

The Urgency Trap: Channeling FoMO into Impulsive Purchases Through Flash Sales in Social Commerce

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ABSTRACT

The rapid growth of social commerce in Indonesia has driven an increase in digital promotions that trigger consumptive behavior, but previous studies have mostly focused on general consumers and ignored the influence of socio-economic context on the psychological responses of low-income consumers. This research gap indicates that there has been no study specifically analyzing how FoMO and flash sale mechanisms influence impulsive buying among lower-middle-class consumers, who have financial limitations but are highly exposed to aggressive social commerce promotions. This study fills this gap by examining the role of FoMO and the mediation of flash sales using the Stimulus–Organism–Response (S-O-R) model on 391 cosmetics consumers with incomes below five million rupiah in the city of Bogor. The results show that FoMO has a very strong direct influence on impulsive buying, while flash sales act as a partial mediator that reinforces impulsive responses. These findings reveal that internal psychological factors are far more dominant than promotional stimuli alone. The unique contribution of this research lies in its focus on lower-middle-class consumers in Indonesia's social commerce ecosystem, as well as its empirical explanation of how this group's psychological vulnerability is exploited by digital promotional strategies. This study enriches the literature on digital consumer behavior in developing countries and emphasizes the need for more ethical marketing practices for vulnerable groups.

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INTRODUCTION

Indonesia's cosmetic industry continues to grow rapidly, driven by increasing awareness of appearance and self-care among younger consumers (Ministry of Industry, 2025). In 2023, the number of cosmetic companies reached 1,010, with SMEs accounting for 89.2% of the total (Coordinating Ministry for Economic Affairs, 2024). Beyond the domestic market, cosmetic exports also rose significantly to USD 770.8 million (Coordinating Ministry for Economic Affairs, 2024). The industry is projected to grow at an annual rate of 5.35% until 2029 (INDONESIA.GO.ID, 2024), indicating strong potential for sustained expansion.

Alongside this growth, cosmetic marketing strategies have shifted toward digital and social media-based platforms. Indonesia recorded approximately 143 million social media users, exceeding 50% of the population as of January 2025 (Kemp, 2025). While Indonesia's digital market was previously dominated by conventional marketplaces such as Tokopedia and Shopee (Ministry of Trade, 2023), it is now transitioning toward social commerce. Social commerce represents an evolution of e-commerce by integrating transactional activities with two-way social interactions through social media and messaging platforms (Baghdadi & Pulparambil, 2025; Huwaida et al., 2024).

This transformation has expanded digital shopping participation across various consumer segments, including lower-middle-income consumers. Increased smartphone penetration and more affordable internet access have positioned this group as a significant segment within Indonesia's social commerce ecosystem (APJII, 2024; Statistics Indonesia, 2023). Low-income consumers tend to engage in impulsive purchases influenced by word-of-mouth and digital exposure and often favor lifestyle-enhancing products despite limited purchasing power (Roy et al., 2021). These characteristics increase their vulnerability to emotional and time-pressured marketing stimuli.

A key psychological mechanism driving impulsive buying in social commerce, particularly among lower-middle-income consumers, is Fear of Missing Out (FoMO). FoMO refers to anxiety arising from the perception of missing important experiences, information, or opportunities obtained by others (Kaddouhah, 2024; Przybylski et al., 2013). This condition is intensified by digital promotional strategies such as flash sales, which emphasize limited quantities and timeframes, creating perceptions of scarcity and urgency. As a result, FoMO becomes a major driver of impulsive buying, defined as emotional, sudden, and unplanned purchasing behavior (Lamis et al., 2022; Martaleni et al., 2022).

Among lower-middle-income consumers earning less than IDR 5 million per month, FoMO exerts a stronger influence due to limited financial capacity, making them more sensitive to exclusive and time-limited promotions. In flash sale situations, individuals with high FoMO levels often respond quickly without fully considering actual needs or financial constraints. FoMO not only heightens attention to short-term discounts but also reinforces the perceived

necessity of immediate purchasing decisions (Zhang, 2024). For low-income consumers, the fear of losing an opportunity to save money can trigger impulsive purchases as emotional compensation for daily financial limitations.

