THE INFLUENCE OF FEAR OF MISSING OUT (FOMO), SELF-CONTROL, AND EASE OF USE ON IMPULSIVE BUYING OF GENERATION Z THROUGH TIKTOK SHOP LIVE SHOPPING FEATURE

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Abstract

This study aims to analyze the influence of Fear of Missing Out (FOMO), self-control, and ease of use on impulsive buying behavior among Generation Z in Surabaya through TikTok Shop's live shopping feature. With Indonesia's internet penetration reaching 80.66% in 2025 and TikTok Shop emerging as the second most popular e-commerce platform in Indonesia with a 27.37% market share, the digital environment increasingly fosters spontaneous consumer behavior. This study employed an associative quantitative approach with purposive sampling, involving 153 Generation Z respondents who actively use TikTok Shop's live shopping feature in Surabaya, of which 151 met the analysis criteria. Data were collected through a structured questionnaire and analyzed using multiple linear regression. Results indicate that FOMO, self-control, and ease of use simultaneously exert a significant influence on impulsive buying ($F=34.613$; $p<0.001$; $R^2=0.414$). Partially, FOMO ($\beta=0.720$; $t=9.627$; $p<0.001$) and ease of use ($\beta=0.253$; $t=2.312$; $p=0.022$) positively and significantly predict impulsive buying, while self-control ($\beta=-0.094$; $t=-0.650$; $p=0.517$) shows no significant effect. These findings imply that digital platforms should consider psychological and technological factors when designing responsible marketing strategies targeting young consumers.

Keywords: Ease of Use, Fear of Missing Out, Generation Z, Impulse Buying, Live Shopping, Self-Control

INTRODUCTION

The rapid development of the digital era has made impulsive buying behavior one of the most significant phenomena in consumer behavior research. Mertaningrum et al. (2023) define impulsive buying as a purchase decision that occurs suddenly as a response to momentary emotional impulses, causing individuals to disregard rational considerations and long-term consequences.

According to the 2025 report by the Indonesian Internet Service Providers Association (APJII), 229.4 million of Indonesia's 284.4 million population accessed the internet, reflecting an 80.66% penetration rate. This high connectivity has accelerated e-commerce growth, with TikTok Shop ranking as the second most popular e-commerce platform in Indonesia with a 27.37% market share (APJII, 2025).

The live shopping feature on TikTok Shop creates a conducive environment for impulsive buying through real-time communication, time-limited promotions, and persuasive visual product presentations. Generation Z—born between 1997 and 2012—are the most vulnerable demographic to impulse buying in live commerce contexts due to their characteristics as digital natives who are highly responsive to rapid stimuli (Hidayah et al., 2025; Triwikrama, 2025).

Despite extensive research on impulsive buying, empirical gaps remain regarding the simultaneous influence of FOMO, self-control, and ease of use specifically within TikTok Shop's live shopping context. Existing studies report inconsistent findings regarding FOMO's role (Septiana et al., 2025; Roliyanah et al., 2024) and self-control's effect (Kumalasari et al., 2025; Selfiana et al., 2023) on impulsive buying. This study addresses these gaps by providing an integrated empirical examination.

The objectives of this study are: (1) to analyze the simultaneous influence of FOMO, self-control, and ease of use on impulsive buying; (2) to analyze the partial effect of FOMO; (3) to analyze the partial effect of self-control; and (4) to analyze the partial effect of ease of use on impulsive buying among Generation Z in Surabaya through TikTok Shop live shopping.

REVIEW OF LITERATURE

Stimulus–Organism–Response (SOR) Theory

The SOR theory explains individual behavior through interactions between environmental stimuli and internal psychological processes (organism), resulting in specific behavioral responses (Maulidina & Hidayati, 2023). In the live shopping context, stimuli such as time-limited promotions and real-time interactions influence consumers' psychological states—FOMO, self-control, and perceived ease of use—ultimately producing impulsive buying responses.

