

THE DARK SIDE OF DIGITAL ENGAGEMENT: HOW FOMO INFLUENCES IMPULSE BUYING BEHAVIOR IN E-COMMERCE PLATFORMS IN PANGKALPINANG CITY

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Abstract

This study aims to analyze the impact of Fear of Missing Out (FOMO) on impulse buying behavior among e-commerce platform users in Pangkalpinang City. FOMO is a psychological phenomenon that arises due to excessive exposure to limited-time promotions and information, which drives consumers to make quick purchasing decisions without prior planning. The research employs a quantitative approach with simple linear regression analysis, involving 152 respondents who have made transactions on e-commerce platforms. The findings indicate that FOMO has a positive and significant effect on impulse buying behavior, with a t-value of 10.553 and significance <0.001. The coefficient of determination (R^2) shows that FOMO explains 42.9% of the variation in impulse buying behavior. This suggests that higher consumer engagement in digital activities, such as interactions with social media and e-commerce platforms, can amplify FOMO and increase the likelihood of impulse purchases. Therefore, e-commerce marketers should consider the psychological impact of FOMO when designing more ethical and sustainable marketing strategies.

Keywords: Fear of Missing Out (FOMO), Impulse Buying Behavior, E-commerce, Digital Engagement

INTRODUCTION

The development of information technology has driven a major transformation in people's economic activities, particularly in the digital commerce sector. Digitalization has not only changed the distribution patterns of goods and services but also shaped increasingly dynamic and technology-driven consumer behavior. In Indonesia, the e-commerce sector has shown very rapid growth in recent years. According to data from the Central Statistics Agency (BPS), the number of e-commerce businesses reached approximately 4.4 million units in 2024, representing a 15.3% increase compared to the previous year. Furthermore, the national e-commerce transaction value reached IDR 1,288.93 trillion, demonstrating a significant contribution to the digital economy. (Yonatan, 2025) This increase confirms that e-commerce has become a key pillar of digital-based economic growth in Indonesia.

This growth is inseparable from the increasing and increasingly widespread internet penetration. By 2023, the number of internet users in Indonesia will reach more than 221 million people, or approximately 80% of the total population. In the Bangka Belitung Islands Province, the internet penetration rate reaches approximately 82.66%, including in Pangkalpinang City, the center of regional economic activity. This situation indicates that the public has relatively high access to digital technology, thus opening up significant opportunities for the development of e-commerce activities. (Statistics, 2024) This high level of accessibility allows consumers to conduct transactions anytime, anywhere, and makes it easier for businesses to reach a wider market.

As digital access increases, so does public engagement in digital activities. Consumers are using e-commerce platforms not only to make purchases but also to research products, compare prices, read reviews, and follow emerging trends through social media.(Rinonce & Jannah, 2025)This high level of interaction results in consumers being exposed to a variety of digital marketing stimuli on a continuous basis. This exposure ultimately influences consumer decision-making, which becomes faster, more responsive, and often irrational.(Farhatun, 2025).

On the other hand, high digital engagement also gives rise to a psychological phenomenon known as Fear of Missing Out (FOMO). FOMO is a condition in which individuals feel anxious about missing out on information, experiences, or opportunities that others have.(Cahyani et al., 2025)In the context of e-commerce, this phenomenon often arises from marketing strategies designed to create a sense of urgency, such as flash sales, limited-time discounts, and real-time promotional notifications. This situation makes consumers feel compelled to make a decision quickly to avoid missing out on a valuable opportunity.(Rahman et al., 2025).

This FOMO phenomenon has an impact on increasing impulse buying behavior, namely purchases made spontaneously without careful planning.(Wuryan et al., 2026)Consumers tend to make purchases based on emotional impulses, rather than rational considerations. Therefore, the interaction between digital engagement, FOMO, and impulse buying is an important phenomenon to study, especially in the context of society in Pangkalpinang City. Based on this description, the research problem formulation in this study is whether FOMO influences impulse buying behavior among e-commerce platform users in Pangkalpinang City. The purpose of this study is to analyze the influence of FOMO on impulse buying behavior. This research is expected to provide theoretical benefits in the development of digital marketing science and practical benefits for business actors in designing more effective and ethical marketing strategies.

