DATA ANALYSIS: INTENTIONS OF MOBILE GAMES USERS IN INDONESIA

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1.1 OVERVIEW OF THE RESEARCH SUBJECT

In this analysis, testing was conducted to see the influence of Interest, Perception of Usability, and Perception of Ease on Mobile Games User Intentions. Data collection was carried out by distributing questionnaires compiled on the Likert scale and obtained by a total of 112 mobile games users domiciled in Indonesia.

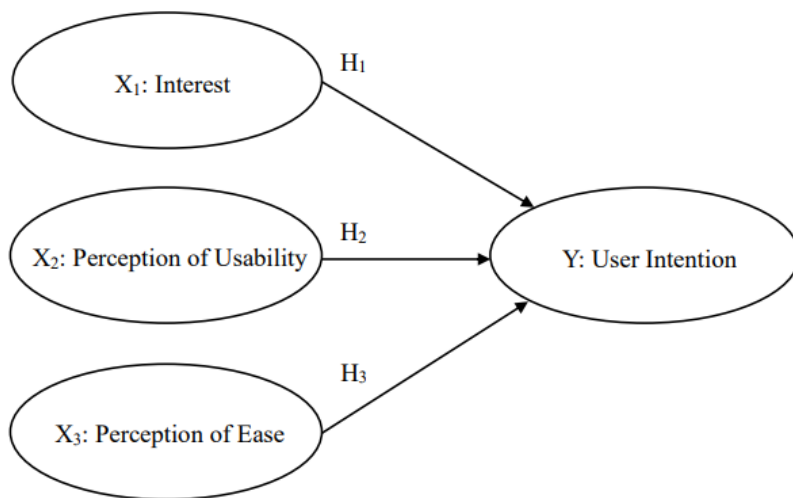## 1.2 ANALYTICAL MODELS AND HYPOTHESES

Figure 1.1 Analysis Model
Source: Data processed, 2021

Based on the analysis model in Figure 1.1, a hypothesis can be formed in this analysis as follows.

H_1 = There is an influence of Interest in the Intention of mobile games users in Indonesia.

H_2 = There is an influence on the Perception of Usability on the Intention of mobile game users in Indonesia.

H_3 = There is an influence on the Perception of Ease on the Intention of mobile games users in Indonesia.

1.3 DATA ANALYSIS

In this analysis, the data used is quantitative so that this analysis is quantitative. Therefore, the data analysis performed is processed using IBM SPSS Statistics data processing software with multiple linear regression analysis techniques/models. The process of analyzing the data is as follows.

1.3.1 Instrument Test

1. Validity Test

Table 1.1 Validity Test Result

Variable	Question	Sig (2-tailed)	Corrected Item-Total Correlation	Conclusion
Interests (X_1)	X1.1	0.000	0.657	Valid
	X1.2	0.000	0.746	Valid
	X1.3	0.000	0.663	Valid
	X1.4	0.000	0.624	Valid
Perception of Usability (X_2)	X2.1	0.000	0.749	Valid
	X2.2	0.000	0.676	Valid
	X2.3	0.000	0.772	Valid
	X2.4	0.000	0.717	Valid
Perception of Ease (X_3)	X3.1	0.000	0.630	Valid
	X3.2	0.000	0.733	Valid
	X3.3	0.000	0.830	Valid
	X3.4	0.000	0.770	Valid
User Intentions (Y)	Y1	0.000	0.785	Valid
	Y2	0.000	0.681	Valid
	Y3	0.000	0.683	Valid
	Y4	0.000	0.661	Valid

Source: SPSS Result Output, 2021 (Appendix 1)

In Table 1.1 it can be known that, the research validity test shows that all indicators of variable interest, perception of usability, perception of ease, and user intention have a Sig value (2-tailed) of < 0.05 each. The Corrected Item-Total Correlation value > 0.5 each. Based on these gains, it can be concluded that, each indicator on the research variable is declared valid, so it can be used for testing of this research multiple linear regression.

2. Reliability Test

Table 1.2 Reliability Test Result

Variable	Cronbach Alpha	Conclusion
Interests (X_1)	0.837	Reliabel
Perception of Usability (X_2)	0.872	Reliabel
Perception of Ease (X_3)	0.877	Reliabel
User Intentions (Y)	0.852	Reliabel

Source: SPSS Result Output, 2021 (Appendix 1)

Table 1.2 shows that, the Cronbach Alpha values of the variables of interest, usability perception, ease perception, and user intention each have a value of > 0.6. Based on these acquisitions, it can be concluded that, all variables are declared reliable, so they can be used for testing of this research multiple linear regression.

