

THE EFFECT OF SOCIAL COMMERCE AND THE TIKTOK SHOP MARKETPLACE EXPERIENCE ON GENERATION Z'S IMPULSE BUYING, MODERATED BY SELF-CONTROL

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Article Info	Abstract
<i>Article history:</i> <i>Received: 16 December 2025;</i> <i>Accepted: 22 December 2025;</i> <i>Published: 29 December 2025</i> <i>Keyword:</i> <i>Social Commerce, TikTok Shop,</i> <i>Marketplace Experience, Impulse Buying,</i> <i>Generation Z.</i>	The rapid penetration of digital transformation has fundamentally reshaped global consumer behavior, particularly through the evolution of Web 2.0 and the emergence of social commerce. This research explores the "shoppertainment" phenomenon on TikTok Shop, where the boundaries between social interaction and commercial activity have become increasingly blurred. The study aims to analyze the influence of Social Commerce and Marketplace Experience on the Impulse Buying behavior of Generation Z in Indonesia, with Self-Control serving as a moderating variable. As digital natives, Generation Z is highly susceptible to the algorithmic architecture of platforms designed to exploit psychological vulnerabilities through infinite scroll mechanisms and real-time personalized content. These features often induce a "flow state," minimizing the "pain of paying" and leading to unplanned purchases. Despite the convenience offered, this digital dynamic has substantial negative implications, such as post-purchase regret and cognitive dissonance, with surveys indicating that 64% of buyers experience regret due to financial waste. This study employs a quantitative methodology to examine whether internal psychological mechanisms, specifically self-control, can act as a relevant defense against aggressive external marketing stimuli. The findings reveal that while Social Commerce and Marketplace Experience significantly drive impulsive purchasing, Self-Control fails to effectively moderate these relationships. This suggests that the intensity of external stimuli and the frictionless shopping design of TikTok Shop tend to override individual self-regulation. This research provides crucial insights for the digital business landscape, emphasizing the urgency for Gen Z consumers to develop higher digital literacy and for platforms to consider the long-term psychological impact of their algorithmic designs.

1. INTRODUCTION

The evolution of Web 2.0 has given rise to a new ecosystem where the boundaries between social interaction and commercial activity have become blurred, giving rise to a phenomenon called social commerce. Advances in information and communication technology have been one of the main drivers of changes in consumer shopping

behavior towards the digital realm (Iranmanesh et al., 2022). The COVID-19 pandemic has significantly accelerated the adoption for the integration of social media and marketplace platforms, that has created an environment where impulse buying is driven by social influence, recommendations from close friends, and persuasive content from influencers. This situation requires a deep understanding of the social dynamics that influence consumer behavior in the digital age.

Indonesia's digital commerce landscape has experienced a profound transformation in recent years. This shift is evidenced by a 2025 survey from the Indonesian Internet Service Providers Association (APJII), which highlights consistent online shopping habits: 30.34% of respondents transact several times a month, 14.78% shop weekly, and 2.41% make purchases almost daily. These findings are based on a comprehensive study of 8,700 respondents aged 13 and older across 38 provinces, conducted between April and July 2025 using multistage random sampling and face-to-face interviews.

From the perspective of consumer behavior and user experience, the integration of interactive innovations is a major catalyst in driving transactions (Trivika Tambing et al., 2023). A study conducted by (Dahniar et al., 2023), confirms that the use of interactive features on TikTok Shop has a significant positive impact on consumer impulse buying. However, aggressive promotional stimuli, such as discounts and influencer marketing, have entrenched impulsive buying habits among young consumers. This behavior is further intensified by a rising culture of materialism, where consumption serves as a mechanism for self-validation. Despite its convenience, this dynamic generates significant psychological costs, frequently resulting in cognitive dissonance. A survey by Kumparan indicates that 64% of buyers experience post-purchase regret, driven by financial waste, product dissatisfaction, and the accumulation of unneeded items.

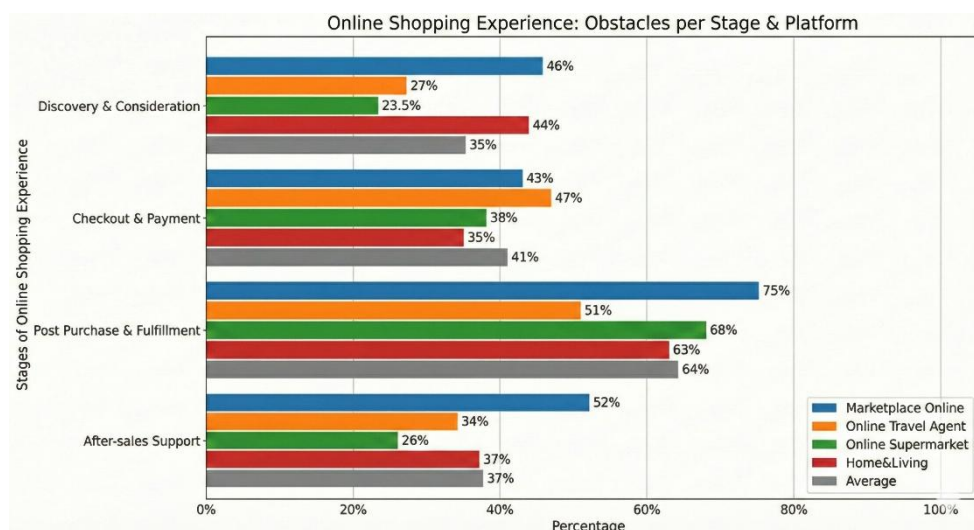


Figure 1. Online Shopping Experience Based On 4 Stages of Shopping
Source: Authors (2025)

Macroeconomically, social commerce acts as a double-edged sword: it fosters economic inclusion by simplifying discovery, yet introduces significant risks. Generation Z, as the primary adopters, faces an ecosystem where social interaction blurs with commercial features like live shopping and "Pay Later" options. Consequently, they become the specific target of algorithmic architectures designed to exploit psychological vulnerabilities.