Extensive research has examined the relationships between FoMO, flash sales, and impulsive buying. FoMO, reinforced by social pressure, encourages rapid decision-making when consumers encounter limited-time promotions (Feng et al., 2024; Kaddouhah, 2024). Flash sales create urgency and scarcity perceptions that increase impulsive buying tendencies (Lamis et al., 2022; Martaleni et al., 2022). Within social commerce, this behavior is further shaped by social factors such as influencer credibility, visual appeal, and online interactions that enhance perceived value and urgency (Baghdadi & Pulparambil, 2025; Hossain et al., 2025). Although electronic word-of-mouth (eWOM) affects purchase intention, psychological variables such as FoMO have been shown to play a more dominant role in impulsive buying behavior (Indrawati et al., 2023).

Low-income consumers experiencing impulsive buying triggers are predominantly young individuals (Roy et al., 2021). This aligns with online shopping becoming a lifestyle trend among youth (Helmi et al., 2023), despite persistent financial constraints (Suyanto et al., 2025). Average monthly online spending among young consumers is reported to be below IDR 800,000, mainly on cosmetics and fashion, yet a small proportion spend more than 80% of their monthly income online (Suyanto et al., 2025). This highlights that impulsive online consumption is not limited to high-income groups.

Conceptually, FoMO is characterized by anxiety and a strong desire to remain socially connected, often resulting in compulsive checking behavior (Przybylski et al., 2013). It is shaped by anticipated regret and social pressure, as explained by Self-Determination Theory and Social Comparison Theory (Festinger, 1954; Przybylski et al., 2013; Kaddouhah, 2024; Theocharis et al., 2025). Individuals experiencing FoMO frequently imitate group behavior, including purchasing decisions, even when such actions conflict with personal preferences. This tendency is closely related to Susceptibility to Social Influence (SSI) (Dinh et al., 2023; Feng et al., 2024).

Flash sales, as time- and quantity-limited promotions, exploit scarcity and loss aversion to stimulate immediate purchases (Aggarwal et al., 2011; Cialdini, 2009; Feng et al., 2024). Excessive urgency generates psychological pressure, activating FoMO and mediating its effect on impulsive buying (Martaleni et al., 2022). Impulsive buying itself is driven by emotional impulses rather than rational evaluation (Beatty & Elizabeth Ferrell, 1998; Rook, 1987), with promotions and digital convenience acting as strong external triggers (Akram et al., 2018; Lamis et al., 2022).

Among low-income consumers, impulsive buying often functions as emotional compensation for financial stress and social validation needs (Goor et al., 2020; Mani et al., 2013; Rucker &

Galinsky, 2008). Consequently, lower-middle-income groups are particularly vulnerable to FoMO and flash sale pressures due to financial limitations and high social media exposure. This study therefore adopts the Stimulus–Organism–Response (S-O-R) model to examine how FoMO, flash sales, and impulsive buying interact among lower-middle-income cosmetic consumers in Indonesia.

RESEARCH METHODS

This study employed a quantitative research design using the Partial Least Squares Structural Equation Modeling (PLS-SEM) approach with the assistance of SmartPLS version 4 software. PLS-SEM was selected due to its strong capability for exploratory and predictive modeling, as well as its flexibility in handling complex models and non-normally distributed data (Hair et al., 2020, 2022). The data analysis followed two main stages: (1) evaluation of the measurement model (outer model) to assess the validity and reliability of the research instruments, and (2) evaluation of the structural model (inner model) to test the proposed hypotheses.

The data were collected from 391 social commerce users in Bogor City who earned less than IDR 5 million per month and had previously purchased cosmetic products during flash sale promotions. Respondents were selected based on these criteria to ensure relevance to the research context. Data collection was conducted through a structured questionnaire distributed directly to respondents.