1.3.2 Classic Assumption Test
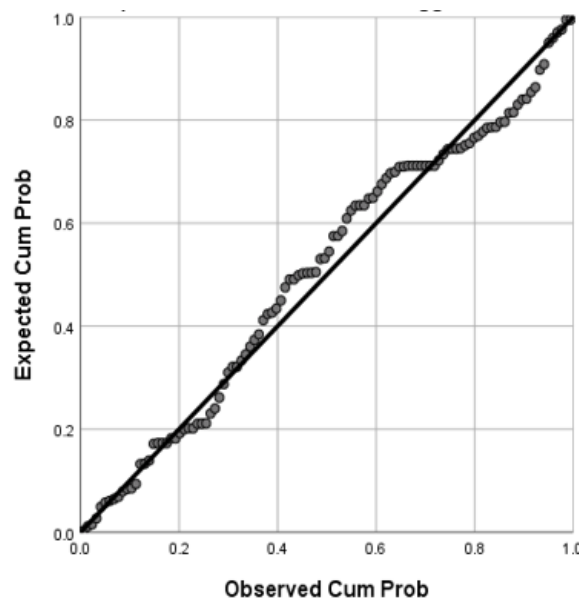
1. Normality Test

Figure 1.2 Normal P-P Plot Graph Test Result
Source: SPSS Statistics Result Output, 2021

Based on the normality test in Figure 1.2 shows the result that, the plot normality chart has dots that follow the diagonal line of regression, so that the regression model can be declared normal. This is also evidenced in the results of the Kolmogorov-Smirnov Test as follows.

Table 1.3 Kolmogorov-Smirnov Test Result

Size	Value
Asymp. Sig. (2-tailed)	0.060

Source: SPSS Result Output, 2021 (Appendix 2)

Table 1.3 indicates that the value of Asymp. Sig. (2-tailed) of the Kolmogrov-Smirnov test is 0.06 and the value is > 0.05. It can be concluded that residual distributed is normal. These results may strengthen the multiple linear regression analysis performed in this study.

2. Multicollinearity Test

Table 1.4 Multicollinearity Test

Independent Variables	Dependent Variables	Collinearity Statistics	
		Tolerance	VIF
Interest (X_1)		0.599	1.670
Perception of Usability (X_2)	User Intentions (Y)	0.456	2.191
Perception of Ease (X_3)		0.576	1.737

Source: SPSS Result Output, 2021 (Appendix 3)

Based on Table 1.4 it can be seen that from the variables of interest, perception of usability, and perception of ease have Collinearity Statistics with a Tolerance value of > 0.100 and a VIF value of < 10.00. It can be concluded that there are no symptoms of multicollinearity in this study, so there is no relationship between independent variables that are strong in nature. These results may strengthen the multiple linear regression analysis conducted in this study.

3. Heteroscedasticity Test
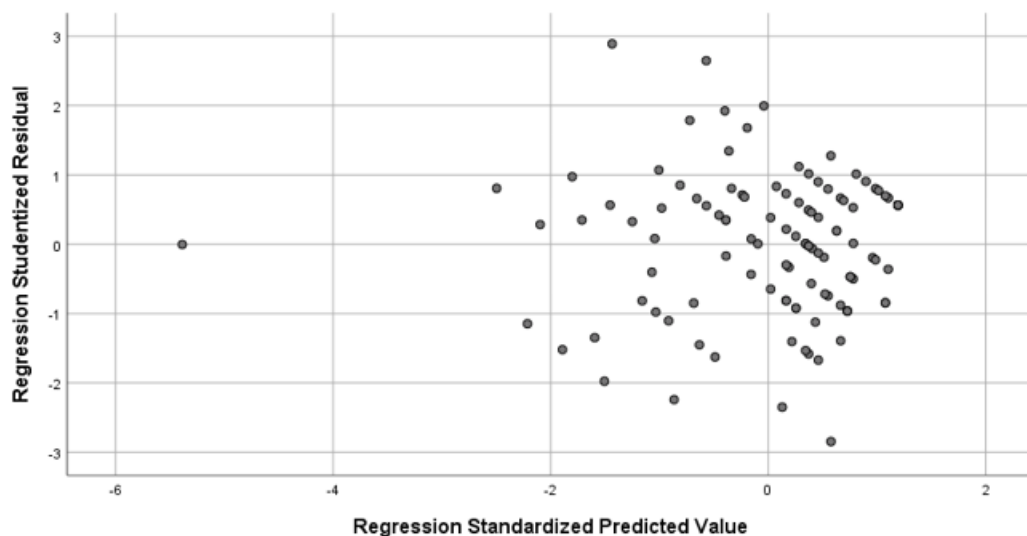
Figure 1.3 Scatterplot Test Result
Source: SPSS Result Output, 2021

