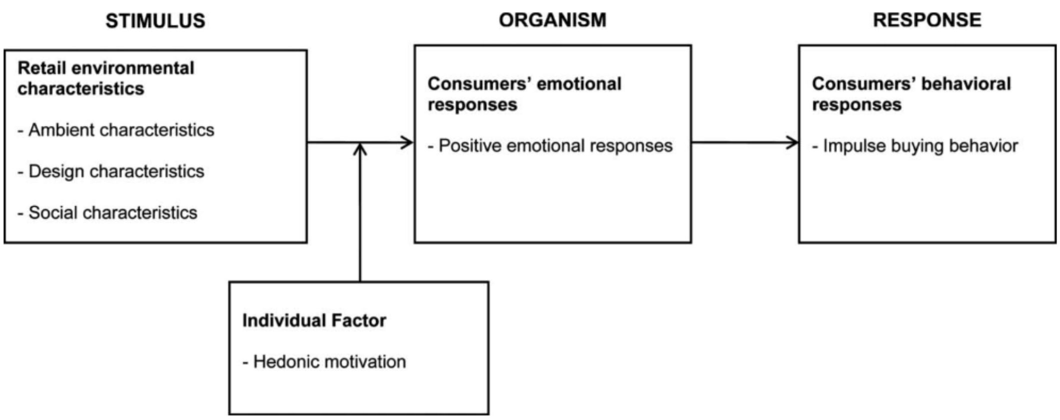

Figure 1: The stimulus-organism-response model for retail-environments. (Chang, Eckman & Yan, 2011, p. 235)

In conclusion, the theoretical model suggests that consumers' impressions of the retail environment's attributes can lead to positive or negative feelings and a spontaneous urge to make purchases. These reactions are anticipated to subsequently impact either impulsive buying tendencies or feelings of regret (Parsad, Prashar, Vijay & Sahay, 2019, p. 4).

2.1.3. Impulse Buying Tendencies

Impulse buying tendency can be categorized as the "Organism" (O) within the SOR model (Lavuri & Thaichon, 2023, p. 724). Impulse Buying Tendency (IBT) is defined by Beatty and Ferrell (1998, p. 174) as encompassing two key aspects: (1) experiencing spontaneous and sudden urges to make immediate purchases, and (2) acting on these urges with minimal contemplation or consideration of potential consequences.

Prior research has indicated a variance in the inclination of individuals towards impulsive purchasing, wherein some consumers exhibit a strong proclivity for spontaneous purchases, while others display a significantly lower tendency in this regard (Rook, 1987, p. 190). Weun, Beatty and Jones (1998, p. 1124) characterized the tendency to buy on impulse as the degree to which an individual is likely to engage in spontaneous purchasing. Thus, an impulse buying tendency scale was developed where it is believed that responses to the Impulse Buying Tendency Scale would fit a normal distribution in which a large number of consumers would score in the middle and smaller numbers would score on either extreme (Weun, Jones & Beatty, 1998, p. 1124).

A 20-item scale was created and validated across two studies by Verplanken and Herabadi (2001, p. 71) to assess the general tendency for impulse buying. This scale encompasses both cognitive elements (like a lack of planning and deliberation) and affective elements (such as feelings of pleasure, excitement, compulsion, lack of control, and regret). It showed a significant correlation with the reported frequency of purchasing typical impulse items and the number of recent impulsive buys. The tendency to buy impulsively was linked to personality traits. Both cognitive and affective aspects of impulse buying were associated with extraversion. The cognitive aspect negatively correlated with conscientiousness, a personal need for structure, and a need to evaluate. The affective aspect was connected to a lack of autonomy and action orientation. These findings suggest that the inclination towards impulse buying is deeply rooted in personality traits (Verplanken & Herabadi, 2001, p. 71).

Impulse buying is classified as a type of hedonic purchasing behavior, driven more by emotions and psychosocial factors rather than rational thought and practical advantages (Chang, Eckman & Yan, 2011, p. 233). Initial research on impulsive buying primarily concentrated on external influences such as product characteristics and the shopping environment. However, in 1985 researchers shifted the focus by stating that the impulse to consume originates with the individual, not the product, suggesting that personal attributes of shoppers are crucial in impulsive buying. Subsequent research, including studies by Dittmar, Beattie and Friese (1995, p. 507) and Silvera, Lavack, and Kropp (2008, p. 27), indicated that young women are more prone to emotion-based impulsive purchases. Other studies have identified individualism, hedonism, and materialism as factors affecting shoppers' impulsive buying tendencies (IBT). Recent research has further explored various traits linked to impulsive buying behavior (Parsad, Prashar & Vijay, 2019, p. 42).

Research also suggests that impulse buying behavior is linked to individuals seeking to elude unfavorable self-perceptions, being a low self-esteem or pessimistic emotions

(Verplanken & Herabadi, 2001, p. 71). According to Adam & Memon (2015, p. 138), income level plays a notable role in influencing impulse buying behavior, with consumers belonging to a lower income bracket being less inclined to engage in impulsive purchases at stores (Adam & Memon, 2015, p. 138).

The study conducted by Xi, Hong, Jianshan, Li, Jiuchang and Davison in 2016 (p. 11) indicates that younger individuals are more prone to impulsive buying, aligning with the widespread belief that impulsivity decreases with age. Additionally, a higher income significantly boosts impulse purchasing, reflecting the conventional view that financial means facilitate such behavior. Furthermore, frequent use of Social Networking Sites (SNS) or online shopping platforms increases the likelihood of impulsive purchases, as these activities heighten exposure to triggers that can spark an impulse to buy (Xi, Hong, Jianshan, Li, Jiuchang & Davison, 2016, p. 11).

2.1.4. Post-Impulse Purchase Regret

Past research executed by Rook in 1987, indicated More than 80% of the participants in the study reported experiencing some form of issue, whereas 19% claimed they had never encountered any problems resulting from an impulse buy. Among the participants who reported negative outcomes from impulse buying, 56% experienced financial difficulties due to their purchases. Thirty-seven percent felt disappointment with products bought on impulse, while 20% experienced guilt. Similarly, 19% faced criticism from others due to their impulsive shopping. A smaller proportion, 8%, mentioned that impulse buys had disrupted their non-financial plans, like diets. Although various financial and emotional issues were reported, none of the respondents sought professional therapy specifically for this issue, nor did they participate in support groups for compulsive buyers (Rook, 1987, p.196).

However, comparing these findings with more recent studies from 2016, it can be stated that impulse purchases still make up for an immense amount of money spent. In 2016, according to research mentioned by Parsad, Prashar, Vijay and Sahay (2019), a study revealed that British shoppers spent approximately 21.7 billion euros on spontaneous purchases. The report also noted that over 50% of these consumers frequently made unplanned purchases during their shopping trips. Additionally, it highlighted that around one third of shoppers in America show similar impulsive buying patterns (Parsad, Prashar, Vijay & Sahay, 2019, p. 2).

The prevalent trend of impulse purchasing is beneficial for retailers, yet it often leads to adverse outcomes for consumers. These include increased personal debt, prolonged negative moods, and diminished self-esteem (Verplanken & Herabadi, 2001, p. 72; Silvera, Lavack & Kropp, 2008, pp. 26 - 27), along with feelings of shame, guilt, and low self-worth (Yi & Baumgartner, 2011, p. 459). According to Rook & Fisher (1995, p. 309), such negative consequences typically arise not from a single instance of impulsive buying but from repeated indulgence in this shopping behavior. According to Rook (1987, p. 196), impulse purchasing is consistently associated with financial distress (such as overspending), feelings of guilt, and social disapproval. Despite the vast amount of research on impulse buying, studies focusing on post-purchase psychological processes and behaviors are scarce. Understanding consumers' emotions, thoughts, and actions after an impulse buy is crucial as these factors significantly impact their future purchasing decisions, including the likelihood of recurring impulsive buying (Spiteri Cornish, 2020, p. 36).

The research conducted by Spiteri Cornish (2020, p. 43) indicates that it is the nature of the consumption experience, rather than the purchase experience, that affects future impulsive buying tendencies. Therefore, even if a consumer enjoys a positive buying experience, such as mood improvement or a psychological uplift, but subsequently has a negative experience with the product's utility, this can lead to a negative reinforcement of impulse buying behavior. The suggestion of this research is that consumers employ various coping strategies to manage negative emotions, which can significantly diminish their influence on the likelihood of future impulsive purchases. The second part of the study investigates the three common coping strategies employed by impulse buyers to mitigate regret: “planful problem-solving, mental disengagement, and positive reinterpretation” (Spiteri Cornish, 2020, p. 43). It asserts that the specific coping method consumers apply to manage feelings of regret will dictate whether their future behavior is perpetuated or reduced (Spiteri Cornish, 2020, p. 43).

2.2. Social commerce: Definition and characteristics

2.2.1. Definition and origin of social commerce

Since 2004, with the rise and popularity of social media platforms like Facebook, Instagram and Twitter, social commerce has emerged as a relatively new concept, attracting exponentially growing research interest. Being connected and accessible online presents not just a chance to interact with others, but also the opportunity to engage in consumption activities regardless of one’s location (Boardman, Blazquez, Henninger & Ryding, 2019, p. 2). The definition of social commerce varies in the literature and there is terminological confusion. Therefore, it is important to clarify how the term has evolved.

Ongoing advancements and research in wireless technologies and electronic gadgets, along with enhancements in electronic commerce (e-commerce), have led to the development of mobile commerce (m-commerce). Shoppers today can easily access shopping websites from their mobile phones, browse through providers' apps, bookmark their preferred items, place them on wish lists, and immerse themselves in a culture of instant shopping. Social commerce (s-commerce), however, takes this a step further by merging e-commerce with social media platforms and offering a range of tools for consumers to socialize and exchange information related to a company or their products. Consumers are now able to purchase products directly via social media (Boardman, Blazquez, Henninger & Ryding, 2019, p. 2).

The concept of social commerce was initially introduced in 2005 by Yahoo! to describe the online community's expression of opinions and ratings about products, as well as the act of sharing product information. Since then, social commerce has evolved into various business models, including a blend of online and offline approaches (Liao, Widowati & Hsieh, 2021, p. 1). Initially, it was associated with activities like sharing shopping lists and reviewing products. Today, the term has expanded to encompass commercial transactions conducted through social media or any other socially driven methods (Sohn & Kim, 2020, p. 1).

Social commerce is frequently viewed as a subset of e-commerce. Earlier studies have generally described it as encompassing two key components: social media and commercial activities. Yet, a more detailed examination of its definitions in literature indicates that there are numerous inconsistencies associated with the concept of social commerce (Zhang & Benyoucef, 2016, p. 95). For instance, Stephen and Toubia (2010, p. 215) stated that social commerce represents a distinct form of internet-based "social media," facilitating active participation by users in the promotion and distribution of products and services across digital marketplaces and communities. Essentially, these platforms integrate the principles of e-commerce with the interactive features of social networking (Stephen & Toubia, 2010, p. 215). This definition specifically restricts the role of sellers to individuals, thereby excluding companies. Other researchers embraced a definition from IBM, describing social commerce as a fusion of e-commerce and electronic word-of-mouth (eWOM) (Zhang & Benyoucef, 2016, p. 96). Notably, electronic word-of-mouth (eWOM), defined by the digital exchange of ideas, experiences, and opinions, is often viewed by consumers as more credible than official brand communications. This makes eWOM a vital source of information for consumers. When positive, it can have a considerably advantageous impact on brands (Santiago & Castelo, 2020, p. 33). Others defined social commerce as conducting sales through social media websites like Facebook, Twitter, LinkedIn, Pinterest, and YouTube (referred to as the "Big Five"), which facilitate user-generated content and social interaction (Zhang & Benyoucef, 2016, p. 96).

The lack of a clear, unified definition of social commerce has led to varying interpretations of what constitutes a social commerce website. Recent studies have pinpointed two primary forms of social commerce: (1) social networking sites that integrate commercial elements for transactions and advertising, and (2) conventional e-commerce websites that incorporate social tools to enable interaction and the exchange of information (Zhang & Benyoucef, 2016, p. 96). Number (1) is exemplified by platforms as Amazon, which primarily focus on e-commerce and are enhanced with Web 2.0 tools that enable customer-generated content (CGC). However, this form of social commerce has limitations in terms of social interactions among customers, such as the inability to tag others, send private messages, or engage in voting (Hajli, Sims, Zadeh & Richard, 2017, p. 134). Number (2) is found on social networking sites that have integrated e-commerce functionalities, such as the before mentioned “Big Five”. These sites provide avenues for customer engagement and foster value creation through collaborative actions like information sharing and content generation (Li, 2019, p. 282). Social commerce may also be initiated through social media platforms and purchased through a company’s website. For instance, if a consumer buys a product from a company's website after seeing a recommendation for the product in a friend's Facebook post, this transaction is considered as social commerce since it has been triggered by social media interaction (Han, 2023, p. 2).

2.2.2. E-Commerce VS s-commerce: key differences and evolvement

In contrast to traditional e-commerce, where consumers typically engage with online shopping sites independently, social commerce is characterized by online communities that foster user interactions and the creation of user-generated content (Zhang & Benyoucef, 2016, p. 95). E-commerce and social commerce websites differ in several key aspects, including their business objectives, the level of customer control, system interface, and the design of the websites. In terms of business goals, e-commerce focuses on maximizing shopping efficiency through features like one-click buying, while social commerce encourages joint value creation through social activities. Regarding customer control, e-commerce sites typically involve individual interaction with little customer influence, whereas social commerce platforms empower customers to create and share content. In the context of system interaction, e-commerce websites provide a one-way flow of content from the site to the customer, contrasting with the collaborative information sharing and interaction found in social commerce, creating a two-way interaction. Finally, concerning website design, e-commerce sites are product-centric, while social commerce sites prioritize social engagement and customer orientation (Li, 2019, p. 283).

However, the main objective of social commerce does not always solely reflect in product sales; instead, it can primarily foster word-of-mouth promotion (Sohn & Kim, 2020, p.1). Integrating the principles of online shopping and social networking, social commerce establishes connections between sellers and consumers across both websites and social media platforms. Social commerce represents a form of e-commerce where transactions are facilitated through online social media platforms, such as the use of Instagram's Product Tags, and similar features (Liao, Widowati & Hsieh, 2021, pp. 1-2). Social commerce has introduced an advanced promotional approach where consumers independently evaluate and contribute to a product's sales. It enables consumers to view and share others' opinions or interests in a product via multiple channels, such as product reviews, blogs, and Social Network Services. Consequently, the consumption traits of individuals engaging in social commerce might be more significant than in any other type of commerce (Sohn & Kim, 2020, p.1).

As social commerce continues to evolve, there is a noticeable shift in the dynamics of interaction between sellers and buyers, especially in emerging markets. The traditional role of intermediaries as used in e-commerce, such as middlemen and brokers, who used to assure product authenticity and enforce return policies, is diminishing. Consequently, both buyers and sellers on these platforms must be prepared to cultivate trust and recognize the risks inherent in their online engagements. Trust in this context is facilitated not by a single entity but by the community of sellers and buyers themselves, developed through their regular communication and transactions. The establishment of trust in these interactions is increasingly reliant on the collective effort of this community, fostered through electronic word-of-mouth and personal exchanges (Gibreel, AlOtaibi, & Altmann, 2018, p. 153).

The importance of social commerce has led to its extensive examination in various research studies. For example, previous research suggests that online reviews on social media platforms play a crucial role as an information source, aiding in consumer decision-making processes. Other studies have indicated that the social support received from online friends is a key factor in encouraging consumers to embrace social commerce. Additionally, it has been argued that social media allows consumers to interact with brands in unprecedented ways. Therefore, research urges companies to transition their marketing strategies from focusing on gaining consumer attention during the pre-purchase phase to establishing connections with consumers' post-purchase (Zhang & Benyoucef, 2016, p. 95). Social commerce has significantly altered the dynamic between companies and consumers. In this market, consumers are not solely buyers of products but also active disseminators of their experiences through word-of-mouth. Essentially, consumers are both creators and distributors of information. This shift has a profound impact on the sales of products and services. By leveraging real-time information sharing on social networks, companies can gain the benefit of maximizing word-of-mouth advertising effects at minimal costs (Sohn & Kim, 2020, p.1).

