

The Effect of Parasocial Relationship on Online Impulsive Buying Tendency: Exploring the Role of Financial Literacy and Self-Control

Ivana Sheruly¹, Andi Supandi Suaid Koentary²
Faculty of Psychology Universitas Indonesia, Indonesia

ivanasheruly@gmail.com

Abstract

Impulsive buying behavior has increased alongside the growth of digital transactions and technological advancements that simplify purchasing. Psychological studies have scientifically demonstrated that e-commerce website design and enjoyable online shopping experiences can trigger positive emotions that drive impulsive buying behavior, especially in women where self-esteem and body image have been proven to be contributing factors. The urgency to examine this issue has been amplified by the COVID-19 pandemic, which has been found to stimulate impulsive buying. With self-control and financial literacy as moderating factors, researchers are focusing on the phenomenon of impulsive buying among women in their early adulthood, as this age group is considered the most vulnerable to impulsive buying behavior. Researchers aim to investigate how self-control and financial literacy might mitigate the influence of parasocial relationships on impulse buying tendencies, with the ultimate goal of preventing individuals in early adulthood from getting trapped in the cycle of impulsive buying and its long-term ripple effects. Participants in this study are 195 women aged 18 to 25 who have a favorite celebrity figure and had purchased beauty products in the previous two months. According to the findings of simple regression analysis, parasocial relationships affect impulsive purchasing tendencies ($F(1.191) = 12.100, p < .05, R^2 = .059, R^2_{Adjusted} = .054$). It was also discovered that self-control has a moderating role on the influence of parasocial relationships toward impulse buying tendencies ($R = .4172, F(1.191) = 13.4189, p < .05$), but financial literacy has no moderating role.

Keywords: emerging adulthood, financial literacy, impulsive buying, parasocial relationship, self-control

Abstrak

Perilaku pembelian impulsif semakin meningkat seiring dengan pertumbuhan transaksi digital dan kemajuan teknologi yang mempermudah pembelian. Studi psikologis telah menunjukkan secara ilmiah bahwa desain situs web e-commerce dan pengalaman belanja online yang menyenangkan dapat memicu emosi positif yang mendorong perilaku pembelian impulsif, terutama pada wanita di mana harga diri dan citra tubuh terbukti menjadi faktor penyebabnya. Urgensi untuk mengkaji masalah ini semakin diperkuat dengan adanya pandemi COVID-19, yang terbukti merangsang pembelian impulsif. Dengan pengendalian diri dan literasi keuangan sebagai faktor moderasi, peneliti fokus pada fenomena pembelian impulsif di kalangan perempuan di masa dewasa awal, karena kelompok usia ini dianggap paling rentan terhadap perilaku pembelian impulsif. Para peneliti bertujuan untuk menyelidiki bagaimana pengendalian diri dan literasi keuangan dapat mengurangi pengaruh hubungan parasosial terhadap kecenderungan pembelian impulsif, dengan tujuan akhir untuk mencegah individu di masa dewasa awal terjebak dalam siklus pembelian impulsif dan efek jangka panjangnya. Partisipan dalam penelitian ini adalah 195 wanita berusia 18 hingga 25 tahun yang memiliki sosok selebriti favorit dan pernah membeli produk kecantikan dalam dua bulan sebelumnya. Berdasarkan temuan analisis regresi sederhana, hubungan parasosial mempengaruhi kecenderungan pembelian impulsif ($F(1.191) = 12.100, p < .05, R^2 = .059$),

$R^2_{Adjusted} = .054$). Ditemukan juga bahwa pengendalian diri memiliki peran moderat terhadap pengaruh hubungan parasosial terhadap kecenderungan pembelian impulsif ($R = .4172$, $F(1.191) = 13.4189$, $p < .05$), namun literasi keuangan tidak memiliki peran moderat.

Kata kunci: hubungan parasosial, pembelian impulsif, literasi keuangan, masa dewasa awal, pengendalian diri

Introduction

Impulsive buying is a multifaceted buying behavior characterized by spontaneous, unplanned for immediate possession, unreflective, and unthoughtful—sudden decisions without considering their consequences (Habib & Qayyum, 2018). Based on a survey of 2,000 adult population in the United States in 2022, 73% of participants said that purchases they made tend to be spontaneous without prior thought (Dickler, 2022). The 2022 survey results showed an increase of 14% compared to the previous year, which showed that 59% of participants said the same thing. Furthermore, Dickler (2022) says that impulsive purchases are increasing along with the massive digital-based transactions and technological developments that make it easier for someone to make purchases. From a psychological perspective, most researchers explain the uptrend of online impulsive buying using the S-O-R framework (Liu et al., 2013). The S-O-R framework explains how internal or external stimuli (S) lead to specific emotional and cognitive reactions (O), which in turn result in a particular response or behavior (R), such as impulsive buying. In this framework, external stimuli might include factors like website design, product displays, advertisements, or promotions, which trigger emotional and cognitive processes in the individual, ultimately leading to impulsive purchasing decisions (Liu et al., 2013). It is a model used to understand the chain of events that culminate in impulsive buying behavior, the individual's psychological and emotional responses, and the resulting action. Following previous research, Wiranata and Hananto (2020) elaborate that advanced digital marketing and technology behind the appearance of e-commerce websites stimulate online impulsive buying behavior. This is understandable because a pleasant experience when consumers browse online store displays creates a positive impact (uplifting consumer's mood) that encourages impulsive buying behavior. While there is much research on impulsive buying, the exploration of impulsive buying within the online context remains relatively limited.