As a result, Gen Z has become the group most vulnerable to falling into the dark side of digital consumption. This is in line with the empirical findings of (Saragih et al., 2024), which confirm that the use of social commerce features such as TikTok Shop has a significant influence in shaping irrational consumptive lifestyles among Generation Z. Therefore, the urgency to examine the role of Self-Control as an individual's capacity to regulate impulsive urges amid the onslaught of algorithms becomes crucial (Rahmawati & Andhaniwati, 2023). However, this study questions whether that assumption holds true within the highly immersive, algorithm-driven environment of TikTok Shop. The platform's unique combination of infinite scrolling, personalized content, and instant checkout mechanisms may create a "hyper-nudge" environment that overpowers standard self-regulation capacities. (S Sipur & Amadi, 2025).

Therefore, this research goes beyond merely describing the phenomenon of impulse buying. Its primary contribution is to critically test the effectiveness of Self-Control as a moderating variable in a social commerce ecosystem designed to erode rational decision-making. Specifically, this study aims to analyze the influence of Social Commerce and Marketplace Experience on the Impulse Buying behavior of Generation Z, and to determine if Self-Control remains a relevant defense mechanism in the face of modern "Shoppertainment" tactics.

2. LITERATURE REVIEW

This chapter constructs a theoretical framework grounded in the Stimulus-Organism-Response (S-O-R) paradigm to explain the dynamics of impulse buying on TikTok Shop. Rather than defining concepts in isolation, this review focuses on the interrelationships between social stimuli, platform experience, and internal self-regulation mechanisms.

2.1 Theoretical and Conceptual Background

The Stimulus-Organism-Response (S-O-R) model serves as the grand theory for this study. Originally proposed by Mehrabian and Russell (1974), it posits that environmental cues (Stimuli) trigger internal cognitive and affective states (Organism), which subsequently drive behavioral outcomes (Response). In the context of TikTok Shop, this model is adapted as follows:

- a. Stimulus (S): Represents the external marketing environment, specifically Social Commerce features (interaction, eWOM) and Marketplace Experience (visuals, ease of use).
- b. Organism (O): Represents the user's internal psychological state. This includes the affective "Flow State" induced by the platform and the cognitive mechanism of Self-Control.
- c. Response (R): The resulting behavior, manifested here as Impulse Buying—a sudden, hedonically complex purchase behavior that lacks prior planning.

2.2 Social Commerce and Marketplace Experience as Drivers of Impulse Buying

In the digital era, consumer behavior is increasingly driven by "Shoppertainment," where commerce and entertainment converge. Social Commerce on TikTok acts as a powerful external stimulus by leveraging social validation. Features such as real-time host interactions, "Yellow Basket" integration, and community-driven trends (e.g., *#TikTokMadeMeBuyIt*) create a sense of urgency and trust that bypasses rational decision-making (R. Awaluddin et al., 2023).

Simultaneously, Marketplace Experience reinforces this effect through "frictionless" design. Research by Dahniar et al. (2023) and Trivika Tambing et al. (2023) highlights that interactive features and intuitive interfaces significantly enhance perceived enjoyment. (Budiono & Agustini, 2024) When users navigate TikTok Shop's seamless ecosystem, they often enter a "Flow State", a psychological condition of total immersion where time distortion occurs and self-consciousness disappears. This state reduces the cognitive "pain of paying," thereby facilitating impulsive responses to marketing stimuli.

2.3 The Moderating Role of Self-Control

While external stimuli (Social Commerce and Marketplace Experience) drive impulsive urges, Self-Control acts as the internal regulatory filter. Defined as the capacity to override prepotent responses to align with long-term goals (Averill, 1973), self-control theoretically enables consumers to resist immediate gratification.

Previous studies suggest that high self-control can buffer against "social poison" or aggressive eWOM by enabling individuals to evaluate future consequences over present desires. However, a critical tension exists in the modern digital landscape: the hyper-engaging nature of TikTok's algorithm may deplete or overwhelm these self-regulatory resources. Therefore, this study posits that while self-control *should* theoretically weaken the link between marketing stimuli and impulse buying, the immersive power of the platform may render this moderator less effective than in traditional retail contexts (Averill, 1973).

2.4 Hypotheses Development

Based on the S-O-R framework and the interaction between external platform stimuli and internal regulation, the following hypotheses are proposed:

- H1: Social Commerce has a positive and significant effect on Impulse Buying.
H2: Marketplace Experience has a positive and significant effect on Impulse Buying.
H3: Self-Control moderates (weakens) the influence of Social Commerce on Impulse Buying.
H4: Self-Control moderates (weakens) the influence of Marketplace Experience on Impulse Buying.

3. RESEARCH METHODOLOGY

3.1 Research Design

This study employs a quantitative approach with a causal associative design to examine the relationships between variables. Primary data was collected via an online survey distributed to Generation Z students (aged 17-27) at Jakarta State University. This demographic was purposively selected because they represent the primary user base of TikTok Shop and are highly exposed to algorithmic social commerce stimuli, making them the most relevant subjects for observing impulsive buying patterns. The sampling technique utilized Non-Probability Sampling with a Purposive Sampling approach. To ensuring data relevance, respondents were restricted to active TikTok users who had completed at least one transaction on TikTok Shop in the last three months. The final sample size was established at 105 respondents, which satisfies the minimum requirements for multivariate analysis in PLS-SEM.