2.2.3. The importance of social commerce via Instagram

The COVID-19 pandemic has hastened the growth of e-commerce as an increasingly popular business model, with a greater number of companies globally utilizing social commerce to sell their products. This trend includes not just large corporations but also small and micro enterprises, which are establishing their online presence through business pages on social media, allowing them to market their products globally. Consequently, platforms such as Instagram, have introduced new features aimed at supporting small businesses, shifting their focus from catering exclusively to larger companies (Herzallah, Muñoz-Leiva, & Liebana-Cabanillas, 2022, p.170).

Instagram primarily centers around the sharing of photos and concise videos, which can be either captured through the app itself or uploaded from a mobile device's library. The platform's main interface, known as the News Feed, displays a collection of these photos and videos, each accompanied by relevant descriptions and hashtags from a variety of user accounts. While the platform originally required video content to be quite brief, it has since evolved to allow for longer videos, with the current maximum duration being one minute. Additionally, Instagram later introduced a feature that enables users to upload several photos and videos in a single post. The Explore tab on Instagram is a dynamic section featuring photos from various users, which can be continuously updated. In 2016, Instagram introduced the Stories feature, where content is visible for only twenty-four hours before disappearing, though since 2017, these stories are automatically saved in a private Stories Archive. Users also have the option to permanently showcase selected stories in their profile under Story Highlights. Each photo or video in Stories can be up to 15 seconds long and enhanced with a range of additions like text, emoticons, filters, animated overlays, music, location tags, temperature, and GIFs. A unique aspect of Instagram Stories, unlike regular posts, is the ability to include web links and references to other online addresses. Further expanding its features, Instagram added a live stream option to the Stories format in 2017. Additionally, in 2018, Instagram launched IGTV, a separate application dedicated to viewing longer, vertical videos. (Romanowski, Lewicki, Ciechomski, Baron, Pierański, Garczarek-Bąk, Białowąs & Szyszka, 2019, p.29).

The content a user sees on Instagram is determined by the app's algorithm, which is tailored to align with the user's interests. This automated system selects posts based on factors such as the accounts a user follows or the posts they have liked. This method of organizing content was introduced as a replacement for the earlier chronological feed. The specifics of how this algorithm functions are kept confidential, and Instagram periodically updates and modifies it to enhance user experience (Pollock, 2018). The photos that appear in a user's feed on Instagram are influenced by both the platform's algorithms and promotional budgets. With the growing number of users and the expanding volume of content, Instagram has been increasingly monetizing its platform. Following the implementation of the algorithmic update, the reach of an organic post is limited to approximately 2-3%, prompting marketers to increasingly rely on paid promotions to ensure their content is seen by a wider audience (Romanowski et al., 2019, p. 30).

Most social media users come across new products on these platforms, with 55% of U.S. consumers making purchases after finding them on social media. Additionally, research from 2021 estimated that around 90.2 million U.S. consumers, accounting for 35.9% of American internet users, engaged in at least one purchase via social commerce (Han, 2023, p. 2). Instagram, identified as the most favored social media application among young consumers in the United States, has demonstrated its incredible effectiveness as a social commerce platform. This is evidenced by the fact that over one-third of Instagram users have made direct purchases through the app, and 72% have been influenced in their buying decisions by posts on Instagram (Han, 2023, p. 2).

In 2019, Instagram introduced an online shopping feature in 2019 - the 'Checkout on Instagram' button, to improve the shopping experience for its users. This feature enables users to buy products directly by clicking on posts (as seen in Figure 2). With this checkout button, Instagram users can explore products, view items through multiple photos and videos, and make purchases directly on Instagram, without having to leave the app. By simplifying the purchasing process and eliminating the need to register on various websites, the checkout button offers a seamless online shopping experience to Instagram users, creating the opportunity for faster shopping experiences (Han, 2023, p. 2). Instagram fuses the eye-catching elements of storefront windows, the variety offered by catalogs, the tailored experience of loyalty programs, and the practicality of checkout counters. Its evolution into a platform for browsing and purchasing reflects a larger trend aimed at enhancing consumer desire and the distribution of products within the consumer market. Essentially, Instagram serves as a series of virtual display cases, crafted to draw in visual attention and engage physical interaction through scrolling and tapping, creating a layout that entices viewers to look, swipe, and interact (Carah, Brown & Hickman, 2023, p. 381).

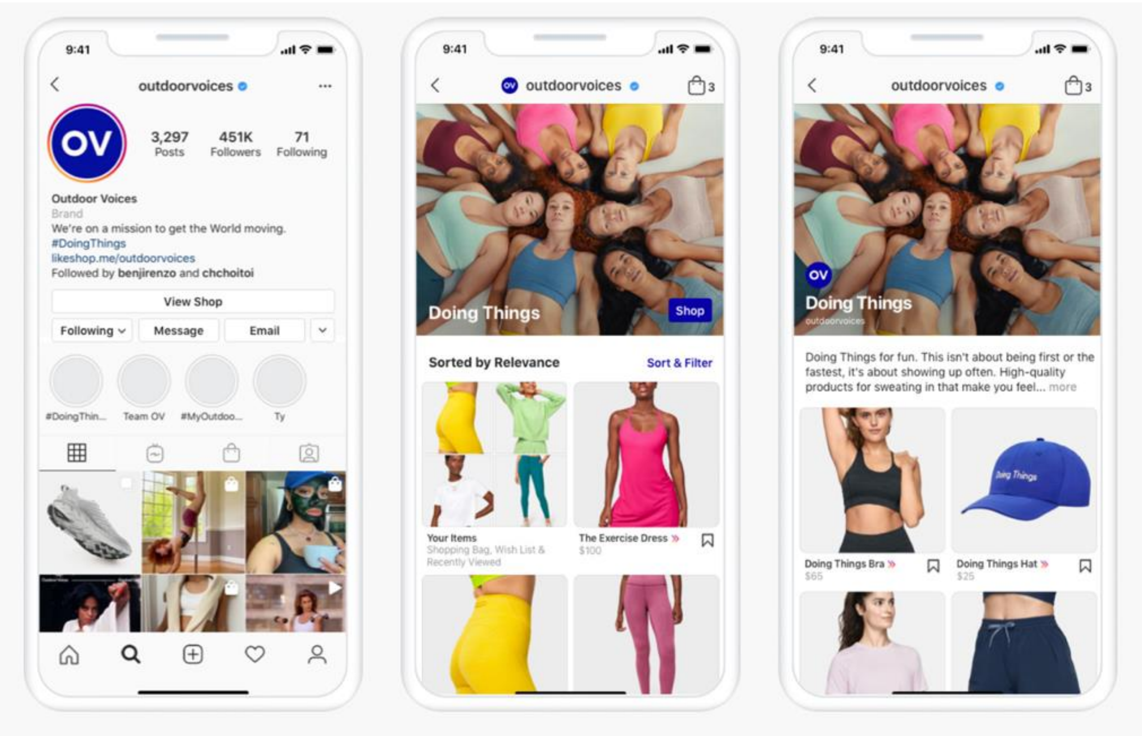

Figure 2: Instagram shopping experience step by step: a seamless shopping experience. (Instagram, 2019)

Another vital component of social commerce on Instagram are so-called digital influencers. Consumers recognize digital influencers as credible and impartial entities, whose actions are perceived to align with the interests of their followers. Their endorsements frequently result in their followers purchasing the promoted products, thereby validating their influence. These individuals actively engage in information seeking, advocate for specific products or brands, and articulate their perspectives to a considerable following on their social media platforms, thereby exerting a notable influence on their followers' behaviors. Providing up-to-date and in-depth information, they have the potential to significantly shape consumer perceptions of brands. Termed as social media influencers, these individuals are identified as online opinion leaders, characterized by their knowledge, specialization in a particular domain, and their power to influence (Santiago & Castelo, 2020, p. 34). A more detailed research of social media influencers on Instagram is given in the section of driving factors for social commerce.

2.3. Influencing factors for impulse buying behavior based on the SOR-model

2.3.1. Characteristics for in-store impulse buying behavior

Impulse purchasing is shaped by two main types of factors: internal and external (as seen in Figure 3). External factors include stimuli like visual displays, arrangement of products, advertising banners, and sensory appeals such as pleasant scents, colors, or music, all strategically implemented by marketers to entice consumers to buy more. Alongside these external elements, internal factors, which encompass the consumer's personality traits, also play a crucial role in influencing their propensity for impulse buying (Činjarević, 2010, p. 172).

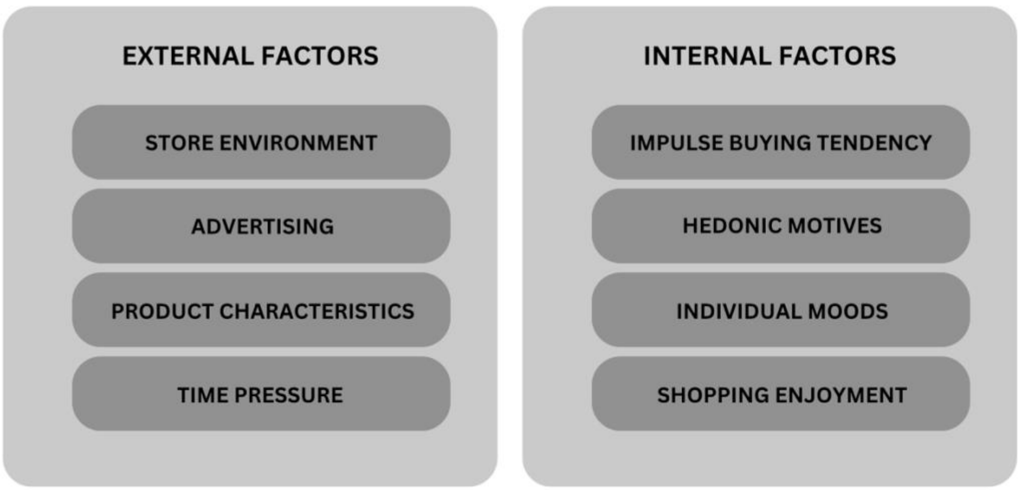

Figure 3: Internal VS external driving factors for impulse purchases in retail. (own illustration)

Conversely, impulsive buying behavior is also characterized as hedonic in nature, where it's linked to a consumer's pleasure and pain receptors. This connection influences the consumer's actions, propelling them towards a goal or away from a perceived threat. Essentially, it boils down to the feelings elicited in the consumer by the store's environment, which influences their purchasing behavior. This behavior is a blend of hedonic psychosocial motivation, integrating both the individual's thought processes and the surrounding social environment (Adam & Memon, 2015, p. 99).

Stern (1962, p. 61) pinpointed nine factors related to products that could affect unplanned purchasing. These include affordability or low price, a minimal need for the item; self-service shopping, extensive mass advertising; widespread distribution, conspicuous store displays, a brief product lifespan; compact size and the ease of storing the product (Stern, 1962, p. 61). The impulse purchasing tendencies of shoppers are impacted by a variety of factors, including the shopping environment (external), the individual characteristics (internal) of the shopper, the product in question, and a range of demographic and socio-cultural elements (Muruganantham & Bhakat, 2013, p. 152).

2.3.1.1. Shopping environment (external factor)

The store environment is composed of several elements: ambient factors like lighting, scent, and music; design factors, which include the layout and range of products offered; and social factors, involving the presence and effectiveness of sales staff. The layout pertains to the arrangement of products, shopping carts, aisles, as well as the size, shape, and spatial positioning of these elements. Product assortment represents the complete range of items a retailer offers. Social factors are related to individuals in the store, such as other customers and salespeople. However, in this study, other shoppers were not included as a focus, as this element is not directly manageable by the retailer, unlike the other factors mentioned (Baker, Parasuraman, Grewal & Voss, 2002, p. 121).

Ambient characteristics in a retail setting are categorized into visual and non-visual background conditions. The non-visual aspects include elements like in-store background music, the intensity of lighting, and the store's cleanliness level. These ambient characteristics are further defined by a clean and relaxing environment, which are recognized as significant factors influencing impulsive buying behavior. Research in supermarkets and restaurants has shown a correlation between the tempo of background music and the increase in consumer impulse purchases. Moreover, lighting not only influences positive consumer responses to impulsive buying but also contributes to creating a positive image of the store (Adam & Memon, 2015, p. 105).

Additionally, the non-visual aspect centers on design characteristics, operationalized through elements such as color, visual complexity, and orderliness. These design characteristics are defined as the physical components within a retail store that influence consumer behavior. They contribute to creating a more relaxing and comfortable atmosphere for the consumer, ultimately resulting in a positive response from the consumer (Adam & Memon, 2015, p. 105). Retail layout refers to the specific arrangement of products, including their dimensions and shapes, along with the placement of shopping carts, aisles, and their spatial relationships. These aspects of store design have been shown to positively influence shoppers' desire to make purchases. Wood (1998, p. 314) noted that approximately 60 percent of purchases in supermarkets and 53 percent of those in mass merchandise stores are influenced by cues encountered within the store. The use of color within the retail environment is particularly impactful in shaping a shopper’s impulse buying tendencies. Previous research has demonstrated that the color scheme and lighting within a store significantly affect consumer shopping behaviors. For instance, the choice of color utilized within a retail space plays a crucial role in fostering a positive impact on the impulse buying tendencies of shoppers (Parsad, Prashar, & Sahay, 2017, p. 4). In the study by Chang, Eckman and Yan (2011), it was found that the ambient and design features of a store directly influenced consumers' positive emotional reactions to the retail environment. Additionally, these positive emotional responses had a direct impact on the consumers' impulse buying behavior (Chang, Eckman & Yan, 2011, p. 246).

When facing time constraints, consumers often prioritize deciding which items to buy and where they make their purchase. Under such conditions, impulse buying can occur, particularly for routine food purchases made in a hurry. Even with limited shopping time, consumers tend to buy more items than what's on their list. However, time pressure can adversely affect impulse buying, as consumers may experience disappointment due to insufficient time for thorough purchasing or browsing. Conversely, when consumers have more available time, the likelihood of making impulse purchases decreases (Bahrainizad & Rajabi, 2018, p. 267).

2.3.1.2. Personality traits and motives (internal factor)

In the realm of consumer behavior, there are two main categories of needs: utilitarian and hedonic. Utilitarian needs focus on functionality and are goal driven. When considering the retail setting, purchases that are pre-planned typically cater to these utilitarian needs, aiming to satisfy specific, practical requirements (Adam & Memon, 2015, p. 106). Hedonic motivation, however, may intrigue consumers to buy impulsively. This category of needs describes the emotional and experiential drivers that encourage consumers to participate in shopping activities. Studies suggest that consumers driven by hedonic motives are more focused on the fun and entertainment elements of the shopping experience (Chang, Eckman & Yan, 2011, p. 238). Research shows that people with hedonic shopping motives often seek more interaction during their shopping experience. They take pleasure in socializing, especially with store employees for assistance or information. For this reason, store staff engaging with these customers can help promote impulsive buying. Moreover, the presence of store staff contributes to creating a welcoming and comfortable setting for shoppers in the retail space (Adam & Memon, 2015, p. 106). Studies by Chang, Eckman & Yan (2011, p. 245) have shown that consumers with a greater hedonic motivation tend to be more attuned to the social features of a store, such as interaction with sales staff. Consumers who perceived that they got personalized attention from sales staff and who enjoyed shopping in their free time (indicating higher hedonic motivation) tended to exhibit more positive emotional reactions (such as excitement, enthusiasm, or inspiration) compared to those who did not prefer shopping as a leisure activity (indicating lower hedonic motivation). As a result, they are more susceptible to the social dimensions of the retail environment compared to those with lesser hedonic motivation (Chang, Eckman & Yan, 2011, p. 245).

A shopper's emotions or moods, particularly feelings of excitement and enjoyment, play a crucial role in triggering impulsive purchasing. Individuals with a high propensity for shopping often spend more time browsing and are generally more inclined to make impulsive purchases (Lavuri & Thaichon, 2023, pp. 725-726). Beatty and Ferrell's 1998 study indicates that the amount of time a consumer spends in a store is directly related to their purchasing behavior, particularly in the context of impulse buying. They observed that consumers who spend more time in a store are likely to purchase more compared to those who spend less time. Additionally, the availability of financial resources is identified as a key facilitator for both regular and impulsive purchases (Beatty & Ferrell, 1998, pp. 184-185).

