



Analysis of Factors Influencing Impulsive Buying at Night from a Gender Perspective

Listia Nurjanah¹, Veren Apriana Jolie²

¹International University of Batam, Batam, Indonesia, listia@uib.ac.id

²International University of Batam, Batam, Indonesia, veren0429@gmail.com

Corresponding Author: listia@uib.ac.id¹

Abstract: This study aims to analyze the influence of the Functionality Component and Psychological Component on Online Impulsive Buying, both directly and indirectly through the mediating variables of Attitudinal Loyalty and Self-Control. This research adopts a quantitative approach using Partial Least Squares Structural Equation Modeling (PLS-SEM) as the analysis technique. The results show that both the Functionality Component and Psychological Component have a significant effect on Attitudinal Loyalty, while only the Functionality Component shows an effect on Self-Control, although the effect is not significant. Additionally, Attitudinal Loyalty has a significant positive influence on Online Impulsive Buying, while Self-Control has a significant negative influence on such behavior. These findings indicate that consumers' attitudinal loyalty plays an important role in driving online impulsive buying behavior, whereas self-control is not sufficiently effective as a deterrent. This study contributes theoretically to the development of consumer behavior models and offers practical implications for digital marketing strategies aiming to maximize customer loyalty to encourage purchase decisions.

Keywords: Online Impulsive Buying, Attitudinal Loyalty, Self-Control, Functionality Component, Psychological Component, PLS-SEM.

INTRODUCTION

Impulsive buying behavior has become increasingly common, especially on online shopping platforms that offer ease of access at any time — including during nighttime hours (Yang et al., 2023). At night, when consumers tend to be more relaxed and potentially less emotionally regulated, impulsive shopping frequently occurs. This behavior is typically unplanned and is influenced by various factors such as emotions, psychological conditions, and the functional features of online platforms (Mehmood et al., 2024). If not managed properly, impulsive buying can lead to negative consequences such as buyer's remorse and financial problems. However, in-depth understanding of nighttime impulsive buying behavior, particularly from gender and psychological perspectives, is still limited in current literature (Zhou et al., 2024). This is important because purchasing decisions made at night may be more vulnerable to psychological states that differ from those during the day.

Impulsive buying behavior has become a significant phenomenon in consumer

behavior, especially in Indonesia. According to a Jakpat (2022) survey, around 80% of Indonesian consumers admitted to having made impulsive purchases while shopping online. Jakpat (short for *Jajak Pendapat*) is an online survey platform in Indonesia that enables companies, researchers, or individuals to collect data and insights from respondents quickly. The platform is commonly used for market research, trend analysis, and understanding consumer behavior across industries.

One highlighted case is the trend of impulsive buying during major promotional events on e-commerce platforms, such as *Harbolnas* (National Online Shopping Day) (Jakpat, 2022). During these moments, consumers are often tempted to purchase unplanned products due to large discounts or limited-time offers. This phenomenon occurs not only during the day but also increases at night. Previous research has shown that impulsive purchase decisions happen more frequently at night due to heightened psychological vulnerability, such as fatigue or the need to relieve stress after a long day (Mehmood et al., 2024). A study by Zhang & Shi (2022) supports this claim by showing that consumers' self-control tends to decrease at night, making them more susceptible to promotions or attractive ads presented by online shopping platforms (Zhou et al., 2024).

This study focuses on impulsive buying behavior at night, with special attention to psychological factors and consumer attitudinal loyalty. According to Gao et al. (2022), attitudinal loyalty to a brand or platform can strengthen the likelihood of impulsive purchases because of consumers' trust in the quality and past shopping experiences (Gao et al., 2022). On the other hand, self-control — a key psychological variable — plays an important role in suppressing impulsive urges. Consumers with low self-control are more prone to impulsive buying, particularly during nighttime. The SOR (Stimulus–Organism–Response) model serves as the theoretical framework, explaining how external stimuli influence individuals' internal processes, which in turn affect their behavioral responses (HUANG et al., 2019). This model has been widely applied in marketing and consumer behavior research. For example, a study by Galih and Dilan (2023) found that accessibility, affordability, and responsiveness are key factors driving interest in mental health services. Another study by Deandra (2022) concluded that social media marketing does not directly influence purchasing decisions, but it effectively builds brand trust, which ultimately drives consumer purchasing decisions. Brand trust was also found to be a full mediator between social media marketing and purchasing decisions in the healthcare industry. Similarly, research by Nita and Jonet (2024) found that live streaming has a positive and significant impact on consumer perceptions of both streamers and the products displayed, increasing purchase intention. Consumer attitudes toward the product were shown to mediate the relationship between live streaming and purchase interest.

However, studies linking the SOR model to impulsive buying (IB) remain limited. One such study by Aish and Pusyita (2023) found a positive relationship between marketing stimuli and users' impulsive buying tendencies, offering insights for companies to optimize their sales promotions. Most studies still focus on general purchase decision factors, such as advertising and promotion effects (Kim et al., 2021). Research connecting the SOR model to IB suggests that emotional and situational factors can trigger impulsive behavior, but further exploration is needed (K. Z. K. Zhang et al., 2018). While research on IB is abundant, time-related aspects — particularly nighttime — have been rarely discussed. Some studies suggest that mood and fatigue significantly influence consumers' decisions to shop at night (Kim, M. J., Lee, C. K., & Jung, 2020). According to Murray (n.d.), accessing online shopping sites at night may increase the likelihood of excessive purchasing. This risk is higher for individuals experiencing mental health issues such as insomnia. In such cases, browsing online stores while unable to sleep may trigger specific psychological states that encourage impulsive shopping behavior. This desire is further amplified by seamless checkout and payment processes.

The emotionally vulnerable state experienced at night often makes consumers more susceptible to external stimuli, such as big discounts, attractive design, or convenient

transactions on e-commerce platforms. Self-control becomes a crucial yet underexplored factor in IB literature. It is defined as an individual's ability to regulate impulsive urges, including the urge to make unplanned purchases (Vohs & Faber, 2007). Research has shown that individuals with low self-control are more likely to engage in impulsive buying, especially when mentally or emotionally fatigued. At night, this self-control capacity tends to weaken due to the mental exhaustion accumulated throughout the day.

In the context of the SOR model, stimuli from the digital environment (e.g., promotional notifications, personalized product recommendations) can affect the "organism" (consumer emotions, mood, and fatigue), ultimately prompting a response in the form of impulsive buying. This study seeks to integrate the role of self-control within the SOR model to understand why impulsive purchases occur more frequently at night. Previous research has also suggested that self-control can act as a moderator that reduces the negative impact of external stimuli triggering IB (Wang & Li, 2022).

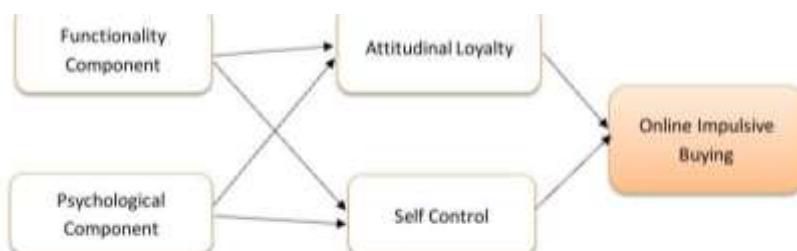
Furthermore, this study highlights how digital platforms can leverage this knowledge to design more ethical interfaces, such as by offering warnings about the risks of impulsive buying or introducing features like a purchase cooling-off period. By understanding the relationships between self-control, digital stimuli, and purchase timing, this research aims to provide new insights that are relevant not only to academics but also to marketing practitioners and e-commerce platform developers.

