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FLASH SALES, HEDONIC SHOPPING VALUE, AND IMPULSIVE BUYING: THE MEDIATING ROLE OF FOMO AMONG SHOPEE USERS IN BATAM

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ABSTRACT

This study examines the influence of flash sales and hedonic shopping value on impulsive buying behavior, with Fear of Missing Out (FOMO) acting as a mediating variable among Shopee users in Batam City. Using a quantitative approach, data were collected from 200 respondents through purposive sampling and analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). The results indicate that both flash sales and hedonic shopping value significantly increase FOMO, which subsequently enhances impulsive buying behavior. Furthermore, flash sales and hedonic shopping value also have direct positive effects on impulsive buying, while their indirect effects through FOMO are stronger, highlighting the important mediating role of psychological factors in consumer decision-making. The model demonstrates moderate explanatory power, suggesting that impulsive buying in e-commerce is influenced by both promotional stimuli and emotional responses. These findings emphasize the effectiveness of integrating time-limited promotions with enjoyable shopping experiences to stimulate impulsive purchases. The study extends the Stimulus–Organism–Response (S-O-R) framework in social commerce and provides practical implications for designing more persuasive promotional strategies.

Keywords : Flash sale, Hedonic Shopping Value, Impulsive Buying Behavior, Fear of Missing Out (FOMO)

INTRODUCTION

The rapid growth of digital technology and internet penetration has transformed consumer purchasing behavior, particularly in the e-commerce ecosystem. The emergence of online marketplaces such as Shopee has intensified competition among platforms, encouraging firms to adopt various digital marketing strategies to attract and retain consumers. One increasingly dominant strategy is *flash sale*, a time-limited promotional mechanism offering substantial discounts to create urgency and stimulate immediate purchase decisions. In the context of online shopping, flash sales have evolved beyond conventional sales promotions into psychological stimuli capable of influencing consumers' impulsive responses (Luo et al., 2024; Nguyen Huu et al., 2023).

Alongside this development, *impulsive buying behavior* has become a significant phenomenon in consumer behavior research, particularly in digital commerce. Impulse buying refers to spontaneous, immediate, and unplanned purchases triggered by sudden urges rather than rational evaluation (Alnoor et al., 2024). Features commonly embedded in e-commerce platforms, such as countdown timers, limited-stock indicators, and real-time promotional notifications, can intensify consumers' emotional arousal and reduce cognitive control, thereby encouraging impulsive purchasing.

Another predictor relevant to impulsive buying is *hedonic shopping value*, which reflects the experiential, emotional, and enjoyment-oriented dimension of shopping (Picot-Coupey et al., 2021). Consumers motivated by hedonic value tend to perceive shopping as entertainment and emotional gratification rather than merely utilitarian activity. Previous studies indicate that hedonic motivation significantly contributes to unplanned purchasing decisions, especially in online environments characterized by convenience,

gamification, and immersive shopping experiences (Heredero et al., 2025). In the context of Shopee, various interactive features such as shopping games, vouchers, and flash promotions may further strengthen hedonic motives and lead to impulsive consumption.

Although those factors may directly affect impulsive buying behavior, recent literature suggests that psychological mechanisms may mediate these relationships. One emerging construct receiving increasing scholarly attention is *Fear of Missing Out* (FOMO). FOMO refers to a pervasive apprehension that others may be having rewarding experiences from which one is absent (Hisham et al., 2025). In e-commerce contexts, FOMO manifests as anxiety about missing limited-time deals, exclusive offers, or highly demanded products, often leading consumers to make immediate, impulsive purchases (Kaddouhah, 2024).

Although previous studies have examined the relationships among flash sales, hedonic shopping value, and impulsive buying behavior, several gaps remain in the literature. First, prior studies have largely focused on the direct effects of promotional and hedonic factors on impulsive buying, while the underlying psychological mechanisms have received less attention. Second, empirical findings regarding the influence of flash sales and hedonic shopping value on impulsive buying behavior remain inconsistent across different e-commerce settings, indicating the need for further investigation. Third, limited studies have explored these relationships within the context of emerging digital economies, particularly among Shopee users in Indonesian cities such as Batam, where online shopping adoption and promotional engagement continue to increase rapidly.

