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Drivers of Gen Z Impulse Buying: Social Network Impulsiveness, Self-Control, and Targeted Advertising

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ABSTRACT:
This study eamines how social network impulsiveness, self-control, and positive attitudes toward targeted advertising relate to impulse buying among Generation Z, while investigating whether impulse buying tendency moderates these relationships. Building on previous research, particularly, this study extends understanding of how social influences, individual self-regulation, and personalized advertising interact in an emerging digital market. A quantitative survey was conducted among 102 Generation Z consumers aged 18–28 in Greater Jakarta, Indonesia, selected through purposive sampling. Data were collected using an online questionnaire and analyzed using partial least squares structural equation modeling (PLS-SEM). The results indicate that social network impulsiveness and positive attitudes toward targeted advertising are positively associated with impulse buying, whereas self-control shows a significant negative association. Impulse buying tendency also demonstrates a positive direct relationship with impulse buying. Its moderating effect is selective, with significance reported only for the relationship between attitudes toward targeted advertising and impulse buying. These findings suggest that spontaneous purchasing reflects an interplay between social influences, personal self-regulation, and advertising perceptions. The study contributes contextual evidence to digital consumer behavior research and encourages e-commerce businesses and Indonesian micro, small, and medium-sized enterprises to prioritize relevant, transparent, and responsible advertising rather than exploit consumer impulsivity.

Keywords: *Gen Z, Impulse Buying, Self-Control, Social Network Impulsiveness, Targeted Advertising*

1. INTRODUCTION

In many situations, people may make a sudden purchase without giving it much thought, simply on a whim, without truly comparing other available options (Moghddam *et al.*, 2024). Impulse buying is often viewed as spontaneous and enjoyable consumer behavior, even though it can actually have a negative impact on personal financial management (Min & Wakslak, 2022). In the digital age, this behavior is further reinforced by the prevalence of e-commerce and social media, which offer features such as flash sales, algorithmic recommendations, and interactive advertising content capable of triggering instant purchasing decisions (Zheng *et al*., 2022). As exposure to technology and algorithms increases, impulse buying is no longer merely a fleeting response but has become part of a mental habit that is difficult to control (Duck *et al*., 2024). This research is crucial because, without mindful consumption habits, this phenomenon could lead to detrimental personal financial management and post-purchase dissonance, particularly among younger generations who are highly vulnerable to digital marketing manipulation (Rangapur *et al.*, 2023).

The impulsive urges that arise on social media are triggered not only by visually appealing content but also by real-time social interactions, such as comments from friends,

reviews by public figures, or a product going viral (Kalim *et al*., 2024). Influencer storytelling and time-restricted offers paired with visual content routinely drive social media users toward impulsive shopping decisions (Wongkitrungrueng & Assarut, 2020). In such an environment, social media is not merely a source of entertainment but transforms into a space that actively encourages impulsive buying (Fu & Hsu, 2023). The social factors embedded within digital platforms make social media one of the dominant forces influencing an individual's consumption decisions (Li *et al*., 2022).

Susceptibility to these marketing triggers is not uniform, as personal self-control frequently acts as a crucial buffer (Chen *et al*., 2022). Individuals with high self-control tend to resist the urge to shop, carefully considering their options before deciding to make a purchase (Olsen *et al*., 2022). Conversely, individuals with low self-control are more easily tempted by sudden visual or emotional cues and ultimately make unplanned purchasing decisions (Li *et al*., 2020). This suggests that impulsive behavior is not solely due to external stimuli but is also related to how an individual regulates themselves (Sun *et al*., 2024).

In addition to social cues and self-control, how an individual perceives advertisements also plays a crucial role (Lavuri, 2023). When advertisements are presented in an enjoyable, informative, and personalized manner, consumers tend to respond positively; it is this positive response that can drive quick, unplanned purchasing decisions (Garaus *et al*., 2021). Furthermore, ads targeted based on users' online behavior can evoke feelings of enthusiasm and a desire to immediately own the product (Liu & Wei, 2021). Such customization must, however, remain within certain limits; if it feels too pushy, consumers may feel uncomfortable (Antonio *et al*., 2022).

This situation becomes even more intriguing when considered in relation to Generation Z, who were born and raised alongside the development of the internet and social media (Hu *et al*., 2022). Gen Z is highly accustomed to the speed of information, an abundance of visual content, and consistent social interaction (Elkatmis, 2024). They are highly active across various digital platforms, making them far more responsive to personalized ads, influencer-based promotions, and recommendations from fellow users (Sun *et al*., 2024). Their age and the fact that their self-control is not yet fully developed are also reasons why Gen Z is easily influenced by such prompts (Fan *et al*., 2020). Given these characteristics, Gen Z is a highly relevant group to study, as they represent today's digital consumers who are most exposed to such influences and most prone to impulsive buying (Li *et al*., 2022).

Direct research on impulsive buying behavior has been conducted by Nyrhinen *et al.* (2024) in Finland in 2024, showing that low self-control, positive attitudes toward targeted advertising, and social media impulsivity contribute to impulsive purchasing. However, a distinct research gap remains regarding how these factors interact within emerging digital economies like Indonesia. Situated within Indonesia's online retail sector across the Jabodetabek region, this study bridges this gap by examining impulse buying tendency as a moderating mechanism rather than a simple replication. The theoretical novelty lies in contextualizing these dynamics within a high-context, mobile-first digital ecosystem, elucidating how enduring individual traits condition the impact of external digital stimuli on Gen Z's unplanned purchases.

This paper investigates the determinants of impulsive shopping among Gen Z consumers situated in Greater Jakarta's digital ecosystem. The research model tests the direct effects of social network impulsiveness, self-control, and positive ad attitudes on impulse buying, while treating impulse buying tendency as a potential moderator. Given Gen Z's high exposure to digital environments, the theoretical novelty lies in contextualizing these dynamics within an emerging online retail landscape. From an applied standpoint, the research bridges internal individual tendencies with external marketing exposure, providing nuanced insights into Gen Z's online purchase drivers in Indonesia.