METHOD

This study is a quantitative research with a descriptive and correlational approach, aiming to understand impulsive buying behavior at night from both gender and psychological perspectives. The research is designed to measure the relationship between variables such as attitudinal loyalty, self-control, and the tendency for impulsive buying.

Data were collected through a structured questionnaire distributed online via Google Forms to capture respondents' perceptions and behaviors. The population of this study consists of adults who actively engage in night-time shopping activities through e-commerce platforms. The focus on this group was chosen due to their specific characteristics in making purchasing decisions, particularly those related to self-control and attitudinal loyalty, which may be influenced by psychological and gender factors. The research sample comprises consumers aged 18 to 60 years who reside in urban areas and have access to shopping centers or online shopping platforms. The sample was selected using a non-probability sampling method through purposive sampling, as the study required respondents with specific relevant characteristics. The minimum target number of respondents was set at 530 to ensure data representativeness.

For data analysis, the Partial Least Squares Structural Equation Modeling (PLS-SEM) method was used, as it allows for testing complex relationships between latent variables, even with relatively small sample sizes, and does not require strict assumptions about data distribution.



Source: Research Results (2025)
Figure 1. Conceptual Framework

H1: Functionality Component has a positive effect on Attitudinal Loyalty.

Research on the influence of the functionality component on attitudinal loyalty indicates that this component plays a significant role in strengthening loyalty, both directly and indirectly through mediators such as satisfaction and trust (Lai et al., 2019). In the context of nonprofit organizations, functional congruence has been shown to enhance donor loyalty, strengthening the relationship between organizations and their contributors (Zogaj et al., 2021). Meanwhile, in the telecommunications sector, functional service quality has an indirect relationship with loyalty through trust, although technical quality tends to dominate (Mohammed & Shahin, 2020). In cause-related marketing, functional congruence and company image influence perceptions of company capability, impacting satisfaction and ultimately increasing customer loyalty (Molinillo et al., 2020). Similar findings have been observed in internet services, where trust serves as a key mediator between functional service quality and loyalty (Khamitov et al., 2019). Overall, these findings affirm that the functionality component plays a crucial role in building and maintaining attitudinal loyalty, either directly or indirectly through satisfaction and trust.

H2: Psychological Component has a positive effect on Self-Control.

The psychological component plays a critical role in influencing self-control, affecting various life aspects such as psychological well-being, performance, and mental health. Individuals with higher self-control tend to exhibit greater mental stability, are less influenced by impulses, and experience self-control fluctuations related to daily well-being (Kleinert et al., 2022) (Schmid et al., 2024). Mindfulness enhances emotion regulation and executive functions, further strengthening self-control (Leyland et al., 2019). Higher self-control is associated with lower anxiety, better performance, and reduced smartphone dependency, which in turn improves concentration and lowers physiological arousal (Roos et al., 2023; Markowitz et al., 2019). Furthermore, individuals with high self-control are more likely to pursue authentic goals rather than those driven by social expectations, highlighting the impact of self-control on goal setting (Rai, 2019). Emotions, motivation, and attention also serve as mediators between cognitive and physical self-control (Stocker et al., 2020). Boredom can weaken self-control, while psychological capital and attitudes toward physical exercise are influenced by one's ability to control impulses (Wolff & Martarelli, 2020) (Fei et al., 2022). Moreover, low self-control is linked to mental health issues such as anxiety, depression, and irritability, with impulse control being key to maintaining mental health (X. Li et al., 2023). Therefore, self-control is a fundamental element in emotion management, goal achievement, and responses to psychological and physiological challenges.

H3: Attitudinal Loyalty has a positive effect on Online Impulsive Buying.

Studies on the relationship between attitudinal loyalty and online impulsive buying behavior suggest that consumers' emotional and psychological commitment to a brand or product significantly affects their tendency to buy impulsively. Cognitive and affective attitudes, especially among Generation Z, strongly influence this behavior, with social presence and online interactions enhancing it (Lina et al., 2022) (M. Zhang & Shi, 2022). Marketing activities on social media, particularly via influencers, increase impulsive buying through source credibility, while social media celebrities reinforce the link between online shopping convenience and impulsive buying (Koay et al., 2021)(Lina et al., 2022). Psychological processes such as product desire, online reviews, and positive emotions from livestreaming environments also play significant roles, although cognitive balance can suppress impulsivity (Gao et al., 2022). Moreover, factors like internet usage, personality, emotional intelligence, and national cultural differences moderate this relationship, indicating that impulsive behavior is shaped by both personal and cultural contexts (Khamitov et al., 2019). Understanding how attitudinal loyalty and psychological factors affect impulsive behavior can help marketers craft more effective strategies to drive online impulsive purchases.

H4: Self-Control has a negative effect on Online Impulsive Buying.

Research shows that self-control has a significant negative effect on online impulsive buying behavior, where individuals with higher levels of self-control are less likely to engage in impulsive purchases (Chen et al., 2022). Self-control also plays a vital role in reducing the effects of negative emotions like depression, which often trigger impulsive online shopping behavior (Wang & Li, 2022). Emotion regulation, particularly the ability to control and assess emotions, is closely related to reduced impulsive buying, with self-control as a key regulating factor (Fang et al., 2022). Additionally, self-control not only affects impulsive buying directly but also by reducing negative emotions that mediate such behavior (Iyer et al., 2019). National culture also moderates the relationship between self-control and impulsive buying, with some cultures showing stronger effectiveness of self-control in reducing impulsive purchases (Loinaz, 2020). Overall, self-control helps individuals manage impulsive urges, especially in online shopping contexts, by playing a crucial role in regulating negative emotions that may trigger such behavior.

H5: Functionality Component has a positive effect on Self-Control.

Research indicates that the functionality component in online self-management programs significantly improves patients' self-control in managing their health conditions (X. Li et al., 2023). These programs help patients monitor and manage symptoms such as fatigue, sleep disturbances, and pain, and reduce uncertainty and stress through direct access to health information and online diagnostic tools (Miedany et al., 2020) (Goswami et al., 2023). Furthermore, online self-management interventions have been shown to significantly boost patient motivation after six months and improve disease activity, functional ability, quality of life, and therapy adherence after 12 months (Roos et al., 2023) (S. Li et al., 2021). Overall, the functionality component in e-Health has a positive impact on patients' self-control, enhancing both motivation and quality of life (Kleinert et al., 2022).

H6: Psychological Component has a positive effect on Attitudinal Loyalty.

Recent studies have shown that the psychological component has a significant influence on attitudinal loyalty. For example, Gulfraz et al. (2022) found that the functional and psychological dimensions of online customer empowerment significantly affect online impulsive buying behavior, which is linked to attitudinal loyalty (Gulfraz et al., 2022). In addition, Afifah et al. (2020) demonstrated that consumer attachment positively influences brand loyalty, suggesting that stronger consumer attachment leads to higher levels of brand loyalty (Saini & Singh, 2020). These findings emphasize the importance of psychological factors such as perception, motivation, and emotional involvement in shaping consumers' positive attitudes toward a brand or e-commerce platform, which in turn strengthens long-term loyalty (Fatmala et al., 2021).