To address these gaps, this study proposes an integrated framework based on the Stimulus–Organism–Response (S-O-R) theory by positioning flash sale and hedonic shopping value as external stimuli, FOMO as an internal psychological organism, and impulsive buying behavior as the behavioral response. The novelty of this study lies in three aspects. First, it explicitly examines the mediating role of FOMO in explaining how promotional and hedonic stimuli influence impulsive buying behavior. Second, it integrates flash sale and hedonic shopping value within a single conceptual model, providing a more comprehensive explanation of impulsive purchasing behavior in e-commerce. Third, it extends the application of the S-O-R framework to Shopee users in Batam City, an emerging digital commerce context that has received limited scholarly attention.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1 Flash Sale

Flash sale has become one of the most widely used promotional strategies in e-commerce to stimulate consumer purchases through limited-time discounts and urgency-driven offers. Flash sale refers to short-term promotional campaigns that provide substantial price reductions within a restricted period, creating pressure for consumers to make immediate purchase decisions (Minor et al., 2025; Rutsaert et al., 2021). Based on the Stimulus-Organism-Response (S-O-R) theory, flash sale acts as an external stimulus capable of influencing consumers' emotional and cognitive reactions, which may subsequently trigger impulsive purchasing behavior.

Previous studies indicate that flash sale promotions can increase purchase urgency and reduce consumers' deliberative decision-making processes, thereby encouraging impulse buying (Sofi & Najar, 2018). In digital marketplaces such as Shopee, flash sale programs are often designed using countdown timers, limited quotas, and exclusive discount schemes that intensify consumers' sense of immediacy. Research by Wang et al., (2025) found that flash sale significantly affects impulsive buying due to the psychological pressure generated by limited-time opportunities. Likewise, Geerts & Masset, (2022) argue that flash sale not only functions as a pricing strategy but also as a psychological trigger influencing spontaneous consumer behavior.

Thus, in this study, flash sale is conceptualized as a marketing stimulus that can directly influence impulsive buying behavior and indirectly influence it through Fear of Missing Out (FOMO).

2.2 Hedonic Shopping Value

Hedonic shopping value refers to the experiential and emotional benefits derived from shopping activities, such as enjoyment, excitement, entertainment, and pleasure (Abu Farha et al., 2024; Picot-Coupey et al., 2021). Unlike utilitarian shopping value, which emphasizes functional and rational benefits, hedonic value reflects the intrinsic enjoyment consumers gain from the shopping process itself.

In online shopping environments, hedonic value is often strengthened through visually appealing interfaces, gamification, personalized recommendations, and interactive shopping features. Platforms such as Shopee provide numerous entertainment-oriented features that can enhance consumers' emotional involvement during shopping.

Several studies have found that hedonic shopping value positively influences impulse buying because emotionally driven consumers are more likely to make spontaneous and unplanned purchases (Alzayat & Lee, 2021; Mahajan et al., 2025). Consumers who shop for enjoyment rather than necessity tend to be more susceptible to promotional stimuli and more likely to engage in impulsive purchases.

Furthermore, hedonic-oriented consumers may be more vulnerable to experiencing FOMO, particularly when exposed to attractive, limited-time promotional opportunities. Therefore, hedonic shopping value is proposed to influence impulsive buying both directly and indirectly through FOMO.

2.3 Fear of Missing Out (FOMO)

Fear of Missing Out (FOMO) is defined as a pervasive apprehension that others may be having rewarding experiences from which one is absent (Elhai et al., 2025; Hartanto & Kasturiratna, 2024; Takács & Seregély, 2025). Initially examined in social media contexts, FOMO has recently gained increasing attention in consumer behavior research, especially in digital shopping environments.