Impulsiveness of Social Networks

Impulsiveness on social networks can be defined as an individual's tendency to act spontaneously in a digital context, influenced by the presence of interactive and engaging social features, and reinforced by users' emotional responses, which ultimately trigger impulsive purchasing decisions (Zhang & Shi, 2022). Impulsivity in social media use is a complex and multidimensional phenomenon influenced by various factors, ranging from individual characteristics and platform design to the digital marketing strategies employed (Helmi et al., 2023). "Impulsiveness of social networks" is defined as the tendency to act suddenly without careful consideration whether in the form of purchases or excessive social media use which is reinforced by ease of access and constant notifications (Pan et al., 2024). Furthermore, according to Yang et al. (2024) Social network impulsiveness denotes a consumer's inclination toward unplanned buying, driven by social media interactions that foster trust in information sources, heightened social presence, and individual innovative capacity. Based on the above definition, "impulsiveness of social networks" refers to an individual's tendency to act spontaneously when using or making purchases on social media, influenced by the platform's interactive design, constant notifications, social presence, as well as emotional factors and trust in information sources, making it a complex and multidimensional phenomenon (Zhang & Shi, 2022; Helmi *et al*., 2023; Yang *et al*., 2024; Pan *et al*., 2025).

Self-Control

Characterized by the suppression of unwanted urges and short-term temptations, self-regulation allows consumers to resist impulsive drivers and maintain goal-directed behavior (Taylor et al., 2020; Inzlicht et al., 2021). Self-control is defined as a dynamic, multi-stage process that ranges from recognizing the need for self-regulation, selecting the appropriate strategy, to implementing that strategy when facing temptations or challenges (Werner & Ford, 2023). According to Riyadi et al. (2023) self-control is defined as an individual's ability to modify behavior, manage unwanted information, and make decisions based on held values. According to Febriandika et al. (2024) High self-regulation mitigates unplanned spending on online food delivery services, as individuals successfully manage impulsive habits and resist purchases prompted by emotional states or promotional incentives. Furthermore, Xie et al. (2025) revealed that self-control acts as a mediator between personality and consumptive behavior, whereby individuals with high levels of self-control are better able to control impulsive urges, even when influenced by personality factors or family background. Based on the above definition, self-control is a dynamic and

gradual ability to regulate thoughts, feelings, and actions in order to resist temptations and impulsive urges, with the aim of fostering rational and long-term-oriented behavior, which also plays a role in reducing consumptive behavior even when influenced by emotional factors, promotions, personality, or the environment (Taylor et al., 2020; Inzlicht et al., 2021; Werner & Ford, 2023; Riyadi et al., 2023; Febriandika et al., 2024; Xie et al., 2025).

Positive Attitude Toward Targeted Advertising

A favorable stance toward targeted advertising reflects a consumer's positive affective and cognitive assessment of tailored promotions that align with their personal interests, providing value through perceived relevance and informativeness (Falcao & Isaias, 2020). Consumers' positive attitudes toward targeted advertising are influenced by several interrelated factors; specifically, ads that feel personalized such as those tailored to users' interests or needs tend to be preferred because they provide useful information and make users feel engaged (Mo et al., 2023). In their study Juanim et al. (2024) found that advertisements combining elements of entertainment and emotional messaging can trigger hedonistic motivation, thereby increasing the desire for impulsive purchases, particularly among young people. Bindah & Gunnoo (2024) added that factors such as customization, informational value, and enjoyment in advertisements are also crucial for building brand awareness and positive attitudes, especially on social media platforms. Based on the above definition, a positive attitude toward targeted advertising is a beneficial emotional and cognitive attitude toward personalized advertisements that are perceived as relevant, informative, and enjoyable because they align with personal interests, and are reinforced by elements of entertainment, emotional messages, and customization that can build consumer engagement, trigger hedonic motivation, and encourage impulsive purchasing behavior, particularly among young people (Falcao & Isaias, 2020; Mo et al., 2023; Bindah & Gunnoo, 2024; Juanim et al., 2024).

Impulsive Buying Tendency

Impulsive buying tendency refers to an individual's behavioral tendency to make purchases spontaneously, immediately, or without much reflection that is, with little involvement of rational thought but rather driven by a strong urge to buy that feels particularly intense (Hadyan et al., 2020). Impulsive buying tendency is often described as a person's natural inclination to act spontaneously while shopping, where they tend to purchase items without prior planning and without much consideration (Parsad et al., 2021). Furthermore, in the study by Kwon & Ahn (2021) Within the scope of consumer behavior studies, individual impulse buying tendency functions as a crucial mediating bridge that channels external marketing cues such as service features and promotional campaigns into actual impulsive buying actions. Furthermore, research indicates that the impulse buying tendency is a dynamic variable that can vary across demographic groups and adapt to various modern shopping situations, including the context of the rapidly evolving live-stream commerce (Arroyo & Guaderrama, 2022). In live-stream commerce, an individual's impulsive buying tendency occurs spontaneously without planning; it arises from frequent viewing of live streams and prior shopping experiences, and is then reinforced by

pre-conceived emotions, such as the fear of missing out on a promotion or the joy of obtaining a rare item (Yi et al., 2023). Based on the above definition, an "impulsive buying tendency" refers to an individual's propensity to make spontaneous, unplanned purchases, triggered by strong emotional impulses with minimal rational consideration, and influenced by external stimuli such as promotions, prior shopping experiences, and modern shopping contexts like live-stream commerce which shape reflective and dynamic responses among individuals and demographic groups Kwon & Ahn, 2021; Parsad et al., 2021; Guaderrama, 2022; Yi et al., 2023).

Impulse Buying

Impulse buying represents an unplanned and instantaneous transaction executed without any preexisting purchasing intention toward the specific item (Nurlinda & Christina, 2020). The feelings of joy, excitement, and satisfaction that consumers experience while watching a live stream can trigger the intention to make an impulsive purchase (Ananda et al., 2021; Yi et al., 2023). Impulse buying is typically triggered by intrinsic factors such as utilitarian and hedonic value, and driven by external factors that satisfy immediate emotional and psychological needs (Lavuri, 2023). In addition, impulsive purchasing is conceptualized as an unintended transaction driven by a spontaneous, powerful compulsion to acquire goods without extensive cognitive evaluation (Ahmadova & Nabiyeva, 2024). In their study Huang et al. (2024) noted that impulse buying is influenced by personality traits such as being trusting, open-minded, sociable, or prone to anxiety, and tends to intensify when consumers feel pressured by limited-time offers or are influenced by emotions whether due to feeling happy or seeking to relieve stress thereby making purchasing decisions more impulsive. Based on the above definition, impulse buying is a sudden, spontaneous, and unplanned purchasing behavior triggered by momentary emotional impulses and influenced by intrinsic, psychological, situational, and personality factors, in which purchasing decisions are made without careful consideration in response to stimuli such as limited-time promotions, entertainment, or sudden emotional needs (Nurlinda & Christina, 2020; Ananda et al., 2021; Lavuri et al., 2023; Yi et al., 2023; Ahmadova & Nabiyeva, 2024; Huang et al., 2024).