H7: Functionality Component has a positive effect on Online Impulsive Buying through the mediation of Attitudinal Loyalty.

Functional components such as ease of navigation, product quality, and technological features that support the user experience play an essential role in building consumer trust in e-commerce platforms (Chen et al., 2022). This trust contributes to the development of Attitudinal Loyalty, a consistent positive attitude toward the brand or service. Such loyalty arises when consumers feel the platform meets their needs and preferences in a satisfying manner (Jingjing Sun & Tingting Li, 2023). Once attitudinal loyalty is formed, consumers are more likely to make impulsive purchases due to their confidence in the quality and prior shopping experience (Gao et al., 2022). Attitudinal loyalty fosters emotional attachment and trust, lowering barriers in the decision-making process. Therefore, attitudinal loyalty serves as a mediator bridging the impact of the functionality component on increased online impulsive buying tendencies (Fang

et al., 2022).

H8: Psychological Component has a positive effect on Online Impulsive Buying through the mediation of Self-Control.

Psychological components such as negative emotions, stress, or social pressure can weaken consumers' ability to control their impulsive urges (Liu et al., 2022). When self-control decreases, individuals become more susceptible to impulsive buying decisions as they prioritize immediate emotional satisfaction over long-term considerations. Thus, psychological components indirectly increase online impulsive buying by undermining consumers' self-control (Nabela & Albari, 2023). On the other hand, self-control serves as an important moderating mechanism that suppresses the negative influence of psychological components on impulsive buying. When self-control remains strong, individuals can resist impulsive urges even when affected by emotions or psychological pressure (Jingjing Sun, Tingting Li, 2023). Therefore, self-control is a key mediator explaining how psychological components can either reduce or enhance the tendency for impulsive buying. Strategies that improve self-control—such as cognitive training or enhanced self-awareness—can mitigate the negative effects of psychological components on impulsive behavior (K. Z. K. Zhang et al., 2018).

H9: Functionality Component has a positive effect on Online Impulsive Buying through the mediation of Self-Control.

Functional components such as review credibility, product information quality, and platform navigation ease help consumers feel more confident and rational in decision-making (Lina et al., 2022). Clear and relevant information from trustworthy sources enhances the perceived usefulness of reviews and facilitates consumer self-control (Koay et al., 2021). When self-control increases, consumers are better able to manage emotions and impulsive urges, thereby reducing the likelihood of impulsive purchases. Conversely, self-control plays a crucial role in suppressing impulsive urges, often triggered by positive emotions or time pressure in online shopping (Nabela & Albari, 2023). Consumers with strong self-control are more likely to evaluate needs logically, even when tempted to make impulsive purchases. Thus, functionality components not only directly affect consumer behavior but also indirectly influence it through increased self-control, ultimately reducing online impulsive buying. Strategies to enhance functionality can be an effective approach to supporting consumers in making more controlled decisions (K. Z. K. Zhang et al., 2018).

H10: Psychological Component has a positive effect on Online Impulsive Buying through the mediation of Attitudinal Loyalty.

Psychological components such as positive emotions, social pressure, and parasocial relationships can directly increase the urge for impulsive buying (Wang et al., 2022; Kim et al., 2020). Positive emotions triggered by consumer reviews or time pressure, for example, create urgency and momentary satisfaction that encourage impulsive purchases. Moreover, social pressure and the influence of popular figures via online media can intensify this tendency, making consumers more vulnerable to unplanned purchases (Jingjing Sun & Tingting Li, 2023). Recent studies show that psychological components such as interactivity, informativeness, and enjoyment significantly affect online impulsive buying. Gulfraz et al. (2022) found that these factors not only drive impulsive purchasing behavior but also enhance users' attitudinal loyalty toward e-commerce platforms (Gulfraz et al., 2022). Additionally, research by Kurniasari and Viyani (2024) revealed that online shopping experience positively influences attitudinal loyalty, which in turn mediates the relationship between shopping experience and online impulsive buying. These findings highlight that attitudinal loyalty may serve as a mediator between psychological components and online impulsive buying, reinforcing consumers' tendency to make unplanned purchases.

RESULTS AND DISCUSSION

Respondent Demographic

Table 1. Respondent Demographic

Criteria	Description	Total	Percentase
Gender	Laki - Laki	270	50.1%
	Perempuan	260	49.1%
	Total	530	100.0%
Age	18 – 25 tahun	279	52.6%
	26 – 33 tahun	181	34.2%
	34 – 41 tahun	68	12.8%
	> 50 tahun	0	0%
Education	Total	530	100.0%
	SMA/SMK/Sederajat	213	40.2%
	Diploma (D1/D2/D3)	68	12.8%
	Sarjana (S1)	221	41.7%
	Magister (S2)	27	5.1%
	Mahasiswa	0	0%
Income	Total	530	100.0%
	< Rp 4,500,000	165	31.1%
	Rp 4,500,000 – Rp 5,000,000	154	29.1%
	Rp 5,000,001 – Rp 10,000,000	145	27.4%
	>Rp 10,000,000	66	12.5%
	Total	530	100%

Source: Processed data (2025)

Based on data collected from 530 respondents, the gender distribution shows a relatively balanced proportion, with 270 male respondents (50.1%) and 260 female respondents (49.1%). In terms of age, the majority of respondents were in the 18–25 age group, totaling 279 individuals (52.6%), followed by the 26–33 age group with 181 individuals (34.2%), the 34–41 age group with 68 individuals (12.8%), and no respondents were over the age of 50.

Regarding the highest level of education, most respondents held a Bachelor's degree (S1), accounting for 221 individuals (41.7%), followed by high school/vocational school graduates (SMA/SMK or equivalent) with 213 individuals (40.2%), Diploma holders (D1/D2/D3) with 68 individuals (12.8%), and Master's degree holders (S2) with 27 individuals (5.1%). No respondents were currently enrolled as active university students.

In terms of monthly income, the majority of respondents earned less than IDR 4,500,000, totaling 165 individuals (31.1%), followed by those earning between IDR 4,500,000–5,000,000 with 154 individuals (29.1%), those earning between IDR 5,000,001–10,000,000 with 145 individuals (27.4%), and the remaining 66 individuals (12.5%) earning over IDR 10,000,000. These data suggest that most respondents are young individuals with medium to higher education levels and low to middle income.

Construct Data Analysis

To test convergent validity, it is necessary to assess the correlation among indicators within the same construct. In the analysis using SmartPLS, convergent validity is evaluated

through reflective indicators by examining the Loading Factor values, which indicate the degree of correlation between each item and its respective construct. A good Loading Factor value is above 0.70, although a minimum value of 0.60 is still considered acceptable. The following are the results of the convergent validity test in this study.