In e-commerce, FOMO occurs when consumers fear missing attractive discounts, scarce products, or exclusive shopping opportunities. This psychological anxiety often drives urgency in decision-making and reduces rational evaluation, resulting in impulsive purchases (Bonaparte, 2025; Piko et al., 2025). Flash sales , and hedonic shopping experiences are considered important triggers of FOMO in online shopping.

Recent studies indicate that FOMO significantly influences online impulsive buying behavior (Kalman Halevi et al., 2025; Morsi et al., 2025; Servidio et al., 2025). Consumers experiencing high levels of FOMO tend to prioritize immediate action over careful consideration, increasing the likelihood of spontaneous purchases.

In this study, FOMO is positioned as a mediating variable that explains how marketing stimuli and shopping motivations translate into impulsive buying behavior.

2.4 Impulsive Buying Behavior

Impulsive buying behavior refers to spontaneous, immediate, and unplanned purchases accompanied by strong emotional urges and little cognitive deliberation (Alnoor et al., 2024). In online shopping environments, impulsive buying has become increasingly prevalent due to the convenience of digital platforms, constant promotional exposure, and personalized recommendation systems.

According to the S-O-R framework, impulsive buying can be viewed as a behavioral response generated by external stimuli (such as flash sale) and internal organismic factors (such as hedonic motives and FOMO). Numerous studies have confirmed that digital marketing stimuli significantly contribute to online impulse buying behavior (Nguyen Huu et al., 2023; Shamim et al., 2024; Silalahi et al., 2025).

Within the context of this study, impulsive buying behavior serves as the endogenous outcome influenced by flash sale, hedonic shopping value, and FOMO among Shopee users in Batam.

2.5 Theoretical Framework

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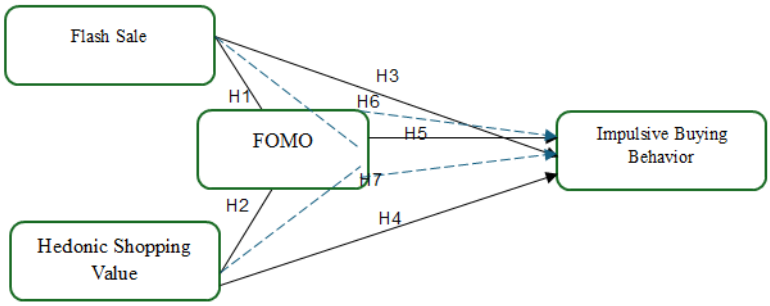
Figure 1. The study's theoretical framework



H1: Flash Sale positively affects FOMO.
H2: Hedonic Shopping Value positively affects FOMO.
H3: Flash Sale positively affects Impulsive Buying Behavior.
H4: Hedonic Shopping Value affects Impulsive Buying Behavior.
H5: FOMO affects Impulsive Buying Behavior.
H6: FOMO mediates the relationship between Flash Sale and Impulsive Buying Behavior.
H7: FOMO mediates the relationship between Hedonic Shopping Value and Impulsive Buying Behavior.

METHODS

3.1 Research Design and Sample

This study adopts a quantitative research approach using a survey method to examine the relationships between Flash Sale , Hedonic Shopping Value, Fear of Missing Out (FOMO), and Impulsive Buying Behavior. The research is explanatory in nature, aiming to test causal relationships among variables. Prior studies have demonstrated that impulsive buying behavior in digital commerce is significantly influenced by situational stimuli such as time pressure and scarcity, as well as internal psychological factors including hedonic motivation and emotional responses (Liu et al., 2023; Nieves-Pavón et al., 2023; Sengoz et al., 2024). Furthermore, recent research highlights that Fear of Missing Out (FOMO) plays a critical role in shaping consumer decision-making by increasing urgency and anxiety related to missed opportunities, which subsequently leads to impulsive purchasing behavior (Chakraborty et al., 2023; Wu et al., 2026; Zhang et al., 2023).