LITERATURE REVIEW AND HYPOTHESIS FORMULATION

This literature review is developed to provide a theoretical foundation for the variables examined in this study, namely digital engagement, FOMO (Fear of Missing Out), and impulse buying behavior. In addition, this section explains the relationships among variables based on previous empirical findings in order to support the formulation of research hypotheses.

According to Habib & Almamy (2025), digital engagement refers to the level of consumer involvement in digital activities that reflects how individuals interact with technology, especially through e-commerce platforms and social media. This involvement is not limited to transactional activities only, but also includes information searching, product exploration, giving reviews, and interacting with digital content provided by companies. In the digital economy, digital engagement is considered an important factor influencing consumer behavior because it enables two-way communication between consumers and service providers.

The growth of digital engagement is also supported by easier access to technology and the increasing use of mobile devices. Consumers are able to access various e-commerce platforms anytime and anywhere, resulting in higher interaction frequency with digital content. In addition, features such as notifications, product recommendations, and personalized content further strengthen consumer involvement. These conditions make consumers more responsive to digital marketing stimuli, which may ultimately influence purchasing decisions (Zanjabila et al., 2023). Therefore, digital engagement functions not only as a medium of interaction, but also as a factor shaping overall consumption behavior.

FOMO (Fear of Missing Out) is a psychological condition in which individuals feel anxious when they believe they are missing experiences or information enjoyed by others (Asyifa et al., 2024). In the e-commerce context, FOMO emerges because of intense exposure to information and marketing strategies emphasizing urgency and exclusivity. Consumers feel encouraged to act immediately due to the perception that available opportunities are limited (Riadi & Septiani, 2025).

This condition is further strengthened by social media, which displays other people's consumption activities in real time.

According to Andrew K. Przybylski et al. (2013), the indicators of FOMO in this study include:

- Fear of Missing Experience, which refers to consumers' fear of missing promotional opportunities or current trends.
- Social Comparison, which refers to the tendency to compare oneself with others who appear better.
- Updates in Shopping Activities, which refers to the need to continuously follow shopping-related updates.
- Urgency to Stay Connected, which refers to the urge to keep monitoring e-commerce applications in order not to miss information.
- Anxiety of Missing Information, which refers to feelings of anxiety when not knowing the latest promotions or offers.

Previous studies have shown that FOMO significantly influences consumption behavior, particularly by increasing purchase urgency and encouraging impulsive decisions (Fadilla, 2025).

Impulse buying behavior refers to purchasing actions carried out spontaneously without prior planning (Nguyen & Van Nguyen, 2025). This behavior is generally triggered by emotional and situational stimuli that lead consumers to make quick decisions without careful consideration. In the e-commerce environment, impulse buying behavior continues to increase due to easy access, wide product variety, and aggressive marketing strategies (Widyariini et al., 2025).

According to Stern (1962), the indicators of impulse buying behavior in this study include:

- Pure Impulse Buying, which refers to sudden purchases made without previous intention.
- Reminder Impulse Buying, which refers to purchases occurring after consumers see a product or advertisement.
- Suggestion Impulse Buying, which refers to purchases influenced by recommendations or reviews.
- Planned Impulse Buying, which refers to purchases triggered by promotions or discounts even though they were not specifically planned beforehand.

Various factors such as promotions, product displays, payment convenience, and consumers' emotional conditions play important roles in encouraging impulsive purchasing behavior on digital platforms (Nanda, 2025).

Previous studies have demonstrated that FOMO has a significant effect on impulse buying behavior in digital contexts. Widodo (2024) found that FOMO and sales promotions simultaneously increase the tendency toward impulse buying, particularly on social commerce platforms. Ayyasy et al. (2025) emphasized that social pressure, product exclusivity, and time urgency are the main factors strengthening the relationship between FOMO and impulse buying.

Meanwhile, Rachman et al. (2024) showed that discount strategies combined with live streaming can increase engagement, which subsequently leads to higher impulse buying behavior. Nguyen (2025) also added that platform design, transaction convenience, and the use of mobile commerce further accelerate impulsive decision-making processes. Therefore, FOMO can be concluded to be a key psychological factor mediating the influence of digital engagement on impulse buying behavior.