2.3.1.3. Product peculiarities (external factor)

Impulsive buying is largely driven by the characteristics of items, including their size, packaging, brand, and distribution. Visual cues, like price reductions, complimentary gifts, and coupons, can also sway shopping behaviors, leading to increased impulsive purchases (Lavuri & Thaichon, 2023, p. 725). Previous studies have shown that hedonic rewards, which enhance the shopper's self-image and appeal, often result in more impulsive buying. Factors like word-of-mouth, enforcement of social norms, marketing tactics, advertising strategies, product discounts, and packaging elements (such as size, color, and design) all play significant roles in influencing consumer impulsivity. Price is a key determinant of customer choice and can impulsively affect buying decisions. Branding is also crucial in impulsive purchases due to the emotional and symbolic messages associated with brands, such as stability, friendship, enjoyment, and joy. The urge to satisfy these and other values can induce a consumer's impulse to buy spontaneously. An effective product and brand strategy focuses on building brand awareness and enhancing brand recall, which can activate impulsive purchasing behavior. For instance, consumers with a high level of brand awareness and loyalty are less prone to impulsively switching brands, while those without a strong preference for a particular brand tend to exhibit natural inclinations towards impulse buying (Duarte, Raposo & Ferraz, 2013, pp. 1236-1237).

Retailers' promotional tactics significantly impact consumers' inclination towards impulsive buying. Retailers focus on triggering this impulsive behavior by implementing promotional activities (PAs) such as in-store promotions. Various promotional tools, including point-of-sale displays, price promotions, celebrity endorsements, product sampling, coupons, demonstration shows, and sweepstakes, are effective in encouraging impulsive buying among shoppers (Parmar, Mann & Ghuman, 2020, p. 577). Loyalty schemes, discounts, and rebates also have a substantial effect on increasing shoppers' impulsive tendencies Promotions that are strategically crafted are more effective in stimulating impulse purchases compared to those without such appealing elements. The presence of promotional offers, discounts, and the temptation of delayed satisfaction can amplify a person’s tendency for impulsive shopping. Impulsive buying is primarily driven by hedonic motives and pricing, leading individuals to favor and actively participate in impulsive purchasing behaviors (Lavuri & Thaichon, 2023, p. 725).

Products can be classified into two categories: low involvement products and high involvement products. For low involvement products, where consumers don't feel the need to conduct extensive research or engage in deep thinking, they often rely on superficial assessment of the product. In such cases, consumers lean towards the peripheral route, depending on specific cues for their purchase decisions. However, as noted by multiple researchers, impulse buying is not limited to low involvement products. It can also occur with high involvement products, driven by the strong emotions these purchases evoke in consumers. When close to a high involvement product, consumers may experience intensified emotions, particularly when a celebrity, with their professional stature and larger-than-life image, features in the POP advertisement. This celebrity presence can significantly influence consumers, making them more susceptible to impulse buying in high involvement purchase situations as well (Parmar, Mann & Ghuman, 2020, p. 578).

2.3.2. Characteristic factors for social commerce impulse buying behavior

As defined in previous chapters, buying a product while browsing social media, without prior intention to shop, is categorized as an impulse purchase. This is because impulse purchases are characterized by their sudden and spontaneous nature, and typically, consumers use social media primarily for social interaction, seeking information, or leisure, rather than with the intent to buy products. Therefore, social commerce is intrinsically linked to impulse buying, occurring when consumers spontaneously decide to buy products during their social media engagement (Han, 2023, p. 1). Online shopping liberates consumers from the limitations often encountered in physical stores, thereby enhancing the probability of engaging in impulse buying (Chan, Cheung & Lee, 2017, p. 205).

Consumers frequently find themselves unexpectedly enticed to add items to their shopping cart in a social commerce environment. This phenomenon results from the fact that social media platforms tailor product highlights based on the consumers' past interactions, such as their previous posts, and the brands they follow, thereby increasing the temptation to make purchases (Canning, 2020). In their 2020 systematic review encompassing 68 studies on impulse buying in the context of social commerce, Abdelsalam, Salim, Alias, and Husain (2020, p. 89049) identified that the factors influencing consumers' online impulse buying behavior (IBB) can be categorized into four distinct groups: social-related factors, website-related factors, consumer characteristics, and marketing-associated factors (as seen in Figure 4). Among these, the platform-related factors category received the most attention in research, with 19 different factors analyzed. The review highlighted that within this category, information quality and visual appeal emerged as the most significant elements impacting impulse buying behavior (Abdelsalam, Salim, Alias & Husain, 2020, p. 89049).

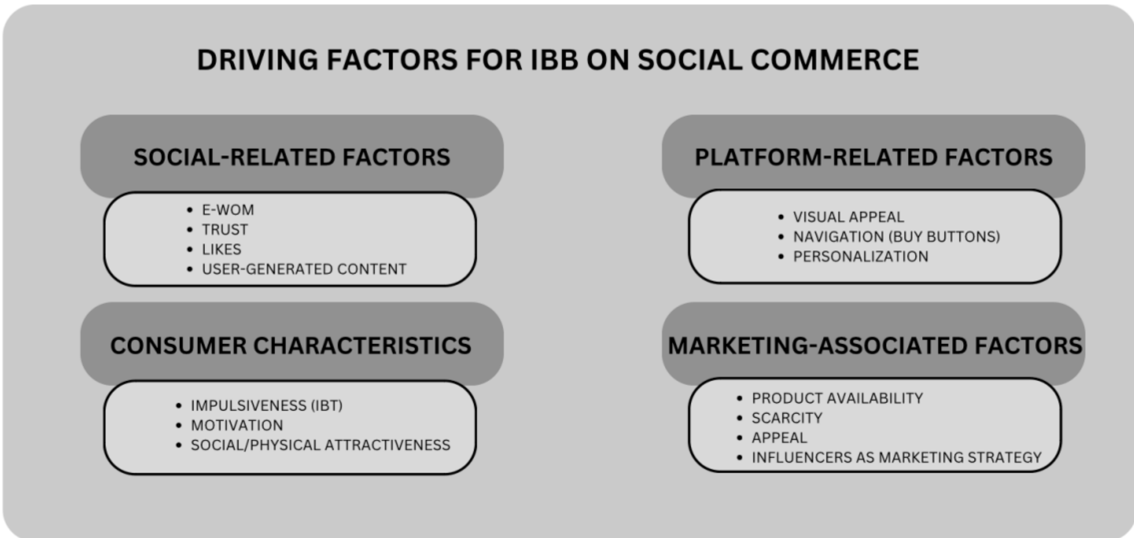

Figure 4: Driving factors for impulse buying behavior (IBB). (own illustration)

2.3.2.1. Social-related factors

Numerous studies have delved into the impact of social-related factors as precursors to online impulse buying behavior (IBB). For instance, researchers have explored how the number of "likes" on social media platforms influences online IBB. Additionally, Electronic Word of Mouth (eWOM) and brand-related user-generated content (UGC) have been frequently examined in these studies, often used interchangeably in the literature. These elements have been assessed for their role as antecedents in driving impulse purchases. Specifically, factors such as "likes", perceived similarity, social presence, and eWOM are among the most scrutinized in this category, highlighting their significance in influencing consumer behavior in online shopping environments (Abdelsalam, Salim, Alias & Husain, 2020, p. 89049). On a social commerce platform, individuals can engage in (e)WOM communication by utilizing various social commerce elements, including ratings and reviews, discussion forums and online communities, as well as recommendations and referrals. WOM empowers users to exchange their experiences, viewpoints, and insights with prospective customers. This, in turn, contributes to reinforcing the buying inclinations of others (Meilatinova, 2021, p. 3). Therefore, electronic word-of-mouth (eWOM) has the capacity to decrease uncertainty regarding a product and boost consumer trust, leading to an increase in the likelihood of making a purchase. Peer-generated content plays a crucial role in driving sales in the realm of e-commerce (Ahmad, Laroche, 2017, p. 202).

Trust is frequently acknowledged as a critical component in establishing successful relationships. Specifically, the connection between trust in product or service providers and customers' intentions to purchase online has been thoroughly investigated in recent research. As information on the Internet grows exponentially, consumers are increasingly inclined to seek recommendations from communities and individuals they trust. Conversely, due to concerns about privacy, consumers are more inclined to share their personal information with entities they trust. According to the theory of trust transfer, trust in a community can be cultivated through interpersonal trust for two primary reasons. Firstly, trust among community members fosters a belief that the exchange and dissemination of information within the community will adhere to established norms and principles. This assurance encourages members to have confidence in the community's ongoing efforts to enhance service quality and manage effective, trustworthy communication channels. Secondly, previous research has highlighted that the presence of interpersonal trust lays the groundwork for the development of institutional trust. Community members who establish robust mutual trust are more likely to view the community as an appropriate platform for communication and interaction (Chen & Shen, 2015, pp. 57-58). Han's 2023 study (p. 8) reveals that well-established brands are more suited to social commerce platforms since they are trusted more by consumers, who are then more inclined to make impulsive purchases. Showcasing popular and recognized products on social media platforms can yield better results compared to lesser-known brands. However, while lesser-known brands might face challenges on social commerce platforms, a significant number of likes from online users can compensate for their lack of brand strength (Han, 2023, p. 8)

2.3.2.2. Consumer characteristics

A notable segment of research focuses on consumer characteristics as influential antecedents. Out of twenty-four studies in this category, eight have specifically examined how various consumer traits impact IBB. Key characteristics identified in these studies encompass traits such as impulsiveness, social and physical attractiveness, as well as hedonic and utilitarian motivations. These traits are considered crucial in understanding how they shape a consumer's tendency to engage in impulse buying while navigating social commerce platforms (Abdelsalam, Salim, Alias & Husain, 2020, p. 89050). As mentioned in chapter 2.3.1. and as verified by Abdelsalam et al. (2020, p. 89050), the impulsiveness or impulse buying tendency plays a vital role in IBB, especially on social commerce (Abdelsalam, Salim, Alias & Husain, 2020, p. 89050). Studies found that when individuals find pleasure in interacting with an e-commerce platform, they are more inclined to exhibit higher levels of impulsive behavior, potentially leading to spontaneous purchasing decisions (Sihombing, Budi & Munajat, 2020, p. 244).

As previously noted, browsing can be categorized into two types: hedonic and utilitarian. Hedonic browsing is centered on the enjoyment, fun, and entertainment aspects that make online shopping a pleasurable experience. On the other hand, utilitarian browsing is more concerned with assessing the practicality and usefulness of the information and the purposefulness of the browsing process. Both these browsing styles influence the propensity to engage in impulsive purchasing, independent of the actual decision to make a purchase (Sihombing, Budi & Munajat, 2020, p. 244). Sihombing, Budi, and Munajat (2020, p. 248) found that perceived enjoyment positively impacts browsing behavior and impulsiveness. Additionally, they noted that both browsing activity and impulsiveness positively influence the urge to make impulsive purchases on the social commerce platform Instagram (Sihombing, Budi & Munajat, 2020, p. 248).

2.3.2.3. Platform-related factors

In the realm of IBB, a substantial portion of research has concentrated on platform-related factors as driving factors. Among these, visual appeal stands out as a particularly significant factor. This emphasis on visual appeal underscores its impact on consumers' impulse buying tendencies. Additionally, other website-related aspects explored in the literature include the influence of website navigational characteristics and the role of personalization. These factors are also considered crucial in understanding how they affect a consumer's propensity to make impulse purchases online (Abdelsalam, Salim, Alias & Husain, 2020, p. 89050).

Influencing factors on e-commerce platforms encompass elements such as buy-buttons. Advertising on social platforms has become significantly more interactive, including numerous features that prompt users to take action. The effectiveness of a buy button in ads goes beyond just enabling purchases; its success is gauged by not only the number of clicks it receives but also by the quantity of purchases made through it. Buy buttons, though not strictly defined, generally refer to clickable features such as icons, images, buttons, links, or text that lead users to another product page where they can complete a purchase on the social platform. These buttons might direct users either to a page within the social platform itself or to an unrelated external website. The perception of security among users is crucial in shaping their attitudes towards shopping on social networking sites. Heightened concerns about privacy may lead to skepticism, which in turn diminishes their likelihood of making purchases through buy-button advertising. Scholars have pointed out that concerns around privacy and security can significantly hinder the use of social commerce. In scenarios where users are apprehensive about their privacy and security in an online purchasing context, this apprehension tends to erode their trust and amplify the perceived risk associated with the transaction. Such factors negatively impact their willingness to make a purchase (Martinez-Lopez, Li, Liu & Feng, 2020, p. 2).

A key benefit of social commerce, particularly on platforms like Instagram, is the capability to showcase paid advertisements that align with individual consumer preferences, commonly referred to as personalization. Online Personalized Advertising (OPA) is a form of advertising tailored to users based on various factors like browsing activities, previous purchases, personal details including usernames and purchase histories, as well as psychographic aspects, current location, and lifestyle preferences (Lina & Ahluwalia, 2021, p. 2). Online retailers can engage in direct, one-to-one advertising to target customers on social media websites, leveraging the personal information provided by consumers upon joining these platforms or their browsing history shared across sites. This approach enables consumers to easily discover products and services that are relevant to them, based on factors like their location or historical data (such as user profiles and past interactions), as recommended by the social media platforms themselves (Phan, Ngo & Phuoc, 2022, p. 77).

Instagram is a popular choice among marketers for delivering such personalized advertisements. Additionally, Instagram offers the advantage of seamlessly guiding customers to external websites or physical store visits, thereby enhancing online purchasing opportunities, as discussed previously (Lina & Ahluwalia, 2021, p. 2). The study conducted by Lina and Ahluwalia (2021, p. 5) indicates that ads that are customized to align with consumers' needs, interests, and browsing history are often perceived by users as useful and valuable. The findings of this study state that the perceived value of such advertising positively influences impulse buying behavior. Essentially, respondents in the study expressed that the advertisements they encountered and deemed useful sparked a desire to purchase products or pay for services when those advertisements were presented (Lina & Ahluwalia, 2021, p. 5).

2.3.2.4. Marketing-associated factors

In the research analyzed by Abdelsalam et al. (2020, p. 89050), the category concerning marketing-associated factors received relatively limited attention. Within this scope, only a few specific antecedents were considered for their influence on online IBB in a social commerce context. These antecedents included product availability, scarcity, vicarious expression, and aesthetic appeal (Abdelsalam, Salim, Alias & Husain, 2020, p. 89050). The proliferation of Social Networking Sites (SNS) has given rise to a new category of celebrities known as social media celebrities or so-called “influencers”. These individuals manage groups or pages on various social media platforms, sharing insights and opinions on purchasing behaviors and their lifestyles. Prior research indicates that these digital celebrities are often deemed more credible and influential than traditional celebrities. Their rise in popularity and the substantial followings they command can be attributed to their authenticity. Social media celebrities often represent sizable online communities, making them attractive to organizations for inclusion in marketing strategies aimed at influencing consumer purchasing behavior (Zafar, Qiu, Li, Wang & Shahzad, 2021, p. 2). The study conducted an empirical investigation into the impact of social media celebrities' posts, observational learning, and impulse buying tendencies on the inclination towards impulsive buying, specifically in the context of Pakistani social media influencers. The findings reveal that the authenticity of a celebrity's posts positively influences consumers' urge to make impulsive purchases. More broadly, these results align with the argument that both celebrities' and peers' parasocial interactions positively affect users' impulse buying tendencies on image-sharing social commerce platforms (Zafar, Qiu, Li, Wang & Shahzad, 2021, p. 9). Koay, Teoh, and Soh's research findings from 2021 (p. 1) demonstrate that the perceived social media marketing efforts of Instagram influencers significantly enhance followers' perceptions of their credibility across three dimensions: attractiveness, expertise, and trustworthiness. However, among these dimensions, only attractiveness and trustworthiness were observed to have a significant positive impact on online impulse buying behavior. Furthermore, the study uncovered that the perceived attractiveness and trustworthiness of Instagram influencers plays a pivotal role as mediating factors in the relationship between perceived social media marketing activities and the propensity for online impulse buying (Koay, Teoh & Soh, 2021, p. 1).

2.4. In-depth analysis of driving factors for social commerce

2.4.1. Social media influencers as a stimulus for impulse buying behavior

The increase in online impulse buying can be attributed to the liberation provided by the e-commerce environment, which removes the traditional constraints of physical shopping such as limited operating hours, the need to travel to stores or malls, and poorly located retail outlets. Additionally, the social networking realm facilitates the promotion of online impulse purchases through influencers - specifically, Instagram (Koay, Teoh & Soh, 2021, p. 1). Instagram was identified as the leading social media application among young American consumers, has demonstrated its effectiveness as a platform for social commerce. Evidence of this effectiveness is seen in the fact that over one-third of Instagram users have engaged in direct purchases through the app, and 72% have been influenced in their buying decisions by content posted on Instagram (Williams, 2019).