Based on statistical data, it can be concluded that the phenomenon of impulsive buying is increasing every year and has even increased significantly during the COVID-19 Pandemic. This assumption is reinforced by the results of research from Wang et al. (2021), who found that consumers have become more impulsive in purchasing since the COVID-19 pandemic. This is understandable, bearing in mind that the changes experienced during the COVID-19 pandemic gave rise to various emotional responses that tend to be negative, one of which is the increased fear of death and uncertainty (Wang et al., 2021). According to Song et al. (2020), when consumers face a threatening situation (death threat), they tend to show consumptive behavior to gain calm from the uncertainty surrounding them. In addition, Marano et al. (2021) found that the lack of opportunity to socialize and the uncertain conditions during the pandemic has increased boredom, loneliness, and feelings of helplessness, making individuals vulnerable to feeling out of control over their lives. Therefore, individuals try to compensate for the unpleasant situations they experience by forming excessive/deficit behavior (Campbell et al., 2020). The results of these research studies emphasize the immediate necessity for further inquiry, as impulsive buying behavior endures even post-COVID-19 pandemic. Along with significant advancements in technology and digital marketing, it becomes imperative to explore ways to mitigate and cut the seemingly cycle of impulsive buying, particularly within the online context.

Previous studies associated impulsive buying with the parasocial relationship variable. The parasocial relationship is defined as an illusion of intimacy (one-sided interpersonal relationship) experienced by fans of their favorite celebrities (Horton & Wohl, 1956). Xiang et al. (2016) found that parasocial relations positively influence a person's tendency to make impulsive purchases. This can happen due to various backgrounds, one of which is the perception that buying products advertised by

idol celebrities is a form of loyalty to a fan (Balaban et al., 2022). Even though these products are not needed, they still buy them impulsively. They hope that this action can be a form of support in helping their celebrity idols have better prestige (Balaban et al., 2022). Besides parasocial relationships, several studies stated that attitude towards money (Almeida et al., 2021), marketing programs (discount, cashback, and free shipping fee) (Khan et al., 2019; Xu & Hang, 2014), availability of buy-now-pay-later service (Lia & Natswa, 2021), more accessible payment methods (Lee & Gan, 2022), peer influence (Thürmer et al. (2020), Electronic Mouth-of-Word (eWOM) (Hartini et al., 2018), and other demographic aspects such as age, education level, and level of income (Desai, 2018; Rana & Tirthani, 2011) also have a role to be antecedent of online impulsive buying behavior.

Even though impulsive buying is seen as something unavoidable, this behavior can be prevented with several modalities, such as self-control and financial literacy. According to Moayery (2019), self-control makes a person more able to make wiser and more rational decisions, especially in shopping activities. In this case, parasocial relationships, which are dominated by emotional aspects, sometimes make consumers unable to think clearly to make decisions rationally, which results in impulsive purchases. Therefore, self-control is weakening the relationship between parasocial relationships and impulsive buying. In line with this, financial literacy makes a person better able to manage finances and wiser in making financial decisions because individuals with adequate financial knowledge generally have clear targets and plans regarding their financial development (Pentecost & Andrews, 2010). With high self-control and financial literacy, a person tends to overcome emotional impulses in consumption behavior. Furthermore, there are several protective factors to repress the tendency of online impulsive buying, such as emotion regulation, emotion evaluation, emotion control, self-regulation, and self-efficacy (Fang et al., 2022; Pradipto et al., 2022).