Based on the theoretical foundation and findings of previous studies described above, the hypothesis proposed in this study is as follows:

H1: FOMO has a positive effect on impulse buying behavior.

In conclusion, this literature review indicates that digital engagement and FOMO play important roles in shaping consumer behavior in the digital era. Therefore, this study is relevant to examine these relationships in the context of e-commerce in Pangkalpinang City.

RESEARCH METHODS

This study uses a quantitative approach with the aim of analyzing the influence of Fear of Missing Out (FOMO) on impulse buying behavior among e-commerce platform users in Pangkalpinang City. The type of research used is explanatory research that aims to explain the causal relationship between the independent and dependent variables. The population in this study is all e-commerce users domiciled in Pangkalpinang City, with a sampling technique using purposive sampling, namely respondents who have made purchases through e-commerce platforms within a certain period. The number of samples is determined based on certain criteria to be able to represent the characteristics of the population. (Sarwono & Handayani, 2021).

The data used in this study were primary data obtained through in-person and online questionnaires. The research instrument was designed based on the FOMO variable indicator, based on Przybylski's (2013) theory, and the impulse buying behavior variable, based on Stern's (1962) theory. Data were measured using a five-point Likert scale, ranging from strongly disagree to strongly agree, to gauge respondents' level of agreement with each statement.

The data collection technique was carried out by distributing questionnaires to respondents who met the research criteria. The data obtained were then tested for validity and reliability to ensure the quality of the research instrument. Validity testing was carried out by observing the correlation value between item scores and total scores, where an item is declared valid if the calculated r value is greater than the table r value. Reliability testing was carried out using Cronbach's Alpha, with the criterion that the instrument is declared reliable if the alpha value is greater than 0.70. (Priadana & Sunarsi, 2021).

Next, data analysis was carried out using simple linear regression analysis techniques to test the influence of the FOMO variable on impulse buying.

$$Y = a + bX + e \dots\dots\dots(1)$$

Information:

- Y = Impulse Buying Behavior
- X = Fear of Missing Out (FOMO)
- a = Constant
- b = Regression coefficient
- e = Error term

Hypothesis testing is conducted using a t-test to determine the partial effect of the independent variable on the dependent variable. The basis for decision-making in the t-test is as follows: if the significance value (Sig.) < 0.05 or the calculated t value $> t$ table, then the hypothesis is accepted, meaning FOMO has a significant effect on impulse buying behavior. Conversely, if the significance value > 0.05 or the calculated t value $< t$ table, then the hypothesis is rejected. (EDHIE RACHMAD et al., 2024).

Additionally, the coefficient of determination (R^2) is used to measure the extent to which an independent variable explains variation in the dependent variable. An R^2 value closer to 1 indicates that the FOMO variable has a stronger ability to explain impulse buying behavior. Conversely, a low R^2 value indicates that other variables outside the model influence impulse buying behavior. (Priadana & Sunarsi (2021).

This study also conducted classical assumption tests, including normality tests, heteroscedasticity tests, and linearity tests, to ensure that the regression model used met the analysis requirements. (Sarwono & Handayani (2021)) The basis for decision-making in the normality test is that if the significance value is > 0.05 , the data is normally distributed. In the heteroscedasticity test, if the significance value is > 0.05 , there are no symptoms of heteroscedasticity. Meanwhile, in the linearity test, the relationship between variables is declared linear if the deviation from linearity significance value is > 0.05 .

The analysis results are then interpreted to answer the problem formulation and test the proposed hypotheses. This method is expected to produce accurate and scientifically sound results.

RESULTS AND DISCUSSION

Research Object Overview

This study aims to analyze the impact of the phenomenon Fear of Missing Out (FOMO) on impulse buying behavior among e-commerce platform users in Pangkalpinang City. The research object focuses on consumers who actively use e-commerce services in the area and have participated in transactions via online platforms within a specified period. This study examines the relationship between digital engagement, which includes interactions with various e-commerce and social media platforms, and impulse buying behavior triggered by FOMO.

