



The Effect of Discount Flash Sale on Online Impulsive Buying of Mercubaktijaya University Students at Shopee Marketplace

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Abstract

The development of digital technology is currently triggering an online shopping model characterized by the development of marketplaces and online marketing strategies to attract consumer interest. This study aims to determine whether there is an influence between the marketing strategy of the Shopee discount flash sale marketplace on online impulsive buying. This research is a quantitative study where the sample determination uses Non-Probability Sampling with Purposive Sampling technique to Mercubaktijaya University Padang students. Data was obtained through a questionnaire distributed with a sample size of 100 respondents. The analysis technique uses multiple linear regression and hypothesis testing using the F test and t test. The data was processed using SPSS (Statistical Package for the Social Sciences) software version 26. The results showed that the correlation between the discount flash sale variable and online impulsive buying showed a positive correlation relationship with a value of 0.546 with a correlation strength level of moderate. There is an influence between the discount flash sale variable on online impulsive buying. This can be seen in the value of t count ($2.128 > t \text{ table } (1.98422)$), and the significance value ($0.036 < 0.05$). When viewed from the coefficient beta value, the discount flash sale variable has a contribution in online impulsive buying of 0.270 which shows a unidirectional relationship between the discount flash sale variable and online impulsive buying, which means that if the activity of the discount flash sale increases, it will make impulsive buying activity on Shopee increase as well.

Introduction

The development of digital technology in Indonesia has led to an increase in the number of internet users, which has also spurred the growth of marketplaces as e-commerce platforms. Based on the *Indonesian Digital Report 2024* survey by We Are Social and HootSuite (Riyanto, 2022), it was noted that by 2024, 77% of the Indonesian population, or around 212.9 million of the total population of 276.4 million, had used the internet. Of these, around 167 million people, or 60.4% of the population, are active users of social media.

The increase in internet users in Indonesia has encouraged people to shift to online-based activities, including e-commerce. This is reflected in the growing number of e-commerce platforms available to meet consumer needs. Based on data from SimilarWeb cited by eDOT (<https://edot.id/articles/5-e-commerce-dengan-pengunjung-terbanyak-di-indonesia-pada-awal-2024-siapa-juaranya>), there are five e-commerce platforms with the highest visits in the first quarter of 2024, namely Shopee, Tokopedia, Lazada, Blibli, and Bukalapak. Shopee ranked first with 235.9 million visits in February 2024.

Shopee is one of the e-commerce platforms in Indonesia owned by Sea Limited and founded by Forrest Li in 2009. First launched in Singapore in 2015, Shopee has expanded its operations

to several countries in Asia, including Malaysia, Thailand, Taiwan, Indonesia, Vietnam, and the Philippines. In 2019, Shopee also became active in Brazil, making it the first country in South America and outside Asia that the platform has targeted for expansion.

Based on the Snapcart survey, which was conducted between June and August 2024, it shows that e-commerce competition is getting tougher in presenting innovations and programs that meet consumer needs. The survey explored Consumer Behavior Characteristics and Preferences in Online Shopping, showing that Shopee ranked first as the most frequently used e-commerce platform. Of the 1,000 respondents aged 23-35 in Indonesia, 78% chose Shopee for shopping.

Shopee implements a mass-market targeting strategy and relies on promotions to reach consumers at large. Programs such as flash sales, vouchers, advertisements, and other attractive offers become part of their digital marketing strategy, in line with the impact of the digital revolution. According to Shabrina (2019) view, the digital revolution has changed consumer behavior, from how to buy, use, to dispose of products that have been consumed. Currently, many e-commerce sites use flash sale programs as a promotional strategy, including Shopee, which is known to actively offer flash sales, discounts, advertisements, and free shipping in large quantities. According to Reza (2016), online marketing with flash sales, discounts, and vouchers is part of the strategy to sell products through the marketplace. Flash sales provide large discounts in a limited time, encouraging consumers to buy immediately (Vannisa et al., 2020; Ratu & Oktaviannur, 2024; Utami, 2024).