Social media influencers are individuals who are deeply engaged in specific subjects on their social media platforms, amassing substantial follower bases. They often incorporate products into their lifestyles, evaluate them, and share reviews with their audience. These influencers achieve celebrity status through content creation online, distinguishing them from traditional celebrities by being celebrities in their own right. This distinction enables them to be more impactful in bolstering brands and conveying compelling marketing communications. Consumers tend to resonate more with social media influencers, viewing them as authentic figures. It is broadly recognized that social media influencers have emerged as a primary source of product or possess the capacity to instigate behavioral changes among their followers. They supply up-to-date and specialized information, potentially swaying consumers' perceptions of brands. These individuals are acknowledged as online opinion leaders, distinguished by their expertise, focus on specific topics, and influential capability (Santiago & Castelo, 2020, p. 34). When an influencer showcases and endorses a specific product through their content, consumers are promptly informed about the product and experience a transient surge of enjoyment and enthusiasm. This emotional response often pushes them towards making an impulsive purchase (Liu, De Costa, Yasin & Ruan, 2023, p. 2).

Product recommendation posts on social commerce platforms are self-generated by consumers (bloggers & influencers) and include direct links for purchasing. These posts offer comprehensive details about the recommended products, encompassing features, images, user experiences, as well as the advantages and benefits of the product. Typically, this information is conveyed through a narrative style, enriched with personal user experiences (Chen, Li, & Zhao, 2020, p. 217). Posts by influencers need to be visually appealing and engaging to effectively sway followers' purchasing behaviors towards the products or services being promoted. Furthermore, Instagram influencers have the added advantage of engaging directly with their audience through comments and direct messages. Such interactions not only make the transactional process more dynamic and enjoyable but also enhance awareness and simultaneously spark purchasing impulses (Koay, Teoh & Soh, 2021, p. 3).

According to research conducted by Lee, Sudarshan, Sussman, Bright and Eastin (2022, p. 91), authenticity has emerged as the most significant predictor of trust toward brand-related posts by Social Media Influencers (SMIs). This effect on perceived trust aligns with research findings demonstrating that consumers tend to feel a greater sense of similarity and trust towards SMIs than traditional celebrities. This suggests that consumers are drawn to follow influencers who exhibit genuineness, transparency, and relatability. Such findings reinforce existing research indicating that Social Media Influencers (SMIs) deliberately cultivate an authentic persona. This strategy enables them to be perceived akin to close friends by consumers, fostering a sense of relatability and identification. While authenticity itself was not directly linked to the frequency of purchases, evidence suggests that the positive impact on trust extends to purchasing behavior. This highlights the critical role of managing trust in SMI marketing strategies, indicating that fostering authenticity not only builds trust but also indirectly influences consumers' purchasing decisions (Lee, Sudarshan, Sussman, Bright & Eastin, 2022, p. 91).

Further research conducted by Shamim, Azam & Islam in 2024 (p. 8) underscores the critical importance of three core elements impacting influencer marketing effectiveness—influencer credibility, message credibility, and media credibility—in building trust towards influencers' branded content (as seen in Figure 5). This trust, in turn, markedly impacts User-Brand Interaction (UBI). Furthermore, this study enriches the academic field by revealing the significant moderating effect of persuasion knowledge on these relationships. It also underscores the mediating function of trust in branded content, offering insights into the complex interplay between influencer marketing strategies and consumer impulse buying intentions (Shamim, Azam & Islam, 2024, p. 8).

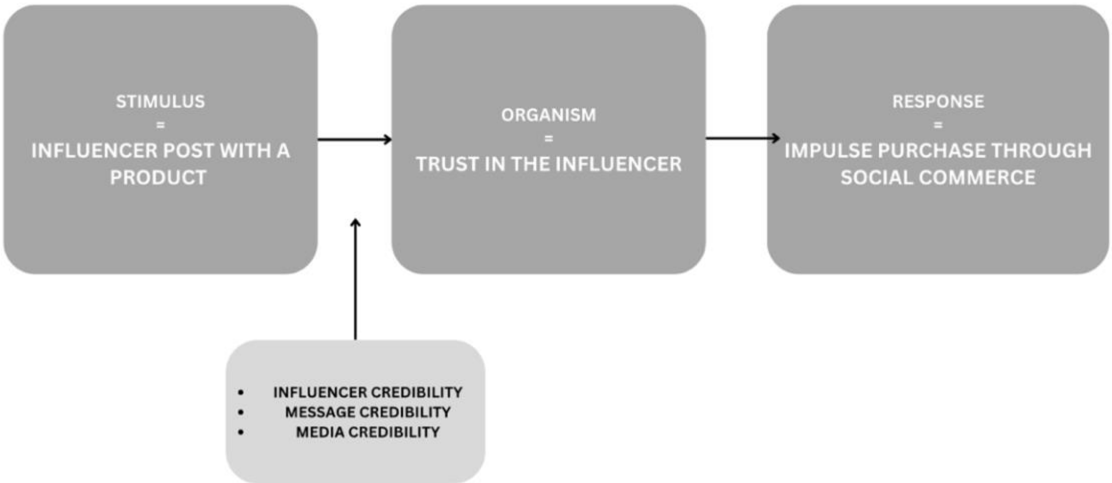

Figure 5: Application of Social Media Influencers as a stimulus on the SOR-Model. (own illustration)

2.4.2. Social influence of peer recommendations as a stimulus for impulse buying behavior

Social influence refers to the process by which individuals modify their thoughts, feelings, attitudes, or behaviors in response to interactions with others. This phenomenon is analyzed through two primary dimensions: informational and normative social influence. Informational social influence involves adopting information from others as a reflection of reality, essentially accepting others' input as evidence of truth. On the other hand, normative social influence pertains to the pressure to conform to the positive expectations of others, often driven by the desire to fit in or be accepted by a group (Hu, Chen & Davison, 2019, p. 299). Research indicates that the dynamics between a shopper and their companions can notably influence impulsive buying behaviors. Luo (2005, p. 289) explored various social influences on consumers' spontaneous purchases and discovered that while shopping alongside peers tends to heighten the propensity for impulsive buying, shopping with family members conversely reduces this inclination. (Luo, 2005, p. 289).

Social support theory has cumulated significant focus from researchers in the domain of s-commerce, being identified as a crucial factor for encouraging participation and fostering positive behaviors among users. Broadly defined, social support encompasses the resources provided by one individual to another. More precisely, it encapsulates an individual's perception of receiving care, responsiveness, and assistance from members within their social circle. This aspect of social support is pivotal for peer influence, as it fosters supportive connections among individuals. Through these effective relationships, one party is more capable of influencing another's perceptions, attitudes, and intentions, highlighting the powerful role of social support in shaping online consumer behavior (Hu, Chen & Davison, 2019, p. 306). Given that social influence emerges from an individual's engagement with their social environment, its determinants are closely linked to the unique aspects of social commerce, which is characterized by "community interaction." Within the realm of s-commerce, this interaction manifests as social support among consumers. This support entails individuals receiving care, responses, and assistance, whether informational or emotional, from others within their social network. This framework highlights the pivotal role of community and interaction in shaping consumer behavior and decision-making in social commerce settings (Hu, Chen & Davison, 2019, p. 299).

Prior research identified social support as a significant factor promoting participation in s-commerce. Building on this, research conducted by Xi et al in 2016 (p. 11) extends the understanding by demonstrating that social support can also enhance peer influences, leading to purchases that might not be essential. Additionally, this study highlights the crucial aspects of an s-commerce system that encourage mutual support and influence among users, notably through the platform's facilitation of personalized services and social exchange (Xi, Hong, Jianshan, Li, Jiuchang, & Davison, 2016, p. 11).

2.4.3. User-generated content as a stimulus for impulse buying behavior

Unlike traditional e-commerce platforms, social commerce sites distinguish themselves by promoting social interactions and enabling the creation and sharing of user-generated content. This approach not only enhances the shopping experience by incorporating a social dimension but also leverages the power of community and peer influence in the purchasing process. Social commerce sites, unlike traditional e-commerce platforms, allow for a significant portion of product-related information to be generated by consumers rather than solely by marketers (Mikalef, Sharma, Pappas, & Giannakos, 2021, p. 1273). User-generated content (UGC) is typically created and disseminated by users or independent opinion leaders who are not endorsed by commercial entities, making it widely regarded as a credible and trustworthy source of information (Cheung, Pires & Rosenberger III, 2020, p. 131).

Posts, blog entries, likes, dislikes, videos, pictures, and various other forms of user input constitute the user-generated content that is immensely valuable to a social commerce company. Such content enriches the platform with diverse perspectives and engages the user community, driving both interaction and transaction on the site (Lin, Li, & Wang, 2017, p. 194). According to researchers, a significant portion of Generation Z consumers, with 67% posting photos or videos at least weekly, has prompted a shift in consumer behavior. This demographic actively influences others by sharing images of their purchases and providing recommendations. Among the various influences on consumer behavior, recommendations and photos showcasing purchases from fellow consumers have emerged as the most impactful. User-generated content (UGC) is perceived as more trustworthy compared to Brand Generated Content (BGC), which includes brand posts and sponsored content (Djafarova & Bowes, 2021, p. 3). This scenario creates a dynamic environment where potential buyers may evaluate information from both marketers and previous customers to make informed purchasing decisions. Consequently, consumers are faced with a wealth of information to sift through before finalizing their purchases (Mikalef, Sharma, Pappas, & Giannakos, 2021, p. 1273).

3. Summary of the most relevant findings of the literature review and hypotheses development

Impulse buying behavior is fundamentally characterized as unplanned and immediate purchases made without deep reflection, arising from a sudden, intense desire. This spontaneous purchasing decision is emotionally complex, potentially leading to internal conflict, and is marked by a lack of consideration for possible consequences (Rook, 1987, p. 189). Further elaboration on impulse buying behavior is provided by Beatty and Ferrell (1998, p. 170), who added to Rook's (1987) definition by emphasizing the absence of "pre-shopping intentions." They pointed out that consumers engaging in impulse purchases enter the store without any specific desire to buy the product they eventually purchase, including not only reminder-product purchases but also goods bought out of immediate desire (Beatty & Ferrell, 1998, p. 170). The classification of impulse buying has evolved to include four types: pure impulse buying, reminder impulse buying, suggestion impulse buying, and planned impulse buying, each with distinct characteristics and circumstances under which they occur (Rook, 1987, p. 191).

The Stimulus-Organism-Response (S-O-R) framework serves as a foundational model to elucidate impulse buying behavior. This theoretical model is structured around three principal components: the stimulus, organism, and response. The 'stimulus' encompasses factors that impact an individual's internal state, prompting a reaction. These stimuli can include both physical and non-physical elements within a retail environment, influencing consumers' internal states or organismic experiences, which comprise perceptual, physiological, emotional, and cognitive activities. The 'organism' represents the intermediate emotional or attitudinal changes induced in an individual by the stimuli (Parsad, Prashar, Vijay & Sahay, 2019, pp. 3-4). Finally, the 'response' denotes the observable behavior or action taken by the individual as a result of these processes, such as customer satisfaction, store patronage, purchase intentions, and the extent of purchases made (Parsad, Prashar, Vijay & Sahay, 2019, pp. 3-4; Li, 2019, p. 283). This model underscores how various environmental factors within a retail setting can shape people's internal states and experiences, subsequently driving their behavioral responses (Parsad, Prashar, Vijay & Sahay, 2019, p. 4).

Sections 2.1.3 and 2.1.4 of this thesis delve into the intricacies of impulse buying tendencies and the aftermath of post-impulse purchase regret, highlighting the psychological underpinnings and emotional repercussions associated with impulsive purchasing behavior. Impulse Buying Tendencies (2.1.3) focus on understanding the 'Organism' aspect within the Stimulus-Organism-Response (S-O-R) model, emphasizing the spontaneous and sudden urges to make immediate purchases with little contemplation. Rook (1987, p. 190) alongside Beatty and Jones (1998, p. 1124) elaborate on the variability among consumers regarding their inclination toward impulsive purchases, attributing such tendencies to personality traits and emotional states. This section integrates the development of the Impulse Buying Tendency Scale by Verplanken and Herabadi (2001, p. 71), which assesses impulse buying through cognitive and affective elements, demonstrating the significant influence of personality dimensions like extraversion and conscientiousness on impulse buying tendencies. This comprehensive approach underlines impulse buying as a hedonic, emotion-driven behavior influenced by both internal and external factors, including the retail environment and individual personality traits (Lavuri & Thaichon, 2023; Chang, Eckman, & Yan, 2011). Research over the years has consistently shown that demographic and psychological factors significantly influence impulse buying behavior. The 2016 research by Xi, Hong, Jianshan, Li, Jiuchang, and Davison found that younger people are more likely to make impulsive purchases, supporting the common view that impulsiveness declines as one ages. (Xi, Hong, Jianshan, Li, Jiuchang & Davison, 2016, p. 11). Based on these findings, I hypothesize as follows:

> H1: There is a difference in impulse buying tendencies across age groups, particularly with younger individuals exhibiting a higher degree of impulse buying compared to older individuals.

On the other hand, studies by Dittmar, Beattie and Friese (1995, p. 507) and Silvera, Lavack, and Kropp (2008, p. 27) highlighted that young women tend to make more emotion-driven impulse purchases. Based on these literature findings, the following hypothesis is concluded:

H2: Women are more inclined to engage in impulse buying compared to men.

Chapter 2.2 of the thesis provides a comprehensive exploration of social commerce, delving into its definition, characteristics, evolution compared to e-commerce, and its significance on platforms like Instagram. Social commerce emerged with the rise of social media platforms such as Facebook and Twitter around 2004 (Boardman, Blazquez, Henninger & Ryding, 2019, p. 2). It extends e-commerce by integrating social media's interactive and social networking features, allowing for direct product purchases through these platforms. Social commerce differentiates from traditional e-commerce by fostering online communities that enhance user interactions and content creation, contrary to the independent user engagement seen in e-commerce. The integration of social tools into e-commerce websites marks a significant evolution, offering avenues for customer engagement through collaborative actions like sharing and content generation. This evolution reflects a shift towards joint value creation beyond mere product sales, emphasizing social interaction and personalized user experiences (Boardman, Blazquez, Henninger & Ryding, 2019, p. 2).

Instagram's significance in social commerce has been magnified by the COVID-19 pandemic, with the platform introducing features to support businesses of all sizes (Herzallah, Muñoz-Leiva, & Liebana-Cabanillas, 2022, p.170). Its focus on visual content, such as photos and videos, along with user-friendly features like the 'Checkout on Instagram' button, enhances the shopping experience (Han, 2023, p. 2). Instagram combines the appeal of storefront windows, catalogs, and loyalty programs with a seamless purchasing process, encouraging impulse buying. Digital influencers on Instagram, recognized for their credibility and authenticity, further stimulate consumer purchasing behavior through their endorsements and content creation (Carah, Brown & Hickman, 2023, p. 381). Taking this prior knowledge into account, it is hypothesized as follows:

H3: There is a significant difference in the frequency of impulse purchases made through social commerce platforms compared to traditional retail shops, with a higher frequency of impulse buying expected on platforms such as Amazon, Instagram, and Facebook.

Chapter 2.3 of the thesis elaborates on the factors influencing impulse buying behavior, with a focus on the application of the Stimulus-Organism-Response (S-O-R) model across different shopping environments: traditional in-store retail and social commerce. Impulse buying in retail settings is driven by a combination of internal and external factors (Muruganantham & Bhakat, 2013, p. 152). External stimuli include the physical arrangement of the store, such as product placement, visual displays, and sensory appeals (e.g., scents, colors, and music), all of which are strategically designed to encourage purchasing. Internal factors refer to the consumer's personal characteristics, including emotional and cognitive responses to the shopping environment. These elements work together to trigger impulse purchases, influenced by various factors including the product's affordability, visibility, and the shopping environment's ability to evoke pleasurable experiences (Činjarević, 2010, p. 172).