RELATIONSHIPS BETWEEN VARIABLES

The Relationship Between Impulsiveness of Social Network and Impulse buying

When someone has impulsive tendencies, persuasive content such as promotions, product reviews, or influencer lifestyles can easily trigger the desire to make unplanned purchases. A study by Helmi *et al*. (2023) shows that young Indonesian consumers often make spontaneous purchases of non-essential products due to ease of access and digital stimuli. Similarly, Yang *et al.* (2024) found that inspiration derived from social media content can drive users to make impulsive purchases, which logically suggests that when someone feels inspired and their emotions are triggered, decision-making tends to be spontaneous. Nyrhinen *et al.* (2024) the empirical results confirm a positive relationship between social network impulsiveness and impulsive purchasing behavior; individuals who are more susceptible to peer influence on social platforms display a higher likelihood of buying impulsively when exposed to others' shopping actions.

Empirically, various studies have confirmed that social network impulsiveness has a positive effect on impulse buying (Helmi *et al*., 2023; Li *et al*., 2025; Nyrhinen *et al*., 2024; Yang *et al*., 2024). Conversely, empirical literature presents mixed results; studies by Anindito & Handarkho (2022); Chen *et al*., (2021); Singh *et al*., (2023) demonstrates that impulsivity within social networks fails to meaningfully drive impulse purchasing decisions. On the basis of these conflicting perspectives, this study proposes the following hypothesis:
H1: Impulsiveness of Social Networks has a positive effect on impulse buying.

The Relationship Between *Self Control* and *Impulse Buying*

Individuals with good self-control are better able to manage stress and emotions while shopping, making them less likely to be tempted to make impulsive purchases. A study by Shams *et al.* (2021) reinforces this finding by showing that high self-control can significantly reduce the tendency toward impulse buying, even when a person is under stress. Conversely, when someone has low self-control, they tend to find it harder to resist emotional urges, making them more prone to making spontaneous purchases without careful consideration meaning that low self-control has a significant impact on increased impulse buying (Prihatiningrum & Said, 2022). High self-control in online environments fosters cautious consumer decision-making, making individuals less susceptible to promotional lures and visual stimuli. Wang *et al.* (2022) erified that self-control significantly dampens e-commerce impulse buying, while Zhao *et al.* (2022) nderscored its role in mitigating impulsive tendencies amid pandemic-induced stress. Although multiple studies consistently report a negative impact of self-control on impulsive spending (Shams *et al*., 2021; Prihatiningrum & Said, 2022; Wang *et al*., 2022; Zhao *et al*., 2022; Febriandika *et al*., 2024). empirical discrepancies remain regarding this relationship (Xie *et al* ., 2025) n the basis of these mixed empirical insights, we propose the following hypothesis:
H2: Self-control has a negative effect on impulse buying

The Relationship Between a Positive Attitude Toward Targeted Advertising and Impulse Buying

When consumers feel that an advertisement aligns with their needs, they tend to respond positively and form an emotional connection with the brand, which logically increases the urge to make impulsive purchases. This suggests that advertisements with emotional appeal can evoke positive emotions that drive consumers particularly the younger generation to make unplanned purchases (Vrtana & Krizanova, 2023). Positive responses to advertisements are also stronger when the ad's content aligns with consumers' personal values; in this context, Lyu *et al.* (2023) found that positive attitudes toward social media advertisements significantly drive the intention to make impulse purchases by increasing trust and emotional connection with the company. Furthermore, when consumers are anxious or uncertain, they tend to prefer assertive advertisements because they provide a sense of security in decision-making, which logically increases the tendency to buy impulsively meaning that positive attitudes toward assertive advertisements rise when consumers feel anxious, and this effect is reinforced by the ease of processing information, which ultimately triggers swift action (Wang *et al*., 2022). Furthermore, Juanim *et al*. (2024) also emphasize

that when advertisements are perceived as appealing and relevant, consumers tend to be immediately tempted to buy without much deliberation, whether due to emotional impulses or hedonistic motives, making advertisements a significant factor in driving impulse buying. Prior research consistently corroborates the positive impact of favorable targeted ad perceptions on impulse buying (Vongurai, 2021 ; Coban, 2023; Lyu *et al*., 2023; Ahmadova & Nabiyeva, 2024; Melati *et al*., 2024). On the basis of these empirical insights, this study proposes the following hypothesis:
H3: A positive attitude toward targeted advertising has a positive effect on impulse buying

The Relationship Between Impulse Buying Tendency and Impulse Buying

An impulsive buying tendency drives individuals to react quickly to the urge to shop without much consideration; they tend to rely on momentary impulses rather than rational thought processes. It has been demonstrated that this tendency has a positive influence on impulse buying behavior, both directly and through the mediation of emotional drives in an online context (Arroyo & Guaderrama, 2022). When an individual views pleasure and the ownership of goods as sources of happiness, the urge to engage in impulsive buying increases. This phenomenon is empirically supported by findings showing that hedonism and materialism strengthen impulse buying tendencies, thereby triggering impulsive shopping behavior (Lavuri *et al*., 2023). Conversely, individuals with a strong predisposition toward impulsive buying are increasingly susceptible to unconsidered spending due to the predominance of affective impulses and impatience during decision-making, with evidence confirming that affective impulse buying tendency positively impacts actual purchases (Qureshi *et al*., 2025).