Based on these perspectives, this study adopts the Stimulus–Organism–Response (SOR) framework, where marketing stimuli (Flash Sale, and Hedonic Shopping Value) influence internal psychological states (FOMO), which subsequently affect behavioral responses (Impulsive Buying Behavior). This framework has been widely used to explain how environmental cues in online shopping contexts trigger emotional and cognitive reactions that lead to impulsive consumption (Duong et al., 2025; Errajaa et al., 2022).

The population of this study consists of all Shopee users in Batam City. Since the exact number of Shopee users is unknown, this study employs a non-probability sampling technique(Basile et al., 2024), specifically purposive sampling (Richter & Tudoran, 2024). This technique is considered appropriate as it allows the selection of respondents who meet specific criteria relevant to the research objectives. The criteria for respondents include individuals who actively use Shopee, have made at least one purchase during a flash sale program, and are familiar with promotional features such as discounts, limited stock, or countdown timers. These criteria were established to ensure that respondents possess sufficient knowledge and experience regarding flash sale promotions and online purchasing activities. Individuals who have never participated in a flash sale or are unfamiliar with Shopee's promotional mechanisms may not be able to accurately evaluate the effects of flash sales, hedonic shopping value, and FOMO on their purchasing decisions. Therefore, selecting respondents with relevant shopping experiences enhances the validity and reliability of the collected data and enables a more accurate assessment of the relationships among the studied variables.

A total of 200 respondents were successfully collected, which is considered

sufficient for analysis using Partial Least Squares Structural Equation Modeling (PLS-SEM) (Gudergan et al., 2025; Liébana-Cabanillas et al., 2025). This sample size meets the recommended minimum requirements for analyzing complex models and ensures adequate statistical power for hypothesis testing (Bari et al., 2025).

3.2 Measurement of Variables

The measurement variables in this study were operationalized using a multidimensional construct approach to capture the complexity of consumer behavior in flash sale contexts. Flash Sale (X1) was measured through two key dimensions, namely time pressure and promotional attractiveness, reflecting the urgency and appeal created by limited-time offers (Zhu et al., 2023). Hedonic Shopping Value (X2) was assessed through enjoyment and emotional gratification, representing the extent to which consumers experience pleasure and positive emotions during the shopping process (Lee & Park, 2024). Fear of Missing Out (FOMO) (Z) was conceptualized as a psychological response and measured using anxiety of missing opportunities and social/trend sensitivity, indicating consumers' concern about losing potential benefits and their responsiveness to social influence and trends (Piko et al., 2025). Meanwhile, Impulsive Buying Behavior (Y) was measured through spontaneous purchase and lack of control, capturing both the unplanned nature of purchases and the inability of consumers to regulate their buying impulses (Azad Moghddam et al., 2024). All constructs were measured using reflective indicators on a Likert scale, ensuring that each dimension adequately represents the underlying latent variables.

Data were collected using a structured questionnaire distributed online through platforms such as WhatsApp, Telegram, and social media. The questionnaire was designed using a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) (Hauff et al., 2024). The instrument consists of multiple items adapted from previous studies to ensure validity and reliability (Seclen-Luna et al., 2024).

3.3 Data Analysis Technique

This study employs Partial Least Squares Structural Equation Modeling (PLS-SEM) using SmartPLS to analyze the data (Hauff et al., 2024; Queiroz et al., 2022; Troiville, 2024). The analysis is conducted in two main stages, namely the measurement model (outer model) evaluation and the structural model (inner model) evaluation (Aleksić et al., 2019; Mamun & Uddin, 2025; Seclen-Luna et al., 2024). The outer model is assessed to ensure the validity and reliability of the constructs by examining convergent validity, discriminant validity, and reliability. Convergent validity is evaluated based on outer loading values greater than 0.70 and Average Variance Extracted (AVE) exceeding 0.50, while discriminant validity is assessed using cross-loadings and the Fornell–Larcker criterion (Cristache et al., 2025; Kiruthika & Geetha, 2025; Navarro-García et al., 2024). Reliability is confirmed through Cronbach's Alpha and Composite Reliability values, both of which should exceed 0.70(Cassia & Magno, 2024).