E-commerce, as the main research object, refers to commercial activities conducted digitally through online platforms such as Shopee, Tokopedia, and TikTok Shop, offering a wide variety of products with various promotions and discounts. This study also focuses on the influence of urgency-based marketing, such as flash sales and limited-time offers, which have become increasingly popular among digital consumers. Through this analysis, the study aims to provide insights into consumer behavior dynamics influenced by FOMO in the e-commerce environment and its impact on impulsive purchasing decisions.

Summary of Respondent Characteristics

To provide a comprehensive overview of the research sample, respondent characteristics were analyzed based on several demographic and behavioral variables, including gender, age, occupation, income, online shopping frequency, platform usage, duration of e-commerce use, and purchasing experience. The following table presents the distribution of respondents based on gender.

Table 1. Distribution of Respondents by Gender (n = 152)

Gender	Frequency (%)
Male	42.1%
Female	57.9%
Total	100%

The data show that the majority of respondents are female (57.9%), while male respondents account for 42.1%. This indicates that women are more dominant in this study, suggesting that female consumers may have higher engagement in e-commerce activities. This dominance may also imply that women are more susceptible to digital marketing stimuli, which is relevant when analyzing impulse buying behavior. The following table presents the age distribution of respondents.

Table 2. Distribution of Respondents by Age (n = 152)

Age Group	Frequency (%)
< 17 years	15.8%
17–20 years	5.3%
21–25 years	32.2%
26–30 years	15.8%
> 30 years	30.9%
Total	100%

The majority of respondents fall within the 21–25 years age group (32.2%), followed by those aged above 30 years (30.9%). This indicates that the sample is dominated by individuals in productive and digitally active age groups. These groups are generally more familiar with technology and more exposed to e-commerce platforms, making them more likely to experience

FOMO and engage in impulse buying. The following table presents the occupational background of respondents.

Table 4.3 Distribution of Respondents by Occupation (n = 150)

Occupation	Frequency (%)
Student	33.3%
Private Employee	7.3%
Civil Servant	29.3%
Entrepreneur	9.3%
Others	20.7%
Total	100%

Most respondents are students (33.3%) and civil servants (29.3%), indicating a diverse sample with both non-income and stable-income groups. Students may be more influenced by trends and social pressure, while civil servants may have more stable purchasing power. This combination provides a balanced perspective on impulse buying behavior across different economic backgrounds. The following table presents respondents' monthly income levels.

Table 4. Distribution of Respondents by Monthly Income (n = 150)

Income Level	Frequency (%)
< IDR 1,000,000	21.3%
IDR 1,000,000–3,000,000	15.3%
IDR 3,000,000–5,000,000	20.0%
> IDR 5,000,000	43.3%
Total	100%

The largest proportion of respondents (43.3%) earn more than IDR 5,000,000 per month, indicating relatively strong purchasing power. This suggests that respondents have the financial capability to engage in online shopping, which may increase the likelihood of impulse buying behavior. The following table shows how often respondents shop online.

Table 5. Frequency of Online Shopping (n = 152)

Frequency	Percentage (%)
Rarely	19.7%
1–2 times/month	40.8%
3–5 times/month	24.3%
> 5 times/month	15.1%
Total	100%

Most respondents shop online 1–2 times per month (40.8%), followed by 3–5 times (24.3%). This indicates that online shopping is a routine activity for many respondents. Frequent exposure to e-commerce platforms increases the likelihood of encountering promotional stimuli, which can trigger FOMO and impulse buying. The following table presents the most frequently used e-commerce platforms.

Table 6. Most Used E-Commerce Platform (n = 152)

Platform	Percentage (%)
Shopee	60.5%
TikTok Shop	32.9%
Tokopedia	3.3%
Lazada	1.3%
Others	2.0%

Total	100%
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Shopee dominates as the most used platform (60.5%), followed by TikTok Shop (32.9%). This suggests that respondents are highly exposed to platforms known for aggressive marketing strategies such as flash sales, live streaming, and personalized promotions. These features are strongly associated with triggering FOMO and impulse buying behavior. The following table shows how long respondents have been using e-commerce platforms.