During National Shopping Days (Harbolnas) such as 10.10 and 11.11, Shopee holds flash sales up to five times a day, offering benefits such as cashback, free shipping vouchers, and other attractive discounts. Shopee also utilizes social media for advertising, involving entertainment personalities as Brand Ambassadors. The use of social media algorithms helps relevant products to be displayed based on consumers' search history (Yanti et al., 2024; Chung et al., 2016). In addition, ahead of Harbolnas, Brand Ambassadors often live stream on Shopee Live and national television, thus strengthening the appeal of the promotion. These various programs aim to attract consumer attention and encourage purchasing decisions through offering products such as beauty, electronics, and daily necessities at more affordable prices (Burke, 2002; Wang et al., 2022; Satterthwaite, 2001). The various forms of advertisements and offers made by Shopee are none other than to attract consumer interest to be able to make purchasing decisions.

Purchasing decisions reflect consumer behavior in choosing and using goods or services according to their needs (Moser, 2016; Toha & Supriyanto, 2023). Promotions such as flash sales and free shipping encourage consumers to make quick decisions due to the fear of running out of stock or the return of normal prices. These stimuli often motivate consumers to buy immediately, even without prior planning. In this process, consumers usually consider factors such as quality, service, and needs, but it is not uncommon for them to buy on impulse without careful consideration (Kacen & Lee, 2002; Verplanken & Sato, 2011).

Limited offers with additional free shipping, such as Shopee's, create a sense of urgency for consumers to shop. This condition opens up opportunities for impulse purchases, which according to Hawkins and Mothersbaugh in (Nighel & Sharif, 2022), are spontaneous and unplanned purchases that occur due to emotional impulses. Bayley in (de Pinto Simanjuntak, 2022) adds that impulse buying is characterized by quick, less thoughtful decisions, and minimal consideration of alternatives. Park in (Darwipat & Syam, 2020) explains that this behavior is often driven by hedonic motivations, such as seeking self-satisfaction, pleasure, or social and emotional satisfaction, making consumers more vulnerable to attractive promotions.

Several previous studies have confirmed the relationship between flash sales and impulsive buying behavior. Research by Andarini (2021) shows that flash sales have a significant influence on impulsive behavior in Shopee users. Another study by (de Pinto Simanjuntak, 2022) also revealed that flash sales significantly influence impulse buying decisions among Shopee user students at Sari Mutiara Indonesia University. Meanwhile, found that impulse buying activity increased during flash sales at Pulchragallery stores. This increase was driven by hedonic and utilitarian motivations, suggesting that flash sales can influence consumers from different perspectives of needs and wants (Maulana, 2024; Rahmawati, 2023).

This research offers novelty by analyzing the effect of *discount flash sale* promotional programs on *online impulsive buying* behavior among Mercubaktijaya University students who shop through the Shopee e-commerce platform. The focus of this research is on the younger generation as the main consumer group that actively uses digital technology and is often involved in online shopping activities. The main objective of this study is to understand and measure the effect of *discount flash sales* on online impulsive buying behavior among Mercubaktijaya University students.

The results of this study can provide benefits for various parties. For researchers, this research is an opportunity to deepen insights into impulse buying behavior that is relevant in the digital era as well as a foundation for further research. For academics, the results of the study can be a reference and material for further study in understanding impulse buying behavior, especially in the context of digital logistics and online marketing. Meanwhile, for companies like Shopee, this research provides strategic insights into the effectiveness of promotional programs such as *discount flash sales* in attracting consumers and encouraging impulse purchases, thus helping companies develop more relevant and effective marketing strategies. Based on this background, the researcher chose to raise the research title: "The Effect of Discount Flash Sale on Online Impulsive Buying of Mercubaktijaya University Students at Shopee Marketplace."

Methods

This research uses quantitative methods based on the philosophy of positivism. This method is applied to research certain populations or samples by collecting data through research instruments and analyzing data statistically, aiming to describe and test hypotheses (Sugiyono, 2017). The quantitative method was chosen because the data used is in the form of numbers, including the stages of collecting, presenting, and interpreting data that focuses on research variables.

The approach used is causal research, which aims to examine the cause-and-effect relationship between the independent variable *discount flash sale* (X) and the dependent variable *online impulsive buying* (Y). Based on observation, this research is a *cross-sectional* type because it is carried out within a certain short span of time and at a specific location (Nugroho & Haritanto, 2022). This study observed the phenomenon of *online impulsive buying* related to *discount flash sales* on students of Universitas Mercubaktijaya Padang for six months, from June to November 2024.