Table 2. Outerloading

Variabel	Item Code	Outerloading	Criteria
<i>Functionality Component</i>	FC1	0.803	VALID
	FC3	0.717	
	FC4	0.719	
<i>Psychological Component</i>	PC1	0.721	VALID
	PC3	0.686	
	PC4	0.692	
<i>Attitudinal Loyalty</i>	PC5	0.728	VALID
	AL1	0.825	
	AL2	0.715	
<i>Self Control</i>	AL3	0.721	VALID
	SC1	0.876	
	SC2	0.843	
<i>Online Buying</i>	SC3	0.841	VALID
	SC4	0.866	
	OIB1	0.864	
<i>Impulsive Buying</i>	OIB2	0.858	VALID
	OIB3	0.777	
	OIB4	0.827	
	OIB5	0.888	

Source: Processed data (2025)

Based on the table above, all indicators have Outer Loading values above 0.70, indicating that the model meets the criteria for Convergent Validity.

Table 3. Discriminant Validity

Variable	Item Code	AVE	Description
<i>Functionality Component</i>	FC1	0.603	VALID
	FC3		
	FC4		
<i>Psychological Component</i>	PC3	0.672	VALID
	PC4		
	PC5		
<i>Attitudinal Loyalty</i>	AL1	0.623	VALID
	AL2		
	AL3		
<i>Self Control</i>	SC1	0.879	VALID
	SC2		
	SC3		
<i>Online Buying</i>	SC4	0.900	VALID
	OIB1		
	OIB2		
<i>Impulsive Buying</i>	OIB3		
	OIB4		
	OIB5		

Source: Processed data (2025)

Discriminant validity aims to ensure that each latent variable in the model is clearly distinct from the others. A model is considered to have adequate discriminant validity if the highest loading value of each indicator is found on its corresponding construct and is greater than the loadings on other constructs.

Table 4. Outerloading Each Constructs

	AL	FC	OIB	PC	SC
AL	0.755				
FC	0.472	0.747			
OIB	0.157	0.184	0.843		
PC	0.372	0.566	0.200	0.707	
SC	-0.079	0.054	-0.287	0.012	0.856

Source: Processed data (2025)

In general, the reliability test measures the consistency of an instrument in producing similar results when used repeatedly on the same subjects. The results of the reliability test in this study are presented in the following table.

Table 5. Reliability Result

No	Variabel	Composite Reliability	Critical Number	Item	Description
1	<i>Functionality Component</i>	0.603	0,6	2	<i>Reliable</i>
2	<i>Psychological Component</i>	0.672	0,6	2	<i>Reliable</i>
3	<i>Attitudinal Loyalty</i>	0.623	0,6	3	<i>Reliable</i>
4	<i>Self Control</i>	0.879	0,6	3	<i>Reliable</i>
5	<i>Online Impulsive Buying</i>	0.900	0,6	4	<i>Reliable</i>

Source: Processed data (2025)

Based on the table above, all variables have Cronbach's Alpha values above 0.60, namely FC at 0.603, PC at 0.672, AL at 0.623, SC at 0.879, and OIB at 0.900. Therefore, it can be concluded that all variables in this study are considered reliable.

Hypothesis Analysis

The researcher employed the SEM-PLS method. According to Thakkar (2020), SEM uses multivariate techniques to analyze data patterns, allowing researchers to test hypotheses regarding the relationships between constructs. The inner model analysis in this test was conducted to understand and confirm the existence of relationships between endogenous and exogenous variables in the study. The evaluation of the inner model was carried out through the following stages.

Path Coefficient

Table 6. Path Coefficient

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
Attitudinal Loyalty -> Online Impulsive Buying	0.136	0.137	0.043	3.177	0.002
Funcionality Component -> Attitudinal Loyalty	0.384	0.387	0.051	7.560	0.000
Funcionality Component -> Self Control	0.069	0.070	0.047	1.463	0.144
Psychological Component ->	0.155	0.159	0.055	2.810	0.005

Attitudinal Loyalty					
Psychological Component	→ Self Control	-0.027	-0.029	0.055	0.483
Self Control → Online Impulsive Buying		-0.276	-0.279	0.030	9.205
					0.000

Source: Processed data (2025)

Special Indirect Effect

Table 7. Special Indirect Effect

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
Psychological Component → Self Control → Online Impulsive Buying	0.007	0.009	0.016	0.468	0.640
Functionality Component -> Attitudinal Loyalty -> Online Impulsive Buying	0.052	0.053	0.018	2.842	0.005
Psychological Component -> Attitudinal Loyalty -> Online Impulsive Buying	0.021	0.022	0.011	1.848	0.065
Functionality Component -> Self Control -> Online Impulsive Buying	-0.019	-0.019	0.013	1.471	0.142

Source: Processed data (2025)

Discussion

H1: Functionality Component has a positive effect on Attitudinal Loyalty

Based on the results of the structural model analysis, most of the hypotheses in this study are supported by the data. H1, which states that the Functionality Component positively influences Attitudinal Loyalty, is proven significant with a coefficient of 0.384 and a p-value of 0.000. This indicates that the higher the functional aspect of a product or service, the stronger the consumer's attitudinal loyalty. This result is consistent with several recent studies that highlight the crucial role of functional value in shaping attitudinal loyalty. Wang et al. (2024) found that functional design elements, such as usability and practicality in product packaging, positively influence brand loyalty in the dairy industry (Zhou et al., 2024). Similarly, Lia & Rhian. (2024) reported that functionality components and experimental marketing have a significant positive effect on attitudinal loyalty (Ria Tuljanah & Indradewa, 2024). A study by Li et al. (2023) further demonstrated that utilitarian value positively predicts attitudinal loyalty through active user involvement in the context of social robotics (X. Li et al., 2023). These findings are supported by Matheus et al. (2025), who identified that functional benefits such as convenience and efficiency play a significant role in building consumer loyalty in digital service platforms (Pereira et al., 2025). In addition, Nurmartiani (2025) revealed that functional product attributes directly contribute to attitudinal loyalty by strengthening consumers' trust and satisfaction with a brand (Nurmartiani, 2025).

H2: Psychological Component has a positive effect on Self-Control

The second hypothesis is not supported by the data, as the effect of the Psychological Component on Self-Control shows a coefficient of -0.027 with a p-value of 0.629. The low t-statistic value (0.483) indicates that this relationship is not statistically significant. Therefore, it can be concluded that in the context of this study, psychological aspects of consumers do not directly enhance their self-control in online impulsive buying behavior. This result is consistent with several recent studies emphasizing that psychological traits alone are insufficient to suppress impulsive tendencies in online purchasing contexts. For instance, Dinda et al (2025)

revealed emotion regulation has a negative effect on impulse buying behavior (Putri et al., 2025). Similarly, Huang et al (2024) found that psychological satisfaction and positive emotions often override rational self-control during online shopping experiences (Huang et al., 2024). Zhang et al. (2022) argued that cognitive awareness and attention control are more influential than emotional or psychological factors in maintaining self-discipline during online purchases (M. Zhang & Shi, 2022). In addition, Thuy et al. (2024) demonstrated that while psychological motivation can increase shopping engagement, it does not necessarily improve consumers' self-control against impulse purchases (Ngo et al., 2024). Lastly, Moghdam (2024) identified that emotional arousal and psychological gratification significantly reduce self-control in digital shopping environments, reinforcing that emotional states can dominate decision-making processes (Azad Moghdam et al., 2024).