In this study, the researcher placed a greater emphasis on early adulthood, owing to several studies that have indicated a higher propensity for the development of online impulsive buying behavior during this life stage. The researcher also considered the long-term effects of impulsive buying on emerging adults, such as (1) the tendency for one impulsive purchase to trigger additional impulsive buying down the line (Santini et al., 2019) and (2) how post-purchase regret can lead to increased frustration and a decline in overall life satisfaction (Tariq et al., 2021). Therefore, the main focus of the research was on early adulthood as the primary subject group. Early adulthood is prone to impulse buying, especially during the COVID-19 pandemic. This assumption is reinforced by Choi (2016), who stated that early adults have a greater tendency to make impulsive purchases when compared to older age groups. Several studies have found that early adults tend to spend their money for fun, one of which is buying things impulsively (Carter, 2018). This is understandable, considering the characteristics of early adulthood are being fond of self-exploration, tending to have their income, or gaining more trust to manage their finances. Early adults think they have the authority to manage their money and then make impulsive purchases (Brici et al., 2013). The impulsiveness of early adults in buying goods has increased since the COVID-19 pandemic, when early adults began to consider online shopping as a way to relieve stress during quarantine (Alexandra, 2021). Early adults look for other sources of pleasure that are easy to do from home (Campbell et al., 2020), and they get this pleasure through online impulsive shopping. From these studies, it appears that shopping behavior in early adulthood has become more impulsive due to the pandemic (Wang et al., 2021). In addition, the condition of the COVID-19 pandemic, which causes a feeling of loneliness, encourages early adults to seek entertainment in cyberspace, one of which is by interacting with their favorite celebrities. According to Dibble et al. (2015), the more often parasocial interactions occur, the stronger the parasocial relationship between fans and celebrities will be. With the strengthening of the parasocial relationship between early adulthood and their idols, the early adult's intention to purchase impulsively increases (Bond, 2016). Therefore, researchers focus on reviewing the phenomenon of impulsive shopping in early adulthood as the age group considered closest and most familiar with impulsive buying behavior. Researchers also want to see how the role of self-control and financial literacy are thought to weaken parasocial relationships on impulse buying tendencies, especially in early adult women who buy beauty products online.

Literature Review

Impulsive Buying Tendencies

Impulsive buying tendency, also known as buying impulsiveness, is a sudden and immediate purchase with no pre-shopping intentions to buy the product category or fulfill a specific buying task (Beatty & Ferrell, 1998). In general, the impulsive buying tendency is an individual's inclination to make irrational decisions based on emotion-driven impulses, and these decisions are made without considering any future consequences (Kacen & Lee, 2002).

As technology advances, researchers have explored impulsive buying more deeply within the online context. In this study, the focus will be directed toward the propensity for impulsive online purchases. Zhao et al. (2022) expound that there exists no divergence in the definition of impulsive buying between offline and online domains; the distinction primarily lies in the facilitating medium and the heightened prevalence of external stimuli in online impulsive buying. Factors like website attributes, perceived ease of use, visual appeal, and product availability (scarcity) are regarded as augmenting an individual's proclivity for making impulsive online purchases (Liu et al., 2013). Moreover, even informative product displays can engender positive emotions, amplifying an individual's disposition to purchase without exhaustive prior contemplation (Adelaar et al., 2003). Furthermore, Sulistiowati (2015) defines online impulsive buying as a strong and spontaneous impulse from within the individual to buy something online, where the decision to buy tends to be taken in a relatively short period and is influenced by the psychological condition of consumers and some external influence.

One notable contrast between offline and online shopping behavior is buyers' inability to have direct physical contact with the products they intend to purchase (Jiang & Benbasat, 2007). Therefore, in-store (offline) enhances the probability of individuals' tendency for impulsive buying, as all sensory perceptions are inundated with tangible stimuli that can be seen, touched, and tasted (Aragoncillo & Orus, 2018). Nonetheless, impulsive buying also frequently happens in online transactions (Aragoncillo & Orus, 2018). This is understandable given the convenience for individuals to access testimonials provided by other consumers, which, in turn, increases purchasing intent (Riegner, 2007). Moreover, the seamless nature of digital transactions, which eliminates the necessity for physical mobilization, enhances the likelihood of impulsive buying occurrences (Yendola & Windasari, 2022). Furthermore, the conditions brought about by the COVID-19 pandemic, with all its limitations, have prompted individuals to shift from offline to online shopping, and the habit of online shopping has persisted beyond the pandemic (Shaw et al., 2022). This transformation has occurred due to the convenience, comfort, and security it offers, particularly for women, as e-commerce transactions can be conducted with anonymous identities (Shaw et al., 2022).

Parasocial Relationship

Horton and Wohl (1956) explain that parasocial relationships are illusory relationships that originate from one party (not reciprocal), and the strength of the relationship is controlled by celebrity performance. The more skilled a celebrity displays the fictitious personality (persona) desired by the audience, the higher the parasocial relationships that will be established (Horton & Wohl, 1956). The construct of parasocial relationships is gaining increasing interest and further research. Researchers are starting to uncover the reasons behind the formation of parasocial relationships. Perse and Rubin (1989) found that parasocial relationships develop because the interactions carried out by celebrities can fulfill the audience's need for intimate relations with other humans. In line with this, Schiappa et al. (2007) argued that parasocial relationships form due to a deficit in social interaction experienced by an individual. Furthermore, Schiappa et al. (2007) stated that individuals with high anxiety levels tend to have solid parasocial relationships, and building parasocial relationships becomes a solution to overcome their anxiety about rejection in genuine relationships since these parasocial relationships are one-sided, and rejection is unlikely. On the other hand, Schiappa et al. (2007) also argued that parasocial relationships can be as simple as individuals' admiration for their celebrity idols. The different motivations underlying the formation of parasocial relationships can also yield different

outcomes, where individuals with negative tendencies are prone to lifestyle problems and psychological disturbances, including impulsive buying (Park & Lennon, 2004).