This research uses two types of data sources, namely primary data and secondary data. Primary data was obtained from the online purchasing activities of Mercubaktijaya University Padang students through the Shopee marketplace, which were recapitulated through a questionnaire. Meanwhile, secondary data comes from various references such as books, research results (journals, proceedings), and articles relevant to the research variables.

The research population focused on Mercubaktijaya University Padang students who are users, customers, or have used Shopee for online shopping. Because the population of Shopee users

among these students is not known with certainty, researchers use the *Non-Probability Sampling* method. The sampling technique applied is *Purposive Sampling*. According to (Sugiyono, 2017), this technique is used because researchers understand that the information needed can be obtained from certain target groups that have relevant information according to predetermined criteria. The sample criteria in this study include: a) Active student of Mercubaktijaya University Padang; b) Shopee users or customers; c) Have ever made an online purchase transaction at Shopee.

Because the exact population of Mercubaktijaya University Padang students who use Shopee is unknown, researchers refer to Roscoe's opinion in (Nugroho & Haritanto, 2022). According to him, the ideal sample size to represent the population ranges from 30 to 500 samples. Meanwhile, the formula used in determining the ideal sample size is the formula proposed by Rao Purba in Fauzan and Mudiantono (2015) which is listed as follows:

$$n = \frac{Z^2}{4Moe^2}$$

Description:

n: number of samples

Z: normal distribution level

Moe : *margin of error* which is the maximum error rate

The error rate in this study is expressed as a percentage, which is between 1% and 10%. The smaller the error rate used, the higher the accuracy of the sample obtained. In this study, the researcher set an error rate of 10% (0.01). By referring to the Z table for the normal distribution at the 10% significance level in a two-way test, a Z value of 1.645 was obtained. Based on the formula proposed by Rao Purba, the ideal sample size for this study was then calculated using this value.

$$n = \frac{Z^2}{4Moe^2}$$

$$n = \frac{1,645^2}{4(0,1)^2} = 67,65$$

$$n = 68$$

Based on calculations using the Rao Purba formula, the minimum sample size required for this study was 68 students of Universitas Mercubaktijaya Padang. However, to ensure that the sample can represent the characteristics of the Shopee user student population, the researcher decided to take 100 respondents.

This study used a questionnaire as a data collection instrument, in the form of a list of questions asked to respondents. Data were collected through literature studies and questionnaires. The data were processed using SPSS (*Statistical Package for the Social Sciences*) software version 26. The research instrument includes validity and reliability tests. The analysis was conducted descriptively and through classical assumption tests, namely normality, multicollinearity, and heteroscedasticity tests. Furthermore, the data were analyzed using correlation, linear regression, and coefficient of determination tests. Hypothesis testing was carried out by partial test (*t-test*) and simultaneous test (*F-test*).

The conceptual framework of this research seen from the previous variables can be described in the following figure:

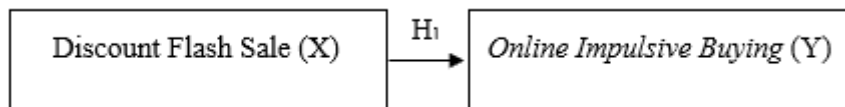


Figure 3. Conceptual Framework

This hypothesis is as follows:

H₁ : There is a significant influence between *Discount Flash sale* and *Online impulsive buying* of Mercubaktijaya University Students at Shopee Marketplace

Result and Discussion

Data Instrument Test

Data Validity Test

The validity test is a measure that shows the level of reliability or validity of a measuring instrument. The validity test is used to measure whether a questionnaire is valid or not. The statement items in the questionnaire are declared valid if the r_{count} value $> r_{\text{(table)}}$. Meanwhile, if the value of $r_{\text{(count)}} < r_{\text{(table)}}$, then the question item is invalid and cannot be analyzed in the next process.