Extensive empirical studies establish that impulse buying tendency exerts a positive direct effect on impulsive purchasing behavior (Parsad *et al*., 2021; Kwon & Ahn, 2021; Arroyo & Guaderrama, 2022; Li *et al*., 2022; Lavuri *et al*., 2023; Pereira *et al*., 2023; Qureshi *et al*., 2025). Based on these collective insights, this study proposes the following hypothesis:
H4: Impulsive buying tendency has a positive effect on impulsive buying As highlighted by Tran (2022) impulse buying tendency acts as a moderating factor that reinforces the connection between psychological drivers and unmonitored spending behavior. Empirical evidence further indicates that highly impulsive individuals are particularly receptive to social influences, which subsequently heightens the persuasive power of social network impulsiveness in prompting purchases (Singh *et al*., 2023). Conversely, self-control which typically helps curb impulsive buying behavior becomes less effective in individuals with a high impulsive tendency, as the strong urge to make spontaneous purchases tends to weaken their self-control (Guo *et al*., 2024). Moreover, impulse buying tendency accentuates the impact of targeted ad attitudes on buying behavior; consumers exhibiting a strong inclination toward impulsive spending respond far more intensely to personalized ads compared to their less impulsive counterparts (Fan & Yang, 2025). This indicates that the tendency toward impulsive shopping not only plays a direct role in driving such behavior but also influences how strongly other factors can shape a person's impulsive intentions or actions while shopping (Rani & Catherine, 2023). Based on the statements above, the following hypotheses are proposed:

H4a: Impulsive buying tendency moderates the relationship between the impulsiveness of social networks and impulse buying
H4b: Impulsive buying tendency moderates the relationship between self-control and impulse buying
H4c: Impulsive buying tendency moderates the relationship between positive attitude toward targeted advertising and impulse buying
Based on these formulated hypotheses, Figure 1 illustrates the proposed empirical model:

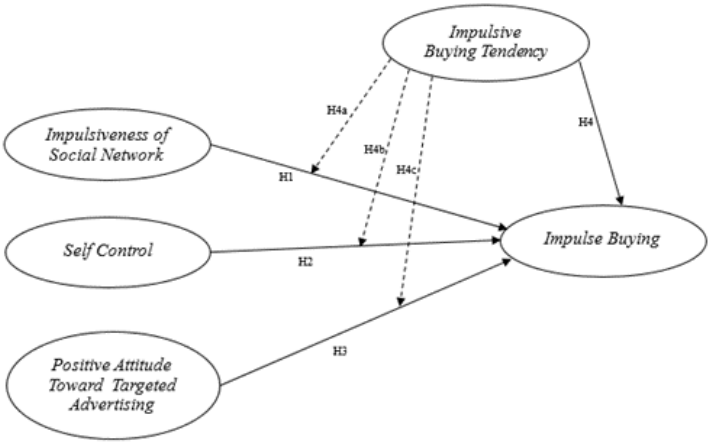


Figure 1. Research Model Framework

METHODS (Poppins 12, Bold)

Using a quantitative survey design, this study collected data via Google Forms. The measurement instrument comprises 20 adapted indicators across five variables using a 4-point Likert scale (1 = strongly disagree to 4 = strongly agree): Impulsiveness of Social Networks (3 items; Aragoncillo & Orús, 2018), Self-Control (7 items; Morean et al., 2014), Positive Attitude Toward Targeted Advertising (3 items; Xu et al., 2008), Impulse Buying (2 items; Rook & Fisher, 1995), and Impulse Buying Tendency (5 items; Rook & Fisher, 1995). Further operational details are outlined in Appendices 2 and 3.

Non-probability purposive sampling was employed to target Generation Z consumers (aged 17–28) residing in Greater Jakarta (Jabodetabek) who are active social media and e-commerce users with at least two recent online impulse purchases. The age bracket was adjusted to include 17-year-olds, reflecting the early digital immersion of Indonesian youth. While the criteria were purposively defined, convenience sampling was utilized as the distribution method via accessible online channels (Google Forms). Based on Hair et al.'s (2017) guideline, a minimum threshold of 100 participants was determined. A pre-test of 30 Gen Z respondents was conducted to confirm the instrument's psychometric properties; these 30 respondents were excluded from the main sample of 102 participants.

A pre-test of 30 Gen Z respondents confirmed the instrument's psychometric properties. All items demonstrated construct validity, exceeding the critical Pearson correlation threshold (). Internal consistency was likewise verified, with Cronbach's alpha coefficients for Impulsiveness of Social Networks (0.686), Self-Control (0.722), and Impulse Buying Tendency (0.639) surpassing the acceptable threshold of 0.60.

Data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) via Smart-PLS 3, given its suitability for exploratory research with moderating constructs and non-normal data (Hair et al., 2017). The measurement model evaluation

included indicator reliability (outer loadings), convergent validity (Average Variance Extracted), and internal consistency (Composite Reliability and Cronbach's Alpha). Discriminant validity was established through the Fornell-Larcker criterion, cross-loadings, and Heterotrait-Monotrait (HTMT) ratios (). Finally, collinearity among predictors was checked using Variance Inflation Factors (VIF).

3. RESULTS

Respondent Description

This study involved 102 respondents with diverse characteristics. The analysis results show that most respondents were women (56.4%), while men accounted for 43.6%. In terms of age, the respondents were predominantly in the 21–24 and 25–28 age groups, each accounting for 35.9%, while the remaining 28.2% were aged 17–20. The frequency of online shopping in the past month showed that most respondents 46.1% made online purchases 3–5 times, followed by those who shopped 0–2 times (25.5%), 6–10 times (14.7%), and more than 10 times (13.7%). Regarding the social media platforms that most influence purchasing decisions, TikTok ranked first with 35.8%, followed by Instagram at 25.5%, YouTube at 14.2%, X at 14.2%, and Facebook at 10.4%. Most respondents admitted to having purchased products after being influenced by ads or posts on social media, with 31.4% stating they do so frequently, 47.1% occasionally, and 21.6% never. However, there are inconsistencies in the data showing different response options with the same percentage figures, which require further clarification.

The average time respondents spend daily on social media and e-commerce platforms is also quite high, with 28.4% of respondents spending 1–3 hours per day, 25.5% less than 1 hour, 21.6% 4–6 hours, and 24.5% more than 6 hours per day. The products most frequently purchased on impulse are fashion items such as clothing, bags, and shoes, accounting for 42.5%, followed by skincare/cosmetics at 26.4%, food/beverages at 18.9%, and accessories or gadgets at 12.3%. Finally, regarding shopping tendencies while strolling through social media and e-commerce platforms, 37.3% of respondents admitted they are easily tempted to shop, 35.3% said it depends on their mood, and 27.5% stated they are not easily tempted. These findings indicate a significant influence of social media and e-commerce on consumer behavior, particularly among younger people.