3.2 Data Analysis Techniques

As explained earlier, this study uses a complex research model involving independent, dependent, and moderating variables. Therefore, the data analysis technique used is variance-based Structural Equation Modeling (SEM) or Partial Least Squares (PLS) with the help of SmartPLS 4.0 software.

The SEM-PLS method was chosen for several compelling reasons: (1) It is capable of analyzing complex path models with many variables and indicators simultaneously, (2) It does not require strict assumptions of data normality as in covariance-based SEM (CB-SEM) or regression in SPSS, (3) It is well-suited for predictive and theory-building research, and (4) It has reliable capabilities in handling data with relatively small to large sample sizes (Hair et al., 2019). The use of PLS-SEM has become the de facto standard in current social commerce and digital consumer behavior research.

Data analysis in PLS-SEM is conducted in two main stages:

3.2.1 Measurement Model Evaluation (Outer Model)

This stage aims to test the validity and reliability of the research instrument (questionnaire) that links indicators to their latent variables.

a) Convergent Validity Test

1. Loading Factor: The outer loading value of each indicator must be > 0.70 . However, for exploratory research, a loading value of $0.50\text{--}0.60$ is still acceptable as long as it does not undermine construct validity (Hair et al., 2019).
2. Average Variance Extracted (AVE): To establish convergent validity, the Average Variance Extracted (AVE) for each latent variable should exceed 0.50 . Passing this threshold demonstrates that the construct accounts for the majority (more than half) of the variance in its observed indicators.

b) Discriminant Validity test

1. Fornell-Larcker Criterion: The Fornell-Larcker Criterion requires that the square root of a variable's AVE exceeds the correlation coefficients between that variable and all other latent variables, ensuring the construct is distinct.
2. Heterotrait-Monotrait Ratio (HTMT): The HTMT ratio value must be < 0.90 (or more strictly < 0.85) to ensure that each variable is empirically distinct from one another.

c) Construct Reliability Test

1. Composite Reliability (CR) and Cronbach's Alpha (CA): Both Composite Reliability (CR) and Cronbach's Alpha (CA) are required to surpass 0.70 to confirm that the indicators are reliable. A slightly lower threshold of 0.60 to 0.70 is permissible specifically for exploratory studies.

3.2.2 Structural Model Evaluation (Inner Model) and Hypothesis Testing

After the measurement model has been declared valid and reliable, the next step is to evaluate the structural model to test the research hypothesis.

a) Coefficient of Determination (R-Square / R^2)

The Coefficient of Determination (R^2) is used to assess the amount of variance in the dependent variable (Y) that is explained by the independent variables (X_1 , X_2) and the moderator (Z). In terms of predictive accuracy, R^2 values of 0.75 , 0.50 , and 0.25 are classified as strong, moderate, and weak, respectively.

b) Predictive Relevance (Q-Square / Q^2)

Using the blindfolding procedure to measure the predictive ability of the model. A Q^2 value > 0 indicates that the model has predictive relevance.

c) Hypothesis Testing (Path Coefficients & Bootstrapping)

Hypothesis testing is conducted by examining the path coefficient values and their significance through the bootstrapping procedure (e.g., with 5,000 subsamples).

1. Direct Effects (H1, H2): Judging from the T-statistic value (> 1.96 for two-tailed at a significance level of 5%) or P-value (< 0.05) in the direct influence pathway.
2. Moderating Effects (H3, H4): Moderating analysis was conducted using the Two-Stage Approach in SmartPLS. The moderating effect is considered significant if the T-statistic value on the interaction path (e.g., $X_1 \times Z \rightarrow Y$) > 1.96 or P-value < 0.05 . The nature of moderation (strengthening/weakening) is determined by the positive/negative sign on the interaction coefficient.

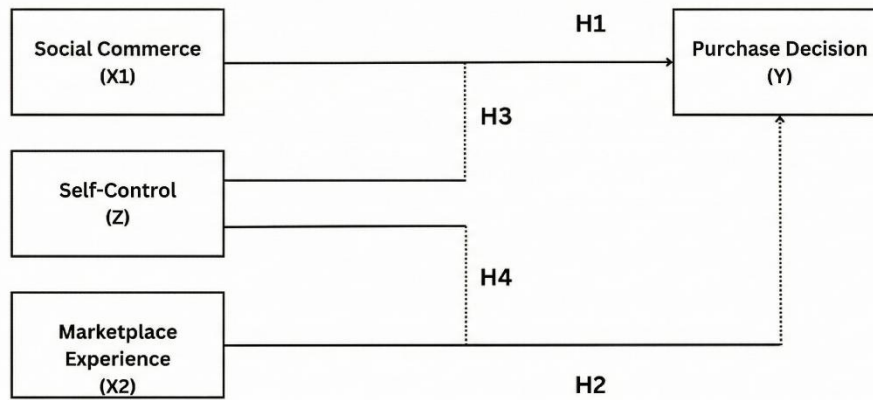


Figure 2. Conceptual Model of the Study
Source: Authors (2025)

4. RESULT AND DISCUSSION

4.1 Overview of Research Object: TikTok Shop as a Shoppertainment Ecosystem

TikTok Shop is an innovative social commerce feature that is fully integrated into the TikTok app ecosystem. Its main advantage lies in the implementation of a closed-loop system, which allows users to carry out the entire transaction process—from finding products to selecting and making payments—without having to switch to another app. Unlike conventional e-commerce platforms, which tend to be passive and catalog-based, TikTok Shop embraces the philosophy of “Shoppertainment.” This concept elegantly combines visual entertainment with shopping activities, so that consumer purchasing decisions are no longer driven solely by functional needs, but also by stimulating and engaging entertainment content.