Table 7. Duration of E-Commerce Usage (n = 152)

Duration	Percentage (%)
< 1 year	14.5%
1–2 years	22.4%
3–5 years	25.0%
> 5 years	38.2%
Total	100%

Most respondents (38.2%) have been using e-commerce for more than 5 years, indicating high familiarity and experience with online shopping. Long-term exposure increases the likelihood of developing habitual shopping behavior and being influenced by digital engagement factors such as FOMO. The following table shows whether respondents have ever made purchases through e-commerce platforms.

Table 8. E-Commerce Purchase Experience (n = 152)

Response	Percentage (%)
Yes	92.1%
No	7.9%
Total	100%

A vast majority of respondents (92.1%) have experience purchasing through e-commerce platforms. This confirms that the sample is highly relevant to the study, as most respondents are active online consumers who are likely to exhibit impulse buying behavior influenced by FOMO.

Result

Validity and Reliability Test

Before conducting further analysis, a validity test was performed to ensure that each questionnaire item accurately measures the intended variables. The following table presents the results of the validity test for the Fear of Missing Out (FOMO) variable:

Table 9. Validity Test Results for FOMO Variable (X)

Item	r Count	r Table	Description
X1	0.602	0.1348	Valid
X2	0.602	0.1348	Valid
X3	0.545	0.1348	Valid
X4	0.525	0.1348	Valid
X5	0.142	0.1348	Valid
X6	0.401	0.1348	Valid
X7	0.419	0.1348	Valid
X8	0.360	0.1348	Valid
X9	0.412	0.1348	Valid

X10	0.355	0.1348	Valid
X11	0.338	0.1348	Valid
X12	0.494	0.1348	Valid
X13	0.482	0.1348	Valid
X14	0.477	0.1348	Valid
X15	0.542	0.1348	Valid
X16	0.562	0.1348	Valid

All items in the FOMO variable have r-count values greater than the r-table value (0.1348). Therefore, all items are declared valid and suitable for measuring the FOMO construct. The following table presents the validity test results for the impulse buying variable:

Table 10. Validity Test Results for Impulse Buying Variable (Y)

Item	r Count	r Table	Description
Y1	0.575	0.1348	Valid
Y2	0.497	0.1348	Valid
Y3	0.550	0.1348	Valid
Y4	0.664	0.1348	Valid
Y5	0.640	0.1348	Valid
Y6	0.661	0.1348	Valid
Y7	0.617	0.1348	Valid
Y8	0.715	0.1348	Valid
Y9	0.673	0.1348	Valid
Y10	0.566	0.1348	Valid
Y11	0.537	0.1348	Valid
Y12	0.614	0.1348	Valid
Y13	0.597	0.1348	Valid
Y14	0.574	0.1348	Valid
Y15	0.676	0.1348	Valid
Y16	0.607	0.1348	Valid

All items for the impulse buying variable have r-count values greater than the r-table value. Thus, all items are valid and can be used for further statistical analysis. To ensure the consistency and stability of the measurement instrument, a reliability test was conducted using Cronbach's Alpha.

Table 11. Reliability Test Results for Each Variable

Variable	Cronbach's Alpha	Number of Items	Criteria	Description
FOMO (X)	0.915	16	> 0.70	Reliable
Impulse Buying (Y)	0.915	16	> 0.70	Reliable

The Cronbach's Alpha values for both variables are 0.915, which are significantly higher than the minimum threshold of 0.70. This indicates that all research instruments have excellent internal consistency. Therefore, the questionnaire is highly reliable and suitable for measuring both FOMO and impulse buying variables.

Classical Assumption Test

The classical assumption tests were conducted to ensure that the regression model used in this study meets the required analytical assumptions, so that the results obtained are reliable. The tests performed include the normality test, heteroskedasticity test, and linearity test. To test data

normality, the Kolmogorov-Smirnov and Shapiro-Wilk methods were used. The results of the tests are presented in Table 1 below.