In the context of social commerce, impulse buying is facilitated through interactions on social media platforms, where the impetus to buy spontaneously can arise while regular social media use (Canning, 2020). The environment offered by social commerce platforms, free from the physical constraints of traditional shopping, increases the likelihood of impulse purchases (Chan, Cheung & Lee, 2017, p. 205). Factors influencing this behavior include the personalized presentation of products based on users' past interactions and the influence of digital influencers behavior. These social and platform-related factors create a conducive environment for impulse buying by enhancing the visual appeal of products and leveraging the trust and credibility established by influencers behavior (Abdelsalam, Salim, Alias & Husain, 2020, p. 89049). While the stimuli in traditional retail are largely sensory and environmental, in social commerce, they are more related to social influence, personalized content, and the ease of transaction facilitated by platform features. Chapter 2.4 of the thesis delves into an in-depth analysis of the driving factors for social commerce, particularly focusing on how social media influencers, peer recommendations, and user-generated content (UGC) stimulate impulse buying behavior. It highlights the significant role of social media influencers in catalyzing impulse purchases. Influencers, with their large follower bases and perceived authenticity, effectively promote products by integrating them into their lifestyle content. This not only informs but also emotionally engages their audience, leading to impulsive buying decisions (Shamim, Azam & Islam, 2024, p. 8). These literature-retrieved facts, lead to the following hypothesis:

> H4: The trust of consumers in social media influencers significantly impacts the likelihood of making an impulse purchase on social commerce platforms.

This section also explores the interaction between consumers and their social circles, including the exchange of product recommendations and reviews, significantly impacts purchasing decisions. The emotional and informational support provided by peers enhances trust and reduces the perceived risk associated with impulse buying, facilitating more spontaneous purchases (Luo, 2005, p. 289). UGC, including posts, blogs, likes, and comments, plays a pivotal role in fostering an environment conducive to impulse buying. This content type, regarded as more trustworthy and authentic than brand-generated content, effectively influences purchasing decisions (Djafarova & Bowes, 2021, p. 3). The participatory nature of social commerce platforms allows for a dynamic interchange of experiences and opinions, enriching the shopping experience and prompting impulsive buys (Han, 2023, p. 1). With this knowledge, I hypothesize as follows:

> H5: Positive recommendations by peers on social commerce platforms (such as direct messages or comments in the comment section) significantly impact the likelihood of making impulse purchases among the target demographic.

4. Methodology

This chapter delves into the comprehensive methodology underpinning the empirical investigation of impulse buying behavior within the realm of social commerce and retail environments. Anchored in a quantitative framework, the research utilizes an online survey instrument, designed to capture a broad spectrum of consumer responses regarding impulse purchasing tendencies on social media platforms in comparison to offline retail environments.

4.1. Explorative design

The explorative design of this study aims to delve into the nuanced dynamics of impulse buying within social commerce in comparison to offline retail-environments, identifying key drivers and patterns. This approach facilitates a deeper understanding of consumer behavior, paving the way for the development of targeted strategies to engage potential customers effectively. The study follows a quantitative approach, employing a structured online-survey instrument to gather detailed insights into consumer responses regarding their impulse purchasing tendencies on social media platforms.

A quantitative approach generally follows a scientific approach, focusing on the measurement of attributes (such as the level of reading proficiency) and establishing relationships (for example, the effect of specific orthography training on spelling skills), which is why this paradigm was chosen. It employs larger sample sizes to ensure representativeness (Pissarek, 2018, p. 130). The survey was conducted online primarily because the nature of the study's focus aligns with the advantages of this method. Online surveys are frequently used in research related to Internet use as they effectively target and engage a population that is already familiar with online environments. This method ensures that participants are likely to have the necessary experience and skills to complete the survey effectively and provide relevant insights (Van Selm & Jankowski, 2006, p. 436).

The chosen method aimed to reach as many participants as possible in a relatively short amount of time. The online survey allowed participants to access it on any smart device, such as PCs, laptops, tablets, or mobile phones. This wide availability was key to reaching a diverse group of people and lowering the barriers for participation. The online survey was developed using the TIVIAN program from EFS (Unipark). It included 25 varied questions designed to assess customer motives and attitudes towards impulse buying behavior. To explore impulse buying in the context of social commerce, participants were provided with examples to further clarify the concept of social commerce. The survey employed a mix of question formats, incorporating multiple choice and predominantly using the Likert scale to gauge responses.

The Likert scale is a widely used psychometric scale in survey-based research. It allows respondents to express their level of agreement or disagreement with a series of statements by using a balanced scale that ranges from agree to disagree. This scale measures the intensity of the respondents' feelings about specific items in the questionnaire. Analyzing the responses from multiple items on a Likert scale can reveal patterns that indicate the scale properties of the data (Barua, 2013, p. 35).

To address the hypotheses outlined in the previous chapter, it was essential to assess participants' views on six distinct aspects: demographic information and prior impulse buying behavior on social commerce platforms, general attitudes towards impulse buying, stimuli in offline retail environments, comparisons between impulse buying behavior in traditional retail versus social commerce environments, trust in social media influencers, and the influence of peer recommendations. The survey aimed to examine the driving factors identified in existing literature and determine their validity for the survey participants.

The survey began with an introductory question aimed at gathering demographic information, such as the participants' age, gender identity, previous purchases via social commerce, and the social commerce platforms they generally use. Even if a part of the participant has never bought products on social commerce, could still provide valuable insights into their perceptions of the platforms and associated stimuli. These questions were presented in a multiple-choice format. Subsequently, to assess personal engagement with impulse buying behavior, questions were structured using semantic differential scales based on the Likert scale. The next phase of the survey focused on identifying the most influential stimuli within offline retail environments. The fourth step involved comparing these retail environments to social commerce settings. The survey then examined participants' attitudes towards social commerce, specifically their views on social media influencers. Finally, the impact of peer recommendations as a stimulus in social commerce was explored. Each of these sections was crafted to delve deeply into the various aspects influencing impulse buying behaviors in different shopping environments.

4.2. Data Collection

The survey utilized a convenience sample, chosen because the specific nature of impulse buying did not necessitate a precisely defined target group. Relevant for the survey were all people who make spontaneous purchases of products, even better if they made those purchases on social commerce or actively use social commerce platforms. Consequently, the survey was inclusive, allowing anyone who received the questionnaire link to participate and provide responses.

This study is based convenience sampling, which is a type of non-probability sampling. Non-probability sampling methods are generally considered less objective than probability sampling because they do not offer each member of the target population an equal chance to participate in the study. Instead, participants of a convenience sample choose themselves to participate. The researcher announces the study and participants decide if they want to join. It is crucial to note that non-probability sampling does not allow for the extension of study results to the general population. Instead, the findings from non-probability sampling research are only applicable to the participants involved in the study (Stratton, 2021, p. 373).

The survey was conducted over a period of 16 days, from March 17, 2024, to April 1, 2024, and was completed by 209 participants. The link referring to the online survey was distributed through various channels: multiple times via Instagram Stories, WhatsApp direct messages, WhatsApp Stories, Facebook direct messages, a LinkedIn post on my personal channel and a LinkedIn post on the channel of a Viennese consultation agency for digital communication strategies that I work with as a Freelancer. Participants were encouraged to share the survey link with friends and family to extend its reach through a snowball sampling effect. The survey was designed to be brief, taking approximately 2-3 minutes to complete, and was conducted in German. This language choice was strategic to specifically gather insights from consumers in the DACH region (Germany, Austria, and Switzerland), where German is predominantly spoken. Additionally, conducting the survey in German allowed individuals who may not be proficient in English to participate as well.

As previously mentioned, the questionnaire was structured into six sections. Following the introductory message, participants were prompted to provide demographic information, including age, gender, and details regarding their past impulse purchases and usage of various social commerce platforms (such as Instagram, Facebook, LinkedIn, Pinterest, Amazon, or none). This section also differentiated whether participants had previously made purchases on social commerce or not. To ensure a clear understanding of what constitutes social commerce tools, screenshots from ads on platforms like Facebook, Amazon, and Instagram were included. The purpose of these questions was to determine the most used platforms among the participants, how many had made purchases, and to explore how these factors varied across different genders and age groups. These questions were asked in a multiple-choice format, whereas participants could also choose more than one option when it comes to social commerce platforms used.

In subsequent sections, the questionnaire delves into respondents' attitudes towards impulse buying and the stimuli that influence such behaviors in both retail environments and social commerce platforms. Respondents were asked to rate their responses using a five-point Likert scale, where 1 signifies 'do not agree at all' and 5 indicates 'very strong agreement'. This scale helps to measure the intensity of their feelings and perceptions related to impulse purchasing across different shopping contexts. The survey measured general attitudes and feelings towards impulse purchases using a five-point Likert scale, ranging from 1 (do not agree at all) to 5 (very strong agreement), each section including four to five questions or statements. This section aimed to explore the frequency of impulse buys, the associated positive and negative emotions following such purchases, and the influence of marketing activities like promotions in both retail and online environments.

Following this, the focus shifted to evaluating stimuli in the offline retail environment. To assess these stimuli, a five-point Likert scale was utilized including 5 statements concerning the retail environment. Respondents answered statements regarding factors such as special in-store sales promotions, product placement at checkout areas, customers' moods upon entering a store, the overall store atmosphere—including music, lighting, and scent—and the cleanliness of the store. This approach helped to identify key drivers of impulse buying behavior in physical retail settings.

The subsequent section of the survey addresses the comparison between impulse purchases made in social commerce settings and traditional retail environments. This part includes a concise definition of social commerce to ensure clarity for respondents. Responses are again collected using a five-point Likert scale, ranging from 1 (do not agree at all) to 5 (strongly agree), but with four statements designed to probe specific aspects of impulse buying. The first statement investigates whether there is a higher tendency for impulse purchases via social commerce compared to traditional retail. Next, the survey examines whether the convenience of in-app purchase options and buy-buttons serve as stimuli for more frequent impulse buying on social commerce platforms versus in traditional retail settings. Additionally, the influence of personalized marketing advertisements is assessed to determine if they act as a stronger stimulus in social commerce, potentially leading to more impulse purchases compared to traditional retail environments. The final statement in this section seeks to gauge overall perceptions: whether respondents believe that social commerce inherently encourages more impulse buying than traditional retail settings. This approach aims to capture nuanced views on the shifting dynamics of consumer behavior in digital versus physical sales contexts.

The following part of the survey turns its attention to the stimuli provided by social media influencers within social commerce. To circumvent the potentially negative connotations associated with the term "social media influencer" and to avoid limiting respondents' perspectives to generic celebrities they might not follow, this section invites participants to consider a person they follow on social media whom they trust. This approach aims to connect the questions to positive feelings about their favorite influencers, thereby encouraging more genuine and positive responses. Responses are gathered using a five-point Likert scale, ranging from 1 (do not agree at all) to 5 (strongly agree), across four specific statements. The first statement explores the level of trust respondents place in social media influencers for product recommendations. The next query assesses whether respondents believe these influencers provide unbiased and truthful recommendations. Following this, the survey examines whether trust in a social media influencer influences the likelihood of making impulse purchases. The final statement seeks to determine how frequently respondents purchase products recommended by social media influencers, capturing their direct behavior influenced by these digital personalities. This section is designed to probe the impact of influencer-driven marketing on consumer impulse buying behaviors in the context of social commerce.

The next section of the survey shifts the focus to another key stimulus in social commerce: peer recommendations on social media. To ensure clarity and remove any potential confusion, a brief explanation of the term "peer" is provided. This groundwork helps to frame the subsequent questions, which are structured on a five-point Likert scale ranging from 1 (do not agree at all) to 5 (strongly agree), across four distinct statements. Firstly. the impact of positive peer recommendations on making impulse purchases is probed, seeking to understand how endorsements from friends and acquaintances can trigger spontaneous buying behaviors. Following this, participants are asked whether they have ever made an impulsive purchase based on a product recommended by a peer, aiming to capture direct instances of such behavior. The third statement delves into the influence of seeing peers' purchases on social media, particularly through channels like Instagram stories, on the likelihood of respondents making more impulsive purchases. This query explores the visual and social proof aspects that might spur impulse buying.

Lastly, the survey examines the level of trust respondents place in peer recommendations compared to traditional marketing advertisements. This final statement seeks to gauge whether the authenticity perceived in peer endorsements carries more weight than professionally crafted marketing messages, potentially influencing buying decisions. Through these questions, the survey aims to assess the nuanced roles that peer interactions on social media play in shaping consumer impulse buying habits within the context of social commerce.

4.3. Hypotheses summary

This section provides a structured overview of the key hypotheses that guide the research study. Each hypothesis is rooted in extensive literature review and aims to explore various dimensions of the subject matter, as mentioned in Chapter 3. The following summary outlines the specific hypotheses to be examined. This approach ensures a comprehensive investigation, setting the stage for meaningful analysis and discussion of the findings.

H1:	There is a difference in impulse buying tendencies across age groups, particularly with younger individuals exhibiting a higher degree of impulse buying compared to older individuals.
H2:	Women are more inclined to engage in impulse buying compared to men.
H3:	There is a significant difference in the frequency of impulse purchases made through social commerce platforms compared to traditional retail shops, with a higher frequency of impulse buying expected on platforms such as Amazon, Instagram, and Facebook.
H4:	The trust of consumers in social media influencers significantly impacts the likelihood of making an impulse purchase on social commerce platforms.
H5:	Positive recommendations by peers on social commerce platforms (such as direct messages or comments in the comment section) significantly impact the likelihood of making impulse purchases among the target demographic.

Table 1: Summary of the hypotheses for the quantitative analysis. (own illustration)

4.4. Description of the hypotheses analysis method

In the subsequent sections, the focus will shift to the methodologies employed for data analysis using the statistical software platform SPSS. These analytical techniques are crucial for testing the hypotheses and, ultimately, addressing the research question of the thesis. This analysis will outline how the data collected through the survey is processed and interpreted, providing a foundation for drawing valid conclusions from the study. The analysis of the collected data is conducted using SPSS, which offers robust statistical tools for identifying patterns, correlations, and significant relationships within the dataset.

Firstly, the analysis begins with the application of descriptive statistics to encapsulate and summarize the demographic data of the participants. This step is crucial as it provides a foundational understanding of the sample's composition, including the distribution of age and gender, as well as patterns in the usage of social commerce platforms. Additionally, descriptive statistics are employed to assess the general tendencies in impulse buying behavior within the sample. By elucidating these key characteristics, a comprehensive overview of the participant profile and their purchasing behaviors is established, setting the stage for more detailed inferential analyses. This preliminary analysis not only highlights basic statistical measures such as means and standard deviations but also sets a quantitative baseline for further investigation.

4.4.1. Hypothesis 1 (Age and Impulse Buying)

The Kruskal-Wallis H test was selected as the appropriate statistical method for evaluating the hypothesis due to its compatibility with the nature of the data. This non-parametric test is particularly suitable when the dependent variable is ordinal, as is the case with the impulse buying tendency measure used in this study, which assesses the frequency or degree of impulsive purchasing behavior without assuming equal intervals between ranks. Moreover, the independent variable, age group, is categorical with multiple levels, making the Kruskal-Wallis H test an ideal choice for comparing medians across these groups without assuming a normal distribution. This characteristic is especially important given the non-normal distribution of the data, as evidenced by the Kolmogorov-Smirnov test results. The test's ability to handle non-parametric data ensures that the analysis remains robust and valid despite these deviations from normality (Cleff, 2019, pp. 202-203).

4.4.2. Hypothesis 2 (Gender and Impulse Buying)

The Mann-Whitney U Test is suitable for testing Hypothesis 2 (H2) because it compares the median scores of two independent groups (in this case, men and women) on an ordinal scale, which aligns with the nature of the dependent variable, impulse buying tendency. As the Likert scale used in the survey provides ordinal data, the Mann-Whitney U Test is appropriate for assessing any differences in median impulse buying tendencies between men and women without assuming normality. This non-parametric test is robust to deviations from normality and is well-suited for situations where the assumptions of parametric tests are not met, making it ideal for analyzing ordinal data. Therefore, it allows for a reliable examination of whether women are more inclined to engage in impulse buying compared to men, providing valuable insights into consumer behavior across gender lines (Cleff, 2019, pp. 181-185; Rasch, Friese, Hofmann & Naumann, 2021, p. 107).