The research instrument employed a five-point Likert scale to measure all constructs in the model. The measurement indicators were developed based on established theoretical foundations and previous empirical studies to capture respondents' perceptions and experiences related to Fear of Missing Out (FoMO), flash sale promotions, and impulsive buying behavior in social commerce.

This study adopts the Stimulus–Organism–Response (S-O-R) model proposed by Mehrabian and Russell (1974) as the underlying conceptual framework. The S-O-R model explains how external environmental stimuli influence internal psychological states, which subsequently lead to specific behavioral responses. This framework is widely applied in consumer behavior research, particularly in digital and socially intensive environments (Huang, 2023; Zhang, 2024).

In this study, Fear of Missing Out (FoMO) represents the stimulus that shapes consumers' internal psychological conditions. Flash sale promotions function as situational contexts that intensify psychological reactions, while impulsive buying reflects the behavioral response. Among low-income consumers, FoMO is often triggered by social pressure and expectations to participate in online shopping trends, increasing sensitivity to flash sale promotions characterized by limited time and quantity. This condition heightens the urge to make immediate purchases without extensive rational evaluation (Baghdadi & Pulparambil, 2025; Feng et al., 2024).

The S-O-R framework is particularly suitable for analysis using PLS-SEM, as it allows for the systematic testing of complex relationships and mediating effects between variables. In this research, PLS-SEM is used to empirically examine the mediating role of flash sales in the relationship between FoMO and impulsive buying behavior (Martaleni et al., 2022).

Based on the Stimulus–Organism–Response (S-O-R) theory and findings from previous studies, this research formulates hypotheses that explain the relationships among Fear of Missing Out (FoMO), Flash Sale, and Impulsive Buying. FoMO acts as a stimulus that influences consumers' internal psychological conditions, which then affect their perceptions during flash sale promotions and ultimately drive impulsive buying behavior. Accordingly, the hypotheses proposed in this study are as follows:

H1: FoMO has a positive and significant effect on Flash Sale.

H2: Flash Sale has a positive and significant effect on Impulsive Buying.

H3: FoMO has a positive effect on Impulsive Buying (direct effect).

H4: FoMO mediates the effect of Flash Sale on Impulsive Buying.

These hypotheses form an integrated structural model that explains the psychological mechanisms underlying impulsive buying behavior in the social commerce context. The model is tested empirically using the Partial Least Squares Structural Equation Modeling (PLS-SEM) technique with SmartPLS software version 4.1.1.4.

RESULTS & DISCUSSION

Description of Respondent Characteristics

This study was conducted by analyzing data from 391 respondents who earn less than five million rupiah, meet the criteria as social commerce users in Bogor City, and have experience purchasing cosmetic products through the Flash Sale feature. Information on the respondents' demographic characteristics and behavior is presented in the following tables to provide a comprehensive overview of the research sample.

Table 1. Respondent's type of work

Income Range	Number of Respondents	Percentage
< Rp 2.000.000	182	46.55%
Rp 2.000.000 - Rp 5.000.000	209	53.45%

Table 1 shows that the majority of respondents (53.45%) had a monthly income between IDR 2,000,000 to IDR 5,000,000, while 46.55% had an income below IDR 2,000,000. This shows that the sample of respondents meets the research criteria, namely respondents with lower middle income.

Measurement Model Evaluation Result (Outer Model). The measurement model in this study was analyzed using the Partial Least Squares Structural Equation Modeling (PLS-SEM) approach with the SmartPLS software. Evaluation of the measurement model (outer model) was conducted to ensure that the indicators used to measure each construct met the required criteria for reliability and validity before proceeding to the structural model analysis stage (Hair et al., 2019). The following figure presents the conceptual model, which consists of three latent constructs_Fear of Missing Out (FoMO), Flash Sale (FS), and Impulsive Buying (IB) along with their respective measurement indicators.