Furthermore, the inner model is evaluated to test the relationships between variables by examining the coefficient of determination (R^2), effect size (f^2), predictive relevance (Q^2), model fit indices such as Standardized Root Mean Square Residual (SRMR) and Normed Fit Index (NFI), as well as hypothesis testing based on path coefficients, t-statistics, and p-values (Magno & Cassia, 2024; Sarstedt et al., 2020). To determine the significance of the relationships, a bootstrapping procedure with 5,000 subsamples is applied (Karma Lhaden et al., 2025; Munawar et al., 2022; Rana et al., 2025).

RESULTS

4.1 Respondent Profile

The respondent profile indicates that the sample is dominated by female participants, accounting for 61% (122 respondents), while males represent 39% (78 respondents). In terms of age distribution, the majority of respondents are young adults aged 21–25 years (48%), followed by those under 20 years (16%), aged 26–30 years (23%), and over 30 years (13%), suggesting that the study primarily captures digitally active consumers. Regarding occupation, students constitute the largest group at 44%, followed by private employees (27%), entrepreneurs (14%), and others (15%). In terms of monthly income, most respondents fall within the lower to middle-income categories, with 37% earning less than IDR

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3,000,000 and 34% earning between IDR 3,000,000 and IDR 5,000,000, while 18% earn between IDR 5,000,000 and IDR 8,000,000, and only 11% earn above IDR 8,000,000. Additionally, the frequency of using Shopee shows that 41% of respondents shop often, 24% very often, 26% occasionally, and only 9% rarely, indicating a high level of engagement with the platform. Furthermore, a significant majority of respondents (88%) have experience with flash sales, while only 12% do not, suggesting that most participants are familiar with flash sale mechanisms and are relevant for analyzing impulsive buying behavior in social commerce contexts.

4.2 Measurement Model Assessment

The structural model results indicate that Flash Sale and Hedonic Shopping Value both have significant positive effects on Fear of Missing Out (FOMO), with path coefficients of 0.404 and 0.364, respectively, explaining 30.1% of the variance in FOMO (R^2 = 0.301). Furthermore, Impulsive Buying Behavior is influenced by three main predictors, namely Flash Sale (β = 0.209), FOMO (β = 0.372), and Hedonic Shopping Value (β = 0.299), with FOMO showing the strongest direct effect among the three. The model explains 42.0% of the variance in Impulsive Buying Behavior (R^2 = 0.420), indicating moderate explanatory power. In terms of the measurement model, all indicators demonstrate strong outer loadings ranging from 0.827 to 0.892, confirming good convergent validity across constructs. Overall, these findings suggest that both promotional factors (flash sale) and psychological factors (hedonic value and FOMO) play important roles in driving impulsive buying behavior, with FOMO acting as a key mediating mechanism that amplifies the influence of flash sales and hedonic shopping experiences on consumers' spontaneous purchasing decisions.

Figure 2. Graphical Output of Research Model

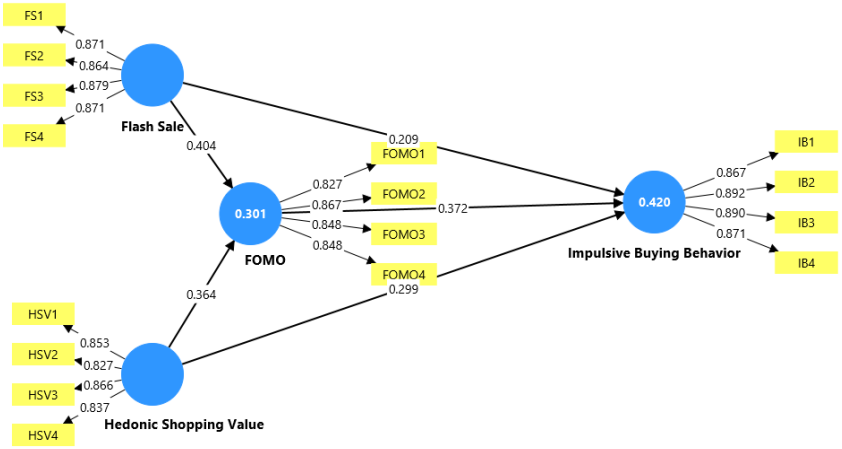

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Table 2. Summary of Composite Reliability, Factor Loading, Average Variance Extracted (AVE) and Cronbach's Alpha

