

The Effect of Free Shipping on Student Purchase Interest in Karawang on the Shopee Application

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ABSTRACT

This study aims to analyze the effect of free shipping promotions on the purchase intention of students in Karawang on the Shopee application. Students, as part of the younger generation, are one of the active e-commerce user groups who have a fairly high level of sensitivity to prices, including shipping costs in online transactions. This study uses a quantitative approach with a survey method through the distribution of online questionnaires to 100 active student respondents in Karawang who have used the free shipping promotion feature on the Shopee application. The collected data were analyzed using simple linear regression with the help of the SPSS application to determine the relationship and effect of free shipping promotions on purchase intention. The results show that free shipping promotions have a positive and significant effect on student purchase intention. This finding suggests that providing incentives in the form of free shipping costs can increase student interest in making purchases through Shopee. Thus, free shipping promotions can be an effective marketing strategy in increasing student consumer purchase intention.

Keywords: *Free Shipping, Interested in Buying, Shopee, Students*

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1. INTRODUCTION

The development of digital technology has driven rapid growth in the e-commerce sector in Indonesia. E-commerce platforms such as Shopee, Tokopedia, and Bukalapak have become consumers' primary choice for meeting their daily needs. Shopee, in particular, has attracted the attention of young consumers with various marketing strategies, one of which is free shipping promotions. Shopee is known for its various attractive promotional features, such as flash sales, discount vouchers, and the most popular, free shipping promotion. Free shipping promotions are a marketing strategy that incentivizes consumers by eliminating shipping costs. This feature allows users to purchase products without incurring shipping costs, thereby reducing the total cost of their purchases.

For students with limited budgets, free shipping offers significant economic benefits and is a key consideration in purchasing decisions. This strategy has proven effective in increasing consumer purchasing interest. Based on previous observations and studies, students tend to seek efficiency in transactions. They compare various offers and are more likely to choose platforms that offer added value, such as ease of access, ease of payment, and, of course, discounts or free shipping. In this case, free shipping can be a stimulus to increase purchasing interest because it is perceived as providing immediate benefits.

Purchase intention is an internal drive within consumers that reflects their desire, interest, and tendency to purchase a product. According to Pratama and Ahmasi (2024), purchase intention is formed from consumers' perceptions of the benefits provided by a product or service, including perceptions of price, quality, and promotion. Therefore, free shipping promotions are a marketing strategy expected to provide a perception of added

value that influences students' purchase intention. Previous studies have shown a significant influence between free shipping promotions and consumer purchasing decisions. For example, Susanti (2020) found that free shipping is not only financially attractive but also increases consumer confidence in completing transactions. Meanwhile, Rahmawati and Yulianto (2021) emphasized that the success of this promotion also depends on the transparency of the accompanying terms and conditions.

Against this backdrop, this study was conducted to empirically test whether the free shipping feature offered by Shopee influences the purchasing interest of college students in Karawang. This research is expected to contribute to the development of digital strategies, particularly in understanding the behavior of young consumers, who are increasingly dominant in the Indonesian e-commerce ecosystem. Furthermore, the results are expected to provide input for e-commerce companies in designing more targeted and effective promotional programs.

2. METHODS

This research is a descriptive study with a quantitative approach. This type of research data uses primary data collected through an online questionnaire distributed to active students in Karawang and taken 100 samples who use the free shipping feature on Shopee. The sampling technique used is purposive sampling. The independent variable in this study is the free shipping promotion with indicators: frequency of viewing promotions, understanding of terms, user convenience, and influence on purchasing decisions. The dependent variable is student purchasing interest with indicators: desire to repurchase, enthusiasm for searching for products, perception of transaction value, and impulse to buy. Data were analyzed using SPSS which includes validity and rehabilitation tests to test the feasibility of the instrument, classical assumption tests consisting of normality and heteroscedasticity, and continued with simple linear regression analysis.

3. RESULTS AND DISCUSSION

3.1 Validity Test

Validity testing is used to determine the extent to which the research instrument (questionnaire) is able to measure the intended construct or variable. In this study, the validity test uses the Pearson Product Moment correlation method between the score of each question item and the total score. If the correlation value (r count) is greater than the r table at a significance level of 5%, then the question is considered valid. The number of respondents in this study was 100 people, so the degree of greatness (df) = $n - 2 = 100 - 2 = 98$. Based on the distribution table of r values at a significance level of 5% (0.05), the r table was obtained at 0.197. The results of the validity test in this study are as follows:

Table 1: Validity Test Results

Variables	Item	r count	r table	Sig.2-tailed	Information
Free Shipping Promo (X)	X.1	0.388	0.197	0,000	Valid
	X.2	0.630	0.197	0,000	Valid
	X.3	0.548	0.197	0,000	Valid
	X.4	0.601	0.197	0,000	Valid
	X.5	0.608	0.197	0,000	Valid
	X.6	0.725	0.197	0,000	Valid
Purchase Interest Student	Y.1	0.646	0.197	0,000	Valid
	Y.2	0.613	0.197	0,000	Valid
	Y.3	0.575	0.197	0,000	Valid

(Y)	Y.4	0.637	0.197	0,000	Valid
	Y.5	0.778	0.197	0,000	Valid
	Y.6	0.523	0.197	0,000	Valid

Source: Processed, 2025

From the test results above, all items have a calculated r value greater than the table r (0.197) and a significance value less than 0.05. This indicates that each question has good validity and is suitable for use in the data collection process for this study. The validity of this instrument is an important basis for ensuring that the collected data truly reflects the constructs to be studied, namely the influence of students on free shipping promotions and purchase interest in the Shopee application.