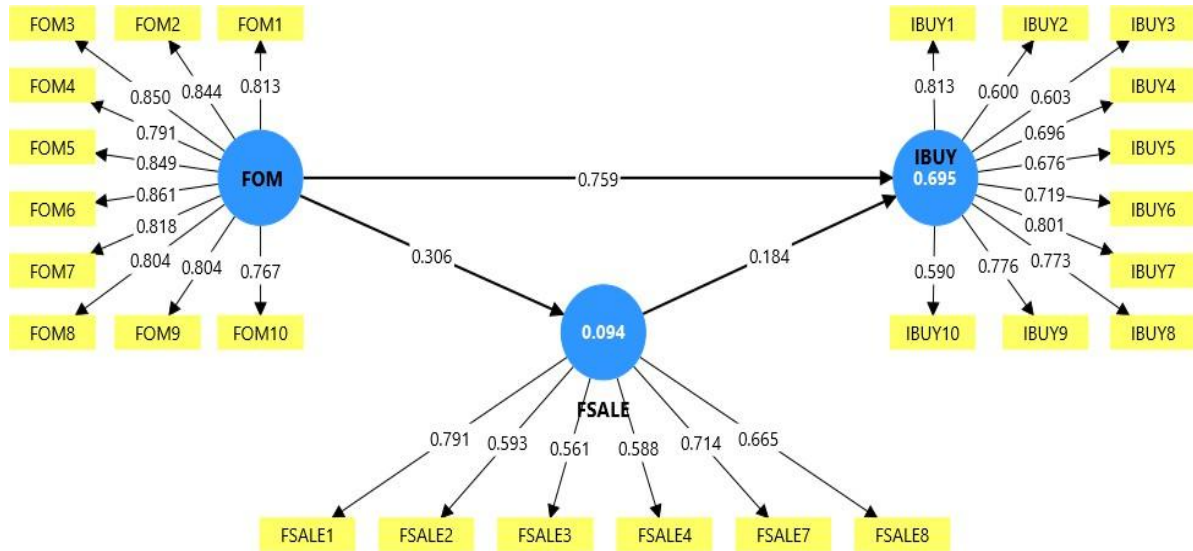


Figure 1. Construct diagram of FoMO, flash sale, and impulsive buying variables in SmartPLS2

Figure 1 illustrates the structural model that has undergone measurement model validation. The Flash Sale (FS) construct is measured using eight indicators (FS1–FS4 and FS7–FS8). According to Hair et al. (2019), indicators with loadings below 0.50 should be eliminated due to their minimal contribution to the construct. Therefore, FSALE5, FSALE6, FSALE9, and FSALE10 were excluded from the measurement model during the initial outer model evaluation stage. The FoMO (FOM) and Impulsive Buying (IBUY) constructs were each measured using ten indicators. This model illustrates the relationships between FoMO and Flash Sale, FoMO and Impulsive Buying, as well as the effect of Flash Sale on Impulsive Buying, in line with the Stimulus–Organism–Response (S-O-R) framework.

Indicator Reability. Indicator reliability refers to the degree of consistency and interrelatedness among indicators in measuring the intended construct (Hair, 2017). An indicator is considered to have adequate convergent validity if its outer loading value is ≥ 0.708 , indicating that more than 50% of the indicator's variance can be explained by the construct (Hair, 2017; Hair et al., 2022). However, indicators with outer loading values between 0.40 and 0.70 may still be retained if they make a significant contribution to the construct's content validity. Conversely, if the outer loading value is below 0.40, the indicator is recommended to be removed due to its very low contribution to the construct (Hair, 2017).

Based on Figure 1, all listed indicators meet the criteria for convergent validity, as indicated by outer loading values above the recommended minimum threshold. Previously, two indicators in the Flash Sale (FS) construct (FS5 and FS10) showed outer loading values below 0.50 and were therefore excluded from the model. Although Hair (2017) allows for a minimum threshold of 0.40, the researchers chose to apply a stricter standard (≥ 0.50) to ensure the quality of construct measurement and to enhance the Average Variance Extracted (AVE) value.