The relevance of TikTok Shop in this study is evident through its features, which systematically support the variables of Social Commerce and Marketplace Experience. First, the integration of short video content on the For You Page (FYP) and Live Shopping sessions creates an immersive visual experience for users. This experience is capable of triggering strong emotional stimulation, which is at the core of the Marketplace Experience. Second, this platform provides a space for real-time two-way interaction through comment columns and video-based product reviews. The presence of this social aspect plays a dual role in building trust and creating urgency to buy in the minds of consumers. In addition, technical features such as the “Yellow Basket” mechanism have proven to be effective in minimizing cognitive barriers to shopping. By simplifying the purchasing process, this feature shortens the decision-making process and acts as a catalyst for impulse buying. As one of the platforms with the fastest Gross Merchandise Value (GMV) growth in Southeast Asia, particularly Indonesia, TikTok Shop provides a highly conducive ecosystem for researching the dynamics between marketing stimuli and consumer psychological responses.

4.2 Respondent Profile and Characteristics: Generation Z as Research Subjects

This study focuses on Generation Z, specifically young adults born between 1997 and 2012, or aged 17 to 27 at the time of the study. Respondents were specifically selected from among active TikTok users who had experience transacting on TikTok Shop. Generation Z was chosen as the subject of this study based on their psychological characteristics and consumption behavior, which are highly relevant to the variables of impulse buying and self-control.

As a group of digital natives, Generation Z is the first generation to grow up with widespread internet penetration. Their dependence on social media is accompanied by Fear of Missing Out (FOMO), a psychological tendency that makes them more vulnerable to exposure and influence from digital marketing stimuli than previous generations. Additionally, Generation Z has a strong tendency toward instant gratification. This desire for speed and convenience aligns with the instant transaction mechanism on TikTok Shop, but often conflicts with their self-control. In many cases, the hedonistic urge to immediately possess desired items tends to dominate over logical considerations regarding financial conditions.

Furthermore, their purchasing decisions are greatly influenced by external factors such as User Generated Content (UGC), recommendations from influencers, and trends that are currently viral in the TikTok community. This makes them ideal subjects for measuring the extent to which Social Commerce can drive unplanned purchasing decisions. Demographically, the respondents in this study represent a background dominated by students and young employees (early jobbers). This group is in a transitional phase where they are beginning to gain financial independence, but psychologically are still in the process of developing stable financial maturity.

4.3 Respondent Characteristic Results

Attached below are the analysis results, ranging from respondent criteria to the results of data analysis from PLS-SEM.

4.3.1 Respondent Characteristics Based on Age

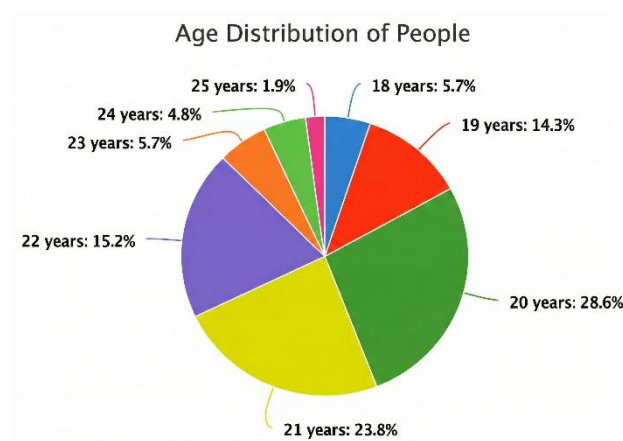


Figure 3. Age Distribution Chart

Source: Authors (2025)

Based on the Figure 3, the majority of respondents in this study were aged 18–25 years, totaling 105 people. This age group generally consists of final-year students or fresh graduates. The dominance of this age group is relevant to the context of the study, because at this stage individuals tend to have high digital literacy and massive social media usage, but often have emotional stability and financial self-control that are still in the developmental stage (emerging adulthood), making them prone to impulsive behavior.

4.3.2 Respondent Characteristics Based on Gender

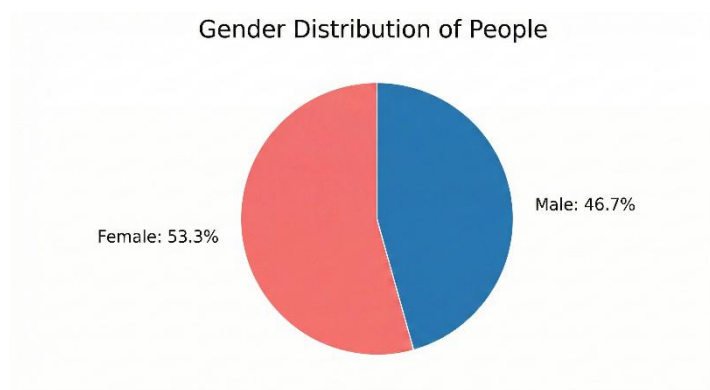


Figure 4. Age Distribution Chart

Source: Authors (2025)

The data above shows that respondents were predominantly female, with 56 respondents or 53.3%. This finding is in line with the characteristics of the TikTok Shop platform, which offers many fashion, beauty, and lifestyle product categories that are visually appealing to female consumers. The dominance of female respondents also supports the relevance of the Impulse Buying variable, where some marketing literature states that female consumers tend to have a higher hedonistic shopping orientation than men.