In its development, the concept of parasocial relationships has another term frequently used by other researchers to describe a similar phenomenon known as parasocial interaction (Klimmt et al., 2006). These two constructs were initially believed to be the same, having no conceptual differences (Klimmt et al., 2006). However, over time, researchers began to distinguish the definitions of these two concepts. The main difference lies in when these parasocial relationships occur, where parasocial interaction is a "brief" relationship that forms when one-way interaction occurs between a celebrity and their fans (Klimmt et al., 2006). This interaction can include talk shows, question-and-answer sessions, daily vlogs, and other interactive dialogues involving their fans (Klimmt et al., 2006). From this definition, it can be concluded that parasocial interaction only occurs when the viewer engages with the media (Klimmt et al., 2006). In contrast, parasocial relationships are formed through long-term parasocial interactions (Schiappa et al., 2007; Dibble et al., 2015). Based on this understanding, parasocial relationships are the cumulative result of repeated parasocial interactions. Therefore, according to Klimmt et al. (2006), these two constructs are independent and can occur in different situations and conditions, so researchers need to be more discerning in using these terms. To adapt to the context of today's parasocial relationships, Dibble et al. (2015) developed a definition of a pre-existing parasocial relationship. Dibble et al. (2015) define a parasocial relationship as a one-way interpersonal relationship formed from exposure to repeated parasocial interactions between celebrities and their fans.

Self-Control

Self-control is a complex psychological construct extensively studied from various theoretical perspectives. Mischel (1974) defines self-control as the ability to delay immediate gratification to obtain greater future rewards. This definition is closely linked to the delay of gratification theory, where individuals with high self-control can resist the temptation of instant rewards in favor of more substantial, delayed gains. Self-control is also reflected in an individual's ability to navigate dilemmas, choosing between immediate satisfaction and long-term benefits.

Another perspective on self-control, as seen in the Delay Discounting theory, is the Discounting Model of Impulsiveness (Ainslie, 1975). It views self-control as an individual's choice to postpone immediate gratification for greater future benefits. People with high self-control can restrain impulsive behavior as they understand the potential long-term consequences of impulsivity. In contrast, those with low self-control struggle to control their impulsive urges due to their limited capacity to consider long-term outcomes.

Hofmann et al. (2009) consider self-control through the lens of dual-system theories, which involve the "hot system" and the "cold system." The hot system is fast, impulsive, and driven by immediate desires, while the cold system is slower, operates with available resources, and initiates rational behavior. Self-control is defined as an internal mechanism that inhibits or manages impulsive urges generated by the hot system by utilizing the functions of the cold system. These various perspectives highlight different aspects of self-control, including effortfulness, inhibition, and the ability to resist immediate gratification for more significant future benefits.

Tangney et al. (2004) state the most recent definition of self-control. They define self-control as the ability to override or change one's inner responses, as well as to interrupt undesired behavioral tendencies and refrain from acting on them. There are three emphases of self-control, namely (1) a person's ability/capability to change the primary response to suit a particular situation, (2) related to a person's adaptability to social norms and culture prevailing in society, and (3) carried out to achieve long-term targets (Arifin & Milla, 2020).

Financial Literacy

According to Chen and Volpe (1998), financial literacy is a person's ability and knowledge to manage his finances regarding opinions and decisions. Chen and Volpe (1998) explain further that

financial literacy can be viewed from a person's understanding of insurance, investment, loans, savings, and other financial attributes. In line with this understanding, financial literacy is seen as in-depth knowledge of financial concepts and products so that he/she can make good financial decisions, such as budgeting, borrowing, saving, and investing (Setiawati & Nurkhin, 2017). Furthermore, the Organisation for Economic Co-operation and Development (OECD, 2015) defined financial literacy as an individual's ability, assessed through their awareness, attitude, knowledge, and behavior, to make financial decisions to achieve financial well-being.

Consistent with the previous definition, financial literacy is also defined as an individual's ability to make accurate financial decisions to achieve their financial goals by utilizing their financial knowledge and financial management skills (Dewi et al., 2020). With financial literacy, individuals become more capable of making sound financial decisions (Lusardi, 2019). Individuals with knowledge and practical financial management skills tend to be more conscious of preparing their financial conditions for both the short and long term, leading to a greater tendency to save by reducing purchases of goods and services that may not be essential (Brochado & Mendes, 2021; Otto et al., 2007). They prefer to save or grow their resources (money) through various financial instruments such as investments, bonds, and other financial products.

Early Adulthood

Arnett (2000) defines early adulthood as a developmental period of transition from the developmental stage of late adolescence to the 20s, which focuses on the age range of 18–25 years. Arnett (2000) emphasizes that a new classification is needed that lies between the developmental stages of late adolescence and young adulthood, considering both empirically and theoretically, the characteristics of emerging adulthood do not match the characteristics of late adolescence but also do not match the characteristics of the developmental stages of young adults. As a consumer, early adulthood has several characteristics, which are (1) considering shopping activities as something that brings happiness, (2) considering debt and buying non-essential products as standard, (3) buying a product to meet social expectations, and (4) tend to make purchases without prior consideration (impulsive) (Penma & McNeil, 2008).