Convergent Validity and Construct Reability. Construct reliability is assessed based on two main indicators: Cronbach's Alpha and Composite Reliability (CR), with a recommended minimum threshold of 0.70 (Hair, 2017; Hair et al., 2022). Convergent validity refers to a construct's ability to explain the variance of the indicators that represent it (Hair, 2017). Convergent validity is evaluated through the Average Variance Extracted (AVE) value, where a construct is considered to meet the requirement if the AVE is ≥ 0.50 , indicating that the construct can explain more than 50% of the variance of its indicators.

Table 2. Convergent validity and construct reliability

	Cronbach's alpha	CR (rho a)	CR (rho c)	AVE
FOM	0.946	0.946	0.954	0.673
FSALE	0.757	0.794	0.818	0.432
IBUY	0.889	0.902	0.909	0.503

Table 2 shows the FOM and IBUY constructs demonstrate good reliability and convergent validity, with Cronbach's Alpha and Composite Reliability values above 0.70 and $AVE \geq 0.50$. In contrast, the FSALE construct has an AVE value of 0.432, which does not meet the criteria for convergent validity, although its internal reliability is considered adequate.

Discriminant Validity. Discriminant validity was analyzed using three main approaches: the Fornell-Larcker criterion and the Heterotrait-Monotrait (HTMT) ratio (Hair, 2017; Hair et al., 2022). According to the Fornell-Larcker criterion, discriminant validity is considered to be established if the square root of a construct's AVE is greater than its correlation with any other construct. HTMT is used as a more sensitive alternative approach, where a value of ≤ 0.90 indicates that discriminant validity has been achieved.

Table 3. Fornell-Larcker test

	FM	FS	IBY
FOM	0.82		
FSALE	0.306	0.657	
IBUY	0.815	0.416	0.709

Table 3 shows the results of the discriminant validity test using the Fornell-Larcker approach indicate that most constructs meet the established criteria. The square root of the AVE for the Fear of Missing Out (FOM) construct is 0.820, which is higher than its correlation with Flash

Sale (0.306), but nearly equal to its correlation with Impulsive Buying (0.815). The Flash Sale (FSALE) construct has a square root AVE value of 0.657, which is greater than its correlation with both FOM (0.306) and Impulsive Buying (0.416). Meanwhile, the Impulsive Buying (IBUY) construct has a square root AVE value of 0.709, which is higher than its correlation with FSALE (0.416), but slightly lower than its correlation with FOM (0.815). Overall, these results suggest that discriminant validity among most constructs is acceptable, although the relationship between FOM and IBUY indicates a relatively high degree of closeness.

Table 4. Heterotrait-Monotrait Ratio (HTMT) test

	FM	FS
FOM		
FSALE	0.283	
IBUY	0.866	0.462

The results of the discriminant validity test using the Heterotrait-Monotrait Ratio (HTMT) approach shown in table 4, show that the HTMT value between the Fear of Missing Out (FOM) and Flash Sale (FSALE) constructs is 0.283, while the value between FOM and Impulsive Buying (IBUY) is 0.866, and between FSALE and IBUY is 0.462. All HTMT values are below the threshold of 0.90, indicating that discriminant validity among the three constructs remains within acceptable limits according to the HTMT criterion. Although the value between FOM and IBUY is relatively high, the results still indicate no serious issues in distinguishing between the constructs in the model.

Structural Model Evaluation Results (Inner Model). The evaluation of the structural model (inner model) aims to assess the extent to which the relationships between latent constructs are strong and statistically significant. Referring to the guidelines by Hair (2017) and Hair et al. (2022), this evaluation process includes multicollinearity analysis using the Variance Inflation Factor (VIF), assessment of the coefficient of determination (R^2), and significance testing of the relationships between constructs through path coefficient analysis and the bootstrapping procedure. The results of the path coefficient and bootstrapping tests will be further explained in the following subsection.