H3: Attitudinal Loyalty has a positive effect on Online Impulsive Buying

The results support this hypothesis, with a coefficient of 0.136, a p-value of 0.002, and a t-statistic of 3.177. This suggests that higher attitudinal loyalty may actually encourage consumers to engage in online impulsive buying. This finding may reflect that when consumers have high loyalty to a particular brand or platform, they tend to feel more confident in making spontaneous purchase decisions. This finding aligns with prior research. For instance, Indriyarti et al. (2025) found that visual engagement and enjoyment significantly enhance attitudinal loyalty, which in turn increases impulsive buying on Shopee (Retno Indriyarti, 1144). Similarly, Akbar et al. (2025) demonstrated that attitudinal and behavioral loyalty positively affect impulse buying, especially when moderated by fan satisfaction and co-creation (Akbar et al., 2025). A study from Maulidia (2024) also confirmed that a pleasant online shopping experience fosters attitudinal loyalty, which mediates the effect on impulsive buying behavior (Maulidia et al., 2024). Zhang and Kim (2022) emphasized that brand trust and emotional attachment—key components of attitudinal loyalty—significantly predict online impulse buying in fashion e-commerce (M. Zhang & Shi, 2022). Likewise, Park and Lee (2021) found that attitudinal loyalty toward mobile shopping apps increases impulsive buying, particularly when users perceive high ease of use and personalization .

H4: Self-Control has a positive effect on Online Impulsive Buying

The fourth hypothesis is rejected because the relationship found is negative and significant. The coefficient of Self-Control on Online Impulsive Buying is -0.276, with a p-value of 0.000 and a t-statistic of 9.205. This indicates that the higher an individual's self-control, the lower the tendency to make impulsive online purchases, which contradicts the original hypothesis. This result aligns with a growing body of literature emphasizing the negative relationship between self-control and impulsive buying behavior. This indicates that individuals with higher self-control are less likely to engage in impulsive online purchases. This finding aligns with a growing body of literature emphasizing the inhibitory role of self-control in consumer behavior. Duan (2025) demonstrated that self-control failure mediates the relationship between mental simulation and compulsive buying, reinforcing the idea that diminished self-control increases impulsivity (Duan, 2025). Morits et al. (2025) found a similar pattern among fashion models in Kupang City, where higher self-control correlated with reduced impulsive buying behavior (Morits et al., 2025). Khan et al. (2023) further confirmed that self-control negatively influences compulsive buying, with ill-being perception acting as a mediator (Butt et al., 2023). Rodrigues and Varela (2021) emphasized that psychological traits like self-control are critical in moderating impulse buying behavior (Cachón-Rodríguez et al., 2025). Additionally, a study published by Mudra & Rusmanto (2024) showed that financial self-control significantly reduces the impact of e-commerce features on impulsive buying among Gen Z consumers (Mudra & Rusmanto, 2024).

H5: Functionality Component has a positive effect on Self-Control

This hypothesis is not supported by the test results, with a coefficient of 0.069, a p-value of 0.144, and a t-statistic of 1.463. This shows that perception of the functional aspect does not have a significant effect on consumers' self-control. Therefore, the functional features of a product or service are not strong enough to shape self-regulation behavior in the context of impulsive buying. Instead, impulsive buying behavior appears to be more strongly influenced by psychological and emotional factors than by rational evaluations of product utility. This conclusion is supported by several studies. Rodrigues and Varela (2021) emphasized that impulse buying is driven more by emotional triggers than functional attributes. A study published in Susmitha (2024) found that online store characteristics like visual appeal and ease of navigation influence impulsive buying more than product functionality (- et al., 2024). Research by Cutright and Wu (2023) reviewed how personal control interacts with consumer behavior but did not find strong links between functional product features and self-regulation. Baumeister et al. (2008) argued that self-control is shaped by deeper cognitive and emotional processes rather than surface-level product traits (Baumeister et al., 2007). Finally, LaRose and Eastin's work, cited in an integrative review, showed that interactive and visually stimulating e-commerce environments can weaken self-regulation, regardless of functional product quality. Collectively, these findings reinforce the conclusion that functional features alone are insufficient to shape consumer self-control in the context of impulsive buying.

H6: Psychological Component has a positive effect on Attitudinal Loyalty

This hypothesis is well supported by the test results. The Psychological Component has a positive and significant effect on Attitudinal Loyalty, with a coefficient of 0.155, a p-value of 0.005, and a t-statistic of 2.810. This indicates that psychological factors such as perceptions, emotions, and consumer trust in a product or service can enhance attitudinal loyalty to a brand or e-commerce platform. This finding is consistent with several studies. Indriyarti et al. (2025) found that visual engagement and enjoyment significantly influence attitudinal loyalty, which in turn affects impulsive buying behavior on Shopee (Retno Indriyarti, 1144). Gavagnin (2025) emphasized that attitudinal loyalty is rooted in emotional connections and psychological commitment, distinguishing it from behavioral loyalty and making it essential for long-term customer relationships. Gulfraz et al. (2022) demonstrated that online customer shopping experience—driven by psychological satisfaction—positively influences attitudinal loyalty, which mediates impulsive buying behavior (Gulfraz et al., 2022). Akhgari and Bruning (2024) also found that trust and emotional commitment are key psychological drivers of attitudinal loyalty, which in turn shapes behavioral loyalty (Akhgari & Bruning, 2024). Finally, a study by Kim et al. (2024) on mobile commerce revealed that perceived enjoyment and trust significantly predict attitudinal loyalty, especially in emotionally engaging platforms (Kim & Song, 2024). Collectively, these findings reinforce the conclusion that psychological components are foundational to building strong, lasting attitudinal loyalty in digital commerce environments.

H7: Functionality Component positively influences Online Impulsive Buying through the mediation of Attitudinal Loyalty

This mediation hypothesis is supported by the data, with an indirect effect of the Functionality Component on Online Impulsive Buying through Attitudinal Loyalty of 0.052 and a p-value of 0.005. These findings show that attitudinal loyalty acts as a significant mediator in the relationship between functional aspects and online impulsive buying behavior. In other words, products with good features and functions can enhance attitudinal loyalty, which in turn encourages impulsive purchases. Several studies reinforce this finding. Indriyarti et al. (2025) showed that visual engagement and enjoyment enhance attitudinal loyalty, which mediates impulsive buying behavior on Shopee. Akbar et al. (2025) found that attitudinal and behavioral loyalty mediate the relationship between brand experience and impulse buying, especially when

moderated by fan satisfaction (Akbar et al., 2025). Gulfraz et al. (2022) demonstrated that online shopping experience impacts impulsive buying through attitudinal loyalty, validating its mediating role (Gulfraz et al., 2022). A study from Universitas Islam Indonesia (2025) confirmed that both functional and psychological components of online customer experience influence attitudinal loyalty, which then drives impulsive buying behavior (Nabela, 2023). Lastly, Suriyadin et al (2025) found that online shopping experience and brand attitude influence impulsive buying among Gen Z, with attitudinal loyalty acting as a key mediator (Suriyadin et al., 2025).

