

The Influence of Learning Facilities and Learning Motivation on Students' Economic Learning Outcomes Class XI SMA Negeri 3 Pematang Siantar

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A B S T R A C T

This *type* of research is quantitative research with a quantitative descriptive data analysis approach, with the research population being all students of class XI IPS SMA Negeri 3 Pematang Siantar and the research sample is also all students of class *sampling* (saturated sampling). The data collection technique uses instruments: learning facilities questionnaire, learning motivation questionnaire, learning outcomes in the form of daily economics test scores. The results of this research show that: there is a positive and significant influence of learning facilities on learning outcomes, this result can be seen in the t test where the calculated t value of learning facilities (7.123) > t table value (1.65776) which means that this variable significant, there is a positive and significant influence of learning motivation on learning outcomes (2.48) > t table value (1.65776) which means this variable is significant, Learning facilities and learning motivation together influence learning outcomes, this result can be seen in the F test where the calculated F value (25.366) is > compared to the table F value (3.07). The R Square coefficient of determination test was found to be 0.299, meaning that 29.9% of the variables of learning facilities and learning motivation had an influence on student learning outcomes at SMA Negeri 3 Pematang Siantar and the remaining 70.1% was the influence of other variables not examined in this research.

INTRODUCTION

The success of students in the educational process is influenced by several factors. These factors can be broadly grouped into two factors, namely from within and from outside the student. And one of the factors that comes from within a student is motivation to learn, while from outside the student, one of them is facilities.

In general, students, parents and teachers always want good learning results, therefore they must know how good learning results are obtained. One of the factors originating from within and outside students that determines success in achieving learning outcomes is learning facilities and also learning motivation. Learning facilities have a role and influence in achieving student learning achievement. Facilities in an educational institution are an important part that needs to be considered. Because the existence of this facility will support students' academic and non-academic activities and support the realization of a conducive teaching and learning process. Educational facilities include all the facilities needed in the teaching and learning process so that the achievement of educational goals can run smoothly, regularly, effectively and efficiently so that students can achieve optimal learning outcomes.

Apart from learning facilities, learning motivation is a factor that also influences the success of a learning process. Learning motivation can be said to be the overall driving force within students which gives rise to learning activities, which guarantees the continuity of learning activities and which provides direction to learning activities, so that the goals desired by the learning subject can be achieved. To be able to learn subjects well, students must have very good motivation, both intrinsic motivation and intrinsic motivation. A student who has good motivation to study will diligently carry out all the tasks assigned to him. So the possibility of errors in theoretical and practical learning can be reduced. With high motivation, theoretical and practical learning outcomes can be satisfactory, whereas with low motivation, theoretical and practical learning outcomes are unsatisfactory.

Based on the results of observations made at SMA Negeri 3 Pematang Siantar, SMA Negeri 3 Pematang Siantar has learning facilities. However, in reality the learning facilities provided by schools do not fully meet the learning needs of students at school and the learning facilities for students at home also still do not meet students' learning needs. This can be seen from the lack of textbooks in schools, the chairs in schools are starting to get damaged, the lack of practical tools needed for learning and *in-focus* which are not yet available in all classes and facilities such as pens, notebooks and the lack of student motivation to learning, lack of student motivation in carrying out assignments given by the teacher.

To find out student learning outcomes, this can be done by carrying out assessments as feedback for the student in learning. However, to equalize perceptions, we should be guided by the current curriculum which has been

refined, including that a teaching and learning process regarding a teaching material is declared successful if the specific instructional objectives can be achieved.

From initial observations at SMA Negeri 3 Pematang Siantar, especially in economics subjects, there were some students who experienced failure in the learning process. Judging from the list of student grades (DKN) given by the economics subject teacher, there are 38.23% of students who got good grades (B), and 61.77% of students who got adequate learning outcomes (C). From the presentation of student scores, it is possible that some students who fail are influenced by learning facilities and their learning motivation. Based on the background of the problem that I have presented, the researcher wants to know how learning facilities and learning motivation influence student learning outcomes. Therefore, researchers are interested in conducting research entitled "The Influence of Learning Facilities and Learning Motivation on Economic Learning Outcomes of Class XI Students of SMA Negeri 3 Pematang Siantar".