Celebrity

Rojek (2001) formulates the definition of "celebrity" as a status attributed to well-known individuals in the public space. There are three categories of celebrities based on how the celebrity obtained the status, namely (1) ascribed, (2) achieved, and (3) attributed. This definition was developed by Krieken (2012), who defines celebrities as individuals who can attract public attention by increasing their "values" so that they become known by many people.

Dynamics of Relations Between Variables

One factor influencing online buying impulsiveness is parasocial relationships (Balaban et al., 2022). Furthermore, Xiang et al. (2016) explained that along with technology, the possibility of individuals being able to interact with public figures from various circles is getting higher. Interaction through virtual world media is called parasocial interaction. This interaction is only in one direction, from the audience to the celebrity. Parasocial interaction usually has few real-world friends, so they turn to social media to fulfill their needs to have relationships with other people. In addition, the condition of the COVID-19 pandemic limits the individual space and increases feelings of loneliness. Parasocial interactions with public figures in cyberspace can fulfill their basic needs and become a means to relieve fatigue. By fulfilling their needs through parasocial interactions, positive emotions and gratitude for their favorite celebrities emerge. Finally, this social interaction lasts long and forms a parasocial relationship that can influence individual behavior and decisions in buying (Dibble et al., 2015; Xiang et al., 2016).

Rozana et al. (2022) found that parasocial relationships affect people's tendency to buy impulsively online. In addition, self-control is a psychological variable that is a "reliance" for researchers in

explaining the causes of the emergence of impulsive behaviors and influenced by emotional impulses, including impulsive purchases. Self-control diverts less desirable internal responses to avoid potential long-term losses (Tangney et al., 2004). Self-control is closely related to decision-making ability (Boureau et al., 2015), where the higher a person's self-control ability, the more rational decisions will be taken, even though they are filled with emotions. Vice versa, individuals with low self-control tend to make impulsive decisions because they cannot stem the emotional impulses they feel. Based on the description above, it can be concluded that self-control is assumed to have a role in weakening the "emotional" influence exerted by parasocial relations on a person's intention to make an impulsive purchase.

In addition to self-control, researchers also assume that financial literacy has a moderating role in the effect of parasocial relationships on a person's tendency to buy impulsively online. Financial literacy is considered one of the modalities that play a role in suppressing the emergence of impulsive purchases (Ihsan & Sukarno, 2021). Individuals with high financial literacy tend to be right in making decisions related to finance. According to Brochado and Mendes (2021), individuals with high financial literacy have a higher awareness of preparing their financial conditions in the long and short term, so they have a greater tendency to save by reducing purchases of goods/services that are not needed. Good financial literacy makes individuals quite careful in making purchases, and they even conduct in-depth surveys and explorations before buying a product (Ihsan & Sukarno, 2021). Furthermore, individuals with financial literacy are not easily provoked by friends, friends, or credible influencers, and they trust the results of their analysis more to make financial decisions (Ihsan & Sukarno, 2021). Financial literacy encourages a person to be more critical in deciding matters pertaining to his financial aspects, including buying activities, so the tendency to make impulsive purchases is smaller with financial literacy.

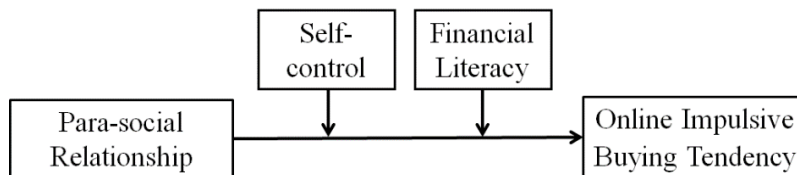


Figure 1. Model of Research

Methods

This non-experimental research uses simple regression and moderation analysis techniques developed by Andrew F. Hayes. Purposive sampling and snowball sampling methods were implemented by researchers in the sampling process. In determining the minimum number of participants, researchers used the G*Power version 3.1 program, and the calculation results showed that this study required a minimum of 119 participants, while the number of participants in this study is $n = 195$.

Researchers use Google Forms as a media questionnaire. On the first page, the researcher attached an informed consent form. After that, the researcher attached several demographic questions and items from each measuring instrument used in this study. On the last page is a debriefing, acknowledgments, and the researcher's contact if the participant has any questions. Researchers screened participants and collected data through social media such as Whatsapp, LINE, Instagram, Twitter, and Telegram. After collecting the data, the researcher cleans the data and reverses the unfavorable items. The several stages of elimination that the researcher carried out before processing the data were (1) eliminating data filled in by male respondents, (2) eliminating participants who did not respond to instructional manipulation checks and instructed-response items correctly, (3) conducting statistical analysis outliers, (4) perform one of the data cleaning methods, namely Mahalanobis Distance, and (5) reverse unfavorable items.