4.3.3 Respondent Characteristics Based on Shopping Frequency

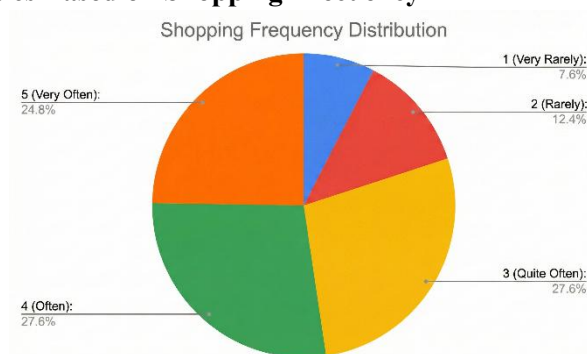


Figure 5. Age Distribution Chart

Source: Authors (2025)

Based on the chart above, the majority of respondents made purchases with a shopping frequency of 3–4 (quite often and often) in the last three months, with a percentage of 27.6% each, or a combined total of 55.2%. This high shopping frequency indicates that respondents are already familiar with the social commerce ecosystem and have been repeatedly exposed to marketing stimuli. This strengthens the validity of the data because respondents are considered to have sufficient experience to assess the variables of Social Commerce and Marketplace Experience.

4.3.4 Respondent Characteristics Based on Job Type

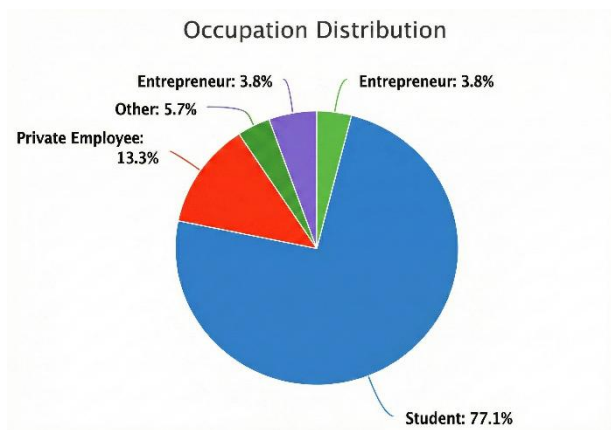


Figure 6. Age Distribution Chart

Source: Authors (2025)

Based on the chart above, the majority of respondents in this study were students, namely 81 people with a percentage of 77.1%. The dominance of this student group is relevant to the demographic profile of Gen Z. This finding has interesting implications for the Self-Control variable. As a group that mostly does not have a steady income (relying on pocket money), students tend to have stricter budget constraints. However, they often have more free time to access social media than working people, resulting in more intense exposure to social commerce. This creates a unique dynamic where impulsive buying often clashes with financial limitations, requiring more complex self-control mechanisms.

Meanwhile, respondents who are already working (Employees and Entrepreneurs) number 18 people or around 17.1%. This group is assumed to have stronger and more independent purchasing power, which allows for easier execution of impulse purchases without the need for parental approval.

4.4 Descriptive Statistical Analysis

Descriptive statistical analysis is utilized to provide an overview of the respondents' responses regarding the variables under study. These descriptive data are measured based on the mean scores of the responses, obtained using a 5-point Likert scale ranging from 1 to 5.

Table 1. 5-point Likert Scale Chart

Rating	Information
1	Strongly Disagree
2	Disagree
3	Netral
4	Agree
5	Strongly Agree

Source: Sugiyono (2019)

4.4.1 Social Commerce Variable (X1)

Table 2. Social Commerce Variable (X1)

Code	Statement	1	2	3	4	5	Total	Mean
X1.1	I frequently interact (e.g., asking questions, leaving comments) with the seller or host during live shopping sessions.	11 (10.5%)	14 (13.3%)	26 (24.8%)	30 (28.6%)	24 (22.9%)	357	3.4
X1.2	I frequently read the comment section from other buyers while watching live shopping	4 (3.8%)	13 (12.4%)	25 (23.8%)	35 (33.3%)	28 (26.7%)	385	3.67
X1.5	I feel a sense of belonging to a community when purchasing products that are trending	12 (11.4%)	23 (21.9%)	38 (36.2%)	19 (18.1%)	13 (12.4%)	313	2.98

	on TikTok (the #TikTokMadeMeBuyIt phenomenon).							
X1.6	The product information provided by the host during live shopping sessions is highly clear and assists me in my purchasing decisions	1 (1.0%)	3 (2.9%)	20 (19.0%)	39 (37.1%)	42 (40.0%)	433	4.12
TOTAL MEAN								3.54

Source: Authors (2025)

Table above shows a Grand Mean of 3.54 (Moderate) for Social Commerce, indicating Gen Z's growing reliance on social features for shopping. The highest indicator, X1.6 (4.12), identifies honest host reviews during live sessions as the primary trust-building factor. Conversely, the community aspect (X1.5) scored lowest, suggesting that users prioritize product information over emotional social bonds.