Fear of Missing Out (FOMO)

FOMO is a psychological phenomenon characterized by the fear or anxiety of missing out on information, experiences, or social activities experienced by others (Fitri et al., 2024). High FOMO intensity increases individuals' tendency to act quickly without rational consideration of consequences (Widodo, 2024). Within the SOR framework, FOMO functions as an organism element mediating between marketing stimuli and consumer purchase responses. This variable is measured using three indicators: fear, worry, and anxiety (Juliandhani & Tjahjawati, 2024.

Self-Control

Self-control refers to an individual's ability to regulate impulses, emotions, and behaviors to remain consistent with long-term goals and values (Nova Lisye Sinaulan et al., 2025). Individuals with high self-control tend to make more rational decisions, while low self-control increases vulnerability to impulsive behavior (Dwi Marsela & Supriatna, 2024). This variable is measured through five indicators: planning before purchasing, price comparison, considering product utility, thinking before buying similar items, and only buying what is needed (Nainggolan, 2022).

Ease of Use

Perceived ease of use refers to an individual's perception of the degree to which operating a system or technology requires minimal effort (Davis, 1989 in Atriani et al., 2020). Based on the Technology Acceptance Model (TAM), ease of use lowers cognitive barriers, accelerating the consumer decision-making process. Measurement indicators include: clarity and comprehensibility, ease of operation, and flexibility (Davis, 1989).

Impulsive Buying

Impulsive buying is defined as spontaneous purchasing behavior without prior planning, triggered by momentary emotional impulses (Mertaningrum et al., 2023; Schiffman & Wisenblit, 2020). Rook and Fisher (1995) in Gumilang et al. (2024) identify four indicators: spontaneity, strong urge to buy, emotional involvement, and purchasing without considering consequences.

Research Hypotheses

Based on the literature review and theoretical framework, the following hypotheses are proposed:

• H1: FOMO, self-control, and ease of use simultaneously exert a significant influence on impulsive buying among Generation Z through TikTok Shop live shopping.
• H2: FOMO partially exerts a significant influence on impulsive buying.
• H3: Self-control partially exerts a significant influence on impulsive buying.
• H4: Ease of use partially exerts a significant influence on impulsive buying.

RESEARCH METHOD

This study employed an associative quantitative design to examine causal relationships between variables. Data were collected via a structured Likert-scale questionnaire (1=Strongly Disagree to 5=Strongly Agree). The population comprised Generation Z individuals (aged 14–29 years) who are active TikTok Shop live shopping users in Surabaya. Purposive sampling was applied with three inclusion criteria: residing in Surabaya, belonging to Generation Z, and having made at least one purchase through TikTok Shop's live shopping feature.

The minimum sample size was determined using Lemeshow's formula, yielding 97 respondents. Data collection resulted in 153 valid responses, with 151 meeting all criteria and included in the final analysis. Respondent profiles were predominantly female (70%), aged 20–23 years (78%), and university students (78%).

Instrument validity was assessed using Pearson Correlation (r-table = 0.159), and reliability was evaluated using Cronbach's Alpha. All items were declared valid. Reliability coefficients were: FOMO (α=0.851), self-control (α=0.564), ease of use (α=0.649), and impulsive buying (α=0.766), all exceeding the minimum threshold of 0.50.

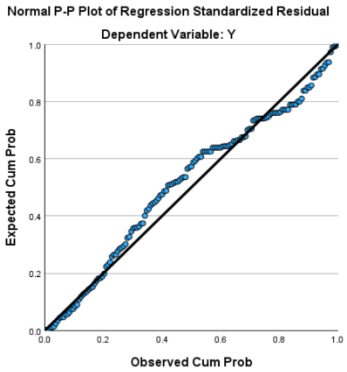
Multiple linear regression analysis was conducted using the model: Y = α + b1X1 + b2X2 + b3X3 + e, where Y denotes impulsive buying, X1 is FOMO, X2 is self-control, and X3 is ease of use. Classical assumption tests—normality (Normal P-P Plot), multicollinearity (Tolerance and VIF), and heteroscedasticity (Scatterplot)—were performed prior to regression. Hypotheses were tested using the F-test (simultaneous) and t-test (partial) at a significance level of α=0.05.