3.2 Reliability Test

Reliability testing aims to measure the extent to which a research instrument can produce consistent and stable results when used repeatedly under the same conditions. In this study, reliability testing was conducted using the Cronbach's Alpha method through the SPSS program. Cronbach's Alpha values range from 0 to 1. The closer to 1, the higher the instrument's reliability. In general, an instrument is considered reliable if the Cronbach's Alpha value is greater than 0.6, which means the questions in the questionnaire are sufficiently consistent and can be used to measure research variables. The following are the results of the reliability test:

Table 2: Reliability Test Results

Reliability Statistics		
Cronbach's Alpha	N of Items	Description
0.844	12	Reliable

Source: Processed, 2025

Based on the results above, a Cronbach's Alpha value of 0.844 indicates that all questions in the questionnaire have an excellent level of internal consistency. Because the value is greater than 0.6, the instrument in this study can be declared reliable and suitable for use in research.

3.3 Normality Test

The normality test is performed to determine whether the residual data in the regression model is normally distributed. This test is important because in classical linear regression analysis, one of the assumptions that must be met is that the residuals must be normally distributed. If this assumption is not met, the results of classical linear regression analysis can be biased and unreliable, especially in decision-making or prediction. In this study, the normality test was performed using the One-Sample Kolmogorov-Smirnov Test (KS Test). This test works by comparing the actual residual distribution with the theoretical distribution. The results of the normality test are as follows:

Table 3: Normality Test

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		100
Normal Parameters ^{a,b}	Mean	0.7563459
	Standard Deviation	3.05386442
Most Extreme Differences	Absolute	0.097
	Positive	0.097
	Negative	-0.075
Test Statistics		0.097

Asymp. Sig. (2-tailed)	.122c
a. Test distribution is Normal.	
b. Calculated from data.	
c. Lilliefors Significance Correction.	

Source: Processed 2025

Based on the test results above, a significance value of 0.122 was obtained, which is greater than 0.05. This indicates that the residual data is statistically normally distributed. This means there is no significant difference between the actual residual distribution and the theoretical normal distribution. This also indicates that the regression model is quite suitable for use, and the resulting analysis can be trusted to explain the relationship between the independent and dependent variables.

3.4 Linearity Test

A linearity test is conducted to determine whether the relationship between the independent and dependent variables is linear, forming a straight line. In this study, the linearity test aims to ensure that the relationship between the free shipping promotion (independent variable) and student purchasing interest (dependent variable) can be analyzed using linear regression. The results of the linearity test are as follows:

Table 4: Linearity Test

ANOVA Table			Sum of Squares	df	Mean Square	F	Sig.
Student Purchase Interest * Free Shipping Promotion	Between Groups	(Combined)	801,093	13	61,623	10,834	0.000
		Linearity	727,566	1	727,566	127,918	0.000
		Deviation from Linearity	73,527	12	6,127	1,077	0.389
	Within Groups		489,147	86	5,688		
	Total		1290.240	99			

Source: Processed, 2025

Based on the results above, the significance value in the Linearity row is 0.000 (less than 0.05), which means there is a linear relationship between the free shipping promotion and student purchasing interest. Meanwhile, the significance value in the Deviation from Linearity row is 0.389 (greater than 0.05), which indicates there is no deviation from the straight line.

3.5 Heteroscedasticity Test

The heteroscedasticity test is used to determine whether errors in a regression model are evenly distributed. If the errors are not evenly distributed or have different variances, heteroscedasticity occurs. This condition can make the analysis results less accurate. One method used to test this is the Glejser Test. In this test, a regression is performed using the absolute value of the residual (ABS_Res) as the predicted variable, while the free shipping promotion variable remains the independent variable. The test results are assessed by their significance value. If the significance value is greater than 0.05, it can be concluded that heteroscedasticity does not occur. However, if the value is less than 0.05, the model is experiencing heteroscedasticity. The following are the results of the heteroscedasticity test:

Table 5: Heteroscedasticity Test Results

		Coefficients ^a				
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4,971	1,810		2,746	0.007
	Free Shipping Promotion	-0.107	0.068	-0.156	-1,560	0.122

a. Dependent Variable: ABS_Res

Source: Processed, 2025

Based on the table above, the significance value (Sig.) for the free shipping promotion variable is 0.122, which is greater than 0.05. This indicates that the free shipping promotion has no significant effect on the error value (residual). Therefore, it can be concluded that this model does not experience heteroscedasticity.