4.4.2 Marketplace Experience (X2)

Table 3. Marketplace Experience (X2)

Code	Statement	1	2	3	4	5	Total	Mean
X2.2	I do not experience any difficulty in locating desired products on TikTok Shop	2 (1.9%)	3 (2.9%)	22 (21.0%)	43 (41.0%)	35 (33.3%)	421	4.01
X2.3	The live shopping features enhance my shopping experience, making it more engaging and interactive	0 (0.0%)	9 (8.6%)	24 (22.9%)	36 (34.3%)	36 (34.3%)	414	3.94
X2.4	I find the visual interface and layout of TikTok Shop (including live shopping) to be aesthetically pleasing	6 (5.7%)	6 (5.7%)	26 (24.8%)	29 (27.6%)	38 (36.2%)	402	3.83
TOTAL MEAN								3.92

Source: Authors (2025)

Table above shows a high Grand Mean of 3.92, reflecting a very positive shopping experience. Indicator X2.2 (4.01) confirms that effortless product discovery generates enjoyment for Gen Z, triggering impulsive responses. This suggests that for these users, shopping has shifted from a functional necessity to a recreational activity, or hedonic browsing

4.4.3 Self Control (Z)

Table 4. Self Control (Z)

Code	Statement	1	2	3	4	5	Total	Mean
Z1	I am disciplined with my shopping budget	8 (7.6%)	13 (12.4%)	24 (22.9%)	39 (37.1%)	21 (20.0%)	367	3.5
Z3	I value saving for future needs more than purchasing items for instant gratification	1 (1.0%)	13 (12.4%)	32 (30.5%)	36 (34.3%)	23 (21.9%)	382	3.64
Z5	I always thoroughly evaluate my needs versus my wants before making a purchase	2 (1.9%)	15 (14.3%)	23 (21.9%)	38 (36.2%)	27 (25.7%)	388	3.7
Z6	I am not easily swayed by FOMO (Fear of Missing Out) when it comes to purchasing trending products	8 (7.6%)	13 (12.4%)	25 (23.8%)	31 (29.5%)	28 (26.7%)	373	3.55
TOTAL MEAN								3.59

Source: Authors (2025)

Overall, the Self-Control variable recorded a Moderate Grand Mean of 3.59, highlighting a gap among Gen Z respondents. While cognitive awareness of financial conditions is present (Z1: 3.5), practical resistance to trends and promotions (Z5 & Z6) is notably lower. This suggests a cognitive-behavioral discrepancy: they understand the importance of saving but struggle to withstand TikTok Shop's aggressive marketing stimuli.

4.4.4 Impulse Buying (Y)

Table 5. Impulse Buying (Y)

Code	Statement	1	2	3	4	5	Total	Mean
Y1	I often make spontaneous purchase decisions and proceed to immediate checkout during live shopping sessions	13 (12.4%)	23 (21.9%)	31 (29.5%)	25 (23.8%)	13 (12.4%)	317	3.02
Y2	Stimuli from live shopping, such as discounts, limited availability, and host persuasion, significantly drive my urge to make an immediate purchase	8 (7.6%)	18 (17.1%)	32 (30.5%)	25 (23.8%)	22 (21.0%)	350	3.33
Y3	I often make unplanned purchases on TikTok Shop for items that were not part of my original intention	21 (20.0%)	20 (19.0%)	25 (23.8%)	23 (21.9%)	16 (15.2%)	308	2.93
Y6	In general, I often engage in purchasing activities on TikTok Shop	8 (7.6%)	13 (12.4%)	29 (27.6%)	29 (27.6%)	26 (24.8%)	367	3.5
TOTAL MEAN								3.19

Source: Authors (2025)

The Impulse Buying variable recorded a Grand Mean of 3.19 (High category), confirming that impulsive purchasing is a significant phenomenon among the research subjects. The highest score was found in indicator Y2 (3.33), revealing that respondents tend to make purchases driven by visual exposure that triggers immediate desire, rather than functional urgency.

4.5 Measurement Model Evaluation (Outer Model)

To ensure the accuracy of the findings, the research instrument was evaluated for validity and reliability. This process confirms that the questionnaire items consistently measure the intended variables and that the collected data is robust enough for hypothesis testing.

4.5.1 Convergent Validity test

A. Outer Loadings: Following established criteria, indicators should ideally exceed 0.70. However, loadings between 0.50 and 0.60 are retained due to the exploratory nature of this study on a new platform (TikTok Shop), provided that the Average Variance Extracted (AVE) thresholds are met.

Table 6. Outer Loadings

Variables	Indicators	Outer Loading	Cut-off Value	Information
Social Commerce (X1)	X1.1	0.898	> 0,70	VALID
	X,1,2	0.839	> 0,70	VALID
	X1.5	0.822	> 0,70	VALID
	X1.6	0.772	> 0,70	VALID
Marketplace Experience (X2)	X2.2	0.778	> 0,70	VALID
	X2.3	0.844	> 0,70	VALID
	X2.4	0.828	> 0,70	VALID
Impulse Buying (Y)	Y1	0.920	> 0,70	VALID
	Y2	0.912	> 0,70	VALID
	Y3	0.857	> 0,70	VALID

	Y6	0.822	> 0,70	VALID
Self Control (Z)	Z1	0.927	> 0,70	VALID
	Z3	0.880	> 0,70	VALID
	Z5	0.903	> 0,70	VALID
	Z6	0.907	> 0,70	VALID

Source: Output SmartPLS 4.0 Algorithm, 2025

Based on the table above, the majority of indicators have loading factor values greater than 0.70. This demonstrates that in the outer loading test, the data is considered valid and suitable for further analysis.

B. Average Variance Extracted (AVE): The AVE value is used to ensure that each latent variable explains, on average, more than half of its indicators' variance (AVE > 0.50).