To measure the parasocial relationship level, researchers used the Parasocial Interaction Scale (PSI-Scale) developed by Rubin et al. (1985), then Yusuf (2020) translated and adapted into Indonesian. The

PSI-Scale consists of 20 favorable items, with a 5-point Likert scale. The Indonesian version of the PSI Scale has good internal consistency ($\alpha = .842$), and the validity test uses the Corrected-Item Total Correlation technique (the $C_{r_{IT}}$ range from .266 to .625).

The Impulsive Buying Tendency Measuring Tool used in this study is the Impulsive Buying Tendency Scale compiled by Sulistiowati (2015) and modified according to the context of online purchases by Adhandayani (2019). The Impulsive Buying Tendency Scale consists of 24 items. Adhandayani (2019) modified the measuring instrument of the Impulsive Buying Tendency Scale to suit the context of her research, which aims at online impulsive buying behavior. The psychometric test results showed that the online version of the Impulsive Buying Tendency Scale has good internal consistency with $\alpha = .917$, and all items correlated significantly to the total score range with $C_{r_{IT}}$ range from .031 to .767.

Self-control was measured using the Brief Self-Control Scale developed by Tangney et al. (2004) and adapted to Indonesian by Arifin and Milla (2020). After going through the process of forward translation, synthesis translation, back-translation, expert judgment, readability test, and psychometric property test of the scale conducted by Arifin and Milla (2020), the Indonesian version of the Brief Self-Control Scale is formulated into 10 items with details of 7 items are unfavorable, and 3 items are favorable. The Indonesian version of the BSCS uses a 5-point Likert scale with a Cronbach's Alpha value of $\alpha = .81$.

To measure the level of financial literacy, researchers use Chen and Volpe's (1998) measurement tool, which was translated into Indonesian by Irwan (2019) with slight modifications in the form of additional items from Van Rooij et al. (2011), OECD (2015), and Klapper et al. (2013). This instrument has good internal consistency with $\alpha = .716$ and $C_{r_{IT}}$ range from .330 to .528. This measuring instrument is in multiple-choice format and classified as a maximum performance test. There is only one correct answer for each question presented among the three other answer choices. Participants will get 1 point if they answer the question correctly. The minimum score that the participants can obtain is 0, and the maximum score that can be obtained is 12.

Results and Discussion

Result

Through data screening, there were 195 from 232 participants that could be processed with inclusion criteria that participants had to fulfill: (1) aged 18–25 years, (2) purchasing beauty products (make-up and/or skin/body care) online in the last two months, (3) having a favorite celebrity figure, and (4) following their favorite celebrity social media accounts and regularly view their uploaded content. Furthermore, the exclusion criteria in this study are: (1) female and (2) had the experience of buying a beauty product impulsively after knowing that the product was reviewed, advertised, and used by their favorite celebrity. This study was dominated by participants aged 20–21 (41.5%) and pursuing a bachelor's degree (88.7%). Most of the participants currently reside in West Java (27.7%), are not married (99%), and do not support other individual needs (88.2%). Finally, from a financial perspective, most of the participants who filled out this questionnaire had a monthly income of \leq Rp4,500,000 (88.7%) and an expenditure range of Rp1,000,0001 - Rp2,000,000 (36.4%). The mean and standard deviation of the four variables are shown in **Table 1**.

Table 1. Descriptive Statistics

Variable	<i>M</i>	<i>SD</i>
Parasocial Relationship	75.22	11.21
Impulsive Buying Tendencies	68.62	15.35
Self-Control	31.04	6.14
Financial Literacy	6.38	2.70

Based on a simple linear regression analysis, it was found that parasocial relations significantly predicted online impulsive buying tendencies $F(1,191) = 12,100, p < .05, R^2 = .059, R^2_{adjusted} = .054$, so H_1 was accepted. The influence of parasocial relations toward impulsive buying tendencies online is 5.9%, while the rest is other factors.

Table 2. Model Summary of Parasocial Relationships, Self-Control, Online Impulsive Buying Tendencies

Model	MSE	<i>R</i>	<i>R</i> ²	<i>F</i>	<i>p</i>
1	197.6836	.4172	.1741	13.4189	.0000

Table 3. Results of Moderation Analysis of Parasocial Relationships, Self-Control, Online Impulsive Buying Tendencies

Predictor	β	SE	<i>t</i>	<i>P</i>	LLCI	ULCI
Constant	-18.0815	35.7689	-.5055	.6138	-88.6344	52.4713
Parasocial Relation (X)	1.4384	.4614	3.1174	.0021	.5283	2.3484
Self-Control (M)	1.9605	1.1290	1.7365	.0841	-.2664	4.1873
Interaction of X*M	-.0352	.0145	-2.4249	.0162*	-.0639	-.0066

The analysis results using PROCESS in **Table 3.** show that the interaction coefficient between social relationships and self-control is $\beta = -.0352$. Furthermore, based on **Table 2.** it was also found that the interaction between the parasocial relationship and self-control had a significant negative (weakening) effect on online impulsive buying tendencies ($R = .4172, F(1.191) = 13.419, p < .05$). These results indicate that self-control has a role in weakening the influence of parasocial relationships toward online impulsive buying tendencies. Based on these results, H_2 was accepted.