RESULTS AND DISCUSSION

Classical Assumption Tests

The normality test aims to evaluate whether the residual values in the regression model are normally distributed. In this study, the Kolmogorov-Smirnov (K-S) test was employed. Based on the analysis, the significance value (Asymp. Sig 2-tailed) was found to be greater than 0.05. Additionally, the Normal P-P Plot (Figure 1) shows data points spreading around the diagonal line, indicating that the research data are normally distributed.

Figure 1.
Normality Test Results



Source: SPSS 31 Statistical Output (2026)

The multicollinearity test is used to ensure there is no high correlation between the independent variables: Fear of Missing Out (X1), Self-Control (X2), and Ease of Use (X3). The test results (Table 1) show that all variables have a Tolerance value > 0.10 and a Variance Inflation Factor (VIF) < 10. Therefore, it can be concluded that the regression model is free from multicollinearity issues.

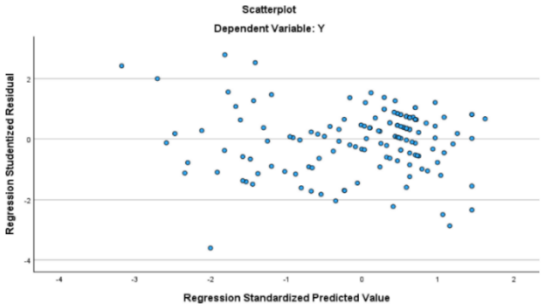
Table 1.
Multicollinearity Test Results

No.	Variabel	Tolerance	VIF
1	*fear of Missing Out*	0,989	1,011
2	Kontrol Diri	0,931	1,074
3	Kemudahan Penggunaan	0,923	1,083

Source: SPSS 31 Statistical Output (2026)

The heteroscedasticity test aims to detect whether there is an inequality of variance in the residuals. This study utilized a scatterplot analysis (Figure 4.2). The results show that the points are spread randomly above and below the number 0 on the Y-axis without forming a specific or regular pattern. This indicates that there is no heteroscedasticity in the regression model, meeting the requirement for a good linear regression.

Figure 2.
Heteroscedasticity Test Results



Multiple Linear Regression Analysis Results

Results from SPSS 31 produced the following regression equation:

Table 2.
Multiple Linear Regression Analysis Results

Coefficients[a]								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3,490	2,461		1,418	0,158		
	Fear of Missing Out	0,720	0,075	0,611	9,627	0,000	0,989	1,011
	Kontrol Diri	-0,094	0,144	-0,043	-0,650	0,517	0,931	1,074
	Kemudahan Penggunaan	0,253	0,109	0,152	2,312	0,022	0,923	1,083
a. *Dependent Variable*: Pembelian Impulsif								

$$Y = 3.490 + 0.720X1 - 0.094X2 + 0.253X3$$

The constant of 3.490 represents the baseline value of impulsive buying when all independent variables are held constant. The FOMO coefficient of 0.720 indicates the most dominant positive effect. The negative self-control coefficient of -0.094 reflects the theoretically expected inverse direction, while the ease of use coefficient of 0.253 reflects a positive effect.

Coefficient of Determination (R^2)

The R Square value of 0.414 indicates that FOMO, self-control, and ease of use collectively explain 41.4% of the variance in impulsive buying. The remaining 58.6% is attributable to factors not included in the model, such as positive emotions, promotions, motivation, and price perception.

F-Test (Simultaneous Effect)

The F-test is conducted to determine whether all independent variables, namely Fear of Missing Out (X1), Self-Control (X2), and Ease of Use (X3), simultaneously have a significant effect on the dependent variable, Impulsive Buying (Y). The test is performed by comparing the $F_{calculated}$ value with the F_{table} value or by analyzing the significance value in the ANOVA table.