Table 7. Average Variance Extracted (AVE)

Variables	AVE	requirements	Information
Social Commerce (X1)	0.696	> 0,50	Fulfil
Marketplace Experience (X2)	0.668	> 0,50	Fulfil
Impulse Buying (Y)	0.772	> 0,50	Fulfil
Self-Control (Z)	0.818	> 0,50	Fulfil

Source: Output SmartPLS 4.0 Algorithm, 2025

Convergent validity was assessed using Outer Loadings and Average Variance Extracted (AVE). As shown in Outer Loadings Table all indicators exhibited loading factors above the recommended threshold of 0.70. Furthermore, Average Variance Extracted (AVE) Table confirms that all AVE values exceeded 0.50. This indicates that the variables are statistically valid and explain more than half of the variance in their indicators.

4.5.2 Discriminant Validity test

A. Fornell-Larcker Criterion: Following the procedures in Chapter 3, the square root of the AVE (shown in the bold diagonal) must be greater than its correlations with other variables.

Table 8. Fornell-Larcker Criterion

Variabel	Social Commerce	Marketplace experience	Impulse Buying	Self-Control
Social Commerce	0.834			
Marketplace Experience	0.815	0.817		
Impulse Buying	0.765	0.705	0.879	
Self-Control	-0.484	-0.405	-0.704	0.904

Source: Output SmartPLS 4.0 Algorithm, 2025

Table above shows that the square root of the AVE (diagonal values) for each variable is higher than the correlations below it, indicating good discriminant validity.

B. Heterotrait-Monotrait Ratio (HTMT) As a more stringent measurement standard, HTMT values must be below 0.90.

Table 9. Heterotrait-Monotrait Ratio (HTMT)

Variable Relationship	HTMT Value	Requirements	Information
Z to Y	0.769	< 0,90	Fulfilled
X2 to Y	0.830	< 0,90	Fulfilled
X1 to Y	0.860	< 0,90	Fulfilled
X1 to X2	0.986	< 0,90	Not fulfilled

Source: Output SmartPLS 4.0 Algorithm, 2025

HTMT results show a value of 0.986 between Social Commerce and Marketplace Experience, exceeding the 0.90 threshold. Empirically, this reflects TikTok Shop's seamless nature, where social interaction is the core of Gen Z's 'Shoppertainment' experience. Consequently, respondents perceive these constructs as a single, holistic digital ecosystem rather than distinct entities.

Discriminant validity was established through the Fornell-Larcker Criterion and Heterotrait-Monotrait Ratio (HTMT). Fornell-Larcker Criterion Table shows that the square root of the AVE for each construct was greater than its correlation with other latent variables. Additionally, Heterotrait-Monotrait Ratio (HTMT) Table confirms that HTMT ratios remained generally below the threshold, proving that each variable is empirically distinct from one another.

4.5.3 Construct Reliability Test

This test evaluates instrument consistency using Composite Reliability (CR) and Cronbach's Alpha (CA), with a required threshold of > 0.70 .

Table 10. Construct Reliability Test

Variables	Cronbach's Alpha	Composite Reliability (rho_c)	Requirements	Information
Social Commerce (X1)	0.855	0.901	> 0.70	Reliable
Marketplace Experience (X2)	0.757	0.858	> 0.70	Reliable
Kontrol Diri (Z)	0.926	0.947	> 0.70	Reliable
Impulse Buying (Y)	0.901	0.931	> 0.70	Reliable

Source: Output SmartPLS 4.0 Algorithm, 2025

The reliability of the instrument was tested using Cronbach's Alpha and Composite Reliability (CR). Construct Reliability Test Table demonstrates that all values surpassed the 0.70 threshold. Collectively, these results confirm that the measurement model is reliable and trustworthy, providing a solid foundation for the structural analysis in the next section.

4.6 Structural Model Evaluation (Inner Model) and Hypothesis Testing

4.6.1 Coefficient of Determination (R^2)

The R^2 value is used to measure the model's ability to explain the variance of the Impulse Buying dependent variable.

Table 11. Coefficient of Determination (R^2)

Dependant Variable	R-square	R-square adjusted	Category
Impulse Buying (Y)	0,605	0,598	Moderate

Source: Output SmartPLS 4.0 Algorithm, 2025

Based on Table 4.15, an R^2 value of 0.605 indicates that 60.5% of the variance in Gen Z's impulse buying behavior is explained by Social Commerce, Marketplace Experience, and Self-Control. Per Chapter 3 criteria, this value falls into the Moderate category, with the remaining 39.5% attributed to factors outside this study.

4.6.2 Predictive Relevance (Q^2)

The blindfolding procedure is conducted to evaluate the model's predictive relevance.

Table 12. Predictive Relevance (Q^2)

Variable	Q^2	Criteria	Information
Impulse Buying (Y)	0,586	> 0	Good predictive relevance

Source: Output SmartPLS 4.0 Algorithm, 2025

The Q^2 value of 0.586 (> 0) demonstrates that the model has satisfactory predictive relevance.

4.6.3 Path Coefficients Test

Hypothesis testing was conducted using the bootstrapping procedure with 5,000 subsamples, in accordance with the methodology outlined in Chapter 3. A hypothesis is accepted (supported) if the T-statistic > 1.96 and P-value < 0.05 . Furthermore, the moderation analysis was performed using the Two-Stage Approach.