THEORETICAL FRAMEWORK

1. Learning Facilities

Learning facilities are tools or anything that is used to facilitate and expedite a business or work carried out by students at school. According to Popi Sopiati (2010:7), facilities are the facilities and infrastructure that must be available to facilitate educational activities in schools. Facilities are all equipment, materials and furniture that are directly used for the educational process in schools, including buildings, study rooms (classrooms), learning media, tables and chairs. Meanwhile, infrastructure are facilities that indirectly support the educational process, including school grounds, school parks and roads to school.

2. Learning Motivation

Learning motivation is the encouragement or strength within an individual, whether consciously or unconsciously, to carry out learning activities to achieve certain desired goals with all the effort and strength he has. Sardiman (2009:79), states the definition of learning motivation: Learning motivation is the overall driving force within students which gives rise to learning activities, which ensures the continuity of learning activities and provides direction to learning activities, so that the goals desired by the learning subject can be achieved.

3. Learning outcomes

Learning outcomes are a process for determining the learning value of students through assessment activities or measuring learning outcomes. According to Susanto (2013: 5) states that, learning outcomes are acquired abilities children after learning activities. So it can be said that learning outcomes are results achieved by students during learning activities and as well as evidence of success that shown in the cognitive, affective and psychomotor aspects shown in the form of symbols, letter, And sentence .

METHODS

The type of research carried out is descriptive quantitative research. This research is descriptive research because it aims to describe the facts and characteristics of a particular population or area systematically, factually and thoroughly. According to Sugiyono (2017:11) that "Quantitative Research can be interpreted as A research method based on positivist philosophy, used to research certain populations or samples, data collection using research instruments, quantitative/statistical data analysis, with the aim of testing the hypothesis that has been applied.

Based on the researcher's title "The Influence of Learning Facilities and Learning Motivation on Economic Learning Outcomes of Class XI Students at SMA Negeri 3 Pematang Siantar. This research was carried out at SMA Negeri 3 Pematang Siantar in August - September 20 23. The population in this study were all students of class XI IPS SMA Negeri 3 Pematang Siantar , totaling 12 2 students. The sample in this study was all students from the population taken, namely all students in class XI IPS SMA Negeri 3 Pematang Siantar, totaling 12 2 students .

RESULTS

Instrument Validity and Reliability Test Results

After testing the instrument, the researcher then tabulated the results of the respondents' answers by arranging answer codes according to the classification of answers in table form. Tabulation of respondents' answers was carried out with the help of the *Microsoft Excel program* and using analytical data using analytical data in the *SPSS 24 program* . From the results of the calculations carried out you can determine whether or not the statement items in the research instrument are valid.

The statement item is declared valid if the $\text{calculated } r \text{ value} \geq r \text{ table}$ with a significance level of $\alpha = 0.05$. From the results of the validity test, it can be seen that the correlation between each question item and the total score of $n = 30$ shows that the $r \text{ table}$ is 0.361. This means that if the correlation value is more than 0.361 then the question is considered valid. The statement items that will be used when testing the hypothesis are only valid statement items, while invalid items cannot be used in research.

The instrument reliability test is carried out if all research instruments have been tested for validity. The instrument reliability test is carried out to determine the level of confidence in the research instrument used as a tool for collecting data. To calculate the reliability test of the research instrument, the Cronbach alpha formula is used . The instrument is declared reliable if the Cronbach Alpha coefficient > 0.6 .

Instrument Validity Test

Calculation of the validity of the study habits questionnaire consisting of 15 statement items, the study concentration questionnaire consisting of 15 statements which were carried out by automatic calculation with *SPSS 24 program analysis data* . After testing and statistical analysis.

Items that are declared valid are items that have a correlation value (r) $>$ 0.361, while items that have a correlation value (r) $>$ 0.361 are valid questionnaire items. This can be concluded that for the learning facilities questionnaire (X_1) it is known that the questionnaire consists of 15 items which have a correlation value (r) $>$ 0.3 61 as many as 15 valid questionnaire items or the entire questionnaire is valid. And for the learning motivation questionnaire (X_2) it is known that the questionnaire consists of 15 items which have a correlation value (r) $>$ 0.3 61 as many as 15 valid questionnaire items or the entire questionnaire is valid. So the questionnaire used in this research is a valid statement. Where in this research 15 questionnaire items were used in this research.