Multicollinearity Evaluation. The multicollinearity analysis using the Variance Inflation Factor (VIF) values showed that all indicators are below the common threshold of 5, indicating no serious multicollinearity issues within the model. The indicators in the Fear of Missing Out (FOM) construct have VIF values ranging from 2.195 to 3.372, while the Flash Sale (FSALE) indicators show relatively low VIF values between 1.296 and 1.579. For the Impulsive Buying (IBUY) construct, VIF values range from 1.437 to 2.322. Overall, these results indicate that the relationships among indicators within each construct do not exhibit problematic multicollinearity that would affect model estimation.

Coefficient of Determination (R^2). The evaluation of the R-square values shows that the Fear of Missing Out (FOM) construct has an R-square value of 0.094 with an adjusted R-square of

0.091. This indicates that the independent variables in the model explain approximately 9.4% of the variation in the FOM construct. Meanwhile, the Impulsive Buying (IBUY) construct has an R-square value of 0.695 and an adjusted R-square of 0.693, indicating that about 69.5% of the variation in impulsive buying can be explained by the influencing constructs. Overall, the R-square value for the IBUY construct is considered strong, while the value for FOM falls into the weak category according to general interpretations in PLS-SEM analysis.

Path Significance Test (Path Coefficient and Bootstrapping). Path coefficients are used to evaluate the direction and strength of relationships between latent constructs in the structural model, with values ranging from -1 to +1 (Hair et al., 2022). A relationship is considered significant if the t-statistic value exceeds 1.96 and the p-value is below 0.05 (Hair, 2017).

Table 5. Path Coefficient

Connection	β	t-statistics	p-value	Information
FOM → FSALE	0.306	6.295	0.000	Significant
FOM → IBUY	0.759	33.598	0.000	Significant
FSALE → IBUY	0.184	6.197	0.000	Significant

Based on these results shown in table 5, all relationships in the model are declared significant with p-values below 0.05 and t-statistics above 1.96, which indicates that all hypotheses are accepted:

1. **H1 is accepted:** Fear of Missing Out (FOM) has a positive and significant effect on Flash Sale (FSALE), with a coefficient $\beta = 0.306$ ($t = 6.295$; $p = 0.000$). This means that the higher the level of FoMo, the greater the tendency of individuals to be attracted to flash sale promotions.
2. **H2 is accepted:** Flash Sale (FSALE) has a positive and significant effect on Impulsive Buying (IBUY), with a coefficient $\beta = 0.184$ ($t = 6.197$; $p = 0.000$). This indicates that flash sale promotions can encourage impulsive buying behavior.
3. **H3 is accepted:** Fear of Missing Out (FOM) has a positive and significant effect on Impulsive Buying (IBUY), with a coefficient $\beta = 0.759$ ($t = 33.598$; $p = 0.000$). This indicates that FoMo is a major factor directly influencing impulsive buying decisions.

Thus, H1 to H3 proposed in this research are proven empirically. The H4 test will be carried out in the mediation test below.

Mediation Test. The mediation test was conducted to determine whether the Flash Sale (FSALE) construct serves as a mediator in the relationship between Fear of Missing Out (FOM) and Impulsive Buying (IBUY). The direct path analysis results show that FOM has a significant effect on FSALE ($\beta = 0.306$, $t = 6.295$, $p = 0.000$), as well as on IBUY ($\beta = 0.759$, $t = 33.598$, $p = 0.000$).

In addition, FSALE also shows a significant positive effect on IBUY ($\beta = 0.184$, $t = 6.197$, $p =$

0.000). All three paths demonstrate significant and positive relationships, thereby meeting the criteria for testing a mediation effect.

The results of the indirect mediation test show that the effect of FOM on IBUY through FSALE (indirect effect) has a coefficient of 0.056, with a t-statistic value of 4.403 and a p-value of 0.000. This indicates that FSALE significantly mediates the relationship between FOM and IBUY. However, since the direct effect of FOM on IBUY remains significant, the mediation is considered partial. Therefore, it can be concluded that Flash Sale partially mediates the influence of FoMO on Impulsive Buying, and thus, hypothesis H4 is accepted.