H8: Psychological Component positively influences Online Impulsive Buying through the mediation of Self-Control

This hypothesis is not supported by the analysis results. The indirect effect of the Psychological Component on Online Impulsive Buying through Self-Control is only 0.007, with a p-value of 0.640, indicating that the mediation is not significant. In other words, psychological factors do not significantly influence online impulsive buying through the Self-Control pathway, suggesting that self-control is not an effective mediation mechanism in this context. Previous studies similarly highlight that self-control may not always act as an effective mediator between psychological drivers and impulsive online purchases. This finding aligns with several studies. Duan (2025) found that while self-control failure contributes to compulsive buying, it does not consistently mediate the relationship between mental simulation and impulsive behavior, suggesting that other psychological mechanisms may be more influential (Duan, 2025). Khan et al. (2023) also reported that self-control influences compulsive buying directly, but its mediating role is often overshadowed by factors like ill-being perception (Butt et al., 2023). A study published in the *International Journal of Business and Economic Affairs* emphasized that social network impulsiveness mediates the relationship between self-control and impulsive buying, not self-control itself (Fayyaz et al., 2023). Another review by IJRPR (2024) highlighted that while self-control is a known moderator of impulsive behavior, its mediating role is often weak or context-dependent (Singh & Mishra, 2024). Finally, Baumeister and Heatherton's foundational work on the strength model of self-control suggests that self-control is more likely to act as a direct inhibitor of impulsivity rather than a mediator between psychological stimuli and behavior (Baumeister et al., 2007).

H9: Functionality Component positively influences Online Impulsive Buying through Self-Control

The test results show that the mediation effect of the Functionality Component on Online Impulsive Buying through Self-Control is also not significant, with a coefficient of -0.019 and a p-value of 0.142. Although the direction of the relationship is negative, the relationship is not strong enough to be considered significant. Thus, Self-Control is not proven to be a mediator between the functional aspect and impulsive buying in this model. This finding aligns with several studies. Duan (2025) found that while self-control failure contributes to compulsive buying, it does not consistently mediate the relationship between cognitive simulations and impulsive behavior. AASM Research (2025) showed that financial self-control moderates—but does not mediate—the impact of e-commerce features like “buy now, pay later” on impulsive buying among Gen Z consumers (Mudra & Rusmanto, 2024). Another study by IJRPR (2024) emphasized that while self-control is a critical factor in impulsive behavior, its mediating role is often weak or context-dependent, especially when external stimuli like product features are involved (Singh & Mishra, 2024). Research by Dhewi et al (2023) also highlighted that poor self-control leads to impulsive buying, but did not find strong evidence that product functionality enhances self-control (Dhewi et al., 2023). Lastly, a study on economic literacy and self-control found that self-control influences impulsive buying more directly, with other variables like financial knowledge acting as more effective mediators

(Efendi et al., 2019).

H10: Psychological Component positively influences Online Impulsive Buying through Attitudinal Loyalty

The final hypothesis shows a near-significant result, with a coefficient of 0.021 and a p-value of 0.065. Although the influence is positive and shows a tendency of a relationship, the p-value > 0.05 means that the relationship cannot be concluded as statistically significant. Therefore, Attitudinal Loyalty cannot yet be considered a strong mediator between psychological components and online impulsive buying behavior. This finding is consistent with several studies that highlight the complexity of psychological influences on consumer behavior. A study from Nabela (2023) found that while psychological components of online customer experience influence attitudinal loyalty, their indirect effect on impulsive buying was not always significant (Nabela, 2023). Gulfraz et al. (2022) similarly reported that psychological satisfaction contributes to attitudinal loyalty, but its mediating role in impulsive buying varies depending on platform engagement and user traits (Gulfraz et al., 2022). Indriyarti et al. (2025) found that enjoyment and visual engagement enhance attitudinal loyalty, which can influence impulsive buying, though the strength of mediation depends on emotional intensity. Gavagnin (2025) emphasized that attitudinal loyalty is shaped by psychological commitment, but its behavioral consequences—such as impulsive buying—are not always linear or predictable. Lastly, Suriyadin et al. (2025) showed that brand attitude and psychological experience influence impulsive buying among Gen Z, with attitudinal loyalty acting as a partial mediator (Suriyadin et al., 2025).

CONCLUSION

Based on the hypothesis testing results and inner model evaluation, it can be concluded that in the context of online impulsive buying, Attitudinal Loyalty plays a key role as a significant mediator between the Functionality Component and Psychological Component toward Online Impulsive Buying. The findings show that the stronger the consumer's attitudinal loyalty, the greater their tendency to make impulsive online purchases. The functionality component is proven to enhance both attitudinal loyalty and self-control, whereas the psychological component only has a significant influence on attitudinal loyalty. However, Self-Control does not show a significant effect either directly on impulsive buying or as a mediator, suggesting that consumers' self-regulation ability is not strong enough to resist impulsive urges in an online context. The indirect effects of the Functionality and Psychological Components on impulsive buying behavior occur only through Attitudinal Loyalty, highlighting its importance in this model. This means that when consumers feel loyal in attitude toward a product or brand—whether due to good functionality or emotional factors—they are more likely to engage in impulsive online purchases.

Future research should consider exploring additional mediating and moderating variables that may influence impulsive buying behavior, such as emotional regulation, digital engagement, or platform design features. Longitudinal studies could provide insights into how attitudinal loyalty and self-control evolve over time, especially in response to changing consumer habits and technological advancements. Moreover, cross-cultural comparisons may reveal whether these relationships hold consistently across different demographic and cultural contexts. Investigating the role of personalized marketing and algorithm-driven recommendations could also offer a deeper understanding of how digital environments shape impulsive buying tendencies. These directions will help refine the theoretical framework and offer practical implications for marketers and platform designers aiming to balance consumer engagement with ethical considerations.

REFERENCES

-, S. M. J., -, A. S. P., & -, S. M. (2024). Impulse Buying Behavior in E-Commerce: Factors Influencing Spontaneous Purchases in Online Retail Environments. *International Journal For Multidisciplinary Research*, 6(4), 1–17. <https://doi.org/10.36948/ijfmr.2024.v06i04.25849>

Akbar, A., Riaz, H., & Koorimannil, S. M. (2025). Attitudinal and Behavioral Loyalty and Impulse Buying: Mediated Moderation of Fan-Co Creation and Satisfaction. *Journal of Advanced Research in Social Sciences and Humanities*, 10(1), 44–57. <https://doi.org/10.26500/jarssh-10-2025-0105>

Akhgari, M., & Bruning, E. R. (2024). How Attitudes Translate to Loyalty: An Integrative Model in Service Relationship Marketing. *Journal of Relationship Marketing*, 23(4), 356–391. <https://doi.org/10.1080/15332667.2024.2368323>

Azad Moghddam, H., Carlson, J., Wyllie, J., & Mahmudur Rahman, S. (2024). Scroll, Stop, Shop: Decoding impulsive buying in social commerce. *Journal of Business Research*, 182(May), 114776. <https://doi.org/10.1016/j.jbusres.2024.114776>

Baumeister, R. F., Vohs, K. D., & Tice, D. M. (2007). The strength model of self-control. *Current Directions in Psychological Science*, 16(6), 351–355. <https://doi.org/10.1111/j.1467-8721.2007.00534.x>

Butt, F. K., Shangguan, D., Butt, A. Q., Arshad, M. T., Raja, B. N. K., Khitab, A., Ding, Y., Li, D., & Mukhtar, M. A. (2023). An Experimental Study to Mitigate Environmental Impacts by Transforming Waste Plastic Bags into Paving Blocks and Roof Tiles. *Sustainability (Switzerland)*, 15(22). <https://doi.org/10.3390/su152215801>