Variabel/Item	*Cronbach's Alpha*	*Composite Reliability*	*Factor Loading*	AVE
Flash Sale (FS)	0.894	0.898		0.759
I feel that I have to purchase immediately because the promotion time is limited			0.871	
The limited time of flash sales makes me rush my purchase decisions			0.864	
Flash sale discounts are very attractive to me			0.879	
Flash sale offers encourage me to buy products even when I did not plan to			0.871	
Hedonic Shopping Value (HSV)	0.868	0.878		0.715
I feel happy when shopping online			0.853	
Shopping provides an enjoyable experience for me			0.827	
I shop to improve my mood			0.866	
I feel emotionally satisfied after making a purchase			0.837	
Fear of Missing Out (FOMO)	0.869	0.87		0.718
I worry about missing the opportunity to get products at lower prices			0.827	
I feel anxious if I do not purchase immediately during promotions			0.867	
I want to follow current shopping trends			0.848	
I do not want to be left behind by others in shopping trends			0.848	
Impulsive Buying Behavior (IBB)	0.903	0.908		0.775
I often make purchases spontaneously without prior planning			0.867	
I buy products without careful consideration			0.892	
I find it difficult to resist buying when I see promotions			0.890	
I purchase products even when I do not really need them			0.871	

Table 3. Summary of Fornell-Larcker, Heterotrait-Monotrait Ratio (HTMT)

	Fornell-Larcker				**Heterotrait-Monotrait Ratio (HTMT)**			
	FOMO	Flash Sale	Hedonic Shopping Value	Impulsive Buying Behavior	FOMO	Flash Sale	Hedonic Shopping Value	Impulsive Buying Behavior
FOMO	**0.847**							
Flash Sale	0.410	**0.871**			0.46			
Hedonic Shopping Value	0.371	0.016	**0.846**		0.418	0.036		
Impulsive Buying Behavior	0.568	0.367	0.440	**0.880**	0.639	0.403	0.489	

Table 3 presents the results of the discriminant validity assessment using the Fornell-Larcker criterion and the Heterotrait-Monotrait Ratio (HTMT). Based on the Fornell-Larcker criterion, the square root of the Average Variance Extracted (AVE) for each construct is greater than its correlations with other constructs. Specifically, the AVE square root values for FOMO (0.847), Flash Sale (0.871), Hedonic Shopping Value (0.846), and Impulsive Buying Behavior (0.880) exceed the corresponding inter-construct correlations, indicating satisfactory discriminant validity.

Furthermore, the HTMT values range from 0.036 to 0.639, all of which are well below the recommended threshold of 0.85. These results suggest that each construct is empirically distinct from the others and measures a unique concept. Therefore, the discriminant validity requirements are fulfilled, confirming that the measurement model demonstrates adequate construct differentiation and is suitable for further structural model analysis.