3.6 Simple Linear Regression Analysis

A simple linear regression analysis was used to determine the extent to which the independent variable (free shipping promotion) influences the dependent variable (student purchase intention). This test is important to determine whether the promotional strategy offered, particularly the free shipping promotion, actually impacts student purchasing decisions. The following are the results of the simple linear regression test:

Table 6: Simple Linear Regression Analysis Results

		Coefficients ^a				
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1,646	2,110		0.780	0.437
	Free Shipping Promotion	0.898	0.080	0.751	11,257	0.000

a. Dependent Variable: Student Purchase Interest

Source: Processed, 2025

Based on the results in the table above, the following simple linear regression equation is obtained:

$$Y = a + bx$$

$$Y = 1.646 + 0.898x$$

This means that if there is no free shipping promotion (the value is 0), then the value of student purchasing interest is estimated at 1.646. Every 1 unit increase in the free shipping promotion will increase student purchasing interest by 0.898 units. The test results also show that the significance value (Sig.) for the free shipping promotion variable is 0.000, which is much smaller than the 0.05 limit. This means that the free shipping promotion really has a significant effect on student purchasing interest. In addition, the standard beta value of 0.751 indicates that the relationship between the free shipping promotion and student purchasing interest is positive and quite accurate.

3.7 F Test (Simultaneous Significance)

The F-test, or simultaneous significance test, is used to determine whether the regression model is suitable for predicting the dependent variable. In this context, the F-test was

conducted to determine whether the free shipping promotion significantly influenced student purchasing interest. If the significance value (Sig.) is <0.05 , the regression model is considered significant and can be used to explain the relationship between the independent and dependent variables. The following are the results of the F-test:

Table 7: F-Test Results

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	727,566	1	727,566	126,719	.000b
	Residual	562,674	98	5,742		
	Total	1290.240	99			
a. Dependent Variable: Student Purchase Interest						
b. Predictors: (Constant), Free Shipping Promotion						

Source: Processed, 2025

Based on the ANOVA table above, the calculated F value was 126.719 with a significance value of 0.000. Because this significance value is smaller than 0.05, it can be concluded that the regression model involving free shipping promotions has a significant effect on student purchasing interest. In other words, this model is suitable for use and has good ability to explain the variations that occur in student purchasing interest based on free shipping promotions.

3.8 Test of the Coefficient of Determination (R Square)

The coefficient of determination test is used to determine the extent to which an independent variable explains the dependent variable. In this study, the independent variable is the free shipping promotion, and the dependent variable is student purchasing interest. The results of this test are indicated by the R-square value obtained from the regression output. The results of the coefficient of determination test are as follows:

Table 8: Results of the Determination Coefficient Test

Model Summary				
Model	R	R Square	Adjusted R Square	Standard Error of the Estimate
1	.751a	0.564	0.559	2.39616
a. Predictors: (Constant), Free Shipping Promotion				
b. Dependent Variable: Student Purchase Interest				

Source: Processed, 2025

Based on the results of the table above, the R Square value obtained is 0.564. This means that 56.4% of the student purchasing intention variable can be explained by the free shipping promotion variable. The Adjusted R Square value of 0.559 indicates that adjustments to the number of variables in the model remain high and close to R Square, thus it can be concluded that the model used has strong explanatory power and is quite stable.

4. CONCLUSION

Based on the research results above, it can be concluded that the free shipping promotion does have a significant impact on increasing student interest in buying. These results were obtained through a series of statistical tests ranging from validity and reliability, classical assumption tests, to simple linear regression analysis. All questions used were proven valid

and reliable, with a Cronbach's Alpha of 0.844 indicating high internal consistency. The results of the normality test showed that the residual data was normally distributed, and no heteroscedasticity was found, which means the regression model is suitable for use. The linearity test and simple regression also showed that the relationship between the independent and dependent variables was linear, significant, and positive, with a regression coefficient of 0.898 and a significance value of 0.000. In addition, the R Square value of 0.564 indicates that 56.4% of the variation in student purchasing interest can be explained by the free shipping promotion.

These results align with findings in relevant scientific journals. Research by Sari and Nurhayati (2023) in the Journal of Business Management showed that free shipping promotions on e-commerce platforms like Shopee influence students' purchasing decisions, primarily because free shipping is perceived as a form of cost efficiency directly perceived by consumers. Another study by Fatimah et al. (2021) found that consumers' perceptions of free shipping promotions increase trust in e-commerce platforms, thereby strengthening their purchase intentions. Especially among students, who generally have limited funds, reduced shipping costs are a crucial factor in making purchasing decisions.

Theoretically, these results are supported by the concept of Kotler and Keller (2016), which states that perceived value plays a key role in shaping purchase intentions. Free shipping promotions can be considered a form of providing added value to price-sensitive consumers, including students. Furthermore, research by Susanti (2020) suggests that such promotions not only offer economic benefits but also create emotional incentives that accelerate purchasing decisions.

Thus, it can be confirmed that the free shipping strategy is an effective promotional approach in attracting young consumers, such as students. This research makes a significant contribution to the development of e-commerce marketing strategies and provides a deeper understanding of the shopping behavior of the younger generation in the digital era. In addition to strengthening the findings of various previous studies, this research also opens up the opportunity for further research to observe the dynamics of changes in consumer behavior towards various types of promotions on other digital platforms.

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