Instrument Reliability Test

For the questionnaire reliability criteria, if $r_{count} > r_{table}$ with a significant level ($\alpha = 0.05$) then the questionnaire is said to be reliable. However, if $r_{count} \leq r_{table}$ then the questionnaire is considered to have no reliability. If the *Cronbach Alpha value* is $>$ 0.60 it is said to be reliable, but if the *Cronbach Alpha value* is $<$ 0.60 it is said to be unreliable.

Cronbach Alpha $>$ 0.60 is declared reliable, and if the *Cronbach Alpha value* is $<$ 0.60 then it is declared unreliable. From the data obtained, it is known that the *Cronbach Alpha* obtained was 0.727 $>$ 0.60. From the results of calculating the reliability of learning facilities, it can be concluded that the research instrument (X_1) in the research questionnaire used is reliable. If the *Cronbach Alpha value* is $>$ 0.60 then it is declared reliable, and if the *Cronbach Alpha value* is $<$ 0.60 then it is declared unreliable . From the data obtained, it is known that the *Cronbach Alpha* obtained was 0.760 $>$ 0.60. From the results of calculating the reliability of Learning Motivation, it can be concluded that the research instrument (X_2) in the research questionnaire used is reliable.

Data Normality Test

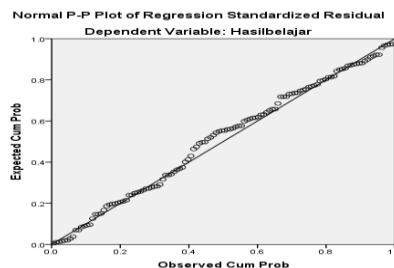


Figure 1. Normal Probability P-Plot Curve

The results of the p-plot graph test show that the data spreads around the diagonal line and follows the diagonal direction, which states that the data meets the assumption of normality and the data is declared to be normally distributed. This can be seen in figure 1 above.

Multicollinearity Test

Table 1. Multicollinearity Test Results

Coefficients ^a			
Model		Collinearity Statistics	
		Tolerance	VIF
1	Learning Facilities	.876	1.139
	Learning Motivation	.876	1.139

a. Dependent Variable: Learning Outcomes

The assumption of *Tolerance* and *Variance Inflation Factor* (VIF) can be stated that if $VIF > 10$ and *Tolerance* value < 0.10 then multicollinearity occurs, and if $VIF < 10$ and *Tolerance* value > 0.10 then multicollinearity does not occur. Based on table 1, it is known that the VIF value of the learning discipline and learning environment variables is $1.139 < 10$ and *the Tolerance value* is $0.876 > 0.10$, so it can be concluded that there is no multicollinearity in the data.

.Heteroscedasticity Test

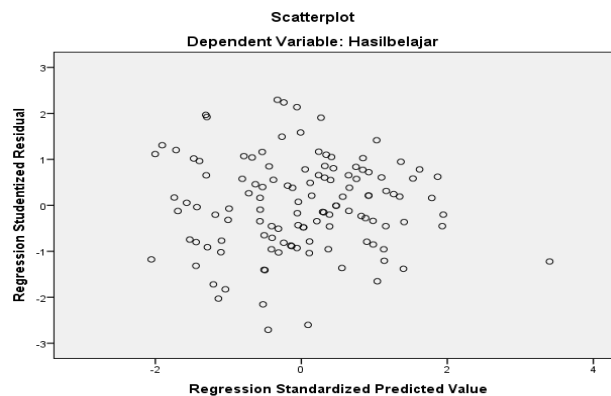


Figure 2 Scatterplot curve

Based on Figure 4.3, it can be seen that the points are spread above and below the number 0 on the Y axis. Thus it can be concluded that heteroscedasticity does not occur.

Multiple Regression Analysis Test

The purpose of the multiple regression analysis test is to determine the direction and how much influence the independent variable has on the dependent variable.

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + e$$

Next, the influence of the independent variable on the dependent variable is tested with a confidence *interval* of 95% or $\alpha = 5\%$.