Table 1. Discount Flash Sale Variable Validity Test Results

Variable: <i>Discount Flash sale</i> (X)			
No.	Indicator / Question Item	Perason Cor (r count)	Description
1	Shopee's frequent <i>flash sales</i> make me remember the promotion	0,596	Valid
2	Shopee holds massive <i>Flash sales</i> on every twin date such as 10.10, 11.11, 12.12	0,398	Valid
3	<i>Flash sales</i> conducted by Shopee often provide more attractive sales promotions than other sites	0,643	Valid
4	Shopee's <i>flash sales</i> make me interested in making purchases	0,802	Valid
5	I feel that Shopee's <i>flash sales</i> take place at the right time	0,615	Valid
6	I realize that the duration of product sales during <i>flash sales</i> does not last long.	0,426	Valid
7	Shopee's <i>flash sale</i> program suits my desires as a consumer	0,626	Valid
8	<i>Flash sales</i> allow me to save money spent on buying products	0,718	Valid

Table 2. Impulsive Buying Online Validity Test Results

Variable: <i>Online impulsive buying</i> (Y)			
No.	Indicator / Question Item	Perason Cor (r count)	Description
1	I feel attracted to make unplanned purchases if I see Shopee <i>Flash sale</i> and Ongkir Ads	0,709	Valid

Variable: <i>Online impulsive buying</i> (Y)			
No.	Indicator / Question Item	<i>Perason Cor</i> (r count)	Description
2	Shopee's <i>flash sale</i> and free shipping program prompted me to immediately find out when the program would be implemented.	0,741	Valid
3	In a very happy state, I often shop at Shopee even though there is no prior plan.	0,713	Valid
4	When I see an artist that I idolize promoting a product on Shopee, I am immediately tempted to buy it	0,711	Valid
5	I experience a sudden, sometimes irresistible or unstoppable urge or impulse to buy an unplanned product	0,645	Valid
6	Before buying a product on Shopee I am used to considering it first	0,447	Valid
7	I tend to shop at Shopee when there are special offers such as discounts, <i>flash sales</i> , free shipping, advertisements and others.	0,604	Valid
8	If there is an interesting promo on Shopee, I tend to buy the product even though I don't really need it.	0,593	Valid
9	I will consider the usefulness of the item before purchasing it on Shopee so that it can be used for a long time.	0,292	Valid

From the results of validity testing using the *Pearson Moment* method in SPSS software displayed in Tables 1 and 2 above, it can be concluded that all statement items for the *Discount Flash Sale* and *Online impulsive buying* variables are declared valid, because the r_{count} value obtained is greater than the r_{table} value. Then all statement items for the research variables can be continued for the next analysis process.

Reliability Test

According to Ghozali (2016: 47) reliability is a tool for measuring a questionnaire which is an indicator of a variable. The instrument reliability test can be seen from the magnitude of the *Cronbach alpha* value on each variable. The instrument to measure each variable is said to be *reliable* if it has a *Cronbach alpha* greater than 0.70 (Ghozali, 2016).

Table 3. Discount Flash Sale Variable Reliability Results

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.746	.754	8

Source: SPSS Data Processing Results, 2024

From the results of reliability testing using SPSS software, the *Cronbach alpha* value for the *Discount Flash sale* variable is 0.746. So that the question items for the *Discount Flash sale* variable are said to be reliable because the *Cronbach alpha* value (0.746) is greater than 0.70.

Table 4. Reliability Results of Online Impulsive Buying Variables

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.787	.788	9

Source: SPSS Data Processing Results, 2022

From the results of reliability testing using SPSS software, the *Cronbach alpha* value for the *Online impulsive buying* variable is 0.787. So that the question items for the *Online impulsive buying* variable are said to be reliable because the *Cronbach alpha* value (0.787) is greater than 0.70.

Descriptive Analysis

Respondents' responses to the observed variables can be seen in the following recap:

Table 5. Respondents' responses to the Discount Flash Sale Variable

No.	Indicator	Mean	Description
1	Shopee's frequent <i>flash sales</i> make me remember the promotion	3,91	Agree
2	Shopee holds massive <i>Flash sales</i> on every twin date such as 10.10, 11.11, 12.12	4,7	Strongly Agree
3	<i>Flash sales</i> conducted by Shopee often provide more attractive sales promotions than other sites	4,04	Agree
4	Shopee's <i>flash sales</i> make me interested in making purchases	3,99	Agree
5	I feel that Shopee's <i>flash sales</i> take place at the right time	3,5	Agree
6	I realize that the duration of product sales during <i>flash sales</i> does not last long.	3,96	Agree
7	Shopee's <i>flash sale</i> program suits my desires as a consumer	3,51	Agree
8	<i>Flash sales</i> allow me to save money spent on buying products	3,84	Agree
	Mean	3,93	Agree