Outer Model Testing

Discriminant Validity

Discriminant validity was assessed through three distinct approaches: the Fornell-Larcker criterion, cross-loadings analysis, and the Heterotrait-Monotrait (HTMT) ratio. According to the Fornell-Larcker results, the square root of the Average Variance Extracted (AVE) for Impulse Buying (0.911) and Impulsiveness of Social Networks (0.801) exceeded their inter-construct correlations in the respective rows and columns, satisfying the standards outlined by Hair et al. (2021). Furthermore, cross-loading evaluations revealed that all indicators exhibited maximum factor loadings on their corresponding latent constructs; for instance, PAT_1 loaded highest on Positive Attitude Toward Targeted Advertising (0.871) compared to its lower cross-loadings on Impulse Buying (0.278) and Impulse Buying Tendency (0.440). Lastly, all HTMT ratios remained strictly below the conservative 0.90

threshold, with notable values including Impulse Buying Tendency to Self-Control (0.549) and Positive Attitude Toward Targeted Advertising to Self-Control (0.582). Collectively, these findings confirm robust discriminant validity across all constructs in the measurement model.

Convergen Validity

Following Hair et al. (2021), convergent validity requires outer loadings , AVE values , and CR metrics . The empirical findings verified that all constructs met these criteria. Indicator outer loadings showed high strength, with Impulse Buying Tendency items ranging between 0.891 and 0.927. Construct AVEs surpassed the minimum baseline most notably Impulse Buying (0.829), Self-Control (0.674), and Positive Attitude Toward Targeted Advertising (0.812) demonstrating that constructs explain more than 50% of indicator variance. Furthermore, high Composite Reliability values (e.g., 0.935 for Self-Control) confirm strong internal consistency. Overall, the measurement model exhibits robust convergent validity for subsequent structural analysis.

Composite Reliability

Composite Reliability (CR) was evaluated to assess the internal consistency across all latent constructs. Following Hair et al. (2021), a CR value surpassing 0.70 demonstrates robust reliability, confirming that the construct effectively accounts for its associated measurement indicators. The test results show that all constructs achieved highly satisfactory CR values. The Impulse Buying construct recorded a CR value of 0.907, indicating high reliability in measuring impulsive buying behavior. The Impulse Buying Tendency construct even reached the highest value of 0.963, demonstrating that its indicators are highly consistent in reflecting the tendency toward impulsive buying. On the other hand, the "Impulsiveness of Social Networks" construct obtained a CR value of 0.843, "Positive Attitude Toward Targeted Advertising" a value of 0.928, and "Self-Control" a value of 0.935 all of which are above the recommended minimum threshold. Furthermore, the constructs IBT_ISN, IBT_PAT, and IBT_SC showed a Composite Reliability (CR) value of 1.000, indicating that these constructs result from the combination of two latent variables and are not measured directly through separate indicators. Overall, all constructs met the Composite Reliability threshold, verifying instrument reliability for advanced structural analysis.

Colinearity Statistics (VIF)

The multicollinearity test in this study was conducted by analyzing the Variance Inflation Factor (VIF) values for each indicator. According to Hair et al. (2021), a VIF value below 5 is considered acceptable, as values exceeding this threshold may indicate potential multicollinearity or excessively strong linear relationships among indicators within the same construct. The test results show that all indicators in this study have VIF values that remain within reasonable and acceptable limits. Most indicators had VIF values ranging from 1 to 4.6. Indicators IBT_1 through IBT_5 showed VIF values ranging from 3.504 to 4.691, while other indicators, such as IB_1 and IB_2, had a VIF value of 1.766, indicating the absence of multicollinearity. In addition, indicators from other constructs, such as ISN_3 (1.199), SC_7 (1.738), and PAT_3 (2.323), also show relatively low values. Interaction constructs, such as IBT*ISN, IBT*PAT, and IBT*SC, have VIF values of 1.000, indicating no multicollinearity

issues. It can be concluded that none of the indicators in this research model face multicollinearity issues and can therefore be used for further structural equation modeling.

Inner Model Testing

Coefficient of Determination (*R*2)

Table 1. R-squared

	R Square	R Square Adjusted
Impulse Buying	0.653	0.627

As evidenced by the coefficient of determination metrics, the specified independent variables substantially account for variations in Impulse Buying. The value of 0.653 indicates that 65.3% of the variance in impulsive spending is jointly driven by Impulsiveness of Social Networks, Self-Control, Positive Attitude Toward Targeted Advertising, and Impulse Buying Tendency. Furthermore, the adjusted coefficient of 0.627 mitigates potential model overestimation due to predictor count, reaffirming that the constructs explain 62.7% of the dependent variable's variance. Per Hair et al.'s (2017) classification, this magnitude reflects a strong structural fit, proving that these factors contribute meaningfully to explaining consumer impulsivity.

Effect Size (f^2)

Evaluation of effect sizes () based on Hair et al.'s (2021) benchmarks where 0.02, 0.15, and 0.35 represent small, medium, and large effects, respectively reveals varying degrees of predictor contributions to Impulse Buying. Positive Attitude Toward Targeted Advertising yielded an of 0.251, reflecting a moderate effect and underscoring its meaningful role in explaining unplanned purchases. Similarly, Impulsiveness of Social Networks recorded an value of 0.175, also falling into the moderate category, which confirms that social media-induced impulsivity exerts a noticeable influence on shopping behavior. Conversely, Self-Control demonstrated a small effect size (), implying a minor contribution to the outcome variable. Lastly, the moderating construct (IBT_PAT) exhibited a moderate effect (), indicating that impulse buying tendency substantially influences the strength of impulsive purchasing decisions.

Model Fit

Model fit testing established acceptable data-to-model fit across all evaluated metrics (Hair et al., 2021). The SRMR values for both saturated (0.072) and estimated (0.071) models remained below the 0.08 cutoff. Minimal discrepancies were further indicated by (1.078 saturated; 1.068 estimated) and (0.567 saturated; 0.549 estimated) scores. In addition, Chi-Square metrics (/) and NFI estimates (/) provided supporting evidence of adequate goodness-of-fit, validating the model for subsequent hypothesis testing.

