

The Influence of the Internet on Study Interests of High School Students in Timor Leste

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ABSTRAK

Several schools in big cities in Timor-Leste already have computers connected to the Internet; these computers are used for school administration and the learning process to facilitate the process of communication and data exchange; each computer must be connected to a wired or wireless network. With a sufficient internet network, I hope students can increase their interest in learning. In this regard, this study aims to explain the positive and negative effects of the Internet on high school students' learning interest in Timor Leste. This research uses a quantitative method, which will be filled with numbers and statistics that will then be described descriptively. Based on the results of this study it is supported by data and analysis of significant conditions, which means that the Internet used is what is expected of the learning interests of high school students in Timor-Leste. Based on the SPSS version 25 data processing test on F count, the results were obtained so that the internet variable (X_1) simultaneously had a simultaneous impact on learning interest (Y) for high school students in Timor-Leste with an F test score of 17.614 and a significant level of 0.000. And sourced from the test of the coefficient of determination that the Internet (X_1) has on the learning interest of high school students in Timor-Leste. The summary model value of R^2 is 0.317.

Keywords: Internet; Interest to learn; Timor Leste

1. INTRODUCTION

Education must equip students with skills and soft skills to form a competent and internationally competitive workforce. Furthermore, the COVID-19 pandemic situation that emerged since the end of 2019 has affected the learning process in schools (Zulaiha & Kusuma, 2020). By Circular Letter Number 15 of 2020 concerning the Implementation of Guidelines for Studying at Home, learning activities in schools and tertiary institutions are carried out at home in the form of offline and online learning. Guidelines for the Minister of Education and Culture of the Republic of Indonesia Number 719/P/2020 concerning Implementation of Curriculum in Education Units Under Special Conditions also regulates learning activities during the COVID-19 pandemic (Idris, 2021). This difference makes the way of learning interest in Timor Leste, where network access in Timor Leste is very limited with teachers who continue to teach with existing theory, but the drawback is that students do not find out or learn by using access to find out more or find out via the internet there are indeed rules in Timor Leste which do not permit students to use their cellphones to access the internet while the learning process may be quite modern now, but the differences in Indonesia and Timor Leste are quite different because in Timor Leste because they still use theory in a learning mode followed by regulations that have existed for a long time, all students must attend classes without using any mobile phones or gadgets, but in Indonesia, everything is sophisticated and modern when learning, we can use the internet and gadgets to find out something about the material provided and broaden our knowledge when learning mode, everything that is used is the rules in each school and also a challenge for educators or teachers to be more creative in increasing students' interest in learning.

From several things, each country must have education arrangements in their respective schools where each education has rights, and constituents and also contributes to school management for generations to bring education to assume the relevance of formal and non-formal education in each school (Nadzirah et al., 2018), State Formal education is a commitment to the education system of every nation to improve, to adjust the curriculum systematically to the needs (Yusuf, 2018). It continues to grow, enabling it to position itself in larger and more competitive markets. The implementation actions are at the level of teachers and educational institutions. In Timor-Leste, in-depth education reform is decided by the ESG, but through a process of curricular arrangement and is conceived and contained within its scope. All curriculum materials are created from the ground up and conform to this statement (Listiwati, 2013). Implementation - Curriculum plans, multi-subject programs, Student manuals, Teacher's guides for these subjects, and various school years. As part of the implementation (re)structuring of the LST curriculum in Timor-Leste, there has been an increase in the number of teachers receiving advanced training in the subject. And Timor Leste will also carry out several processes to update the curriculum that will be implemented in schools in Timor Leste (Cabrita, 2015).

Students who are interested in learning will continue to study hard; compared to students who are not interested in themselves, the desire to continue learning is empty. Interest is the tendency to feel happy about something so that if students study hard, their grades will be satisfactory (Yunitasari, 2020). Learning subjects via the web will be more conducive to increasing knowledge for each student; the Internet is a medium of communication between organizations and their customers, creating a new virtual organization. The Internet is a global computing system that uses a common method of connecting hardware devices and transmitting digital information, a community of people using common communication technologies, and a globally distributed information system (Pradana, n.d.). From this it follows that with the help of the Internet a person can contact one or more other people and communicate, receive and disseminate information.

Several schools located in big cities in Timor-Leste already have computers connected to the internet, these computers are used for school administration as well as for the learning process to facilitate the process of communication and data exchange, each computer must be connected to a network, either wired or wireless. With a sufficient internet network, I hope students can increase their interest in learning. Based on this, this study aims to explain the positive and negative effects of the internet on the learning interest of high school students in Timor Leste.