Based on Figure 1.3 shows that, scatterplot points spread out and do not describe any specific pattern. Thus, this research regression model did not show any symptoms of heteroskedasticity. This is supported by the results of the Glejser test as follows.

Table 1.5 Glejser Test Result

Independent Variables	Dependent Variables	Sig.
Interest (X_1)		0.709
Perception of Usability (X_2)	Residual Absolut (Abs_Res)	0.849
Perception of Ease (X_3)		0.538

Source: SPSS Result Output, 2021 (Appendix 4)

Table 1.5 indicates that, the significance value of an independent variable to Absolute Residual is greater than 0.05. It can be concluded that, this research regression model does not occur heteroskedasticity. These results may strengthen the multiple linear regression analysis conducted in this study.

1.3.3 Correlation Coefficient (R) Test

Table 1.6 Correlation Coefficient (R) Test Result

Independent Variables	Dependent Variables	Pearson Correlation	Sig. (2-tailed)
Interest (X_1)		0.683	0.000
Perception of Usability (X_2)	User Intentions (Y)	0.657	0.000
Perception of Ease (X_3)		0.575	0.000

Source: SPSS Result Output, 2021 (Appendix 5)

Table 1.6 shows that the significance value of each independent variable in the form of interest, perception of usability, and perception of ease is smaller than 0.05. Thus, independent variables can partially explain dependent variables. The Pearson Correlation value can be described as follows.

1. Interest (X1) to User Intention (Y) = 0.683, so it is expressed to be strongly correlated.

2. Perception of Usability (X2) to User Intention (Y) = 0.575, so it is strongly correlated.

3. Perception of Ease (X3) to User Intention (Y) = 0.575, so it is moderately correlated.

1.3.4 Coefficient of Determination (R^2) Test

Table 1.7 Coefficient of Determination (^{R2}) Test Result

R	R Square	Adjusted R Square
0.760	0.577	0.565

Source: SPSS Result Output, 2021 (Appendix 6)

Based on Table 1.7 shows that, the result of the value of R is 0.760. That is, the value is close to 1 so that it indicates a positive strong relationship independently. While the value of R^2 (R Square) is 0.577. So that the contribution of independent variables of Interest (X_1),

Perception of Usability (X$_2$), and Perception of Ease (X$_3$) to the dependent variable of User Intention (Y) amounted to 57.7%. The remaining 42.3% was caused by other factors that were not present in the study.

1.3.5 Multiple Linear Regression Test

Table 1.8 Multiple Linear Regression Test (Coefficients) Result

Type	Dependent Variables	Unstandardized Beta (B)
Constant		0.283
Interest (X$_1$)	User Intentions	0.465
Perception of Usability (X$_2$)		0.263
Perception of Ease (X$_3$)		0.203

Source: SPSS Result Output, 2021 (Appendix 7)

Based on Table 1.8 of the multiple linear regression equations in this study as follows:

$Y = \alpha + \beta X_1 + \beta X_2 + \beta X_3 + e$, then

$Y = 0.283 + 0.465X_1 + 0.263X_2 + 0.203X_3$

The above multiple linear regression equations can be described as follows:

1. The constant value (α) of 0.283 is a constant or state when the user's intention variable (Y) has not been influenced by the interest variable (X$_1$), perception of usability (X$_2$), and perception of ease (X$_3$).

2. The βX_1 value (regression coefficient value X$_1$) of 0.465 is an interest variable (X$_1$) has a positive sharpener to the user's intentions in the sense that, any increase of 1 (one) unit of interest variable will affect the user's intention by 0.465 assuming that, other variables are not studied in this study.