Path Coefficients

Table 2. Path Coefficients

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
IBT_ISN→Impulse Buying	-0.171	-0.176	0.077	0.234	0.026

IBT_PAD→Impulse Buying	0.265	0.256	0.092	2.894	0.024
IBT_SC →Impulse Buying	0.104	0.084	0.086	1.210	0.227
ImpulsiveBuying Tendency → Impulse Buying	0.214	0.215	0.099	2.230	0.026
Impulsiveness of Social Networks → Impulse Buying	0.279	0.260	0.099	2.808	0.005
Positive Attitude Toward Targeting Advertising → Impulse Buying	0.358	0.385	0.126	2.841	0.005
Self Control → Impulse Buying	-0.189	-0.202	0.095	1.995	0.047

Structural model evaluation (hypothesis testing) was conducted by assessing the statistical significance of the path coefficients. Following Hair et al. (2021), a hypothesis is supported at the 5% significance level when the -statistic exceeds the critical threshold of 1.660 alongside a -value below 0.05. Additionally, the nature and direction of the relationship are inferred directly from the original sample () coefficient.

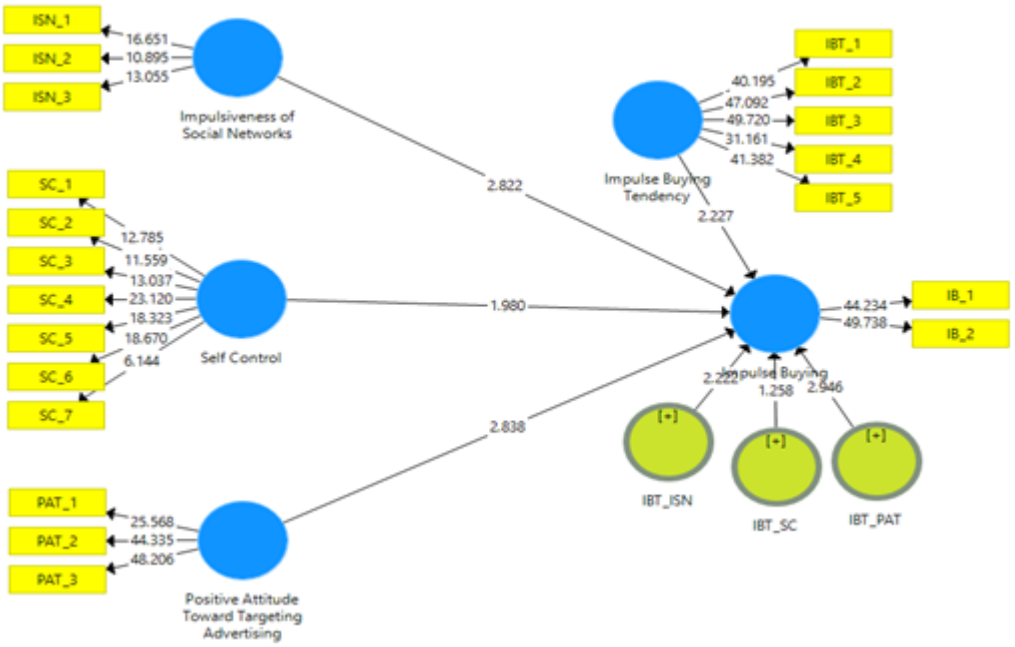


Figure 2. Path Diagram

Hypothesis Testing

Table 3. Hypothesis Testing

	Relationships	Original Sampel	T Statistics	P Values	Result
H1	Impulsiveness of Social Networks has a positive effect on Impulse buying	0.279	2.808	**0.005**	Accepted

H2	Self-control has a negative impact on Impulse buying	-0.189	1.995	**0.047**	Accepted
H3	Positive Attitude Toward Targeted Advertising has a positive effect on Impulse buying	0.358	2.841	**0.005**	Accepted
H4	Impulsive buying tendency has a positive effect on Impulse Buying	0.214	2.230	**0.000**	Accepted
H4a	Impulsive Buying Tendency Moderates the Relationship Between Impulsiveness in Social Networks and Impulse Buying	-0.171	2.234	**0.026**	Rejected
H4b	The tendency toward impulsive buying moderates' self-control and impulse buying	0.265	1.210	**0.227**	Rejected
H4c	The tendency toward impulsive buying moderates the relationship between a positive attitude toward targeted advertising and impulse buying	0.104	2.894	**0.004**	Accepted

Source: Researcher's data analysis, (2025)

The hypothesis testing results detailed in Table 3 indicate that many proposed paths received statistical support. Specifically, Impulsiveness of Social Networks demonstrated a significant positive influence on Impulse Buying (H1:). Likewise, Self-Control exerted a significant negative effect on Impulse Buying (H2:). Both Positive Attitude Toward Targeted Advertising (H3:) and the direct effect of Impulse Buying Tendency (H4:) significantly driven Impulse Buying behavior. Conversely, moderation hypotheses H4a and H4b were not supported. Despite H4a exhibiting a -statistic above 1.96, its negative path coefficient () contradicted the hypothesized direction, while H4b fell short of significance (). However, H4c confirmed that Impulse Buying Tendency significantly moderates the relationship between Positive Attitude Toward Targeted Advertising and Impulse Buying (). Collectively, these empirical findings underscore that while platform impulsivity and advertising perceptions catalyze Gen Z's impulsive spending, moderating baseline tendencies operate selectively across relationships.

4. DISCUSSION (Poppins 12, Bold)

Research on Gen Z behavior shows that many respondents are active social media users who are very familiar with promotional content, digital trends, and online shopping. This group is dominated by individuals who spend a significant amount of time each day browsing platforms such as Instagram, TikTok, and Shopee whether to seek entertainment, follow influencers, or search for products. Digital media serves not merely as a communication channel for consumers, but as a primary benchmark for purchase decisions. Beyond providing product-related information, social platforms actively construct individual lifestyles, project social identity, and signal status. Through fast-paced interactions and visually appealing content, Gen Z responds emotionally to various stimuli such as targeted ads, discounts, and testimonials.

First, the empirical results confirm that social network impulsiveness positively drives impulse buying among Generation Z. This indicates that heightened impulsive urges prompted by social media content increase consumers' likelihood of executing spontaneous purchases. Indicator-level evaluation reveals that item ISN_1 ("I often get inspiration to buy items from social media platforms such as Instagram, TikTok, or Facebook") exhibited the strongest factor loading within this construct. This indicates that exposure to ideas or

inspiration from social media content such as product reviews, fashion trends, or influencer recommendations is the primary trigger for impulsive shopping behavior. Meanwhile, the indicator with the lowest loading factor is ISN_3 (When I see friends or influencers showing off interesting items on social media, I feel the urge to own the same item). Although still influential, the impulsive urge stemming from seeing others' possessions is relatively lower compared to general inspiration from social media content. This may be due to differences in personal preferences or levels of consumer awareness regarding trends displayed by others. It is concluded that the most dominant factor driving impulse buying from social media is exposure to general purchasing ideas and inspiration, not merely the desire to own the same item as others. These results are consistent with previous findings Helmi *et al*. (2023); Nyrhinen *et al*. (2024); Yang *et al*. (2024); Li *et al*. (2025) the impulsiveness of social networks has a positive effect on impulse buying, indicating that the dominance of social media in daily life not only influences how people interact, but also shapes the way they make instant and emotional consumption decisions.