The total effect results show that FOM has a total influence of 0.815 on IBUY ($t = 45.793$, $p = 0.000$), which is the combination of both direct and indirect effects. This confirms that FOM is a dominant factor in driving impulsive buying behavior, both directly and through the influence of flash sale-based promotions.

Discussion. The results of this study provide strong empirical evidence regarding the role of Fear of Missing Out (FoMO) as a key psychological factor driving impulsive buying behavior among lower- middle-income cosmetic consumers in the era of social commerce. These findings align with the Stimulus-Organism-Response (S-O-R) theoretical framework, which explains how external stimuli in the form of social and digital pressure trigger internal psychological responses that lead to unplanned, consumptive behavior.

The effect of FoMO on flash sales ($\beta = 0.306$) confirms that individuals with a high level of fear of missing out are more susceptible to promotion strategies based on scarcity and time limitation. This is consistent with the findings of Przybylski et al. (2013), which state that FoMO activates mechanisms of social comparison and the need for validation, thereby driving individuals to follow purchasing trends perceived as popular or exclusive. In the context of lower-middle-income consumers, flash sale promotions not only offer financial savings but also provide psychological access to products that are typically perceived as beyond their reach.

The most significant finding is the strong direct effect of FoMO on impulsive buying ($\beta = 0.759$), indicating that the fear of missing out is a primary driver of unplanned consumptive behavior. This suggests that, within consumer segments facing financial limitations, FoMO functions as an emotional compensation mechanism that motivates purchases as a form of social participation and self-validation. This phenomenon aligns with the research by Roy et al. (2021), which states that low-income consumers use impulsive buying as a coping strategy to deal with economic and social pressures.

Although flash sales are proven to have a positive effect on impulsive buying ($\beta = 0.184$), the effect is relatively smaller compared to FoMO. This suggests that urgency- and scarcity-based promotional strategies are more effective when targeted at individuals who already have a psychological predisposition such as high FoMO. This finding also confirms that flash sales act as a catalyst that amplifies existing internal drives, rather than serving as the primary trigger for impulsive purchases.

The partial mediation effect of flash sales in the relationship between FoMO and impulsive buying (indirect effect = 0.056) indicates that scarcity-based promotions serve as an additional pathway that strengthens the influence of FoMO. This is consistent with the dual-processing model, which suggests that impulsive purchase decisions involve an interaction between emotional processes (FoMO) and cognitive processes (promotion evaluation), although the emotional aspect remains dominant. In the context of social commerce, this mediation is reinforced by personalization algorithms and peer influence, which create an echo chamber of perspectives, continuously exposing consumers to content that validates their purchasing decisions.

The high R^2 value for the impulsive buying construct (69.5%) indicates that the proposed model has strong predictive power in explaining the consumptive behavior of lower-middle-income consumers. This suggests that the combination of FoMO and flash sales forms a robust framework for understanding psychological dynamics within the social commerce ecosystem, particularly in market segments that are vulnerable to emotional manipulation.

Research Implications. This study provides significant theoretical contributions in several aspects. First, it enriches the literature on the application of the Stimulus-Organism-Response (S-O-R) model in the context of social commerce by focusing on the lower-middle-income consumer segment. Unlike previous studies that generally analyzed consumers in a broad sense, this research demonstrates that socio-economic conditions fundamentally influence the psychological mechanisms involved in purchase decision-making.

Second, this study integrates Fear of Missing Out (FoMO) as a psychological variable that has not been widely explored in the context of impulsive buying in Indonesia. The findings regarding the dominant direct influence of FoMO on impulsive buying offer new insights, suggesting that internal psychological factors have a stronger predictive power than external stimuli such as promotions. This challenges the conventional assumption that marketing strategies are the primary drivers of impulsive consumption.