Table 3.
F-Test Results

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	688,089	3	229,363	34,613	<.001[b]
	Residual	974,096	147	6,627		
	Total	1662.185	150			
a. Dependent Variabel: Pembelian Impulsif b. Predictors: (Constant), *Fear of Missing Out,* Kontrol Diri, Kemudahan Penggunaan						

Based on the test results in the table above, the significance value is (insert value), which is lower than 0.05. This indicates that Fear of Missing Out, Self-Control, and Ease of Use simultaneously exert a significant influence on Impulsive Buying among Generation Z users of the TikTok Shop Live Shopping feature.

t-Test (Partial Effects)

The t-test is employed to examine the individual significance of each independent variable on the dependent variable. The hypothesis is accepted if the significance value is less than 0.05 or if the $t_{calculated}$ value is greater than the t_{table}.

Table 4.
t-Test Results

Coefficients[a]								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3,490	2,461		1,418	0,158		
	X1	0,720	0,075	0,611	9,627	0,000	0,989	1,011
	X2	-0,094	0,144	-0,043	-0,650	0,517	0,931	1,074
	X3	0,253	0,109	0,152	2,312	0,022	0,923	1,083
a. Dependent Variabel: Pembelian Impulsif								

Effect of FOMO (X1): The t-calculated value of 9.627 exceeded the t-table value of 1.976 (p=0.000<0.05), thus H2 is accepted. FOMO positively and significantly influences impulsive buying. Each unit increase in FOMO increases impulsive buying by 0.720 units. This finding is consistent with Rinonce et al. (2025) and Zhang & Rosli (2025), who demonstrate that high-FOMO consumers respond to time-limited promotions, real-time notifications, and social pressure during live streaming by making spontaneous purchases. During live shopping sessions, FOMO is activated through scarcity mechanisms, exclusive offers, and direct influencer interaction, creating psychological urgency that overrides deliberate evaluation.

Effect of Self-Control (X2): The t-calculated value of -0.650 fell within the acceptance range (-1.976 < -0.650 < 1.976) with p=0.517>0.05, thus, H3 is rejected. Self-control does not significantly influence impulsive buying. Although the negative coefficient aligns theoretically, the intensity of external stimuli—including flash sales, exclusive discounts, and persuasive host interaction—overrides consumers' self-regulatory mechanisms. This result is consistent with Wang et al. (2022), who found that the dynamic

environment of live streaming commerce can shift decision-making processes from rational to emotional, rendering even self-controlled individuals susceptible to impulse buying.

Effect of Ease of Use (X3): The t-calculated value of 2.312 exceeded the t-table value of 1.976 ($p=0.022<0.05$), thus H4 is accepted. Ease of use positively and significantly influences impulsive buying. TikTok Shop's integrated design enables consumers to view products, interact with sellers, and complete transactions within a single application with minimal friction, reducing cognitive barriers and accelerating spontaneous purchasing. This is supported by Huang et al. (2023), who confirm that perceived ease of use positively predicts impulsive buying in live streaming commerce contexts.

CONCLUSION

This study empirically demonstrates that FOMO, self-control, and ease of use simultaneously exert a significant influence on impulsive buying among Generation Z in Surabaya through TikTok Shop live shopping ($F=34.613$; $p<0.001$; $R^2=0.414$). Partially, FOMO is the dominant predictor with a positive and significant effect ($\beta=0.720$; $p<0.001$), followed by ease of use ($\beta=0.253$; $p=0.022$). Self-control, however, does not significantly predict impulsive buying ($\beta=-0.094$; $p=0.517$) in this stimuli-intensive live shopping context.

Theoretically, this study reinforces the applicability of SOR theory in digital live commerce, demonstrating that external stimuli—technological ease and FOMO—exert greater influence than internal control mechanisms on Generation Z's impulsive behavior. Practically, businesses can leverage FOMO-based promotional strategies (flash sales, limited-stock alerts, real-time notifications) and seamless transaction interfaces to stimulate impulse purchases. However, marketing ethics must be observed to prevent excessive consumerism.

This study's limitations include its geographical scope (Surabaya only) and the absence of mediating or moderating variables. Future research is recommended to incorporate additional variables such as positive emotions, promotions, or perceived trust; expand the geographical scope; and employ mixed-method approaches for more comprehensive consumer behavior insights.

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