Table 4. Model Summary of Parasocial Relationships, Financial Literacy, Tendency to Impulse Buying Online

Model	MSE	<i>R</i>	<i>R</i> ²	<i>F</i>	<i>p</i>
1	211.2655	.3425	.1173	8.4632	.0000

Table 5. Results of Moderation Analysis of Parasocial Relationships, Financial Literacy, Tendency to Impulse Buying Online

Predictor	β	SE	<i>T</i>	<i>P</i>	LLCI	ULCI
Constant	30.2103	15.0498	2.0074	.0461	.5251	59.8954
Parasocial Relation (X)	.6062	.1926	3.1478	.0019	.2263	.9860
Financial Literacy (M)	2.8161	2.4273	1.1602	-.2474	-1.9717	7.6040
Interaction of X*M	-.0525	.0312	-1.6800	.0946	-.1141	.0091

The analysis results using PROCESS in **Table 5**. Show that the interaction coefficient between parasocial relationships and financial literacy is $\beta = -.525$. Furthermore, based on **Table 4**. it was also found that the interaction between parasocial relationships and financial literacy in influencing online impulsive buying tendencies was negative (weakened) but not strong enough to prove a significant effect ($R = .342$, $F(1,191) = 8.463$, $p = .095$). These results indicate that financial literacy is not proven to have a significant role in weakening the influence of parasocial relationships toward online impulsive buying tendencies. Based on these results, H_3 is rejected.

Discussion

This study tries to prove the role of financial literacy and self-control as moderators in the influence of parasocial relationships toward online impulsive buying tendencies (beauty products) in emerging adulthood. It was found that parasocial relationships could predict online impulse-buying tendencies in early adulthood. That way, it can be concluded that the H_1 in this study is accepted. That is, the intensity of high parasocial relationships increases the tendency of individuals to make impulse purchases online. This finding aligns with the results of Xiang et al. (2016) and Balaban et al. (2022), who conducted parasocial research on e-commerce and television to see their effect on impulse buying. These studies found that parasocial interactions carried out by celebrities through e-commerce, social media, and television strengthen the intensity of individual parasocial relationships. The stronger the intensity of the parasocial relationship, the higher the fans' trust in their favorite celebrity. Fans believe that all products used by their favorite celebrity or a product advertised are of high quality because they are used/promoted by their idol celebrity (Zafar et al., 2020); Djafarova & Rushworth, 2017). With this trust, consumers buy the product suddenly, without prior consideration.

Furthermore, this study also found that self-control moderates the influence of parasocial relationships on impulse buying tendencies. Thus, the H_2 in this study is accepted. According to the statistical analysis results, high self-control weakens the effect of parasocial relationships on online impulse-buying tendencies. Furthermore, low self-control will strengthen the influence of parasocial relationships on online impulsive purchases. This is understandable, considering self-control is the ability to avoid decisions and actions that will be regretted later, including impulse buying. Vice versa, without mature self-control, individuals will tend to be carried away with positive emotions in the form of a sense of security, awe, and a sense of comfort that arise due to interactions and parasocial relationships with their favorite celebrities. Furthermore, these positive emotions reduce an individual's ability to make decisions rationally (Lerner et al., 2015). As a result, impulse purchases are made by individuals with low self-control.

Nevertheless, the H_3 was rejected. Financial literacy is not proven to have a moderating role in the influence of parasocial relationships on impulse buying tendencies. However, the statistical analysis shows insignificant results, the direction in line with the theoretical basis, where high financial literacy can weaken the effect of parasocial relationships on an impulse buy. This finding aligns with the results of previous research conducted by Ningtyas and Vania (2021), which examined the role of financial literacy as a moderator in the influence of materialism on online impulse-buying tendencies. It was found that financial literacy did not have a moderating role in the study. Furthermore, Ningtyas and

Vania (2021) explained that the insignificant results might be caused by early adult perceptions of how to live life, which refers to the slogan "You only live once, you have to enjoy it" (You Only Live Once). In addition, the Fear of Missing Out (FoMo) was found to be high in early adulthood, considering that early adulthood tends to make social comparisons with peers (Christy, 2022). In this case, celebrities can become figures associated with their peers (Dinh & Lee, 2021). Therefore, the fear of being left behind eventually emerges and influences buying decisions (Christy, 2022). Therefore, to meet psychological needs and social expectations, the tendency to buy impulsively tends to remain high, regardless of the level of financial literacy one has.