Cachón-Rodríguez, G., Blanco-González, A., Prado-Román, C., & Fernández-Portillo, A. (2025). How compulsive and impulsive buying affect consumer emotional regulation. Is anxiety a differential element? *European Journal of Management and Business Economics*, 34(3), 340–358. <https://doi.org/10.1108/EJMBE-06-2023-0172>

Chen, T., Samaranayake, P., Cen, X. Y., Qi, M., & Lan, Y. C. (2022). The Impact of Online Reviews on Consumers' Purchasing Decisions: Evidence From an Eye-Tracking Study. *Frontiers in Psychology*, 13(June). <https://doi.org/10.3389/fpsyg.2022.865702>

Dhewi, T. S., Al Farodis, Q., & Azzahra, H. F. (2023). *Unlocking Impulse Buying: The Role of Self Control, Shopping Lifestyle, and Age in Purchase Decisions at Miniso* (Issue Bistic). Atlantis Press International BV. https://doi.org/10.2991/978-94-6463-302-3_11

Duan, X. (2025). Mental simulation and compulsive buying: a multiple mediation model through impulse buying and self-control. *Frontiers in Psychology*, 16(March), 1–13. <https://doi.org/10.3389/fpsyg.2025.1507031>

Efendi, R., Indartono, S., & Sukidjo, S. (2019). the Mediation of Economic Literacy on the Effect of Self Control on Impulsive Buying Behaviour Moderated By Peers. *International Journal of Economics and Financial Issues*, 9(3), 98–104. <https://doi.org/10.32479/ijefi.7738>

Fatmala, M. N. A., Askandarini, A., & Syukmawati, Y. (2021). Understanding The Effect Of Hedonic Shopping Value On Impulsive Buying Behaviours In Young Adult Women Through The Case Of Midnight Sale. *European Journal of Psychological Research*, 8(1), 26–32. www.idpublications.org

Fayyaz, A., Zia, H., & Haider, A. (2023). Impact of Self Control on Impulsive Buying, With Mediating Role of Impulsiveness of Social Networks and Moderating Role of Gender. *International Journal of Business and Economic Affairs (IJBEA)*, 8(4), 103–112. <https://doi.org/10.24088/IJBEA-2023-84009>

Fei, T., Zhu, C., Zhang, L., Liu, X., Zhang, Y., & Li, H. (2022). Curriculum Design of Virtual Simulation Experiment of Thermistor Temperature Measurement Characteristics Based on Educational Psychology. *International Journal of Neuropsychopharmacology*, 25(Supplement_1), A43–A43. <https://doi.org/10.1093/ijnp/pyac032.059>

Gao, H., Chen, X., Gao, H., & Yu, B. (2022). Understanding Chinese Consumers' Livestreaming Impulsive Buying: An Stimulus-Organism-Response Perspective and the Mediating Role of Emotions and Zhong Yong Tendency. *Frontiers in Psychology*, 13(July). <https://doi.org/10.3389/fpsyg.2022.881294>

Goswami, L., Senges, A., Estier, T., & Cherubini, M. (2023). Supporting Co-Regulation and Motivation in Learning Programming in Online Classrooms. *Proceedings of the ACM on Human-Computer Interaction*, 7(CSCW2). <https://doi.org/10.1145/3610089>

Gulfraz, M. B., Sufyan, M., Mustak, M., Salminen, J., & Srivastava, D. K. (2022). Understanding the impact of online customers' shopping experience on online impulsive buying: A study on two leading E-commerce platforms. *Journal of Retailing and Consumer Services*, 68(March), 103000. <https://doi.org/10.1016/j.jretconser.2022.103000>

Huang, S. C., Silalahi, A. D. K., Eunike, I. J., & Riantama, D. (2024). Understanding impulse buying in E-commerce: The Big Five traits perspective and moderating effect of time pressure and emotions. *Telematics and Informatics Reports*, 15(July), 100157. <https://doi.org/10.1016/j.teler.2024.100157>

HUANG, Y., HUANG, Y., TANG, Y., & CHEN, Z. (2019). Examining the Influence Mechanism of Customer Perceived Food Authenticity and Loyalty in the Ethnic Restaurant: Cultural Identity as a Moderation. *Canadian Social Science*, 15(12), 51–57. <https://doi.org/10.3968/11482>

Khamitov, M., Wang, X. (shane), Thomson, M., Morwitz, V. G., Inman, J. J., & Hoegg, J. (2019). How Well Do Consumer-Brand Relationships Drive Customer Brand Loyalty? Generalizations from a Meta-Analysis of Brand Relationship Elasticities. *Journal of Consumer Research*, 46(3), 435–459. <https://doi.org/10.1093/jcr/ucz006>

Kim, J. H., & Song, H. (2024). Examining the influence of multiple dimensions of authentic dining experiences. *Service Industries Journal*, 44(5–6), 317–341. <https://doi.org/10.1080/02642069.2022.2059074>

Kleinert, T., Nash, K., Leota, J., Koenig, T., Heinrichs, M., & Schiller, B. (2022). A Self-Controlled Mind Is Reflected by Stable Mental Processing. *Psychological Science*, 33(12), 2123–2137. <https://doi.org/10.1177/09567976221110136>

Koay, K. Y., Teoh, C. W., & Soh, P. C. H. (2021). Instagram influencer marketing: Perceived social media marketing activities and online impulse buying. *First Monday*, 26(9). <https://doi.org/10.5210/fm.v26i9.11598>

Leyland, A., Rowse, G., & Emerson, L. M. (2019). Experimental effects of mindfulness inductions on self-regulation: Systematic review and meta-analysis. *Emotion*, 19(1), 108–122. <https://doi.org/10.1037/emo0000425>

Li, S., Ren, P., Chiu, M. M., Wang, C., & Lei, H. (2021). The Relationship Between Self-Control and Internet Addiction Among Students: A Meta-Analysis. *Frontiers in Psychology*, 12(November), 1–16. <https://doi.org/10.3389/fpsyg.2021.735755>

Li, X., Dai, J., Zhu, X., Li, J., He, J., Huang, Y., Liu, X., & Shen, Q. (2023). Mechanism of attitude, subjective norms, and perceived behavioral control influence the green development behavior of construction enterprises. *Humanities and Social Sciences Communications*, 10(1), 1–13. <https://doi.org/10.1057/s41599-023-01724-9>

Lina, Y., Hou, D., & Ali, S. (2022). Impact of online convenience on generation Z online impulsive buying behavior: The moderating role of social media celebrity. *Frontiers in Psychology*, 13(August), 1–17. <https://doi.org/10.3389/fpsyg.2022.951249>

Maulidia, R., Utami, F. N., Si, S., Studi, P., Administrasi, S., Komunikasi, F., & Telkom, U. (2024). *Pengaruh Online Customers Shopping Experience terhadap Online Impulsive Buying melalui Attitudinal Loyalty pada Shopee di Provinsi DKI Jakarta*. 11(6), 5431–5447.