Second, this study also demonstrates that self-control has a negative effect on impulse buying. These results indicate that self-control acts as a form of self-discipline capable of resisting emotional urges or external temptations from the environment, including stimuli originating from social media or online promotions. Based on the indicator analysis, SC_1 ("I can refrain from buying items I don't need") has the highest factor loading value. This suggests that the most dominant aspect of self-control influencing the reduction in impulse buying is the ability to refrain from making purchases that do not align with one's needs. Conversely, indicator SC_7 ("I often buy items immediately without considering other options or comparing prices first") has the lowest value. Although this indicator points to impulsive behavior, its low value suggests that respondents tend to rarely make purchases without considering other options, indicating a certain level of caution when shopping. These results corroborate prior empirical work (Febriandika et al., 2024; Prihatiningrum & Said, 2022; Shams et al., 2021; Wang et al., 2022; Zhao et al., 2022), which highlights that strong self-control buffers against advertising exposure and stress-induced impulsive purchasing.

Third, a favorable attitude toward targeted advertising exerts a significant positive influence on Generation Z's impulse buying. This finding indicates that when consumers positively receive promotional content tailored to their personal preferences and interests, it evokes an affective urge that prompts unplanned purchases. Based on the indicator analysis, PAT_2 ("I have purchased an item after seeing an ad that appeared on social media") has the highest factor loading value. This suggests that the direct experience of purchasing a product after seeing an ad is a tangible manifestation of targeted advertising's influence on impulsive behavior. Meanwhile, the PAT_1 indicator ("I feel that ads appearing on social media align with my interests") had the lowest value, indicating that while consumers perceive ads as relevant, not all ad exposures automatically trigger a purchase; additional factors such as visual appeal, urgency, or promotions influence the final decision. These findings are consistent with Vongurai, (2021); Coban, (2023); Lyu et al. (2023); Ahmadova & Nabiyeva, (2024); Melati et al. (2024) who noted that a positive attitude toward targeted advertising has a positive effect on impulse buying.

Fourth, baseline impulse buying tendency was confirmed to significantly and positively influence impulse buying behavior. These results indicate that an impulsive tendency in shopping is one of the main triggers of spontaneous consumption behavior,

especially in the digital context. Based on the indicator analysis, IBT_2 ("Sometimes I feel like buying something right away just because I saw a review, unboxing video, or someone else's post") has the highest loading factor. This suggests that visual cues and real testimonials from others on social media are the strongest triggers for individuals with a high tendency toward impulsive shopping. Conversely, indicator IBT_4 ("I have purchased items that I had not previously planned to buy") has the lowest value, indicating that while unplanned purchases often occur, the triggers may be stronger when there is direct influence from online content or social interactions. These observations corroborate a broad body of literature (Arroyo & Guaderrama, 2022; Kwon & Ahn, 2021; Lavuri et al., 2023; Li et al., 2022; Parsad et al., 2021; Pereira et al., 2023; Qureshi et al., 2025) demonstrating the direct positive impact of impulse buying tendencies on impulsive transactions. The findings reinforce that as consumer buying tendencies become more pronounced, affective platform stimuli increasingly catalyze unconsidered online shopping decisions.

The results of the first moderation test indicate that Impulse Buying Tendency does not moderate the relationship between Impulsiveness of Social Networks and Impulse Buying in the direction predicted by the hypothesis. This means that an individual's level of impulse buying tendency neither strengthens nor weakens the influence of impulsive stimuli from social media on spontaneous purchases. This suggests that stimuli from social media have a consistent power to trigger impulse buying, regardless of whether consumers have high or low levels of impulsivity. Based on the analysis of the "Impulsiveness of Social Networks" indicators, the highest-scoring indicator was ISN_1 ("I often get inspired to buy items from social media platforms like Instagram, TikTok, or Facebook"). This finding suggests that inspiration from social media serves as the primary trigger for impulsive buying across all consumer groups, meaning that differences in levels of impulse buying tendency do not exert an additional influence. Meanwhile, the lowest indicator was ISN_3 ("When I see friends or influencers showing off attractive items on social media, I feel the urge to own the same item"), indicating that the drive stemming from social comparison is relatively smaller and does not vary sufficiently across individuals to produce a moderating effect. These results align with studies conducted by Iyer *et al.* (2020) and Chen *et al*. (2022), which noted that the relationship between social media impulsivity and impulsive buying is not significantly moderated by impulsive buying tendencies, and concluded that the relationship between impulsive buying tendencies and environmental cues is not always consistently moderating but rather depends on the context and the type of cue provided.

Regarding the second moderating pathway, the empirical results indicate that Impulse Buying Tendency fails to exert a significant moderating effect on the link between Self-Control and Impulse Buying. In practice, this implies that self-control deters impulsive purchasing behavior at comparable levels across different consumer segments. These findings demonstrate that the protective capacity of self-regulation persists stably regardless of an individual's innate propensity for spontaneous spending. Based on the analysis of the self-control variable indicators, the highest indicator was SC_1 ("I can refrain from buying items I don't need"). This value indicates that the ability to refrain from making purchases that do not meet one's needs is a consistent self-control factor across all respondent groups. Meanwhile, the lowest indicator was SC_7 ("I often buy items immediately without considering other options or comparing prices first"). This low value suggests that buying

without consideration is indeed rare, both among individuals with high and low impulse buying tendencies, so a moderating effect did not emerge. This result aligns with findings by Duan (2025), who reported that impulse buying tendency fails to moderate the relationship between self-control and impulse buying. Put simply, self-control deficits directly drive impulsive purchasing decisions, irrespective of an individual's baseline impulsivity level.