2. RESEARCH METHOD

This research focuses on the location of a high school named São Operario Balide in Timor-Leste. This research was also conducted in July 2022. Based on the location and time of the research, it can be seen that this research is included in the quantitative research with a descriptive nature. This approach is empirical, objective, measurable, rational, systematic, and provides information about the relationship between three or more to test the hypotheses made (Sugiyono, 2007). Researchers collect data using samples taken randomly (*Cluster random sampling*), which involves two stages: determining the area and the people in the sampling area (Sugiyono, 2012). The subjects of this research were 40 students of class XI. Class of SMA Sao Jose Operario Balide Dili Timor-Leste, consisting of 20 students from class XI A and 20 students from class XI B.

Researchers used a questionnaire, a data collection technique in which respondents were given a series of questions. In this study, researchers used a Likert scale to measure subjects' responses on the same 5-point scale. Variables measured on a Likert scale are converted into variable indicators and expressions using a categorical scale. The respondent's perception scale consists

of 5 response categories. Selection of a scale of 1 to 5 is done to influence respondents to give an assessment of the questions asked.

This Likert scale is used to measure Internet Influence:

+	Answer	-
5	Strongly agree	1
4	Agree	2
3	Neither agree or disagree	3
2	Disagree	4
1	Strongly disagree	5

Data Validity

To test the validity of the instrument items in this study, the *Product Moment* correlation formula was used as follows (Arikunto, 2010):

$$r_{xy} = \frac{N\sum XY - (\sum X)(\sum Y)}{\sqrt{\{N\sum X^2 - (\sum X)^2\}\{N\sum Y^2 - (\sum Y)^2\}}}$$

Description:

r_{xy} : Correlation coefficient

n : Number of student

$\sum X$: Total score of each student on the question item

$\sum Y$: The sum of the total scores of all students

Description:

- With a significant level (α) = 5%
- If r count \geq r table it can be said to be valid
- If r count $<$ r table it can be said to be invalid.

Reliability Test

This is a tool for measuring questionnaires that indicate variables or constructs. A survey is considered reliable when the answers to the questions are consistent or stable over time (Sugiyono, 2011). Cronbach's alpha is used as a measure of reliability:

$$\alpha = \left[\frac{k}{K-1} \right] \left[1 - \frac{\sum \alpha^2}{\sigma^2} \right]$$

where:

α : Reability

k : Number of question

$\sum \alpha^2$: Number of variant items

σ^2 : Total variant

Test Criteria as follows:

- a. Significant level of *cronbach alpha* value 0,60
- b. *Cronbach Alpha* result $\geq 0,60$ can be said to be reliab
- c. *Cronbach Alpha* result $< 0,60$ can be said to be unreliable

3. RESULT AND ANALYSIS

3.1. RESULT

Description of Respondents

Table 1. The Gender of Respondents

		Frequency	Percent	Validity Percent	Cumulative Percent
Validity	Male	8	20,0	20,0	20,0
	Female	32	80,0	80,0	100,0
	Total	40	100,0	100,0	

The results showed that of the 40 respondents, 20.0% were male, and 80.0% were female. As can be seen from the table above, more women than men participated in this study.

Table 2. Respondent Characteristics Based on Class

		Class			
		Frequency	Percent	Validity Percent	Cumulative Percent
Validity	A	20	50,0	50,0	50,0
	B	20	50,0	50,0	100,0
	Total	40	100,0	100,0	

Based on 40 respondents, 50.0% of Class A respondents and 50.0% of Class B respondents. From the table above it can be seen that the respondents in this study were Class A and Class B at the same time.

Validity Test

Validity illustrates that the instrument or measuring tool is actually able to measure the variables measured in this study. In this study the questionnaire items were validated if the *r-count* \geq the *r-table* score with a significance of 5% used in this test personal income moment and it is known that the *r-table* score is 0.3120 ($n = 98$) degrees of freedom ($df = n - 2 = 40 - 2 = 38$) α at 5%. Statistical Products and Services Solutions (SPSS) 25.0 for Windows was used for data analysis. The results of the validity test carried out are as follows:

Table 3. Internet Validity Test Results

Variable	Item	r-count	r-table	Description
Internet (X1)	1	0,755	0,3120	Valid
	2	0,534	0,3120	Valid
	3	0,513	0,3120	Valid
	4	0,763	0,3120	Valid
	5	0,686	0,3120	Valid
	6	0,727	0,3120	Valid
	7	0,722	0,3120	Valid
	8	0,780	0,3120	Valid
	9	0,698	0,3120	Valid
	10	0,673	0,3120	Valid

Source : primary data, processed in 2022

Score: *r*-numbers are all positive and greater than *r-table*, it can be concluded that 10 online questions are valid.