Source: SPSS Data Processing Results, 2024

Based on the results in the table above, the description of the *Discount Flash sale* variable consists of eight (8) statement items. The highest *mean* score is on the statement "Shopee holds a massive *Flash sale* on every twin date such as 10.10, 11.11, 12.12" with an average of 4.7, which means that respondents strongly agree with the statement. Meanwhile, the lowest *mean* score is the statement "I feel that the *Flash sale* conducted by Shopee takes place at the right time" with an average of 3.5, which means that respondents agree with this statement. For this *Discount Flash sale* variable, the overall average of 100 respondents is 3.93 where the respondent agrees with the *discount flash sale* variable.

Table 6. Respondents' responses to the Online Impulsive Buying variable

No.	Indicator	Mean	Description
1	I feel attracted to make unplanned purchases if I see Shopee <i>Flash sale</i> and Ongkir Ads	3,78	Agree

No.	Indicator	Mean	Description
2	Shopee's <i>flash sale</i> and free shipping program prompted me to immediately find out when the program would be implemented.	3,66	Agree
3	In a very happy state, I often shop at Shopee even though there is no prior plan.	3,52	Agree
4	When I see an artist that I idolize promoting a product on Shopee, I am immediately tempted to buy it	3,23	Neutral
5	I experience a sudden, sometimes irresistible or unstoppable urge or impulse to buy an unplanned product	3,32	Neutral
6	Before buying a product on Shopee I am used to considering it first	4,3	Strongly Agree
7	I tend to shop at Shopee when there are special offers such as discounts, <i>flash sales</i> , free shipping, advertisements and others.	4,09	Agree
8	If there is an interesting promo on Shopee, I tend to buy the product even though I don't really need it.	3,19	Neutral
9	I will consider the usefulness of the item before purchasing it on Shopee so that it can be used for a long time.	4,09	Agree
	Mean	3,89	Agree

Source: SPSS Data Processing Results, 2024

Based on the results in the table above, the description of the *Online impulsive buying* variable consists of nine (9) statement items. The highest *mean* score is in the statement "Before buying a product at Shopee, I am used to considering it first" with an average of 4.3, which means that respondents Strongly Agree with the statement. Meanwhile, the lowest *mean* score is the statement item "If there is an attractive promo at Shopee, I tend to buy a product even though I don't really need it" with an average of 3.19, which means that respondents are Neutral to the statement. For this free shipping variable, the overall average of 100 respondents is 3.89 where respondents agree with the *online impulsive buying* variable.

Classical Assumption Testing

The normality test aims to test whether the *residual* variables in the regression model have a normal distribution. The normality test was carried out with SPSS 26 software through the *Kolmogorov Smirnov* Test and using the *Normal Probability Plots* method. The following are the results of the *Normal Probability Plot of the residual* value of the regression *model*:

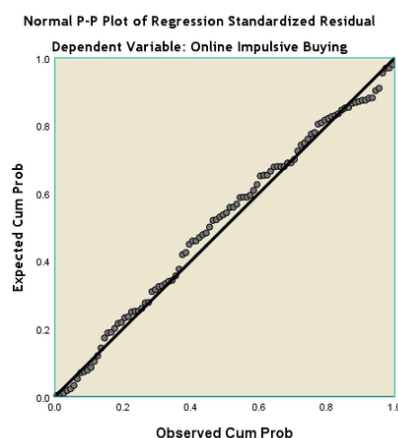


Figure 4. Normal Propability Plot

From the *Normal Probability Plot* graph above, it can be seen that the points (*dots*) of the data distribution are spread around the diagonal line and follow the diagonal direction. Thus, the *residuals* are normally distributed.

Furthermore, using the *One Sample Kolmogorov Smirnov* method using SPSS 26, the results are as follows:

Table 7. One Sample Kolmogorov Smirnov Results

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		100
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	4.01291527
Most Extreme Differences	Absolute	.060
	Positive	.054
	Negative	-.060
Test Statistic		.060
Asymp. Sig. (2-tailed)		.200 ^{c,d}
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		
d. This is a lower bound of the true significance.		