3. The βX_2 (regression coefficient value X$_2$) of 0.263 is a perception variable of usability (X$_2$) has a positive influence on the user's intentions with the sense that, each increase of 1 (one) unit of the usability perception variable will affect the user's intention by 0.263 assuming that, other variables are not studied in this study.

4. The βX_3 value (regression coefficient value X$_3$) of 0.203 is a perception variable of ease has a positive influence on user intentions with the sense that, each increase of 1 (one) unit of ease perception variable will affect the user's intention by 0.203 assuming that, other variables were not studied in this study.

1.3.6 Hypothesis Test

1. F Test (Fit Model)

Table 1.9 F Test (Model Fit) ANOVA Result

Type	Df	F	Sig.
Regression	3	49.145	0.000
Variable Dependents: User Intentions			
Predictors: Constant, Interest, Perception of Usability, Perception of Ease			

Source: SPSS Result Output, 2021 (Appendix 8)

Table 1.9 shows that the result of a significance value of 0.000 < 0.05. It can be concluded that, simultaneously independent variables in the form of interests, perceptions of usability, and perceptions of ease affect the dependent variables of user intentions. Therefore, this research analysis model is feasible (Fit).

2. t Test

Table 1.10 t Test (Coefficients) Result

Type	Dependent Variables	Value t	Sig.
Interest (X_1)		5.212	0.000
Perception of Usability (X_2)	User Intentions	2.835	0.005
Perception of Ease (X_3)		2.464	0.015

Source: SPSS Result Output, 2021 (Appendix 9)

Table 1.10 shows that, each significance value on an independent variable is smaller than 0.05. So that the results are obtained as follows.

1. The interest variable (X_1) has a significance value of 0.000 < 0.05, then H_0 is rejected and H_a is accepted. That is, interest (X_1) has a significant effect on the user intentions (Y).

2. The perception of usability variable (X_2) has a significance value of 0.005 < 0.05, then H_0 is rejected and H_a is accepted. That is, the perception of usability (X_2) has a significant effect on the user intentions (Y).

3. The perception of ease variable (X_3) has a significance value of 0.015 < 0.05, then H_0 is rejected and H_a is accepted. That is, the perception of ease (X_3) has a significant effect on user intentions (Y).

1.3.7 Sort Indicators

Based on descriptive variables and indicators there is a possibility of obtaining optimal or better research results in the future, when using indicators with a range of **"STRONGLY AGREE"**. Therefore, it can be re-researched using indicators that have been sorted as follows.

Table 1.11 Indicator Sort Results

Variable	Indicators	Category
Interests (X_1)	$X_{1.2}$	Strongly Agree
	$X_{1.3}$	Strongly Agree
Perception of Usability (X_2)	$X_{2.1}$	Strongly Agree
	$X_{2.2}$	Strongly Agree
	$X_{2.3}$	Strongly Agree
Perception of Ease (X_3)	$X_{3.1}$	Strongly Agree
	$X_{3.2}$	Strongly Agree
	$X_{3.3}$	Strongly Agree
	$X_{3.4}$	Strongly Agree
User Intentions (Y)	Y_4	Strongly Agree

Source: Data processed, 2021

Table 1.11 is the result of the indicators that have been sorted. Future testing can use these indicators with other indicators relevant to the research theme. This use is expected to meet more optimal results in the development of mobile games and apps.

1.3.8 Result

Based on the hypothesis testing that has been carried out on the t and F tests, this analysis obtains the following results.

1. The interest has a significant positive effect on intentions of mobile games users.
2. The perception of usability has a significant positive effect on intentions of mobile games users.
3. The perception of ease has a significant positive effect on intentions of mobile games users.

APPENDIX

Appendix 1: Validity and Reliability Test

Interests (X₁)

Correlations

		X1.1	X1.2	X1.3	X1.4	X1_Total
X1.1	Pearson Correlation	1	.595**	.463**	.598**	.816**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	112	112	112	112	112
X1.2	Pearson Correlation	.595**	1	.754**	.521**	.864**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	112	112	112	112	112
X1.3	Pearson Correlation	.463**	.754**	1	.478**	.801**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	112	112	112	112	112
X1.4	Pearson Correlation	.598**	.521**	.478**	1	.806**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	112	112	112	112	112
X1_Total	Pearson Correlation	.816**	.864**	.801**	.806**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	112	112	112	112	112

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

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
X1.1	13.0089	4.279	.657	.469	.799
X1.2	12.7768	4.175	.746	.648	.759
X1.3	12.5893	4.677	.663	.579	.799
X1.4	13.1607	4.190	.624	.414	.817