Table 4. Results of the Validity Test of Interest in Learning

Variable	Item	r-count	r-table	Description
Purchasing Decisions (Y)	1	0,814	0,3120	Valid
	2	0,761	0,3120	Valid
	3	0,753	0,3120	Valid
	4	0710	0,3120	Valid
	5	0,709	0,3120	Valid
	6	0,749	0,3120	Valid
	7	0,799	0,3120	Valid
	8	0,577	0,3120	Valid
	9	0,737	0,3120	Valid
	10	0,643	0,3120	Valid

Source : primary data, processed in 2022

The r-count values are all positive and r-table, so it can be concluded that the 10 interesting questions are valid.

Reability Test

This reliability test uses the Cronbach alpha test. The device is declared reliable if the coefficient value Alpha is greater than *Cronbach's Alpha* value (0,60).

Table 5. Reliability Test Result

Variable	Alpha Coefficient	Cronbach's Alpha	Description
Internet Access (X1)	0,873	0,60	Reliable
Interest of Learning (Y)	0,892	0,60	Reliable

The internet coefficient (X_1) is 0.873 or has a positive sign and is greater than the Cronbach alpha value ≥ 0.60 , so it can be concluded that the internet (X_1) is declared reliable. The Coefficient of Interest in Learning (Y) is 0.892, which is positive and greater than the Cronbach alpha ≥ 0.60 value. It can be concluded that interest in learning is reported as reliable.

Hypothesis Test

Hypothesis testing was analyzed in the first and second stages using multiple regression tests, which aim, among other things, to determine the effect of the internet on interest in learning. This study discussed each regression model for each research model.

Table 6. T-test Results

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig
		B	Std. Error	Beta		
1	(Constant)	5,920	0,752		7,870	0,000
	X1	-0,775	0,185	-0,563	-4,197	0,000

a. Dependent Variable: Y

Testing the effect of Internet perception (X_1) on Learning Interest (Y) of São Jose Operario Balide High School Students in Dili Timor-Leste.

Determining the null hypothesis and alternative hypothesis

H_0 : The Internet Variable (X_1) has no influence on Learning Interest (Y) of São Jose Operario High School Students, Timor-Leste.

H_a : Internet Variable (X_1) has an influence on Learning Interest (Y) Students of São Jose Operario High School Timor-Leste.

Determining the t-table value

The value of the t table results from the degrees of freedom, namely $df = n-2$ or $dk = 40-3-1=36$ (n is the number of samples), $\alpha = 5\%$, because this is a two-tailed test, $a/2 = 0.05/2 =$, so t-table = 2.02809.

Basis for decision making in t-test

- H_0 is accepted and H_a is rejected if the value of t count $<$ t table or if the sig. < 0.05

2. H_a is rejected and H_0 is accepted if the t count $>$ t table or if the sig value < 0.05

Kesimpulan

It can be seen that t -count (4.197) $>$ t -table (2.02809) and column coefficient, sig value (0.000) $<$ 0.005. This means that H_0 is rejected and H_a is accepted. From this it can be concluded that the Internet variable (X_1) has a significant effect on high school students' learning interest (Y).

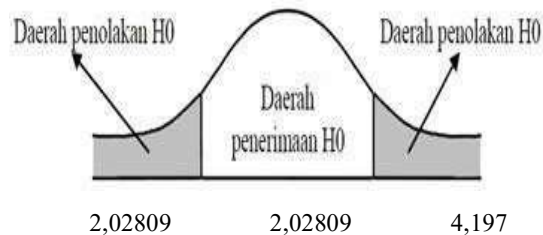


Figure 1. T-test Results

F Test

The F-test is used to determine how much influence the independent variables simultaneously (simultaneously overall) on the dependent variable F by comparing the calculated F -table obtained by multiple linear regression with the F -table. The results of simultaneous testing (F) carried out using the SPSS version 25 program are presented in Table 7.

Table 7. F-test Result

Model		Sum of Squares	df	Mean Square	F	Sig
1	Regression	8,038	1	8,038	17,614	.000 ^b
	Residual	17,341	38	0,456		
	Total	25,379	39			
a. Dependent Variable: Y						
b. Predictors: (Constant), X ₁						

The test steps are as follows:

Determine the Hypothesis

H_0 : Internet Variable (X_1), simultaneously has no effect on Learning Interest (Y) of SMA São Jose Operario Balide Dili Timor-Leste Students.

H_a : The Internet Network Variable (X_1) simultaneously influences Learning Interest (Y) of SMA São Jose Operario Balide Dili Timor-Leste students.