Source: SPSS Data Processing Results, 2024

Based on the test results using SPSS 26 software above, the *Asymp. Sig. (2-tailed)* of 0.200. Because the value of *Asymp. Sig. (2-tailed)* value of 0.200 is greater than 0.05 so it can be stated that the residual data is normally distributed.

Multicollinearity Test

Multicollinearity is a situation where between two or more *independent* variables in the regression model there is a perfect or near perfect linear relationship. A good regression model requires the absence of multicollinearity problems. To detect the presence or absence of multicollinearity, you can see the *Tolerance* and VIF values in the linear regression results. If the *Tolerance* result is more than 0.1 and VIF is less than 10, there is no multicollinearity.

Table 8. Multicollinearity Test Results

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.806	3.478		.807	.422		
	Discount flash sale	.270	.127	.205	2.128	.036	.593	1.687

a. Dependent Variable: Online impulsive buying

Source: SPSS Data Processing Results, 2024

Based on the results of multicollinearity testing using SPSS above, it can be seen that the regression model has a *Tolerance* value for the *Discount Flash sale* variable of 0.593 with a VIF of 1.687. Because the *Tolerance* value for the *Discount Flash Sale* variable is above 0.1 and the VIF value is less than 10, it can be stated that there are no symptoms of multicollinearity between the independent variables.

Heteroscedasticity Test

Heteroscedasticity is a condition in which there is an inequality of variance of the residuals in the regression model. A good regression model requires the absence of heteroscedasticity problems. To detect the presence or absence of this symptom, researchers used SPSS 26 software using the *Spearman's rho* method and looked at the dots on the regression *scatterplots*. The following are the results of heteroscedasticity testing on SPSS 26 using the *Spearman's rho* method:

Table 9. Spearman's Rho Heteroscedasticity Results

Correlations						
			<i>Discount flash sale</i>	Ad Attractiveness	Free Shipping	ABS_RES
Spearman's rho	<i>Discount flash sale</i>	Correlation Coefficient	1.000	.643**	.483**	.007
		Sig. (2-tailed)	.	.000	.000	.945
		N	100	100	100	100

*. Correlation is significant at the 0.05 level (2-tailed).

Source: SPSS Data Processing Results, 2024

From the test results in Table 9 above, it can be seen that the significance value in *Sig. (2-tailed)* for the *absolute residuals of the flash sale discount* variable regression model is 0.945. Because the significance value of *sig. (2-tailed)* for the *discount flash sale* variable as an independent variable is more than 0.05, it can be concluded that the regression model does not have heteroscedasticity problems.

Data Analysis Testing Results

Correlation Analysis

Correlation analysis is intended to determine the closeness of the relationship, the direction of the relationship and whether the relationship is significant or not. The following is a correlation testing hypothesis:

H₀: means that there is no relationship between the independent variable (*discount flash sale* on the dependent variable (*online impulsive buying*))

H₁: means that there is a relationship between the independent variable (*discount flash sale* on the dependent variable (*online impulsive buying*))

Using SPSS 26, the output results of the significance of each variable are as follows:

Table 11: Correlation Output Results

Correlations					
		<i>Discount flash sale</i>	Ad Attractiveness	Free Shipping	<i>Online impulsive buying</i>
<i>Discount flash sale</i>	<i>Pearson Correlation</i>	1	.622**	.476**	.546**
	Sig. (2-tailed)		.000	.000	.000
	N	100	100	100	100
	<i>Pearson Correlation</i>	.546**	.660**	.460**	1

<i>Online impulsive buying</i>	Sig. (2-tailed)	.000	.000	.000	
	N	100	100	100	100

** . Correlation is significant at the 0.01 level (2-tailed).

Source: SPSS Data Processing Results, 2024

Based on the results of the analysis using SPSS 26, a significance value of 0.000 was obtained for the independent variable *discount flash sale* on the dependent variable *online impulsive buying*. Since the value is smaller than 0.05, the null hypothesis (H0) is rejected and the alternative hypothesis (H1) is accepted, which indicates a significant relationship between the two variables. The strength of the relationship is measured through the Pearson Correlation value, which is 0.546. This value indicates a positive correlation direction with the strength of the relationship at a moderate level.