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	94,655	5,034		18,801	,000
Learning Facilities	,466	,065	,471	7.123	,000
Motivation to learn	,240	,096	,391	2,488	.014

a. Dependent Variable: Learning Outcomes

Table 4.2 Multiple Regression Analysis Test Results

Based on table 4.9, it is known that the constant value (a) is 94,655 , while the value of learning facilities (b1) is 0.466 and the value of learning motivation (b2) is 0.240 , so the regression equation is:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + e$$

$$Y = 94.655 + 0.466 X_1 + 0.240 X_2 + e$$

1. The constant of 87.559 has a positive sign, meaning that if learning facilities (X1) and learning motivation (X2) are assumed to be = 0, then economic learning outcomes (Y) are a constant of 94.655. The regression coefficient for the learning facilities variable (X1) of 0.466 has a positive sign, which means that learning facilities have a positive effect on learning outcomes. This shows that with good learning facilities, learning outcomes will increase by 0.466

2. The regression coefficient for the Learning Motivation variable (X2) of 0.240 has a positive sign, which means that learning motivation has a positive effect on learning outcomes. This shows that with good learning motivation, learning outcomes will increase by 0.240
3. e is the possible error in the regression equation model which is caused by the possibility of variables that influence the learning outcome variables, but are not found in the regression equation.

t test

The partial test (t) is used to determine whether the hypothesis used is accepted or rejected, with a confidence level of 95% or $\alpha=5\%$, with the following conditions:

1. If $t_{count} > t_{table}$, then the independent variable has an effect on the dependent variable.
2. If $t_{count} < t_{table}$, then the independent variable has no effect on the dependent variable.

Table 4.3 t test results

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	Q	Sig.
		B	Std. Error	Beta		
1	(Constant)	94,655	5,034		18,801	,000
	DLearning Facilities	,466	,065	,584	7.123	,000
	Motivation to learn	,240	,096	,204	2,488	.014

a. Dependent Variable: Learning Outcomes

Based on table 4. 3 it was found that $t_{count} > t_{table}$, namely $7.123 > 1.65776$. So it can be seen that the learning facility variable (X1) rejects the null hypothesis (Ho1) and accepts the alternative hypothesis (Ha1). Furthermore, the calculated t value of learning motivation (2.488) is greater than the t_{table} (1.65776), so it can be seen that the learning motivation variable (X2) rejects the null hypothesis (Ho2) and accepts the alternative hypothesis (Ha2). Thus it can be concluded that the independent variable has a significant effect on the dependent variable.

F test

The F test is carried out to find out whether the independent variables together have an influence on the dependent variable. In this case, F_{count} is compared with F_{table} with the following conditions:

1. If $F_{count} > F_{table}$, then H_0 is rejected and H_1 is accepted
2. If $F_{count} < F_{table}$, then H_1 is rejected and H_0 is rejected.

Table 4.4 F Test Results

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	792,279	2	396.140	25,366	,000 ^b
	Residual	1858.385	119	15,617		
	Total	2650.664	121			
a. Dependent Variable: Learning Outcomes						
b. Predictors: (Constant), Learning facilities, Learning motivation						

Based on table 4.4, it is found that the $F_{calculated}$ value (25.366) is greater than the F_{table} value (3.07). This indicates that the research results reject the null hypothesis (H_0) and accept the alternative hypothesis (H_a). Thus, together, learning facilities and student learning motivation influence the student learning outcome variables at SMA Negeri 3 Pematang Siantar with a significant level of influence. This means that the hypothesis which states that learning facilities and student learning motivation jointly influence student learning outcome variables at SMA Negeri 3 Pematang Siantar can be accepted.

Coefficient of Determination Test

Table 4.5 Coefficient of Determination Test Results

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,547 ^a	,299	,287	43,951	1,667
a. Predictors: (Constant), Learning Environment, Learning Discipline					
b. Dependent Variable: Learning Outcomes					

Table 4.5 Coefficient of Determination Test Results

The coefficient of determination *R Square value* in table 4.12 is known to be 0.299. Which means that 29.9% of the variables of learning facilities and learning motivation have an influence on student learning outcomes at SMA Negeri 3 Pematang Siantar. Meanwhile, 70.1% is the influence of other variables not examined in this research.