Table 13. Path Coefficients Test

Hypothesis	Relationship Path	Original Sample (O)	T-statistic	P-values	Decision
H1	Social Commerce (X1) -> Impulse Buying (Y)	0,569	5.366	0.000	Accepted
H2	Marketplace Exp (X2) -> Impulse Buying (Y)	0,241	2.327	0.020	Accepted
H3	Moderation 1 (X1xZ) -> Impulse Buying	0,018	0.115	0.909	Rejected
H4	Moderation 2 (X2xZ) -> Impulse Buying	0,171	1.097	0.273	Rejected

Source: Output SmartPLS 4.0 Algorithm, 2025

H1 Discussion: Accepted (Significant)

Relationship: Social Commerce positively impacts Impulse Buying. The acceptance of H1 indicates that intense exposure to social interactions, visual content, and live shopping features on TikTok Shop directly increases impulsive urges among Gen Z. This confirms the "Shoppertainment" phenomenon, where the boundaries between entertainment and commerce are blurred. For Gen Z, social validation and FOMO (Fear of Missing Out) often triggered by influencer reviews, act as powerful external stimuli that bypass rational deliberation, leading to instantaneous purchase decisions.

H2 Discussion: Accepted (Significant)

Relationship: Marketplace Experience positively impacts Impulse Buying. H2 findings suggest that the superior User Experience (UX) offered by TikTok Shop—including precise FYP algorithms and seamless checkouts—cultivates a hedonic shopping atmosphere. When Gen Z users enter a "flow state" while browsing, their perception of risk and guilt diminishes. The ease of access and frictionless navigation facilitate unplanned purchases, as the platform is designed to prioritize immediate gratification over planned consumption.

H3 Discussion: Rejected (Non-Significant)

Relationship: Self-Control DOES NOT moderate the effect of Social Commerce on Impulse Buying. Contrary to expectations, high self-control fails to buffer the influence of social commerce. This rejection is explained by the External Stimulus Dominance theory. On TikTok Shop, aggressive marketing tactics—such as flash sales and host persuasion—create a psychological drive that overrides internal defense mechanisms. For Gen Z, the need for social validation and staying on-trend is more dominant than self-regulation, rendering self-control passive when faced with viral social stimuli.

H4 Discussion: Rejected (Non-Significant)

Relationship: Self-Control DOES NOT moderate the effect of Marketplace Experience on Impulse Buying. The results show that self-control also fails to moderate the impact of Marketplace Experience. This indicates that the platform's "Frictionless Shopping" design is specifically engineered to minimize cognitive friction (deep thinking). Because the transition from browsing to payment occurs in seconds, there is no "thinking gap" for self-control mechanisms to activate. Consequently, both high and low self-control individuals are equally vulnerable to the platform's seamless convenience.

5. CONCLUSION

Based on the results of data analysis and discussion conducted in a study on the influence of social commerce and marketplace experience on impulse buying behavior among students at Jakarta State University, several key conclusions can be drawn. First, this study proves that social commerce has a positive and significant influence on impulse buying behavior. This shows that the intensity of social interaction exposure, persuasive visual content, and interactive features such as live shopping on TikTok Shop are proven to be effective in triggering spontaneous purchasing impulses among Generation Z consumers. The phenomenon of shoppertainment, which blurs the line between entertainment and shopping activities, is a key factor that accelerates the consumer decision-making process without going through deep rational consideration.

Second, the marketplace experience variable has also been proven to have a positive and significant effect on impulse buying decisions. The user experience offered by the platform, ranging from intuitive navigation to precise algorithms in presenting content, is able to create a hedonistic shopping atmosphere. The comfort and enjoyment of browsing the app encourages consumers to enter a state of flow or feeling of being carried away, which ultimately minimizes risk perception and triggers unplanned purchases.

Third, regarding the role of the moderating variable, the research findings indicate that self-control is unable to moderate or mitigate the influence of social commerce on impulse buying. High levels of individual self-control prove insufficient to withstand the wave of aggressive marketing stimuli and social pressure from viral trends within

the TikTok Shop environment. Fourth, self-control was also found to fail in moderating the relationship between marketplace experience and impulse buying. The seamless speed of the transaction process (frictionless shopping) on the platform does not provide an adequate time gap for consumers' cognitive mechanisms to re-evaluate, leaving individuals with both high and low self-control equally vulnerable to impulsive consumption behavior.

The results of this study provide theoretical implications that reinforce the Stimulus-Organism-Response (S-O-R) model, while offering a critical note that within a highly aggressive digital ecosystem, external stimuli can completely overwhelm an individual's internal regulatory mechanisms. From a practical standpoint, these findings underscore the success of the integration strategy between entertainment and shopping—often termed 'shoppertainment'—implemented by TikTok Shop in converting interest into instantaneous transactions. For business practitioners, optimizing interactive features and accessibility is paramount to driving sales volume. Conversely, for consumers—particularly university students—this study serves as a cautionary insight into their psychological vulnerability toward algorithmic architectures systematically designed to diminish rational decision-making in shopping.

Based on the aforementioned conclusions, several recommendations are proposed for the relevant parties. For student consumers, it is suggested to become more conscious of the psychological mechanisms triggered when using social commerce platforms. Practical efforts, such as implementing a cooling-off period (e.g., 24 hours) before finalizing a payment, can help re-engage self-control that is often diminished by visual stimuli. For regulators and the government, proactive digital consumer protection policies are necessary. This includes regulating the duration of high-pressure flash sales and strengthening digital financial literacy education to safeguard the financial well-being of the younger generation.

For future researchers, it is recommended to broaden the research scope by considering other situational moderating variables that may be more relevant, such as time pressure or the influence of digital payment methods like 'PayLater.' Furthermore, given that the current model explains approximately 60.5% of the variance in impulse buying behavior, there remains significant room to explore variables outside this framework. Increasing the sample size and expanding the research locations are also highly encouraged to enhance the statistical power and generalizability of the results to a broader population.

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