Mehmood, K., Jabeen, F., Iyanna, S., Zhang, H., Piccardi, P., & Nehra, N. S. (2024). Exploring drivers of behavioral willingness to reduce plastic consumption and socially responsible

consumption behavior: A stimulus–organism–behavior–consequence paradigm based environmental management perspective. *Corporate Social Responsibility and Environmental Management*, 31(4), 3098–3118. <https://doi.org/https://doi.org/10.1002/csr.2731>

Mohammed, S. S., & Shahin, O. (2020). Service Quality Perspectives in Telecommunication Sector: Trust and Loyalty Investigation. *Revista Amazonia Investiga*, 9(28), 394–403. <https://doi.org/10.34069/ai/2020.28.04.44>

Molinillo, S., Mercadé-Melé, P., & De Noronha, T. (2020). Cause-related marketing influence on consumer loyalty in a medium-sized city. *Sustainability (Switzerland)*, 12(9), 1–16. <https://doi.org/10.3390/su12093632>

Morits, K. K., Anakaka, D. L., & Panis, M. P. (2025). Self-Control and Impulsive Buying Behavior in Fashion Models. *Journal of Health and Behavioral Science*, 7(3), 763–778.

Mudra, U. J., & Rusmanto, T. (2024). The Role of Financial Self-Control in Mitigating Online Impulsive Buying Among Gen Z Consumers in Indonesia's E-Commerce Sector. *Journal of System and Management Sciences*, 14(6), 470–489. <https://doi.org/10.33168/jsms.2024.0629>

Nabela, H. R. (2023). *Terhadap Online Impulsive Buying Pada E-commerce Shopee & Tokopedia Dengan Attitudinal Loyalty Sebagai Variabel Mediasi Diajukan oleh Hana Rizquna Nabela* FAKULTAS BISNIS DAN EKONOMIKA UNIVERSITAS ISLAM INDONESIA YOGYAKARTA. 1–134.

Nabela, H. R., & Albari, A. (2023). The influence of online customer shopping experience on online impulsive buying in e-commerce with attitudinal loyalty as a mediation variable. *International Journal of Research in Business and Social Science* (2147- 4478), 12(6), 56–65. <https://doi.org/10.20525/ijrbs.v12i6.2876>

Ngo, T. T. A., Nguyen, H. L. T., Nguyen, H. P., Mai, H. T. A., Mai, T. H. T., & Hoang, P. L. (2024). A comprehensive study on factors influencing online impulse buying behavior: Evidence from Shopee video platform. *Helijon*, 10(15), e35743. <https://doi.org/10.1016/j.helijon.2024.e35743>

Nurmartiani, E. (2025). The Influence of Product Attributes, Price, and Image on Customer Loyalty. *Jurnal Ilmiah Manajemen Kesatuan*, 13(4), 2449–2458. <https://doi.org/10.37641/jimkes.v13i4.3206>

Pereira, M. de S., de Castro, B. S., Cordeiro, B. A., de Castro, B. S., Peixoto, M. G. M., da Silva, E. C. M., & Gonçalves, M. C. (2025). Factors of Customer Loyalty and Retention in the Digital Environment. *Journal of Theoretical and Applied Electronic Commerce Research*, 20(2), 1–21. <https://doi.org/10.3390/jtaer20020071>

Putri, D. M., Marniati, M., & Purnomo, R. A. A. (2025). Emotional Regulation and Impulsive in Fashion Purchases among Emerging Adulthood: An In-Depth Quantitative Study. *Jurnal Psikologi Teori Dan Terapan*, 16(02), 133–142. <https://doi.org/10.26740/jptt.v16n02.p133-142>

Retno Indriyarti, E. (1144). DETERMINANTS OF ONLINE CUSTOMERS' ATTITUDINAL LOYALTY AND IMPULSIVE PURCHASING ON SHOPEE: THE ROLE OF VISUAL ENGAGEMENT AND ENJOYMENT Faktor-faktor yang Mempengaruhi Loyalitas Sikap Pelanggan Online dan Pembelian Impulsif di Shopee: Peran Keterlibatan Visual dan Kenikmatan. *Journal of Business & Applied Management Kyai Tapa*, XVIII(1), p-ISSN. <https://doi.org/10.30813/jbam.v18i1.8200>

Ria Tuljanah, L., & Indradewa, R. (2024). Factors That Influence Impulsive Buying. *Dinasti International Journal of Education Management And Social Science*, 5(6), 1634–1645. <https://doi.org/10.38035/dijemss.v5i6.2957>

Saini, S., & Singh, J. (2020). Managing consumer loyalty: An expanded model of consumer experience management and consumer loyalty. *International Journal of Asian Business*

and *Information Management*, 11(1), 21–47.
<https://doi.org/10.4018/IJABIM.2020010102>

Schmid, J., Moschko, T., Riccio, M., Snyder, K. A., Gawrilow, C., & Stadler, G. (2024). Self-control fluctuates from day to day and is linked to subjective well-being within and between persons. *Applied Psychology: Health and Well-Being*, 16(1), 254–272. <https://doi.org/10.1111/aphw.12482>

Singh, P. P., & Mishra, P. (2024). Understanding the Triggers of Impulse Buying Behaviour: A Comprehensive Review. *International Journal of Research Publication and Reviews Journal Homepage: Www.Ijrpr.Com*, 5(2), 1029–1034. www.ijrpr.com

Suriyadin, M. I., Agustina, T. S., Ekowati, D., Airlangga, U., Airlangga, U., & Airlangga, U. (2025). *Jurnal Manajemen Dayasaing Volume 27 No . 1 Juni 2025 Website : https://journals2.ums.ac.id/index.php/dayasaing/index PENGARUH BUDAYA ORGANISASI TERHADAP KINERJA KARYAWAN Abstrak*.

Vohs, K. D., & Faber, R. J. (2007). Spent resources: Self-regulatory resource availability affects impulse buying. *Journal of Consumer Research*, 33(4), 537–547. <https://doi.org/10.1086/510228>

Wang, B., & Li, Y. (2022). Consumers' Intention to Bring a Reusable Bag for Shopping in China: Extending the Theory of Planned Behavior. *International Journal of Environmental Research and Public Health*, 19(6). <https://doi.org/10.3390/ijerph19063638>

Wolff, W., & Martarelli, C. S. (2020). Bored Into Depletion? Toward a Tentative Integration of Perceived Self-Control Exertion and Boredom as Guiding Signals for Goal-Directed Behavior. *Perspectives on Psychological Science*, 15(5), 1272–1283. <https://doi.org/10.1177/1745691620921394>

Zhang, K. Z. K., Xu, H., Zhao, S., & Yu, Y. (2018). Online reviews and impulse buying behavior: the role of browsing and impulsiveness. *Internet Research*, 28(3), 522–543. <https://doi.org/10.1108/IntR-12-2016-0377>

Zhang, M., & Shi, G. (2022). Consumers ' Impulsive Buying Behavior in Online Shopping. *Computational Intelligence and Neuroscience*, 2022, 1–8.

Zhou, Y., Gao, W., Kato, T., Yao, W., Shi, C., Wang, J., & Fei, F. (2024). Investigating key factors influencing consumer plastic bag use reduction in Nanjing, China: A comprehensive SEM-ANN analysis. *Process Safety and Environmental Protection*, 181, 395–406. <https://doi.org/10.1016/J.PSEP.2023.11.043>

Zogaj, A., Tscheulin, D. K., Lindenmeier, J., & Olk, S. (2021). Linking actual self-congruence, ideal self-congruence, and functional congruence to donor loyalty: the moderating role of issue involvement. *Journal of Business Economics*, 91(3), 379–400. <https://doi.org/10.1007/s11573-020-01006-9>