Table 12. Normality Test

Tests of Normality						
Y	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Y	,072	150	,052	,981	150	,032

a. Lilliefors Significance Correction

Based on Table 1, the Kolmogorov-Smirnov test shows a significance value of 0.052 (> 0.05), indicating that the data are normally distributed. Meanwhile, the Shapiro-Wilk test shows a significance value of 0.032 (< 0.05), suggesting that the data are not normally distributed. This difference in results may be due to the higher sensitivity of the Shapiro-Wilk test in detecting deviations, especially with large sample sizes. In this study, the sample size reaches 150 respondents ($n > 50$), so the Kolmogorov-Smirnov test is considered more relevant as the primary reference. Therefore, the data in this study can be considered normally distributed (approximately normal) and meet the normality assumption. Next, the heteroskedasticity test was conducted to determine whether there is inequality in error variance within the regression model. The test results are presented in the form of a scatter plot in Figure 1 below.

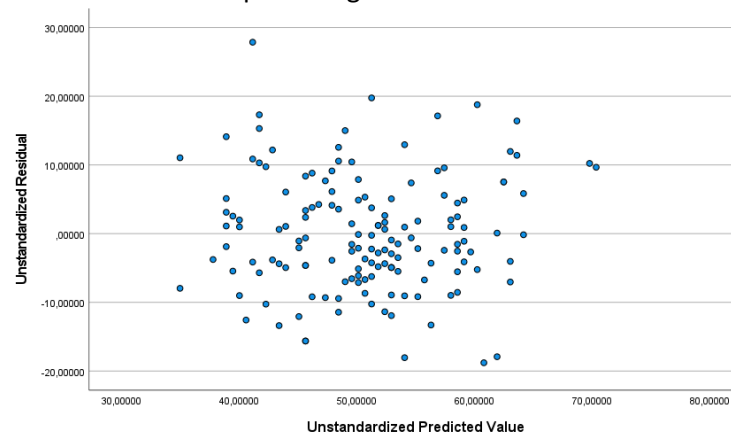


Figure 1. Heteroskedasticity Test

Based on Figure 1, the residual points are randomly distributed and do not form any specific pattern. This distribution indicates that the error variance is constant (homoskedasticity), meaning there is no indication of heteroskedasticity in the regression model. Thus, the homoskedasticity assumption is satisfied. The next test is the linearity test, which aims to determine whether the relationship between the independent and dependent variables is linear. The test results are shown in Figure 2 below.

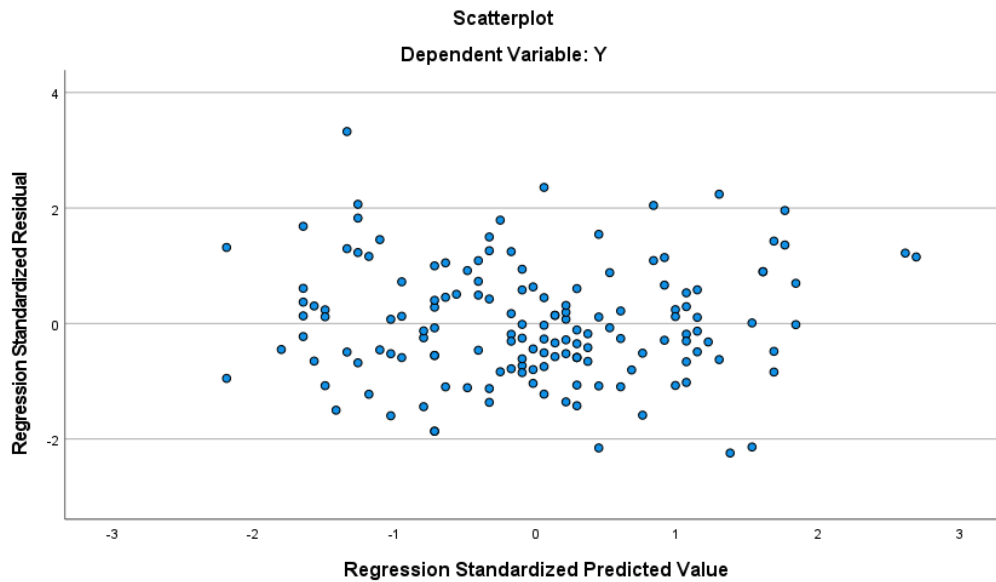


Figure 2. Linearity Test

Based on Figure 2, the points are randomly scattered without forming a particular pattern. This indicates that the relationship between the independent variable (FOMO) and the dependent variable (Impulse Buying) is linear. Therefore, the regression model in this study satisfies the linearity assumption.