4.4.3. Hypothesis 3 (Platform Preference and Impulse Buying)

The Kruskal-Wallis H Test is suitable for testing hypothesis H3 because it is a non-parametric test that does not assume a normal distribution of the data, making it appropriate for ordinal data or non-normally distributed interval data, such as the Likert scale responses typically used to gauge consumer attitudes. It can compare more than two independent groups, which is necessary if you are analyzing the differences across multiple levels of agreement or several consumer segments. Additionally, the Kruskal-Wallis H Test determines whether there are statistically significant differences in the medians between groups, which aligns with the objective of H3—to discern whether there are differences in impulse buying tendencies between traditional retail and social commerce platforms. It also accommodates the use of ranked data, which is common in surveys assessing consumer behaviors (Cleff, 2019, pp. 202-203).

4.4.4. Hypothesis 4 (Trust in Influencers and Impulse Buying)

Spearman's Rank-Order Correlation is suitable for testing Hypothesis 4 (H4) because it assesses the relationship between two ordinal variables—in this case, the trust of consumers in social media influencers and the likelihood of making an impulse purchase on social commerce platforms. The dependent variable, impulse buying tendency, is measured on an ordinal scale, while the independent variable, trust in influencers, is also ordinal, as it likely involves Likert scale responses. Spearman's correlation coefficient, derived from rank-ordered data, does not assume linearity or normality, making it appropriate for analyzing the relationship between these two ordinal variables. Additionally, it accounts for monotonic relationships, capturing whether as trust in influencers increases, so too does the likelihood of making impulse purchases. Therefore, Spearman's Rank-Order Correlation provides a robust method for exploring the association between trust in influencers and impulse buying tendencies, offering valuable insights into the role of influencer trust in consumer behavior on social commerce platforms (Puth, Neuhäuser & Ruxton, 2015, pp. 77-78; Astivia & Zumbo, 2017, pp. 347-348).

4.4.5. Hypothesis 5 (Peer Recommendations and Impulse Buying)

Spearman's Rank-Order Correlation is suitable for testing Hypothesis 5 (H5) because it examines the relationship between two ordinal variables—in this case, positive recommendations by peers on social commerce platforms and the likelihood of making impulse purchases among the target demographic. The dependent variable, impulse buying tendency, is measured on an ordinal scale, while the independent variable, positive recommendations by peers, is also ordinal, likely assessed using Likert scale responses. Spearman's correlation coefficient, derived from rank-ordered data, does not rely on assumptions of linearity or normality, making it robust for analyzing ordinal variables. Furthermore, it captures monotonic relationships, indicating whether an increase in positive peer recommendations corresponds to a higher likelihood of making impulse purchases. Thus, Spearman's Rank-Order Correlation provides a reliable method for exploring the association between peer recommendations and impulse buying tendencies, offering valuable insights into the influence of peer recommendations on consumer behavior in social commerce settings (Puth, Neuhäuser & Ruxton, 2015, pp. 77-78; Astivia & Zumbo, 2017, pp. 347-348).

5. Results and hypothesis testing

The original questionnaire was developed and distributed in German. Prior to analysis, it was translated into English to facilitate a broader evaluation. The results derived from this questionnaire have been integrated and are discussed extensively in this paper.

Out of the total pool of respondents, 209 participants successfully completed the survey, which accounts for a significant 93.30% of the net participation. The average time taken to complete the survey was approximately 9 minutes and 45 seconds according to the arithmetic mean. This suggests that the majority of participants were able to finish the survey relatively quickly, indicating a well-structured and efficiently designed questionnaire that maintained participant engagement through to completion. The median completion time was even shorter, at just over 4 minutes, demonstrating that at least half of the participants were able to navigate through the survey at a swift pace.

5.1. Results of the empirical study

5.1.1. Socio-demographic insights

The survey data provides insight into the demographics of the respondents, revealing a pronounced trend towards purchasing on social commerce platforms, a participant pool skewed towards youth, and a majority of female participants. Understanding these demographic nuances is vital for framing the subsequent analysis of impulse buying behaviors, as such traits are likely to shape shopping habits and predilections.

Regarding gender, 75.60% (158 individuals) of the respondents identify as female, 23.92% (50 individuals) as male, and a marginal 0.48% (1 individual) as other. This highlights a significant female majority in the survey's demographic composition.

The age distribution of participants, as seen in Figure 6, shows that the largest group is those aged 21 - 30 years old, making up 53.11% (111 individuals) of the respondents. The next significant age group is 31 - 40 years old at 19.14% (40 individuals), followed by the 16 - 20 years age group at 15.31% (32 individuals). Those aged 41 - 55 years represent 9.09% (19 individuals) of the sample, and the smallest group is those 56 years old or older, accounting for only 3.35% (7 individuals). This indicates that the survey sample is predominantly young, with a majority of participants under the age of 40.

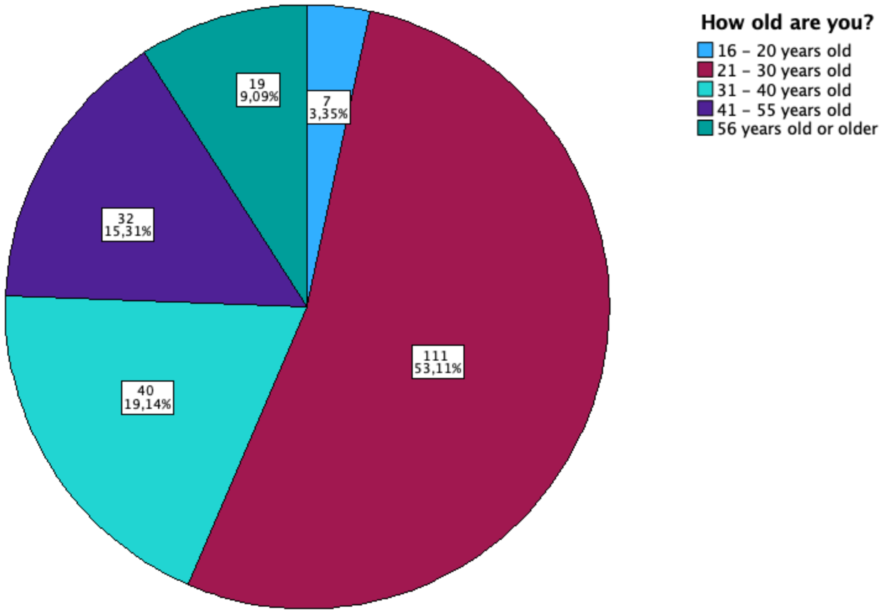

Figure 6: Age distribution across the respondents. (SPSS copy)

A vast majority of participants, 93.78% (196 individuals), have previously made purchases on social commerce platforms. Only a small fraction, 6.22% (13 individuals), reported not having engaged in such behavior. This suggests a strong inclination towards using social commerce for shopping among the surveyed population. A cross-examination was conducted in order to examine which platforms are most used among respondents who claimed to have bought products in a social commerce environment. Analyzing the cross-examinations reveals insightful patterns about the usage of social commerce platforms among respondents. Those who have previously made purchases via social commerce predominantly use Amazon, with 97,2% (172 out of 177) of users confirming past purchases, translating to approximately 97.18%. Instagram follows, with about 94.74% (144 out of 152 users), having made a purchase. LinkedIn and Pinterest show lower purchase rates, with about 92.86% (26 out of 28) and 94.59% (70 out of 74) respectively. Interestingly, Facebook users reported 65 out of 71, roughly 91.55%, indicating they've bought through social commerce.

5.1.2. General insights into impulse buying behavior

As seen in Figure 7, approximately 14% of people strongly disagree with often making impulsive purchases, indicating they do not typically buy on impulse. About 23% agree they occasionally make spontaneous purchases, while around 15% strongly agree, showing a tendency towards impulsive buying. In this data, the mode is listed as 3.00, which corresponds to the "Neutral" response category. This suggests that the most common response among survey participants was "Neutral" regarding their tendency to make spontaneous purchases.

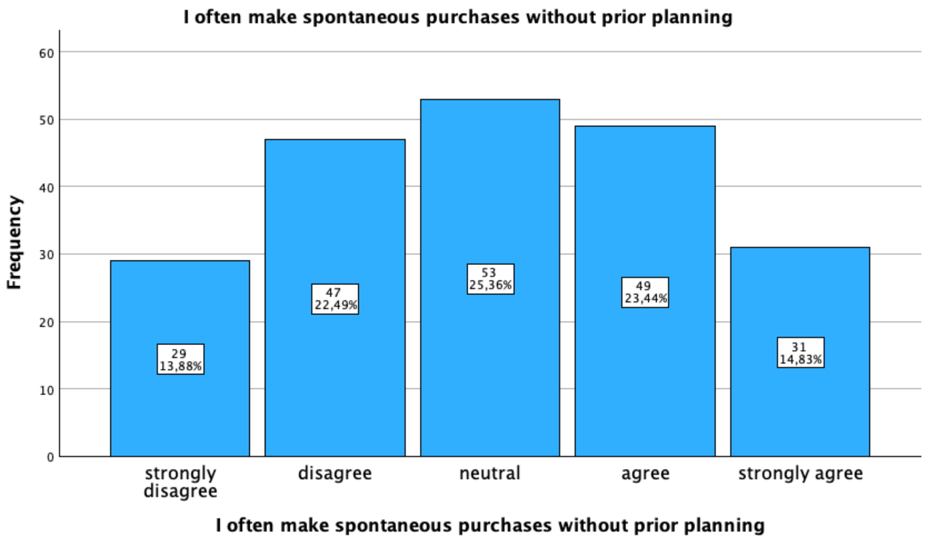

Figure 7: General impulse buying frequencies among the respondents. (SPSS copy)

A significant 32% of respondents agree that impulsive purchases bring them joy and excitement, indicating emotional satisfaction from such behavior. Only 12% strongly disagree, suggesting they do not find joy in spontaneous buying. The mode of the dataset is 4.00, which, according to the previous frequency distribution you provided, corresponds to the response "Agree". This confirms that "Agree" is indeed the most common response given by participants regarding the statement "Impulse purchases bring me a feeling of joy and excitement".

However, the majority, about 33%, strongly agree that they have experienced regret after impulsive purchases, highlighting the complex emotions involved. A very small fraction, 1.4%, strongly disagrees, indicating they rarely feel buyer’s remorse. The mode of the responses is 5.00, which indicates that "Strongly Agree" was the most common answer given, suggesting a significant number of participants have experienced strong feelings of regret following impulsive purchases.

5.1.3. Stimuli for impulse buying behavior in retail environments

A combined total of over 44% of respondents are inclined to buy impulsively due to in-store promotions, such as sales, with 27.27% agreeing and 17.22% strongly agreeing. A smaller group of 6.22% strongly disagree with being influenced by such incentives. The mood of customers plays a significant role, with 24.88% agreeing and 21.05% strongly agreeing that a good mood increases their likelihood of impulsive purchases. A minority of 11.96% strongly disagree with this sentiment. Around 25% agree that the atmosphere of a store, including lighting, smell, and music, can influence impulsive purchases, and 13.88% feel strongly about this influence. Meanwhile, 14.83% strongly disagree that the atmosphere has such an effect. The perception of a store being clean, tidy, and well-sorted has an impact on impulsive buying for a significant 28.71% who agree and 19.62% who strongly agree. On the other hand, 12.44% strongly disagree that store tidiness affects their impulsive buying tendencies.

5.1.4. Comparison of impulse buying behavior in retail environments and social commerce

The survey data uncovers that a notable majority, or 48.53%, of respondents lean towards more impulsive purchases on online platforms compared to retail stores, with a substantial 26.32% expressing strong agreement. Despite this trend, there remains a considerable fraction, 33.5%, who disagree to varying degrees with the tendency to impulsively buy online. Delving into specific online features, about a third of those surveyed, 33%, recognize that 'buy now' buttons on social media platforms boost their impulsive buying, although 25.84% strongly dispute the influence of these buttons. In the realm of personalized marketing, 25.36% agree, with another 9.57% in strong agreement, that such strategies spur impulsive buying, while 21.53% stand firmly opposed, feeling unaffected by these tactics. Comparatively, 33.01% view social commerce as a more enticing sphere for impulse buying, supported by 22.97% who strongly agree, in contrast to 10.05% who emphatically resist the idea, favoring traditional retail environments for such spontaneous actions.

5.1.5. Trust in social media influencers as a stimuli for impulse buying behavior in social commerce

The majority of respondents do not trust product recommendations from influencers, with 31.58% strongly disagreeing and 30.14% disagreeing. Only a small portion, 12.21%, agree or strongly agree with trusting such recommendations. A significant majority, 44.98%, strongly disagree with the statement that influencers make honest and unbiased reviews, and another 34.93% disagree, indicating skepticism towards the authenticity of influencers' reviews.

The credibility of a social media influencer has a notable impact on purchasing decisions for a small group of respondents, with 12.44% strongly agreeing and 18.18% agreeing. However, the majority, 54.99%, either strongly disagree or disagree that an influencer's credibility influences their decision to buy. A large majority, 77.6%, are not inclined to make spontaneous purchases based on influencers' recommendations, with 51.2% strongly disagreeing with the tendency to do so. Conversely, only 12.82% of respondents either agree or strongly agree that they would make such spontaneous purchases. In summary, there is a clear tendency for the majority to not be influenced by influencers when it comes to making purchasing decisions.

5.1.6. Trust in peer recommendations

There is an even distribution across responses, with 31.59% of respondents disagreeing (strongly and not) that positive peer recommendations on social media influence their purchase decisions. In contrast, 31.99% agree to some extent, showing a divided opinion on this influence. A significant 61.1% of respondents have not made impulsive purchases based on peer recommendations, with 39.71% strongly disagreeing that they've done so. Meanwhile, only 14.07% agree in some capacity that they have. The majority of respondents, 58.85%, disagree with the statement that seeing purchases and recommendations from peers on social media, such as Instagram Stories, tempts them to make impulsive purchases. Only 22.49% agree to some degree. There is a discernible level of skepticism towards peer recommendations on social media compared to traditional advertising, with 45.41% disagreeing that they trust such recommendations more. However, 35.21% indicate some level of increased trust in peer recommendations over traditional advertising.

5.2. Hypothesis testing

5.2.1. H1: Kruskal-Wallis H Test

The Null Hypothesis (H0) sounds as follows: The impulse buying tendency is the same across all age groups.

The alternative hypothesis (H1) sounds as follows: There is a difference in impulse buying tendencies across age groups, particularly with younger individuals exhibiting a higher degree of impulse buying compared to older individuals.

In the proposed study, the independent variable is the age group, which is a categorical variable divided into more than two categories: 16-20, 21-30, 31-40, 41-55, and 56 or older. The dependent variable is the impulse buying tendency, measured on an ordinal scale. This scale represents the degree or frequency of impulse buying behavior among the participants. The relationship between these variables will be examined to determine if age influences the tendency to make impulsive purchases. The Kruskal-Wallis H Test was employed to investigate whether there exists a variance in the impulse buying tendencies among various age groups. The null hypothesis posited that the median impulse buying tendency remains consistent across all age brackets, while the alternative hypothesis suggested a discrepancy, particularly with younger individuals exhibiting a heightened inclination for impulsive purchases compared to their older counterparts.

The box plot, as seen in Figure 8, graphically represents the distribution of impulse buying tendencies across different age groups, with the grand median indicated at 3,000. It appears that all age groups have a median value around this grand median, suggesting no significant differences in median impulse buying tendencies across the groups briefly. Table 2 is a table of pairwise comparisons, which shows the results of comparing each pair of age groups against each other to determine if there are statistically significant differences in their medians. In the context of the Kruskal-Wallis H Test results, the 'Test Statistic' column in the table presents the Kruskal-Wallis statistic for each comparison between pairs of age groups. This statistic helps determine whether there are significant differences in the distributions of impulse buying tendencies between the groups. The 'Sig.' or significance values correspond to the p-values for these pairwise tests. A p-value is a measure of the probability that the observed data would occur by chance if the null hypothesis — which states that there is no difference between the groups — were true. Typically, a p-value of less than 0.05 is considered statistically significant .

However, when conducting multiple pairwise comparisons, as depicted in Table 2, the risk of a type I error, where a true null hypothesis is incorrectly rejected, increases. To account for this, the 'Adj. Sig.' or adjusted significance values have been computed using a Bonferroni correction. This correction is a conservative approach that reduces the chances of falsely identifying a significant effect by adjusting the p-value threshold downwards based on the number of comparisons. This means that the significance level is divided by the number of tests to control for the increase in type I error rate, resulting in more stringent criteria for significance. In this analysis, even with the Bonferroni correction, the adjusted p-values are above the 0.05 threshold, indicating that the test did not find evidence to reject the null hypothesis of equal medians across the age groups.