Multiple Linear Regression

Regression analysis aims to determine the relationship between the *independent* variable and the *dependent* variable using a linear equation. The following is a multiple linear regression equation in this study obtained from the test results using SPSS 26 software which can be seen in Table 4-12 below:

Table 12. Regression Coefficients

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.806	3.478		.807	.422
	<i>Discount flash sale</i>	.270	.127	.205	2.128	.036

a. Dependent Variable: *Online impulsive buying*

Source: SPSS Data Processing Results, 2024

The multiple linear regression equation from Table 12 above can be seen in the *Unstandardized Coefficients* column at the B value, which if described the regression equation for this study is:

$$Y' = b_0 + b_1X$$

$$Y' = 2.806 + 0.270X$$

Description:

Constant b_0 = 2.806 means that if the *discount flash sale* on Shopee users is 0, then the impulse buying activity on Shopee is 2.806.

Coefficient b_1 : 0.270 means that if the purchasing activity due to the *discount flash sale* at Shopee increases by 1 unit, the impulse buying activity at Shopee will increase by 0.270 units.

Hypothesis Testing

Partial Test (t Test)

The t test is used to test the effect of the *independent* variable partially on the *dependent* variable. In this study, the *independent* variable is the *flash sale discount* variable. There are two ways to determine whether there is an influence between these variables. The first way is by comparing the t_{count} value and the t_{tabel} value. The $t_{calculated}$ value is obtained from the SPSS 26 output in the following *coefficient* table. While the t_{table} value is obtained from the T table

using a significance level of 0.05 and (n-1) is 99, the t_{table} value is 1.98472. The decision-making criteria through this t statistical test are as follows:

If $t_{count} \leq t_{(table)}$ OR $-t_{count} \geq -t_{table}$ then H_0 is accepted then there is no effect of the *independent* variable on the *dependent* variable.

If $t_{count} > t_{(table)}$ OR $-t_{count} < -t_{table}$ then H_0 is rejected then there is an effect of the *independent* variable on the *dependent* variable.

The second way to determine whether there is an influence between the *independent* variables on the *dependent* is to compare the significance value obtained in the *Coefficient* output with 0.05. The decision-making criteria are as follows: If the significance value of t test > 0.05 then H_0 is accepted and H_a is rejected. This means that there is no influence between the *independent* variable and the *dependent* variable. If the significance value of the t test < 0.05 then H_0 is rejected and H_a is accepted. This means that there is an influence between the *independent* variable and the *dependent* variable.

The following are the results of the t test output using SPSS 26:

Table 13. Output Coefficients

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.806	3.478		.807	.422
	<i>Discount flash sale</i>	.270	.127	.205	2.128	.036
a. Dependent Variable: <i>Online impulsive buying</i>						

Source: SPSS Data Processing Results, 2024

Based on the results of the *coefficients output* above, it can be concluded that variable X (*Discount flash sale*) partially affects the variable *Online impulsive buying*, this can be seen in the value $t_{(count)} (2.128) > t_{table} (1.98422)$, so that H_0 is rejected and accepts H_1 , namely the *discount flash sale* partially affects *online impulsive buying*. Further testing is done by comparing the significance value contained in Table 13 where the significance value for the *discount flash sale* variable is 0.036. Because the significance value (0.036) < 0.05 then H_0 is rejected and accepts H_1 , namely the *discount flash sale* partially affects *online impulsive buying*.

Simultaneous Test (F Test)

The F test is used to test the effect of *independent* variables together on the *dependent* variable. There are two ways of testing done. The first way is done by comparing the F_{count} value with F_{table} . F_{count} is obtained from the test results using SPSS 26 which are listed in Table 14 below. While the value of F_{table} is obtained from Table F, using a significance level of 0.05 with the value of DF_1 is $k-1 = 2$, where k is the number of *independent* variables. While DF_2 is $n-k-1 = 100-3-1 = 96$. The obtained F_{Table} value is 3.09. The decision-making criteria are as follows:

If $F_{calculated} > F_{table}$ then reject H_0

If $F_{calculated} < F_{table}$ then accept H_0

The second way to determine whether there is a simultaneous influence of *independent* variables on the *dependent* is to compare the significance value obtained in the *coefficient* output with 0.05. The decision-making criteria are as follows:

If the significance value of the F test > 0.05 then H_0 is accepted and H_a is rejected.