Third, this study expands the understanding of social commerce dynamics in Indonesia by illustrating how digital platforms exploit psychological vulnerabilities to drive consumption. The findings on the partial mediating effect of flash sales indicate that digital promotional strategies do not operate independently, but rather through complex interactions with consumers' psychological predispositions.

Fourth, this study develops valid and reliable measurement instruments for assessing FoMO, flash sales, and impulsive buying in the Indonesian context, which can be used for future related research. The validation of these instruments provides an important methodological contribution to studies on digital consumer behavior in the Southeast Asian region.

Practical Implications. The findings of this study have important practical implications for various stakeholders in the cosmetics industry and social commerce. For players in the

cosmetics industry, the results highlight the need for more responsible and ethical marketing strategies, especially when targeting lower-middle-income consumer segments. Social commerce platforms are advised to implement features that encourage more rational decision-making, such as a cooling-off period, budget reminders, or integrated financial education.

For digital business practitioners, the understanding of FoMO's dominant role in driving impulsive buying indicates the need to focus on communication strategies that foster positive social engagement rather than exploiting psychological vulnerabilities. Content strategies that emphasize long-term value propositions, authentic testimonials, and product education are more ethical alternatives compared to manipulative techniques that rely on time pressure and artificial scarcity.

For regulators and policymakers, these findings point to the need for developing regulations that protect consumers from exploitative digital marketing practices. This includes setting transparency standards for digital promotions, limiting the use of pseudo-scarcity techniques, and requiring platforms to provide tools that serve as sources of financial literacy for users.

For educational institutions and consumer protection organizations, this research underscores the importance of digital and financial literacy programs focused on vulnerable groups. Educational initiatives that cover psychological manipulation techniques in digital marketing, strategies for managing FoMO, and healthy financial decision-making should be developed and widely disseminated.

CONCLUSION & SUGGESTION

This study successfully establishes Fear of Missing Out (FoMO) as a dominant psychological driver of impulsive buying behavior among lower-middle-income cosmetics consumers within Indonesia's burgeoning social commerce landscape. Employing the Stimulus-Organism-Response (S-O-R) model, the research demonstrates that FoMO exerts a powerful direct influence on impulsive purchasing and also operates indirectly, with its effects being mediated by the perceived urgency of flash sale promotions. A central finding is that internal psychological predispositions like FoMO hold greater predictive power over consumer behavior than external marketing stimuli alone, highlighting the significant psychological vulnerability of this consumer segment to digital and social pressures. Consequently, this research provides a significant contribution by integrating social psychology with digital consumer behavior, offering a comprehensive framework for understanding consumption dynamics in market segments susceptible to emotional exploitation in the digital era.

Despite its contributions, this study is subject to several limitations that warrant consideration and temper the generalizability of its findings. The research is geographically confined to a single Indonesian city, Bogor, and is focused exclusively on the cosmetics industry, which restricts the applicability of the conclusions to other regions or product categories with different purchasing characteristics (e.g., utilitarian vs. hedonic). Methodologically, the cross-sectional design precludes definitive causal inferences and an analysis of behavioral changes over time.

Furthermore, the reliance on self-report measures for impulsive buying introduces potential response biases, such as social desirability and recall inaccuracies. The study also did not investigate potential moderating variables, such as financial literacy or self-control, which could significantly influence the strength of the observed relationships.

Building upon these limitations, several avenues for future research are recommended to advance the field. Future studies should expand the geographic scope to include diverse regions for cross-cultural validation and conduct comparative analyses across different industries to test the universality of the identified psychological mechanisms. To establish causality and capture dynamic behaviors, longitudinal or experimental research designs are highly encouraged. Integrating objective behavioral data from e-commerce analytics would also provide a more accurate alternative to self-report measures. Finally, researchers are advised to incorporate moderating variables like financial literacy and social support for a more nuanced understanding, as well as to explore the development of technology-based interventions designed to mitigate consumer vulnerability and examine the role of emerging technologies like AI in either exacerbating or alleviating the effects of FoMO in social commerce

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