Overall, the results of the classical assumption tests show that the regression model used meets the assumptions of normality, is free from heteroskedasticity, and has a linear relationship, making it appropriate for further analysis.

Simple Linear Regression Analysis Results

Simple linear regression analysis is used to determine the effect of the independent variable, Fear of Missing Out (FOMO), on the dependent variable, Impulsive Buying Behavior. The results of the regression analysis are shown in Tables 2 and 3 below. This table shows the summary of the linear regression model, which describes the strength of the relationship between the independent and dependent variables.

Table 13. Model Summary

Model Summary^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,655 ^a	,429	,426	8,379

a. Predictors: (Constant), X

b. Dependent Variable: Y

Based on Table 2, the value of R is 0.655, indicating a positive relationship with a moderate strength between FOMO and Impulsive Buying Behavior. The R Square value of 0.429 indicates that 42.9% of the variation in Impulsive Buying Behavior can be explained by the FOMO variable, while the remaining variation is influenced by other variables outside the scope of this research model. The Adjusted R Square value of 0.426, which is close to the R Square value, indicates that the model used is quite good. Meanwhile, the Std. Error of the Estimate value of 8.379 shows the level of prediction error in the model, where the smaller the value, the better the model's ability to predict the dependent variable.

This table shows the regression coefficient values, including the constant, independent variable coefficients, as well as t-values and significance levels. Next, the results of the regression coefficients are presented in Table 3 below.

Table 14. Coefficients

Coefficients ^a					
Model		Unstandardized Coefficients		Standardized Coefficients	t
		B	Std. Error	Beta	
1	(Constant)	25,969	2,452		10,592
	X	,562	,053	,655	10,553

a. Dependent Variable: Y

Based on Table 3, the following regression equation is obtained:

$$Y = 25.969 + 0.562X$$

The constant value of 25.969 indicates that when FOMO is considered to be zero, Impulsive Buying Behavior has a value of 25.969. The FOMO regression coefficient of 0.562 indicates that for each increase of 1 unit in FOMO, Impulsive Buying Behavior will increase by 0.562, assuming other variables remain constant.

The Standardized Beta value of 0.655 shows that FOMO has a strong influence on Impulsive Buying Behavior. Additionally, the t-value of 10.553 with a significance level of < 0.001 indicates that the FOMO variable significantly affects Impulsive Buying Behavior.

Hypothesis Testing Results (t-Test)

Hypothesis testing was conducted using the t-test to determine whether the independent variable has a significant partial effect on the dependent variable. The results of the t-test can be seen in Table 3 (Coefficients).

Based on the test results, the FOMO variable has a t-value of 10.553 with a significance level of < 0.001. This significance level is smaller than 0.05, so it can be concluded that the FOMO variable significantly affects Impulsive Buying Behavior. Thus, the hypothesis proposed in this study, which is:

H1: FOMO has a positive effect on Impulsive Buying Behavior is accepted.

This result shows that the higher the level of FOMO experienced by consumers, the greater their tendency to engage in impulsive buying.

Coefficient of Determination (R²)

The coefficient of determination is used to measure how well the independent variable explains the variation in the dependent variable. The value of the coefficient of determination can be seen in Table 2 (Model Summary), which is the R Square value of 0.429.

This indicates that 42.9% of the variation in Impulsive Buying Behavior can be explained by the FOMO variable. The remaining 57.1% is influenced by other variables not studied in this research, such as promotions, ease of platform use, consumer emotional conditions, and other social factors. To strengthen the analysis results, the overall significance test of the model is shown in Table 4 below.