If the significance value of the F test < 0.05 then H_0 is rejected and H_a is accepted.

Table 14 ANOVA

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1414.515	3	471.505	28.392	.000 ^b
	Residuals	1594.245	96	16.607		
	Total	3008.760	99			
a. Dependent Variable: Online impulsive buying						
b. Predictors: (Constant), Free Shipping						

Source: SPSS Data Processing Results, 2024

Based on the F_{count} value contained in Table 14 above, there is $F_{\text{count}} 28.392 > F_{\text{Table}} (3.09)$, so H_0 is rejected and accepts H_a , namely *discount flash sales* have an effect on *online impulsive buying*. Further testing is done by comparing the significance value contained in Table 4-14 where the significance value is 0.000. Because the significance value $(0.000) < 0.05$, H_0 is rejected and accepts H_a , namely the *discount flash sale* has an effect on *online impulsive buying*.

In the *discount flash sale* variable, the average answer score is 3.93, which means that 100 respondents in this study agree with the *discount flash sale* variable. The highest *mean* score is in the statement "Shopee holds a massive *Flash sale* on every twin date such as 10.10, 11.11, 12.12" with an average of 4.7, which means that the respondents strongly agreed with the statement. Meanwhile, the lowest *mean* score is the statement "I feel that the *Flash sale* conducted by Shopee takes place at the right time" with an average of 3.5, which means that respondents agree with the statement

The results of testing the correlation between the *discount flash sale* variable and *online impulsive buying* show a positive correlation relationship with a value of 0.546 with a correlation strength level of medium. Meanwhile, when looking at the effect of these two variables, there is a rejection of H_0 and acceptance of H_a , which means that there is an influence between the *discount flash sale* variable on *online impulsive buying*. This can be seen in the value of $t_{\text{count}} (2.128) > t_{\text{table}} (1.98422)$, and the significance value $(0.036) < 0.05$.

When viewed from the *coefficient beta* value, this *discount flash sale* variable has a contribution to *online impulsive buying* of 0.270. The positive sign of the beta coefficient value of 0.270 indicates a unidirectional relationship between the *discount flash sale* variable and *online impulsive buying*, which means that if the activity of the *discount flash sale* increases, it will make impulsive buying activity on Shopee increase as well.

The results of this study support research conducted by de Pinto Simanjuntak (2022), *flash sale* variables have a significant effect on *online impulsive buying* on Shopee user students at Sari Mutiara Indonesia University. This illustrates that by setting a *flash sale event* at Shopee, it will increase *online impulse buying*. Then it supports research by Andarini (2021) where *flash sales* partially have a significant effect on *impulse buying* behavior in Shopee users. *Flash sale*, which has another name, namely *price of deal* and is one of the promotional tools that can

create a sales stimulus so that it can be sold directly or immediately (Nastiti, 2020; Halik et al., 2024).

Then research conducted by Nighel & Sharif (2022) *flash sales* have a positive effect on the urge to buy at Shopee *e-commerce*. *Flash sales* offered by Shopee *e-commerce* are used to encourage consumers to buy products with large discounts for a limited time. Thus, the *flash sale* offered by *e-commerce* Shopee has an effect on consumer purchasing patterns, so that it can increase the urge to buy at *e-commerce* Shopee.

Conclusion

Based on the results and discussion of the research, it shows that the *discount flash sale* variable has a positive correlation relationship with *online impulsive buying* of 0.545 with a level of closeness that is moderate. This variable also has an influence on the *online* impulse buying activities of Mercubaktijaya Padang University students in the Shopee *marketplace* with a contribution of 0.270, which means that when the frequency of *flash sales* increases, it will make impulsive buying activities at Shopee increase as well.

From the results of these findings, it provides several suggestions that can be useful. On the *discount flash sale* variable, Shopee is advised to consider a flash sale schedule that is more in line with students' free time, because its current implementation often takes place at busy times. On the *online impulsive buying* variable, Shopee needs to increase the intensity and variety of promos to encourage impulsive buying, apart from flash sales. For future research, it is recommended to expand the sample so that impulsive buying behavior can be described more representatively. In addition, future research can add other variables such as price, brand image, promotion, variety, and product quality to understand the factors that influence impulse buying more comprehensively.

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