Second, impulsive purchases are often associated with reducing individual stress levels (Hama, 2001; Sulistiowati, 2015). According to Bhattacharjee and Ghosh, 2022, the COVID-19 pandemic has increased stress levels. This is understandable, considering that the COVID-19 pandemic appeared suddenly and significantly changed individual lives. Several policies implemented during the Pandemic reduced the frequency of social interaction. If previously interacting with relatives was a way to reduce stress levels, during the COVID-19 pandemic, they lost it. Furthermore, Veybitha et al. (2021) found that individuals' positive emotions tend to increase by buying impulsively. Therefore, when the individual's stress level is high, impulsive buying becomes an option to get positive emotions to counter stress. In addition, to fulfill their need for social interaction, individuals tend to turn to social media (Elisa et al., 2022). Through social media, individuals establish parasocial interactions with their favorite celebrities. The higher the social interaction that is established, the higher their parasocial relationship is (Dibble et al., 2015). With the high intensity of parasocial relationships, the probability of impulsive buying is also higher (Xiang et al., 2016). Thus, the condition of the COVID-19 Pandemic forms participants tend to have high impulse buying, regardless of how good/bad their financial literacy is, because they need a "means" to release their negative emotions and stress, one of which is buying impulsively.

Furthermore, Rudd (1997) found that women view beauty products as a tool to deal with social demands as a woman. By buying beauty products, women feel they have more control over themselves to live as socially acceptable women. Pikoos et al. (2020) said that since the COVID-19 Pandemic, individual stress levels have tended to increase. His research found that stress levels correlated with a person's intention to pamper himself through self-beautifying products or treatments. The higher the stress level, the higher a person's intention to buy beauty products or beautifying services. This can be understood by looking at beauty products as a means for women to release their feelings of stress and fatigue and to regain "control" over themselves. Based on this explanation, it can be assumed that there is a possibility that women with high financial literacy still have a high tendency to buy impulsively (especially beauty products) to fulfill their "urgent" psychological needs and then relieve stress during the COVID-19 pandemic therefore that the role of financial literacy weakening the effect of parasocial relations toward impulsive buying tendencies is not very significant.

On the other hand, this research has several advantages. First, the measuring instruments used in this study have been tested for reliability and validity so that the results of this study have the credibility that can be accounted for. Second, in the data processing, the researcher carried out several stages of cleaning the data to eliminate data suspected of having low quality. The researcher included several instructed-response items to test the attention and seriousness of the participants when filling out the research questionnaire, in which participants with inappropriate responses were eliminated. Furthermore, the researcher also conducted a Mahalanobis Distance analysis to ensure that the selected data has high consistency. Finally, this research topic is relevant to the COVID-19 Pandemic, where limited access to face-to-face interaction encourages individuals to have parasocial interactions. The results of this study can trigger the birth of further studies related to the dynamics of parasocial relationships and impulsive buying.

The researcher realizes that there are some limitations in this study. First, this study used the self-report method in the data collection process so that answers based on social desirability bias might be included in this study. Second, researchers are also aware that demographic data was not asked of

participants and has the potential to influence research results, namely employment status. The researcher only asked about the participants' income but did not confirm whether the "income" came from their parents or their income. Third, the researchers did not specify the beauty product brands and celebrities the participants idolized. There also needed to be a specification of the type of influencer that wanted to be examined in more depth. Although the participants said they had the experience of impulsively buying beauty products after being advertised by their idol celebrity and explained the reasons, it is possible that the impulse purchases made were not driven by their parasocial relationship. Individuals may buy a product impulsively not because of a parasocial relationship but because of a marketing strategy implemented by a beauty brand or because of curiosity that arises because of the characteristics, persuasion skills, and celebrity content that encourages the individual's desire to try the advertised product.

Conclusion

This study proves that the parasocial relationship can predict impulsive buying tendencies in women who like to buy beauty products online in early adulthood. In addition, this study also proves that self-control has a role in weakening the influence of parasocial relationships on online impulse-buying tendencies. Finally, this study found that the financial literacy variable was not proven to weaken the effect of parasocial relationships on online impulse-buying tendencies.

Suggestion

Based on some of the implications that have been previously described, the researcher has several suggestions that can be considered for further studies. First, bearing in mind that several items on the Brief Self-Control Scale measuring instrument are negative and judgmental, a social desirability check can be carried out to increase the credibility of the data. Second, suppose future research wants to examine financial literacy's effect on buying beauty products. In that case, you can also add financial management behavior to see how participants manage their finances (Dew & Xiao, 2013). Third, future research can add participant inclusion criteria related to employment status and sources of income. Finally, it is also necessary to specify beauty products and idolized celebrities so that more in-depth analysis can be carried out regarding the dynamics between the variables.

For readers, this study proves that self-control has a role in weakening the influence of parasocial relationships on online impulsive buying. Therefore, early adults need to look back on themselves related to self-control abilities. For sellers, these research findings can be implemented to increase sales by choosing a celebrity to become a business partner. Sellers can choose a celebrity with credibility and who is active in parasocial interactions with his fans. It is also necessary to review the content of the uploaded content, whether it is relevant to the product you want to advertise. Creating an attractive and informative online storefront display is also essential to increase the probability of individuals buying products. Displaying positive product reviews can also be a strategy to increase marketing, especially if the target consumers are early adults.

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