The results of the third moderation test show that Impulse Buying Tendency significantly moderates the relationship between Positive Attitude Toward Targeted Advertising and Impulse Buying. This means that the more positive consumers' attitudes are toward targeted ads on social media, the more likely they are to make spontaneous purchases. These results indicate that acceptance of ads relevant to personal interests, needs, or preferences can trigger an emotional urge to buy without planning. Based on the indicator analysis, the highest-scoring indicator was PAT_2 ("I have purchased an item after seeing an ad appear on social media"). This value demonstrates that the direct experience of making a purchase after seeing an ad serves as concrete evidence of the power of targeted advertising in triggering impulse purchases. Meanwhile, the lowest indicator was PAT_1 ("I feel that ads appearing on social media align with my interests"). This suggests that while consumers may perceive ads as relevant, such relevance does not necessarily lead directly to a purchase without additional motivating factors, such as promotions or social recommendations. These findings align with Fan & Yang (2025) who demonstrated that Impulsive Buying Tendency moderates the relationship between Positive Attitude Toward Targeted Advertising and Impulse Buying, confirming that ads are more effective at triggering impulse buying when targeted at individuals with a high Impulsive Buying Tendency, as they tend to respond more quickly to visual and emotional messages tailored to their personal preferences.

5. CONCLUSION

Empirical evidence from Generation Z in Greater Jakarta confirms that social network impulsiveness, self-control, and positive attitudes toward targeted advertising significantly shape impulsive buying behavior. These outcomes reinforce the joint influence of psychological traits and digital environments on spontaneous consumption among digitally engaged youth. Specifically, social network impulsiveness positively drives impulse purchases, indicating that persuasive, viral, and visually rich content on platforms such as TikTok and Instagram fosters social pressure and emotional urges that accelerate unplanned spending. Conversely, self-control exhibits a significant inverse relationship with impulsive buying, highlighting its function as a vital psychological buffer against aggressive digital marketing. Additionally, positive attitudes toward targeted advertising promote impulsive purchases, as consumers' favorable responses to personalized and relevant ads elicit positive emotions and brand engagement. Furthermore, impulse buying tendency directly heightens spontaneous purchasing, though its moderating influence is selective significantly amplifying only the impact of targeted advertising attitudes while remaining non-significant across other relationships. Ultimately, impulse buying in the digital age stems from a interplay between compelling social media content, favorable ad perceptions, underlying personal impulsivity, and diminished self-regulation. However, not all these relationships are strengthened by the moderating variables. This means that impulsivity as a personal trait does not necessarily amplify all types of digital or psychological influences on spontaneous purchasing decisions.

LIMITATIONS AND RECOMMENDATIONS

This research is subject to several limitations that warrant consideration in future studies. First, the sample was restricted to 102 Generation Z respondents within the Greater Jakarta region, which may constrain the generalizability of the findings to the broader Gen Z demographic across Indonesia. Constraints related to time, available resources, and participant access primarily dictated this sampling scope. Second, the quantitative approach using an online survey method opens the possibility of respondent dishonesty, such as some respondents filling out the survey carelessly or inconsistently, which could affect the accuracy of the data. Third, this research model focuses only on three main variables, without considering other external factors such as price, promotions, or psychological states during shopping, even though these factors may play a significant role in driving impulse buying behavior. Fourth, although moderation analysis was employed, this study has not explored other factors that could strengthen or weaken the relationships between variables, such as mood, time spent on social media, or respondents' stress levels. Fifth, situational variables such as the duration of social media use, ad exposure time, and shopping intensity under emotional conditions have not been included as additional factors, even though these aspects have great potential to explain the development of impulse buying among Gen Z more comprehensively.

Considering these identified limitations, several recommendations are outlined to guide future research endeavors. First, to have a broader scope and provide a comprehensive picture of Gen Z, future researchers are advised to expand the respondent pool beyond the Greater Jakarta area and increase the sample size. By involving Gen Z from various regions, the results obtained will better reflect the diversity of characteristics and impulsive shopping behaviors on a national scale. Second, to minimize the risk of data inaccuracies resulting from inconsistent completion of online questionnaires, future researchers may consider using mixed methods approaches, such as interviews or observations, to gain a deeper understanding of respondents' experiences and emotions during the shopping process. Third, it is recommended to enrich the research model by incorporating external variables such as price, promotions, social recommendations, or even time pressure while shopping, as these factors often serve as real triggers for impulsive decisions, particularly in the digital world. Fourth, given the importance of psychological context in consumer behavior, variables such as mood, the time of day spent on social media, and stress levels should be added as moderator or intervening variables to gain a deeper understanding of the dynamics of the relationships among variables. Fifth, a final suggestion is to begin incorporating situational variables into the model framework, such as the duration of ad exposure, shopping intensity during periods of heightened emotion, or nighttime scrolling habits. These factors reflect Gen Z's highly distinctive digital habits and can provide a more realistic picture of how impulse buying takes shape in everyday life.

MANAGERIAL IMPLICATIONS

From a managerial perspective, these findings urge e-commerce firms and MSMEs to adopt ethical digital marketing strategies. Rather than exploiting psychological vulnerabilities to induce impulsivity, marketers should use targeted advertising to provide genuine informational value and personalized relevance. Furthermore, platforms should integrate

'cooling-off' features or mindful spending reminders, acknowledging that while self-control buffers against impulse buying, it is less effective when consumers are exposed to highly personalized, emotionally resonant ad cues. Consumers need to be more vigilant regarding promotional content that is viral, emotional, or uses urgency tactics (such as limited stock and countdowns). It is recommended that consumers not make a purchase immediately upon being exposed to such advertisements, but rather take a moment to consider their needs, product quality, and alignment with their personal budget.

Second, the empirical evidence demonstrates that impulse buying tendency fails to moderate the relationship between self-control and impulsive shopping behavior. This outcome underscores that individual self-regulation serves as a vital deterrent against unplanned purchases, even among consumers exhibiting a pronounced baseline propensity for impulse buying. This indicates that self-control is a skill that can be cultivated and utilized to avoid detrimental purchasing decisions. Consumers can implement strategies such as making a shopping list before opening a shopping app, setting a monthly budget limit, using the "save for later" feature, or utilizing spending reminders on their devices. Additionally, honing financial awareness through financial literacy such as by monitoring monthly expenses can help Generation Z develop wiser and more sustainable consumption habits.

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CONFLICT OF INTEREST

"The authors declare no conflict of interest."

AUTHOR CONTRIBUTIONS

The authors all contributed to this study, from conceptualization, methodology, data collection, and analysis to the initial draft, revision, and editing, and worked on it collaboratively.

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