4.3 Structural Model Assessment

The results of the structural model assessment presented in Table 4 indicate that the model demonstrates acceptable explanatory power, predictive relevance, and no collinearity issues. The coefficient of determination (R^2) shows that Flash Sale and Hedonic Shopping Value explain 30.1% of the variance in FOMO (R^2 = 0.301), while Flash Sale, Hedonic Shopping Value, and FOMO jointly explain 42.0% of the variance in Impulsive Buying Behavior (R^2 = 0.420), indicating moderate explanatory strength. The effect size (f^2) analysis reveals that Flash Sale has a moderate effect on FOMO (0.233) but a weak effect on Impulsive Buying Behavior (0.061), while Hedonic Shopping Value shows a moderate effect on both FOMO (0.190) and Impulsive Buying Behavior (0.130). Additionally, FOMO has a moderate effect on Impulsive Buying Behavior (0.167), highlighting its important role in the model. Collinearity diagnostics show that all VIF values range from 1.000 to 1.430, which are well below the critical threshold of 5, indicating no multicollinearity issues among the constructs. Furthermore, the Q^2 Predict values of 0.284 for FOMO and 0.306 for Impulsive Buying Behavior confirm that the model has good predictive relevance. Complementing these findings, Table 5 indicates that the model fit is satisfactory, as evidenced by an SRMR value of 0.051 (below the threshold of 0.08) and an NFI value of 0.888 (above the minimum threshold of 0.80), confirming that the proposed model fits the empirical data well.

Table 4: Coefficient (R^2), Effect Size ($f^{\wedge 2}$), Q^2predict, Collinearity (VIF)

	Effect Size (f^2)		**Collinearity (VIF)**		**Determination Coefficient (R^2)**	**Q^2 Predict**
	FOMO	Impulsive Buying Behavior	FOMO	Impulsive Buying Behavior		
Flash Sale	0.233	0.061	1.000	1.233		
Hedonic Shopping Value	0.19	0.13	1.000	1.190		
FOMO		0.167		1.430	0.301	0.284
Impulsive Buying Behavior					0.420	0.306

Table 5. Summary of model fit SEMR/NFI

	Saturated model	Threshold
SRMR	0.051	< 0.08
NFI	0.888	> 0.80

4.4 Hypothesis Testing

The results of hypothesis testing presented in Table 6 indicate that all proposed hypotheses (H1–H7) are supported, as evidenced by significant t-statistics and p-values below the 0.05 threshold. Flash Sale has a significant positive effect on FOMO (β = 0.404, t = 7.589, p = 0.000), while Hedonic Shopping Value also significantly influences FOMO (β = 0.364, t = 6.911, p = 0.000). Furthermore, Flash Sale directly affects Impulsive Buying Behavior (β = 0.209, t = 3.407, p = 0.001), and Hedonic Shopping Value shows a stronger direct effect on Impulsive Buying Behavior (β = 0.299, t = 4.757, p = 0.000). FOMO itself has a significant and substantial impact on Impulsive Buying Behavior (β = 0.372, t = 6.076, p = 0.000), indicating its important role as a psychological driver. In addition, the mediation analysis reveals that FOMO significantly mediates the relationship between Flash Sale and Impulsive

Buying Behavior (β = 0.150, t = 4.400, p = 0.000), as well as the relationship between Hedonic Shopping Value and Impulsive Buying Behavior (β = 0.135, t = 4.322, p = 0.000). Overall, these findings confirm that both direct and indirect effects in the model are statistically significant, highlighting the crucial role of FOMO as a mediating variable in explaining impulsive buying behavior in the context of flash sales and hedonic shopping experiences.

Table 6. Results of Hypothesis Testing

Hipotesis	Original sample (O)	T statistics	P values	Information
H1: Flash Sale → FOMO	0.404	7.589	0.000	Confirmed
H2: Hedonic Shopping Value → FOMO	0.364	6.911	0.000	Confirmed
H3: Flash Sale → Impulsive Buying Behavior	0.209	3.407	0.001	Confirmed
H4: Hedonic Shopping Value → Impulsive Buying Behavior	0.299	4.757	0.000	Confirmed
H5: FOMO → Impulsive Buying Behavior	0.372	6.076	0.000	Confirmed
H6: Flash Sale → FOMO → Impulsive Buying Behavior	0.150	4.400	0.000	Confirmed
H7: Hedonic Shopping Value → FOMO → Impulsive Buying Behavior	0.135	4.322	0.000	Confirmed