Perception of Usability (X₂)

Correlations

		X2.1	X2.2	X2.3	X2.4	X2_Total
X2.1	Pearson Correlation	1	.605**	.677**	.655**	.863**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	112	112	112	112	112
X2.2	Pearson Correlation	.605**	1	.639**	.545**	.808**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	112	112	112	112	112
X2.3	Pearson Correlation	.677**	.639**	1	.668**	.883**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	112	112	112	112	112
X2.4	Pearson Correlation	.655**	.545**	.668**	1	.848**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	112	112	112	112	112
X2_Total	Pearson Correlation	.863**	.808**	.883**	.848**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	112	112	112	112	112

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

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
X2.1	12.5268	5.152	.749	.562	.828
X2.2	12.4196	5.633	.676	.469	.857
X2.3	12.5804	4.822	.772	.596	.819
X2.4	12.8839	5.095	.717	.527	.841

Perception of Ease (X₃)

Correlations

		X3.1	X3.2	X3.3	X3.4	X3_Total
X3.1	Pearson Correlation	1	.529**	.658**	.524**	.768**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	112	112	112	112	112
X3.2	Pearson Correlation	.529**	1	.690**	.694**	.862**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	112	112	112	112	112
X3.3	Pearson Correlation	.658**	.690**	1	.768**	.908**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	112	112	112	112	112
X3.4	Pearson Correlation	.524**	.694**	.768**	1	.883**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	112	112	112	112	112
X3_Total	Pearson Correlation	.768**	.862**	.908**	.883**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	112	112	112	112	112

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

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
X3.1	12.8571	6.051	.630	.444	.882
X3.2	13.0893	4.947	.733	.549	.845
X3.3	12.9196	5.066	.830	.700	.806
X3.4	13.0446	4.818	.770	.641	.830

User Intentions (Y)

Correlations

		Y1	Y2	Y3	Y4	Y_Total
Y1	Pearson Correlation	1	.686**	.657**	.630**	.878**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	112	112	112	112	112
Y2	Pearson Correlation	.686**	1	.553**	.536**	.822**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	112	112	112	112	112
Y3	Pearson Correlation	.657**	.553**	1	.561**	.850**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	112	112	112	112	112
Y4	Pearson Correlation	.630**	.536**	.561**	1	.801**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	112	112	112	112	112
Y_Total	Pearson Correlation	.878**	.822**	.850**	.801**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	112	112	112	112	112

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

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Y1	12.1071	5.322	.785	.621	.779
Y2	12.3304	5.376	.681	.499	.817
Y3	12.2679	4.612	.683	.479	.828
Y4	11.9107	5.668	.661	.447	.826

Interests (X₁)

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.837	.840	4

Perception of Usability (X₂)

Reliability Statistics

| Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.872	.873	4

Perception of Ease (X₃)

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.877	.878	4

User Intentions (Y)

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.852	.859	4

Appendix 2: Normality and Kolmogrov-Smirnov Test
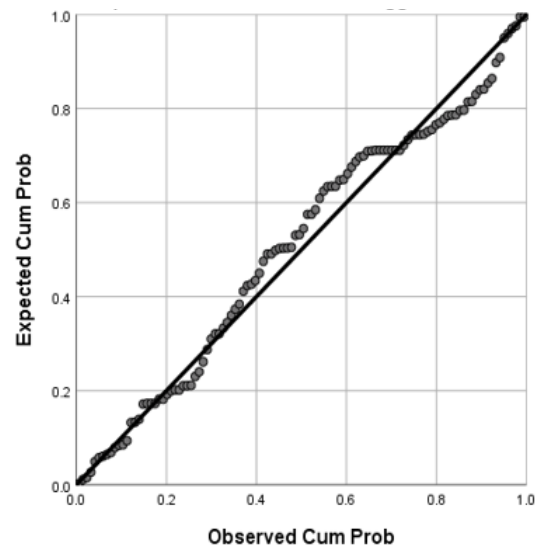
One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		112
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	1.93825352
Most Extreme Differences	Absolute	.082
	Positive	.066
	Negative	-.082
Test Statistic		.082
Asymp. Sig. (2-tailed)		.060[c]