DISCUSSION

The research was conducted to determine the influence of learning facilities and learning motivation on the economic learning outcomes of Class XI students at SMA Negeri 3 Pematang Siantar. In this research there are 3 problem formulations that need to be answered through the research that has been carried out.

1. Table 4.5 Coefficient of Determination Test Results The Influence of Learning Facilities and Learning Motivation on Economics Learning Outcomes of Class XI Students at SMA Negeri 3 Pematang Siantar

Based on the results of research that has been carried out, the regression coefficient value is 0.466 obtained $t_{\text{table}} 1.65776$. So, it is obtained that $t_{\text{count}} > t_{\text{table}}$, namely $7.123 > 1.65776$. So it can be seen that the learning facility variable (X1) rejects the null hypothesis (Ho1) and accepts the alternative hypothesis (Ha1). Which means there is a positive and significant influence between the Learning Facilities variable on Class XI Economics Learning Outcomes IPS SMA Negeri 3 Pematang Siantar. The regression coefficient value obtained from this research is 0.466, this shows that with every addition of 1 score point for the Learning Facilities variable, there will be an increase in Learning Outcomes of 0.466. On the other hand, if the learning discipline score decreases by 1 point, this will be followed by a decrease in learning outcomes of 0.466.

2. The Influence of Learning Motivation on Economic Learning Outcomes of Class XI IPS Students at SMA Negeri 3 Pematang Siantar

Based on the results of the research that has been carried out, a regression coefficient value of 0.240 is obtained. The calculated t value of learning motivation (2.488) is greater than the t_{table} (1.65776), so it can be seen that the learning motivation variable (X2) rejects the null hypothesis (Ho2) and accept the alternative hypothesis (Ha2). Thus it can be concluded that the independent variable has a significant effect on the dependent variable. Which means there is a positive and significant influence between the variable Learning Motivation on Economics Learning Outcomes for class XI IPS SMA Negeri 3 Pematang Siantar. The regression coefficient value obtained from this research is 0.240, this shows that with each additional 1 score point for the Learning Motivation variable, there will be an increase in Learning Outcomes of 0.240. On the other hand, if the learning facilities score decreases by 1 point, this will be followed by a decrease in learning outcomes of 0.240.

3. The Influence of Learning Facilities and Learning Motivation on Economic Learning Outcomes of Class XI IPS Students at SMA Negeri 3 Pematang Siantar.

To answer the third problem formulation, the influence of Learning Facilities and Learning Motivation on the economic learning outcomes of class XI IPS students can be seen from the results of research that has been carried out as follows:

The independent variables, namely Learning Facilities and Learning Motivation, simultaneously influence Economic Learning Outcomes. This is in accordance with the results of hypothesis testing carried out with the help of SPSS release 24. It was found that the calculated F value (25.366) was greater than the $F_{\text{table value}}$ (3.07). This indicates that the research results reject the null hypothesis (Ho3) and accept the alternative hypothesis (Ha3). Thus, together learning facilities and student motivation influence the student learning outcome variables at SMA Negeri 3 Pematang Siantar with a significant level of

influence. This gives meaning to the hypothesis which states that learning facilities and student motivation to jointly influence student learning outcome variables at SMA Negeri 3 Pematang Siantar can be accepted.

This research is supported by previous research conducted by Embuni Dewi¹, Rina Selva Johan², Fenny Trisnawati with the title " *The Influence of Learning Facilities, Interest in Learning on the Learning Outcomes of Economics Subjects for Class XI IPS Students at SMA Negeri 12 Pekan Baru* ". Research conducted by Embuni Dewi¹, Rina Selva Johan², Fenny Trisnawati, shows that there is a significant relationship between learning facilities at home and interest in studying at home together on learning outcomes. with a count of 12809 f is greater than t table.

Therefore, to be able to improve learning outcomes, it is necessary to improve learning facilities in learning by increasing according to indicators. Apart from that, learning motivation also influences students in learning because the enthusiasm and desire to learn comes from a student, so teachers are asked to help students to be enthusiastic in the learning process and produce good learning results.