DISCUSSION AND CONCLUSSION

5.1 Discussion

The findings of this study provide strong empirical evidence that both promotional stimuli and psychological factors play a critical role in shaping impulsive buying behavior in social commerce. Flash Sale was found to significantly influence FOMO, indicating that time-limited offers and promotional attractiveness effectively create a sense of urgency among consumers (Das et al., 2019; Lu & Wang, 2024). This result aligns with the scarcity and urgency principle, where limited-time promotions trigger anxiety about missing opportunities, thereby encouraging quicker decision-making (Geerts & Masset, 2022). Similarly, Hedonic Shopping Value significantly affects FOMO, suggesting that consumers who experience enjoyment and emotional gratification during shopping are more likely to feel compelled not to miss attractive deals (Alzayat & Lee, 2021; Silalahi et al., 2025). This highlights that emotional engagement in the shopping process intensifies psychological pressure, leading to heightened FOMO.

Furthermore, the results demonstrate that both Flash Sale and Hedonic Shopping Value have direct and significant effects on Impulsive Buying Behavior, although their indirect effects through FOMO are also substantial (Tandon et al., 2022). Among all predictors, FOMO shows the strongest influence on impulsive buying behavior, confirming its central role as a psychological driver. This indicates that impulsive purchases are not solely driven by external promotional factors but are largely shaped by internal emotional responses. Consumers who experience higher levels of anxiety about missing opportunities tend to make spontaneous and less controlled purchasing decisions. The mediation analysis further strengthens this finding, showing that FOMO partially mediates the relationship between both Flash Sale and Hedonic Shopping Value and Impulsive Buying Behavior. This suggests that promotional strategies and hedonic experiences are more effective when they successfully trigger consumers' emotional responses, particularly FOMO.

From a theoretical perspective, these findings provide empirical support for the Stimulus–Organism–Response (S-O-R) framework adopted in this study. According to the S-O-R theory, external environmental stimuli influence individuals' internal psychological states, which subsequently shape behavioral responses. In the present study, Flash Sale and Hedonic Shopping Value function as stimuli that trigger consumers' emotional and cognitive reactions, represented by FOMO as the organism component. These internal psychological responses then lead to Impulsive Buying Behavior as the behavioral response. The significant mediating role of FOMO confirms that consumers do not react directly to promotional

stimuli alone; rather, their purchasing behavior is influenced through psychological processes that generate urgency, emotional arousal, and fear of missing opportunities. Therefore, the findings extend the application of the S-O-R framework in the context of social commerce by demonstrating the importance of FOMO as a key psychological mechanism linking marketing stimuli to impulsive purchasing decisions.

These findings also imply that in highly competitive digital marketplaces, such as social commerce platforms, marketers should not only focus on offering discounts or attractive promotions but also design strategies that enhance emotional engagement and perceived urgency (Luo et al., 2024). Flash sale campaigns, when combined with enjoyable shopping experiences, can significantly increase the likelihood of impulsive purchases by activating consumers' fear of missing out (Takács & Seregély, 2025). Therefore, integrating promotional tactics with psychological triggers becomes a key strategy for influencing consumer behavior in online environments.

CONCLUSION

In conclusion, this study confirms that Flash Sale and Hedonic Shopping Value significantly influence Impulsive Buying Behavior both directly and indirectly through FOMO. The results highlight that FOMO serves as a crucial mediating variable that connects external marketing stimuli with internal consumer responses, ultimately leading to impulsive purchasing decisions. The model demonstrates moderate explanatory power, indicating that the combination of promotional and psychological factors provides a meaningful explanation of impulsive buying behavior in social commerce contexts.

This study contributes to the literature by integrating promotional and psychological perspectives into a single model, emphasizing the importance of emotional mechanisms in consumer decision-making. Practically, the findings suggest that businesses should focus on creating time-limited promotions and enhancing the hedonic value of shopping experiences to stimulate consumer engagement and increase sales. However, this study is limited to a specific context and sample, and future research is recommended to include additional variables, such as consumer personality traits or perceived risk, as well as to explore different platforms and demographic groups to enhance generalizability.

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