Therefore, based on this data, the rejection of the null hypothesis for all pairwise comparisons failed. This means that there is no statistically significant difference in median impulse buying tendencies between any pairs of age groups at the 0.05 significance level. So, in conclusion, according to this analysis, the data does not support the alternative hypothesis that younger individuals exhibit a higher degree of impulse buying compared to older individuals. All age groups seem to have similar median impulse buying tendencies.

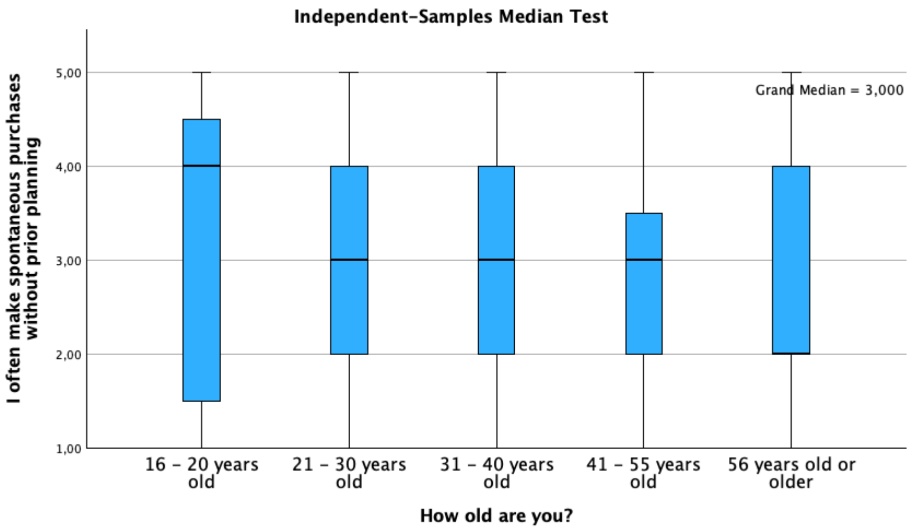

Figure 8: Box plot representation of the distribution of impulse buying tendencies across different age groups. (SPSS copy)

Pairwise Comparisons of How old are you?

Sample 1-Sample 2	Test Statistic	Sig.	Adj. Sig.[a]
56 years old or older-41 – 55 years old	,259	,611	1,000
56 years old or older-31 – 40 years old	,197	,657	1,000
56 years old or older-21 – 30 years old	,778	,378	1,000
56 years old or older-16 – 20 years old	,195	,658	1,000
21 – 30 years old-31 – 40 years old	,285	,594	1,000
21 – 30 years old-16 – 20 years old	,588	,443	1,000
41 – 55 years old-16 – 20 years old	2,786	,095	,951
31 – 40 years old-41 – 55 years old	1,278	,258	1,000
31 – 40 years old-16 – 20 years old	,954	,329	1,000
21 – 30 years old-41 – 55 years old	3,156	,076	,756

Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same.
Asymptotic significances (2-sided tests) are displayed. The significance level is ,050.

a. Significance values have been adjusted by the Bonferroni correction for multiple tests.

Table 2: Pairwise comparisons depicting the results of comparing each pair of age groups against each other. (SPSS copy)

5.2.2. H2: Mann-Whitney U Test.

The Null Hypothesis (H0) sounds as follows: There is no difference in impulse buying tendencies between women and men.

The alternative hypothesis (H2) sounds as follows: Women are more inclined to engage in impulse buying compared to men.

The test aimed to explore the potential differences in impulse buying tendencies between women and men. The impulse buying tendency was measured on an ordinal scale, while gender was the categorical independent variable, classified into male and female. To test the hypotheses, the Mann-Whitney U test was employed. The null hypothesis posited no significant difference in impulse buying tendencies between genders. In contrast, the alternative hypothesis suggested that women are more inclined than men to engage in impulse buying.

The test statistic resulted in a Mann-Whitney U value of 2944.500 and a Wilcoxon W value of 4219.500. The associated Z statistic is -2.776, and the p-value is 0.006 (two-tailed). The results showed that the p-value was .006, which is substantially lower than the commonly accepted threshold of .05 for statistical significance. This indicates a statistically significant difference in impulse buying tendencies between the two gender groups. The negative Z-score points to the difference favoring the alternative hypothesis. Further examination of the rank sums, as seen in Table 3, revealed that female participants had a higher mean rank compared to male participants (mean rank for females was 11086, while for males it was 8439). This higher mean rank among females supports the conclusion that women exhibit a stronger tendency towards impulse buying than men.

These results support Hypothesis 2, which posited that women are more inclined to engage in impulse buying compared to men. Therefore, based on the Mann-Whitney U Test findings, there is evidence to suggest that gender influences impulse buying behavior, with females demonstrating a greater propensity for spontaneous purchases without prior planning compared to males.

Mann-Whitney Test

Ranks				
	Which gender do you identify with?	N	Mean Rank	Sum of Ranks
I often make spontaneous purchases without prior planning	female	158	110,86	17516,50
	male	50	84,39	4219,50
	Total	208		

Table 3: Examination of the rank sums, distinguishing between male and female. (SPSS copy)

5.2.3. H3: Kruskal-Wallis H Test

The Null Hypothesis (H0) sounds as follows: There is no statistically significant difference in the frequency of impulse purchases made through social commerce platforms compared to traditional retail shops.

The alternative hypothesis (H3) sounds as follows: There is a significant difference in the frequency of impulse purchases made through social commerce platforms compared to traditional retail shops, with a higher frequency of impulse buying expected on platforms such as Amazon, Instagram, and Facebook.

The Kruskal-Wallis H Test conducts pairwise comparisons across a spectrum of consumer agreements regarding their propensity for making spontaneous purchases without prior planning. In this analytical approach, each row is dedicated to contrasting pairs of responses that range from "strongly disagree" to "strongly agree." The Pairwise Comparisons, as seen in Table 4, further quantifies these differences. Several comparisons, such as "strongly disagree–neutral," "strongly disagree–agree," and "strongly disagree–strongly agree," have very low adjusted significance values (0.000 or 0.001), suggesting significant differences in their medians. Conversely, comparisons like "neutral–agree" and "agree–strongly agree" have high adjusted significance values (1.000), indicating no significant differences between these groups. Looking at the graph in Figure 9, there's a visible variation in the median scores of impulse buying frequencies across different levels of agreement with the statement about making spontaneous purchases without prior planning.

Interpreting these findings suggests that for certain levels of agreement, the hypothesis that there are differences in impulse buying behavior between social commerce platforms and traditional retail stores holds true, as there are statistically significant differences in the respondents' tendencies to make spontaneous purchases. However, not all levels of agreement exhibit these significant differences. The data supports H3 for some pairwise comparisons, particularly where the adjusted significance values are below the 0.05 threshold, implying that the frequency of impulse purchases is different between some levels of agreement on the propensity to buy impulsively through social commerce platforms as opposed to traditional retail shops.

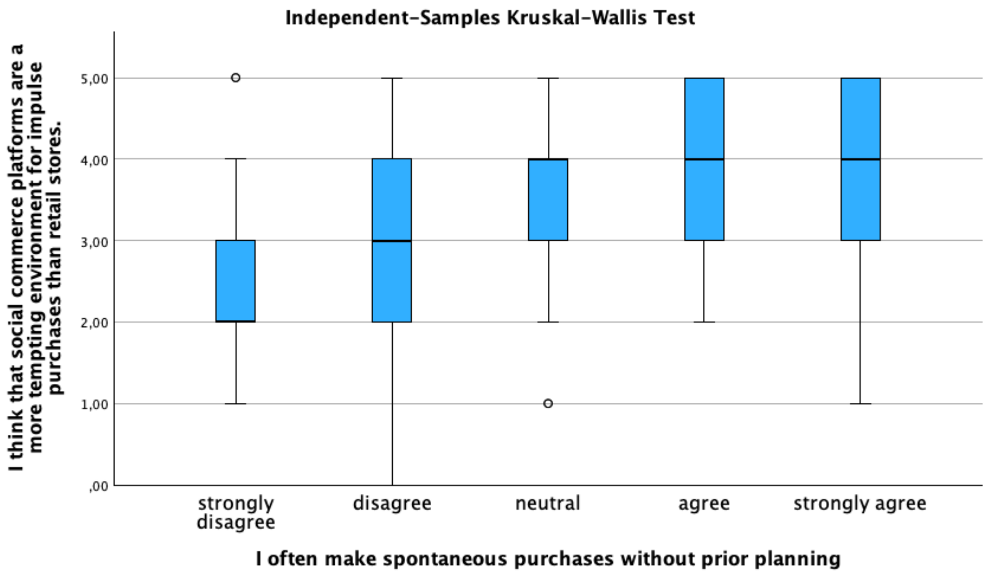

Figure 9: Variation in the median scores of impulse buying frequency across different levels of agreement with the statement about making spontaneous purchases without prior planning. (SPSS copy)

Pairwise Comparisons of I often make spontaneous purchases without prior planning

Sample 1-Sample 2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig.[a]
strongly disagree-disagree	-12,454	13,855	-,899	,369	1,000
strongly disagree-neutral	-55,194	13,553	-4,073	<,001	,000
strongly disagree-agree	-57,813	13,747	-4,205	<,001	,000
strongly disagree-strongly agree	-59,935	15,158	-3,954	<,001	,001
disagree-neutral	-42,740	11,756	-3,635	<,001	,003
disagree-agree	-45,359	11,980	-3,786	<,001	,002
disagree-strongly agree	-47,481	13,576	-3,497	<,001	,005
neutral-agree	-2,619	11,628	-,225	,822	1,000
neutral-strongly agree	-4,741	13,267	-,357	,721	1,000
agree-strongly agree	-2,122	13,466	-,158	,875	1,000

Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same.
Asymptotic significances (2-sided tests) are displayed. The significance level is ,050.

a. Significance values have been adjusted by the Bonferroni correction for multiple tests.

Table 4: Pairwise comparisons of agreement-levels. (SPSS copy)

5.2.4. H4: Spearman's Rank-Order Correlation.

The Null Hypothesis (H0) sounds as follows: The trust of consumers in social media influencers does not impact the likelihood of making an impulse purchase on social commerce platforms.

The alternative hypothesis (H4) sounds as follows: The trust of consumers in social media influencers significantly impacts the likelihood of making an impulse purchase on social commerce platforms.

The results from the Spearman's rank-order correlation analysis, as depicted in Table 5, assess the relationship between two variables: the frequency of buying products recommended by influencers on platforms like Instagram spontaneously, and the level of trust consumers have in product recommendations from influencers. The Spearman's rho correlation coefficient between these two variables is 0.590, suggesting a moderate positive correlation. This means that as trust in influencers' recommendations increases, so does the likelihood of making spontaneous purchases based on these recommendations. The significance value (Sig. 2-tailed) for this correlation is less than 0.001, which is far below the conventional threshold of 0.05 for statistical significance. Therefore, the result is highly significant, indicating a very low probability that this correlation could have occurred by chance. The 'N' value, which is 209, represents the number of observations included in the analysis, providing a sufficient sample size to give confidence in the results. The correlation is marked as significant at the 0.01 level (2-tailed), which indicates that the results are robust and the likelihood of them being due to random chance is less than 1%.

Given the results, the null hypothesis (H0) suggesting that the trust of consumers in social media influencers does not impact the likelihood of making an impulse purchase on social commerce platforms is rejected. The alternative hypothesis (H4), which posits that there is a significant impact of trust in influencers on the likelihood of making such impulse purchases, is accepted. In summary, the data suggests that the degree to which consumers trust influencers on social media platforms like Instagram has a notable and statistically significant correlation with their tendency to make impulse purchases based on those influencers' recommendations.

Correlations

			I often buy products recommended by influencers I follow on platforms such as Instagram spontaneously.	I trust product recommendations from influencers.
Spearman's rho	I often buy products recommended by influencers I follow on platforms such as Instagram spontaneously.	Correlation Coefficient	1,000	,590**
		Sig. (2-tailed)	.	<,001
		N	209	209
	I trust product recommendations from influencers.	Correlation Coefficient	,590**	1,000
		Sig. (2-tailed)	<,001	.
		N	209	209

**. Correlation is significant at the 0.01 level (2-tailed).

Table 5: Spearman's rank-order correlation analysis assessing the relationship between influencer-driven variables. (SPSS copy)

5.2.5. H5: Spearman's Rank-Order Correlation.

The Null Hypothesis (H0) sounds as follows: Positive recommendations by peers on social commerce platforms do not impact the likelihood of making impulse purchases.

The alternative hypothesis (H5) sounds as follows: Positive recommendations by peers on social commerce platforms (such as direct messages or comments in the comment section) significantly impact the likelihood of making impulse purchases among the target demographic.

The data, depicted in Table 6, reveals the relationship between two specific consumer behaviors using Spearman's rank-order correlation. One variable being the tendency of individuals to make impulse purchases based on positive peer recommendations on social media, and the other one being the extent to which these positive peer recommendations influence their purchase decisions. The Spearman's rho correlation coefficient between these two variables is 0.449, indicating a moderate positive correlation. This means that there is a statistically significant association between the likelihood of making impulse purchases and the influence of positive recommendations from peers on social media. With a p-value less than 0.001, this correlation is highly significant, suggesting a very low probability that this association is due to chance.

The results lead to the rejection of the null hypothesis (H0) that positive recommendations by peers on social commerce platforms do not impact the likelihood of making impulse purchases. Consequently, the alternative hypothesis (H5), which asserts that positive peer recommendations on social commerce platforms significantly influence the likelihood of making impulse purchases among the target demographic, is supported. The correlation is significant at the 0.01 level (2-tailed), which underscores the strength and reliability of the association. In summary, the analysis suggests that positive social peer influences on commerce platforms play a significant role in driving impulse purchasing behavior.

Correlations

			I have bought products impulsively in the past based on recommendations of my peers.	Positive peer recommendations on social media influence my purchase decisions.
Spearman's rho	I have bought products impulsively in the past based on recommendations of my peers.	Correlation Coefficient	1,000	,449**
		Sig. (2-tailed)	.	<,001
		N	209	209
	Positive peer recommendations on social media influence my purchase decisions.	Correlation Coefficient	,449**	1,000
		Sig. (2-tailed)	<,001	.
		N	209	209

**. Correlation is significant at the 0.01 level (2-tailed).

Table 6: Spearman's rank-order correlation analysis assessing the relationship between two specific consumer behaviors using Spearman's rank-order correlation. (SPSS copy)

6. Conclusion

6.1. Discussion of the most relevant results

The hypothesis test (H1) explored whether there are differences in impulse buying tendencies across various age groups, specifically positing that younger individuals are more prone to impulse purchases than older ones. Employing the Kruskal-Wallis H Test, the study found no significant differences in median impulse buying tendencies among the age groups, even after adjusting for multiple comparisons using the Bonferroni correction. All age groups exhibited similar tendencies around a grand median, suggesting that age may not significantly influence impulse buying behaviors as initially hypothesized. These findings oppose the study conducted by Xi, Hong, Jianshan, Li, Jiuchang and Davison in 2016 (p. 11), which stated that impulse buying tendency decreases with age. However, a major limitation of these findings stems from the age distribution of the survey participants, predominantly skewed towards younger individuals aged 21-30, who comprised over half of the sample. This overrepresentation raises concerns about the generalizability of the results, as the behaviors of this age group might not accurately reflect the impulse buying tendencies of the broader population.

The hypothesis test (H2) using the Mann-Whitney U Test investigated differences in impulse buying tendencies between genders, specifically hypothesizing that women are more likely to engage in impulse buying than men. The findings revealed a statistically significant difference, with the test statistic ($Z = -2.776$) and a p-value of 0.006, indicating that women indeed exhibit a stronger tendency towards impulse purchases compared to men. This supports the alternative hypothesis and suggests that gender does influence impulse buying behaviors, with females demonstrating a higher propensity for such actions, which also aligns with the state of literature of the studies conducted by studies by Dittmar, Beattie and Friese (1995, p. 507) and Silvera, Lavack, and Kropp (2008, p. 27). However, the credibility of these results must be evaluated in light of the survey's gender distribution, which heavily favors female participants, comprising 75.60% of the sample. This significant overrepresentation of females could potentially bias the results, exaggerating the gender differences in impulse buying tendencies. This demographic skew might limit the applicability of the findings across a more balanced male-to-female ratio, suggesting that the observed effect might not be as pronounced in a more evenly distributed population.