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

Appendix 3: Multicollinearity Test (Tolerance and VIF)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.283	1.340		.211	.833		
	Minat	.465	.089	.421	5.212	.000	.599	1.670
	Persepsi Kegunaan	.263	.093	.263	2.835	.005	.456	2.191
	Persepsi Kemudahan	.203	.082	.203	2.464	.015	.576	1.737

a. Dependent Variable: Intensi Pengguna

Appendix 4: Heteroscedastisity Test (Scatterplot and Glejser)
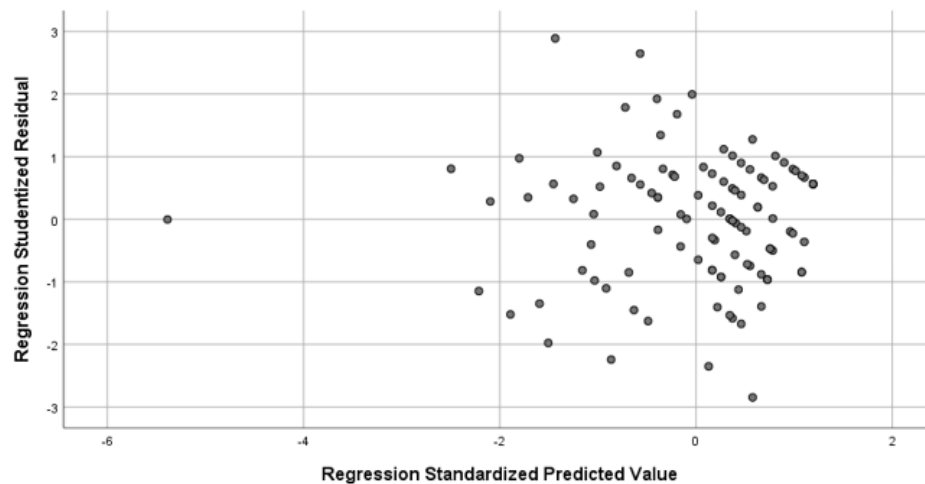
Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.586	.796		3.249	.002
	Minat	-.020	.053	-.046	-.374	.709
	Persepsi Kegunaan	-.011	.055	-.027	-.191	.849
	Persepsi Kemudahan	-.030	.049	-.078	-.618	.538

a. Dependent Variable: Abs_Res

Appendix 5: Correlation Coefficient (R) Test

Correlations

		Minat	Persepsi Kegunaan	Persepsi Kemudahan	Intensi Pengguna
Minat	Pearson Correlation	1	.625[**]	.481[**]	.683[**]
	Sig. (2-tailed)		.000	.000	.000
	N	112	112	112	112
Persepsi Kegunaan	Pearson Correlation	.625[**]	1	.644[**]	.657[**]
	Sig. (2-tailed)	.000		.000	.000
	N	112	112	112	112
Persepsi Kemudahan	Pearson Correlation	.481[**]	.644[**]	1	.575[**]
	Sig. (2-tailed)	.000	.000		.000
	N	112	112	112	112
Intensi Pengguna	Pearson Correlation	.683[**]	.657[**]	.575[**]	1
	Sig. (2-tailed)	.000	.000	.000	
	N	112	112	112	112

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

Appendix 6: Coefficient of Determination (R^2) Test

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.760[a]	.577	.565	1.965

a. Predictors: (Constant), Persepsi Kemudahan, Minat, Persepsi Kegunaan

b. Dependent Variable: Intensi Pengguna

Appendix 7: Multiple Linear Regression Test

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.283	1.340		.211	.833
	Minat	.465	.089	.421	5.212	.000
	Persepsi Kegunaan	.263	.093	.263	2.835	.005
	Persepsi Kemudahan	.203	.082	.203	2.464	.015

a. Dependent Variable: Intensi Pengguna

Appendix 8: F Test (Fit Model)

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	569.269	3	189.756	49.145	.000[b]
	Residual	417.008	108	3.861		
	Total	986.277	111			

a. Dependent Variable: Intensi Pengguna

b. Predictors: (Constant), Persepsi Kemudahan, Minat, Persepsi Kegunaan

Appendix 9: t Test

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.283	1.340		.211	.833		
	Minat	.465	.089	.421	5.212	.000	.599	1.670
	Persepsi Kegunaan	.263	.093	.263	2.835	.005	.456	2.191
	Persepsi Kemudahan	.203	.082	.203	2.464	.015	.576	1.737

a. Dependent Variable: Intensi Pengguna