Table 15. ANOVA

ANOVA ^a					
Model		Sum of Squares	df	Mean Square	F
1	Regression	7819,431	1	7819,431	111,369

,000^b

Residual	10391,342	148	70,212
Total	18210,773	149	

a. Dependent Variable: Y
 b. Predictors: (Constant), X

Based on Table 4, the calculated F-value of 111.369 with a significance level of < 0.001 indicates that the regression model is significant as a whole. This means that the FOMO variable collectively has the ability to explain the variation in Impulsive Buying Behavior significantly. Thus, it can be concluded that the regression model used in this study has a good ability to explain the relationship between FOMO and Impulsive Buying Behavior.

Discussion

Based on the research findings, it is known that the variable Fear of Missing Out (FOMO) has a positive and significant effect on impulse buying among e-commerce users in Pangkalpinang City. This is evidenced by a t-value of 10.553 and a significance level of < 0.001 . This means that the higher the level of FOMO experienced by consumers, the greater their tendency to make impulsive purchases. Additionally, the coefficient of determination value of 42.9% indicates that FOMO contributes significantly in explaining impulse buying behavior, although other factors outside the scope of this study also influence it.

This finding can be explained through the perspective of the digital engagement theory proposed by Habib & Almamy (2025). Digital engagement describes the level of consumer involvement in digital activities, such as interacting with content, seeking information, receiving recommendations, and responding to promotions on e-commerce platforms and social media. High digital engagement exposes consumers to more digital marketing stimuli, such as notifications, limited-time discounts, product reviews, and personalized content. This intense exposure triggers FOMO, which is the feeling of worry about missing out on certain opportunities or trends. In such conditions, consumers are more likely to make quick and emotional decisions, increasing the likelihood of impulse buying.

The results of this study are also consistent with previous research from an international context. Research by Oak & Markandeya (2025), which examined Generation Z in India, found that FOMO has a significant influence on impulse buying. The study explained that digital marketing strategies, such as using urgency-based advertisements and social media exposure, strengthen consumers' fear of missing out, thereby driving unplanned purchases. The similarity in these results shows that the phenomenon of FOMO occurs not only in local contexts but also globally, especially among generations with high levels of digital engagement.

This study's results can be understood through several factors influencing consumer behavior in the digital age. First, the presence of flash sale features and promotions with limited-time offers creates time pressure, encouraging consumers to make purchases immediately. Second, real-time notifications from e-commerce apps increase the frequency of exposure to product offers, thereby reinforcing impulsive urges. Third, the role of social media in spreading trends and other users' experiences contributes to social pressure, which amplifies FOMO. Fourth, personalization features and product recommendations make marketing stimuli more relevant to individual preferences, thus increasing the likelihood of spontaneous purchases.

Therefore, it can be concluded that digital engagement acts as a factor that strengthens the relationship between FOMO and impulse buying. The higher the consumer's engagement in digital activities, the greater the likelihood of FOMO, which ultimately drives impulsive buying behavior. This indicates that in the digital age, consumer purchasing decisions are not only based on rational needs but are also influenced by psychological factors and the intensity of interactions with digital technology.

CONCLUSION

Based on the results of the research, it can be concluded that the phenomenon of Fear of Missing Out (FOMO) has a significant impact on impulse buying behavior among e-commerce platform users in Pangkalpinang City. The analysis shows that the higher the level of FOMO experienced by consumers, the greater the likelihood of them engaging in impulse buying. This indicates that high engagement with digital technologies, such as e-commerce and social media, can amplify FOMO, which in turn drives purchasing decisions that are more emotionally driven rather than rationally considered.

This study contributes to understanding how digital engagement influences consumer behavior, particularly in the context of aggressive digital marketing tactics like limited-time discounts and flash sales. Therefore, it is important for marketers to consider the psychological impact of FOMO when designing their marketing strategies. In this regard, marketers should be cautious in using tactics that may lead to impulsive buying behaviors that may not always be beneficial for consumers.

Recommendations for future research include exploring other factors that may influence impulse buying, such as social, emotional, or e-commerce platform design factors. Additionally, it would be valuable to consider demographic differences that may affect FOMO levels and impulse buying behavior, such as age or income, which could provide deeper insights into consumer behavior variations.

For e-commerce practitioners, it is advised to adopt marketing strategies that not only leverage FOMO but also provide added value to consumers, aiming to build more ethical and sustainable relationships.

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