The hypothesis test (H3) employed the Kruskal-Wallis H Test to determine if there were significant differences in the frequency of impulse purchases made through social commerce platforms compared to traditional retail shops. The results highlighted notable disparities, with several pairwise comparisons showing statistically significant differences, particularly when contrasting extreme levels of agreement regarding propensity for impulse buying. For example, comparisons between respondents who "strongly disagree" and those who "strongly agree" on making spontaneous purchases indicated significant differences in impulse buying frequency on social commerce platforms. These findings partially align with the ones stated by Xi, Hong, Jianshan, Li, Jiuchang & Davison (2016, p. 11) that the frequency of social media usage increases the propensity of impulse purchases. Nonetheless, an important limitation to consider in interpreting these results is the overwhelming majority of participants (93.78%) who have previously engaged in shopping through social commerce platforms. This significant skew towards experienced social commerce users may amplify the observed tendencies to engage in impulse buying on these platforms, potentially overshadowing the behaviors of those less familiar with or inclined to use such platforms. Thus, while the data supports the hypothesis that social commerce may encourage more frequent impulse purchases compared to traditional retail, the generalizability of these findings might be limited by the predominant composition of the sample.

Hypothesis test (H4) utilized Spearman's Rank-Order Correlation to assess the impact of consumer trust in social media influencers on the likelihood of making impulse purchases on social commerce platforms. The analysis revealed a moderate positive correlation (Spearman’s rho = 0.590), with a highly significant p-value (less than 0.001), indicating that as trust in influencers' recommendations increases, so does the propensity to make impulse purchases based on these endorsements. Thus, the data supports the alternative hypothesis, confirming that trust in influencers significantly influences impulse buying behavior on platforms like Instagram. Despite the statistical support for H4, the overall sentiment among the survey participants suggests a general skepticism towards influencers. A substantial majority express distrust in influencer recommendations and deny that such endorsements influence their purchasing decisions. This discrepancy highlights a limitation in generalizing the correlation findings across the broader population, as those who are influenced might represent a distinct subset of consumers who are more susceptible to social media marketing, rather than reflecting the typical consumer behavior. This variation underscores the complexity of influencer impact, suggesting that while there is a significant effect for some, it may not be universally applicable across all social commerce users.

The hypothesis test (H5) examined the influence of positive peer recommendations on social commerce platforms on impulse purchasing behaviors using Spearman's Rank-Order Correlation. The analysis demonstrated a moderate positive correlation (Spearman's rho = 0.449) with a highly significant p-value (less than 0.001), indicating a strong association between peer influences and impulse purchases. This result supports the alternative hypothesis that positive recommendations from peers significantly impact the likelihood of making impulse purchases on these platforms. However, the broader survey responses reveal a more nuanced picture. There is an even distribution across opinions regarding the influence of peer recommendations, and a significant majority of respondents (61.1%) reported not making impulsive purchases based on such recommendations. Additionally, a majority (58.85%) disagree that seeing peer purchases and recommendations tempts them to make impulsive purchases. This suggests that while there is a significant correlation for some, overall skepticism towards peer recommendations persists among a large portion of the sample. This divergence highlights a critical limitation in generalizing the correlation findings: although a statistically significant influence exists for some individuals, a substantial portion of the population remains unaffected by peer recommendations on social commerce platforms. This complexity underscores the importance of considering individual differences in susceptibility to social influences when evaluating the impact of peer recommendations on consumer behavior.

6.2. Answering the research questions

6.2.1. Answering the main research question: Differences of driving factors for impulse buying in social commerce and retail environments

The main research question sounds as follows: “What driving factors for impulse purchases in social commerce can be identified - in contrast to physical stores?”

In the context of social commerce, the key driving factors for impulse purchases, in contrast to physical stores, are deeply rooted in the unique interplay of digital platform features and human psychology, as discussed in chapter 2.3. Firstly, social-related factors play a pivotal role in social commerce, with electronic word-of-mouth (e-WOM), trust, and user-generated content fostering a community-centric purchasing environment that encourages impulse buying (Meilatinova, 2021, p. 3; Mikalef, Sharma, Pappas, & Giannakos, 2021, p. 1273). This contrasts with physical stores, where external stimuli such as store layout, visual merchandising, and ambient factors primarily influence such behaviors (Baker, Parasuraman, Grewal & Voss, 2002, p. 121). Secondly, the characteristics of consumers themselves, including their impulsiveness, motivation, and social or physical attractiveness, are significant (Abdelsalam, Salim, Alias & Husain, 2020, p. 89050). These internal factors are similar in both online and offline environments; however, in social commerce, the interactivity and social reinforcement present on platforms like Instagram can further amplify impulsiveness, making it a more pronounced driver of impulse purchases (Sihombing, Budi & Munajat, 2020, p. 248).

Platform-related factors are unique to the digital domain. The visual appeal of social commerce sites, the ease of navigation with integrated "buy now" buttons, and the personalization of the shopping experience all contribute to a streamlined path from desire to purchase (Martinez-Lopez, Li, Liu & Feng, 2020, p. 2; Phan, Ngo & Phuoc, 2022, p. 77). This is in stark contrast to physical stores, where the tangible experience and the serendipity of discovering products are the main triggers for impulse buying (Chang, Eckman & Yan, 2011, p. 238; Chang, Eckman & Yan, 2011, p. 245). Finally, marketing-associated factors in social commerce are characterized by product availability, scarcity, and, notably, the use of influencers as a marketing strategy

(Abdelsalam, Salim, Alias & Husain, 2020, p. 89050). Influencers on platforms like Instagram become significant drivers of impulse purchases by creating trust and leveraging their perceived authenticity (Santiago & Castelo, 2020, p. 34), which is less prevalent in the traditional retail context, where advertising and in-store promotions dominate (Parmar, Mann & Ghuman, 2020, p. 577).

The survey conducted within the study aimed to investigate these various facets of impulse buying behavior found in the literature, comparing social commerce and traditional retail environments through specific questions designed to uncover the nuances of consumer interactions in both contexts. The survey addressed the role of specific platform features unique to social commerce, such as "buy now" buttons and personalized advertisements. Respondents reported that these features facilitated easier and quicker purchases, with a third of respondents expressing that such conveniences made them more prone to impulse buying compared to the sensory and physical cues of traditional retail settings. Among the participants who reported making a purchase through social commerce, 97.18% indicated that they use Instagram, highlighting the platform's prominence in this space. Accordingly, these results are consistent with existing literature, demonstrating that nearly all shoppers in social commerce are active on Instagram. Peer recommendations also featured prominently in the survey. It sought to determine how online social interactions influence impulse buying decisions compared to in-store experiences, where such social proofs might be less pronounced. The data showed that a considerable number of respondents were influenced by recommendations from peers within their social networks, emphasizing the role of social validation in online impulse purchases. Furthermore, the survey delved into shopping motivations and behaviors, highlighting emotional triggers and the convenience of shopping methods as significant drivers of impulse purchases. The results revealed varying degrees of impulsivity among shoppers, with differences highlighted between those who shopped online versus in physical stores. For instance, emotional responses triggered by engaging content on social media were cited as a key factor in impulse buying online, while the tactile experience of handling products played a similar role in physical stores.

In summary, while there are internal factors such as impulse buying tendency and hedonic motives that influence consumers in both settings, social commerce introduces unique external factors like influencer marketing and platform dynamics, which create a compelling, socially rich environment conducive to impulse purchases. Overall, the survey's findings underscored the distinct dynamics at play in social commerce compared to traditional retail environments. Influencers, personalized marketing, and peer interactions were all found to significantly enhance the propensity for impulse purchases online, providing a clear picture of how digital platforms are reshaping consumer shopping habits.

6.2.2. Answering guiding question 1: Peculiarities of impulse buying in social commerce environments

The first guiding question sounds as follows: “What are the peculiarities of impulse buying in social commerce in contrast to physical stores?”

Impulse purchases in social commerce are distinguished by the immediacy and convenience of the buying process, facilitated by digital platforms. Unlike physical stores where impulse buying can be triggered by physical product displays and in-store promotions, in social commerce, digital cues such as limited-time offers, direct "buy now" prompts, and social proof (e.g., likes, shares, and comments) play a significant role. (Martinez-Lopez, Li, Liu & Feng, 2020, p. 2; Luo, 2005, p. 289) These factors are compounded by the high frequency of interactions with influencers who endorse products, creating a powerful impetus for impulse buying that is less prevalent in traditional retail environments (Liu, De Costa, Yasin & Ruan, 2023, p. 2).

The survey results highlighted that a significant majority of respondents, approximately 97.18%, indicated that they use Instagram for social commerce, pointing to the platform's significant role in facilitating impulse buying, as mentioned before. This data underscores the importance of visually engaging platforms that integrate direct purchasing options, such as "buy now" buttons, which simplify the buying process and enhance the impulsiveness of purchases. Furthermore, the survey explored the emotional and psychological triggers of impulse buying in social commerce. It was found that promotions and exclusive offers, often disseminated through social media, effectively trigger impulse purchases. The immediacy and accessibility of these promotions on social platforms make them more influential compared to the more planned and less frequent promotions in physical stores.

In summary, the peculiarities of impulse buying in social commerce, as highlighted by the survey findings, reflect a significant shift towards digital triggers, primarily driven by social interactions, influencer marketing, and platform-specific features that cater to the convenience and immediacy of online shopping.

6.2.3. Answering guiding question 2: Stimuli for impulse buying in social commerce

The second guiding question sounds as follows: “How must a company proceed in order to trigger impulse purchases via social commerce?”

To trigger impulse purchases, companies should leverage platform-related factors such as visual appeal and easy navigation, ensuring a personalized and interactive user experience. The findings from chapter 2.3.2.3. show that buy buttons and personalized ads on platforms like Instagram effectively convert browsing into impulse buying (Phan, Ngo & Phuoc, 2022, p. 77). The study results align with the literature, suggesting that optimizing these features along with engaging influencer partnerships will enhance the likelihood of impulse purchases.

Integrating insights from Chapter 5, the research elucidates that while influencers play a pivotal role, the mechanism through which impulse purchases occur in social commerce involves a multifaceted array of factors, from the intricacies of the social commerce platform to the nuanced characteristics of consumers themselves. The survey data reveals a general skepticism towards the credibility and authenticity of influencers and their recommendations. Specifically, 31.58% of respondents strongly disagree, and 30.14% disagree with trusting influencer product recommendations. Furthermore, a significant majority (44.98% strongly and 34.93% generally) express doubts about the honesty of influencers' reviews. Despite the notable influence of a small group of respondents who trust influencers (12.44% strongly agree and 18.18% agree that influencer credibility impacts their purchasing decisions), the broader data indicates that 54.99% either strongly disagree or disagree that an influencer's credibility influences their buying decisions. Moreover, 77.6% of respondents are not inclined to make impulse purchases based on influencer recommendations, with 51.2% strongly resisting such spontaneous buying.

Regarding peer recommendations, the findings are similarly mixed. While there is an even split with 31.59% disagreeing and 31.99% agreeing that peer recommendations influence their buying decisions, a significant 61.1% have not made impulsive purchases based on these recommendations. Additionally, a majority (58.85%) do not feel tempted to make impulse purchases from seeing peer purchases and recommendations on platforms like Instagram Stories. This skepticism extends to the broader perception of peer recommendations on social media, with 45.41% of respondents indicating less trust in these compared to traditional advertising, though 35.21% show some increased trust over traditional methods.

In conclusion, while social commerce provides a platform for influencer and peer recommendation-driven purchases, the actual effectiveness of these stimuli as triggers for impulse buying is limited by widespread consumer skepticism and a discernible caution towards the authenticity and influence of such recommendations. This skepticism shapes the impulse buying landscape in social commerce, highlighting a need for more genuine and trustworthy engagements to effectively stimulate impulse purchases.

6.2.4. Answering guiding question 3: Influencers as a stimulus for impulse buying in social commerce

The third guiding question sounds as follows: “To what extent do influencers on Instagram trigger impulse purchases in the area of social commerce?”

Section 2.4.1 of the thesis explores the role of social media influencers as a stimulus for impulse buying behavior. It discusses how influencers leverage their extensive reach and perceived credibility to significantly influence consumer behaviors on social media platforms. Influencers on Instagram hold substantial sway in triggering impulse purchases, acting as a bridge between companies and consumers (Santiago &

Castelo, 2020, p. 34; Chen, Li, & Zhao, 2020, p. 217). Literature highlights that the authenticity and trustworthiness of influencers are critical in determining their impact on impulse buying. Consumers are more likely to make impulse purchases when they perceive an influencer's recommendations as genuine and trustworthy (Lee, Sudarshan, Sussman, Bright & Eastin, 2022, p. 91). However, the effectiveness of influencers can be undermined by consumer skepticism towards the authenticity of their endorsements. The literature findings underscore the need for influencers to maintain transparency with their audience to maximize their impact on impulse buying (Shamim, Azam & Islam, 2024, p. 8).

Survey data presents a complex picture of influencer effectiveness. A majority of respondents exhibit skepticism towards influencers, with 31.58% strongly disagreeing and 30.14% disagreeing with trusting influencer recommendations. Similarly, 44.98% strongly disagree and another 34.93% disagree with the perception that influencers provide honest and unbiased reviews, underscoring a significant doubt about the authenticity of influencer content. Despite the overall distrust, a small but notable segment of respondents acknowledges the influence of credible influencers on their purchasing decisions, with 12.44% strongly agreeing and 18.18% agreeing that influencer credibility impacts their buying choices. However, this does not necessarily translate into impulse buying behaviors. A significant 77.6% of participants are not inclined to make spontaneous purchases based on influencer recommendations, including 51.2% who strongly oppose such behaviors.

These findings align with literature suggesting that while influencers can significantly sway consumer behavior, their impact varies widely based on perceived credibility and the authenticity of their content. The skepticism noted in the survey responses reflects a growing consumer awareness of influencer marketing tactics, which may diminish the impulsiveness of buying decisions. This suggests a need for influencers to foster greater authenticity and transparency in their engagements to effectively influence impulse buying in social commerce.

6.3. Limitations of the study

The limitations of the study are rooted in its sampling and response accuracy. The use of a convenience sample restricts the generalizability of the findings, as it may not accurately reflect the broader population's behavior (Stratton, 2021, p. 373). The disproportionate representation of female respondents (75.60%) compared to male respondents (23.92%) further skews the data, potentially biasing the results towards female perspectives on impulse buying in social commerce. A further limitation, not previously discussed, is the potential impact of cultural factors that were not controlled for in the study. The cultural background of respondents can significantly influence consumer behavior, including impulse buying tendencies. Without a diverse cultural representation or specific consideration of how cultural differences impact buying behavior, the findings might not accurately reflect the global social commerce market.

Another limitation lies in the nature of the online-survey, which is the possibility of inaccurate responses, whether intentional or not, adds another layer of uncertainty to the study's conclusions. Moreover, any misinterpretation of questions by respondents could lead to discrepancies between their actual thoughts or behaviors and the data collected (Coleman, 2018, pp. 293-296). These factors collectively suggest that the study's insights should be considered with caution and within the context of its sample characteristics.

6.4. Outlook and implications

The study outlines the future of social commerce, especially focusing on impulse purchases, highlighting the growing integration of shopping and social media. As personalization and artificial intelligence advance, impulse buying is expected to increase, with influencers playing a crucial role in shaping consumer behavior. Moreover, future studies could examine the impact of emerging technologies such as augmented reality (AR) and virtual reality (VR) on impulse buying. As these technologies become more integrated into social commerce, understanding their influence on consumer behavior could be pivotal for developing effective marketing strategies.

However, the study also points to areas needing more research. Future studies should aim for a more diverse group of participants to better understand different consumer behaviors. Additionally, research should expand to a broader demographic to include a more diverse range of ages, socioeconomic backgrounds, and cultural contexts, thereby enhancing the generalizability of the findings across different populations. Another area for research could involve the dynamics of impulse buying during different economic cycles. Economic downturns or booms might alter consumer impulse buying behavior, and studying these patterns could help businesses adjust their strategies according to economic conditions.

In conclusion, this study lays the groundwork for further exploration and urges businesses to keep up with technological advancements and the changing landscape of consumer behavior in social commerce. Managers should heed these insights, but also stay tuned to the evolving landscape, as what drives impulse purchases today may transform with the next digital innovation.

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