CONCLUSIONS AND RECOMMENDATIONS

Based on the results of the research and discussion described in the previous chapter, the following conclusions can be drawn:

1. calculated t value of learning facilities is $7.123 > t_{\text{table value}} 1.65776$, so it can be seen that the learning facilities variable (X_1) rejects the null hypothesis (H_01) and accept the alternative hypothesis (H_a1) which means the variable is significant.
2. calculated t value of learning motivation is $2,488 > t_{\text{table value}} 1.65776$, so it can be seen that the learning motivation variable (X_2) rejects the null hypothesis (H_02) and accept the alternative hypothesis (H_a2) which means that the variable is significant.
3. Learning facilities and learning motivation together have a significant influence on learning outcomes, this result can be seen in the F test where the calculated F value (25.366) $>$ table F value (3.07). The R Square coefficient of determination test was found to be 0.299 , which means that 29.9% of the variables of learning facilities and learning motivation have an influence on student learning outcomes at SMA Negeri 3 Pematang Siantar, and the remaining 70.1% is the influence of variables not examined in this research.

FURTHER STUDY

It is recommended that other researchers who will research the same problem be able to choose research subjects with different characteristics and be able to research other variables that can influence economic learning outcomes besides the variables of learning facilities and learning motivation, so that they can further develop knowledge.

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The author realizes that in writing this thesis, there are still many shortcomings. For this reason, with all humility the author hopes for suggestions and constructive criticism for the perfection of writing this thesis research proposal in the future so that it can provide direction to the author in the next steps of writing.

REFERENCES

- AM Sardiman. (2009). Teaching and Learning Interaction and Motivation. Jakarta: PT. Rajawali Press.
- Abin Syamsudin Makmun, (2009). Educational Psychology. Bandung: PT. Rosdakarya Teenager.
- Amirin M. Tatang, et al. Education Management. Yogyakarta: UNY PRESS. (2010).
- B. Uno, Hamzah. (2008). Motivation Theory and Its Measurement, Jakarta: Bumi Aksara.
- Bafadal, Ibrahim. (2014). School library management. Jakarta: Earth of Literacy.
- Bahri Syaiful. (2011). Learning Psychology. Jakarta: Rineka Cipta.
- Bahri, Syaiful. (2016). Learning Psychology. Jakarta: Rineka Cipta.p.105
- Darajat, J. & Abduljabar, B. (2014). Applications of Statistics in Physical Education. Bandung: CV. Warliartika Star.
- Dimiyati and Mudjiono. (2009). Learning and Learning. Jakarta: Rineka Cipta.
- Dimiyati and Mudjiono. (2013). Learning And Learning. Jakarta: Rineka Cipta.
- Gie, The Liang. (2006). Effective Ways to Study. Jakarta : Raya Grafindo.
- Istarani, et al. (2017). Learning activity. Medan: Larispa Indonesia.

- Istirani, and Intan Pulungan. 2017. Enslkopedia of Education Volume I. Medan: Media Persada.
- Purwanto, M. Ngalim. (2007). Educational Psychology. Bandung: PT Teen Rosdakarya.
- Purwanto. 2017. Evaluation of Learning Outcomes. Yogyakarta: Student Library.
- Sanjaya, Vienna. (2010). Learning Strategies Oriented to Educational Process Standards. Jakarta : Prenada Media Group.
- Siregar, Nurliana. (2014). Learning and Learning.[Online] accessed on 7 June 2017 Available at: [http://akademik.uhn.ac.id/portal/public_html/FKIP//Nurliani_Siregar/Belajar&Learning5](http://akademik.uhn.ac.id/portal/public_html/FKIP//Nurliani_Siregar/Belajar&Learning5.pdf) .pdf Supardan, Dadang.(2013). Introduction I.
- Slameto. (2016). Learning and Factors That Influence It. Jakarta: Rineka Cipta.
- Sopiatin, Popi. (2010). Learning Management Based on Student Satisfaction. Bogor: Ghalia Indonesia.
- Sudjana, Nana (2016). Assessment of Teaching and Learning Process Results. Bandung: PT. Rosdakarya Teenager.
- Sugiyono. 2018. Quantitative Research Methods. Bandung: Alfabeta.
- Sujarweni, V. Wiratna. (2019) Business & Economic Research Methodology. Yogyakarta: Pustaka Baru Press.

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Suryabrata, Sumadi, (2011). Educational Psychology, Jakarta: PT. Raja Grafindo Persada.