Define F table

By using a significant level ($\alpha = 5\%$) and degrees of freedom ($dk = (n-k-1) = (40-2-1) = 37$ where n is the number of samples & k is the number of purchasing variables (numerator) = 3 (df for regression and degrees of freedom for the denominator (denominator) = 37 (df for residuals), so that the value of the F table test = (3.25)

Basis for decision making in F-test

- If $F_{\text{count}} < F_{\text{table}}$, then H_0 is accepted
- If $F_{\text{count}} > F_{\text{table}}$ then H_0 is rejected

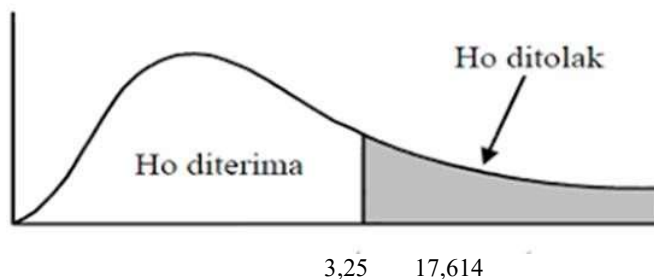


Figure 2. F-test Result

Determination Test (R^2)

Table 8. Determination Coefficient

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.563 ^a	0,317	0,299	0,67553
a. Predictors: (Constant), X1				

The table above shows that the correlation between Internet Variables (X_1) and Learning Interest (Y) can be seen from the R result of 0.563, which means that the relationship between X and Y variables is 56.3%. And the magnitude of the contribution of the variable X to Y can be seen from the R Square of 0.317. So it can be concluded that the contribution of variable X_1 to Y is 0.317%, while other unknown variables explain the remaining 43.7%.

Conclusion

It can be seen that $F_{hitung}(17,614) > F_{tabel}(3,25)$ and a significant value ($0.000 < 0.05$) so that H_0 is rejected and H_a is accepted. Variable means that Belief (X_1) simultaneously has a significant effect on the variable Learning Interest (Y) of São Jose Operario High School students, Timor-Leste.

3.2. ANALYSIS

The results of this study are further elaborated in this discussion section as follows;

This research was conducted to examine the extent to which the **INFLUENCE OF THE INTERNET ON LEARNING INTEREST IN HIGH SCHOOL STUDENTS IN TIMOR LESTE**. The 40 respondents in this study were grouped into several categories such as gender and class.

First, the characteristics of the respondents studied in this study were gender-matched based on male sex 8, 32 respondents and female respondents, or 20% male and 80% female. The two characteristics of respondents based on the class studied in this study are equivalent to 20 respondents or 50%.

In the validity test of 40, using the person product moment correlation technique to test each item statement on each variable (Independent and Dependent). the results of the validity test can be stated that the questions used in the study regarding the **INFLUENCE OF THE INTERNET ON THE LEARNING INTEREST OF HIGH SCHOOL STUDENTS IN TIMOR-LESTE** consist of 20 items of questions, and after being tested, all statements are declared valid.

In the reliability test of 40 respondents, the Cronbach Alpha value was ≥ 0.60 for each variable. In the Reliability test, the value of Cronbach Alpha internet (X_1) is 0.873, and interest in learning (Y) is 0.892. So it can be concluded that each variable has a Cronbach Alpha value ≥ 0.60 so that it is declared Reliable.

From the results of the hypothesis calculations with the help of the Statistical Product and Service Solution (SPSS) 25.0 for windows program, the following results are obtained.

The influence of the internet (X_1) on interest in learning (Y) for high school students in Timor-Leste.

The results of the t-test calculation show that the coefficient value is (-0.775) with a t_{count} value of 4.197. The results of this study indicate that the internet influences the learning interest of high school students in Timor-Leste.

The results of this study indicate an important condition: better student evaluation of **the internet** increases interest in learning to use the internet in high schools in Timor-Leste. The results of this study are in line with the results of Meisyaroh (2015), which shows that the *internet* variable significantly affects interest in learning in senior high schools in Timor-Leste. Thus Hypothesis 1 that "**the internet**" has a significant effect on interest in studying high school in Timor-Leste" is **proven**.

The influence of the internet on interest of learning

The results of the F test in this study obtained an F-count of 17.614 with a significant level of 0.000 <0.05, which means that the *internet* variable simultaneously influences the learning interest of high school students in Timor-Leste..

4. CONCLUSION

Based on the results of data processing to prove the hypothesis proposed. Based on the data and analysis that has been carried out, the results of this study show a significant condition, which means that the internet used is what is expected of high school students learning interests in Timor-Leste. Based on the SPSS version 25 data processing test on F count, it was found that the internet variable (X_1) simultaneously had a simultaneous effect on learning interest (Y) for high school students in Timor-Leste with an F test score of 17.614 and a significant level of 0.000. And based on the results of the test of the coefficient of determination that the internet (X_1) has on the learning interest of high school students in Timor-Leste. The summary model value of R^2 is 0.31.

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