



The Effect of Learning Motivation and the Learning Environment on Learning Achievement

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ABSTRACT

Keywords:

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This study aims to determine whether there is influence of learning motivation and learning environment on learning achievement. This research is ex post facto with quantitative research methods. The population in this study were students of class XI IPS SMA Negeri 1 Dolok Masihul with a total sample of 72 students. The sampling technique used in this study is the Total Sampling technique. Data collection was carried out by means of documentation and questionnaires. The research questionnaire was first tested for validity using the Aiken formula and reliability using the Cronbach Alpha formula. Data analysis techniques using Multiple Linear Regression Test, Partial Hypothesis Testing (T-Test), Simultaneous Hypothesis Testing (F-Test) and Coefficient of Determination Test. From the results of data analysis with multiple linear regression analysis, the equation $Y = 25.797 + 0.178 X_1 + 0.406 X_2$ is obtained. The results of the T-test show that learning motivation has a positive and significant effect on student achievement by obtaining a $t_{count} > t_{table}$ ($2.356 > 1.995$) and a significant value < 0.05 ($0.021 < 0.05$). The learning environment has a positive and significant effect on learning achievement by obtaining $t_{count} > t_{table}$ ($2.438 > 1.995$) and a significant value < 0.05 ($0.017 < 0.05$). Learning Motivation and Learning Environment have a positive and significant effect on Learning Achievement by obtaining a value of $F_{count} > F_{table}$ ($6.237 > 3.12$) and a significant value of $0.003 < 0.05$. Furthermore, the coefficient of determination obtained R square of 0.759 or 75.9% variable X affects variable Y.

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1. Introduction

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Education is a system of inputs, processes and outputs. Input is that students carry out learning activities, processes are teaching and learning activities, while outputs are the results of the processes carried out. It is expected that the implementation of the training process will produce skilled and highly competitive human resources to compete in the current era of globalization. Education is a conscious effort to grow and develop human resource potential through teaching activities. Education is something that is very important for a person's provision in facing future challenges.

Learning achievement is influenced by several factors, namely factors that come from within students or factors that come from outside students. In line with the opinion (Slameto, 2016: 54) argues, that "Factors that affect learning achievement can be classified into two groups, namely internal factors originating in students and external factors originating from outside students". According to Purwanto (in Wahyudi, 2014) "these factors are factors from within, namely factors of maturity, motivation and school environment. External factors are the environment and available opportunities".

According to Mudzakir and Sutrisno (Laos, 2015: 31) put forward factors that affect learning achievement in detail, namely: 1) internal factors (factors in humans) a) physiological factors (which are physical) include: (1) due to illness (2) due to lack of health (3) due to body defects b) psychological factors (factors of a spiritual nature) include: (1) integrity (2) aptitude (3) interest (4) motivation (5) mental health 2) external factors a) family environment, The main and first education centers include: (1) Parents' attention (2) Economic situation b) School environment (1) Teachers (2) Tool factors (3) Building conditions c) Mass media factors and social environment (1) Mass media factors (2) Social environment (a) friends mingling (b) Neighboring environment (c) Activities in the community.

The learning motivation possessed by students in all teaching activities plays an important role in improving student achievement in certain subjects. If students can understand and master what is learned and stored for a long time, so that teaching that is expected to improve student achievement can be achieved.

In addition to learning motivation, there is another factor that has a strong influence on learning success, namely the learning environment. In the teaching and learning process, a comfortable learning place and environment is very important to help students focus on learning. With the right environment, students can achieve better results and enjoy the results of their learning.

According to Purwanto (2016: 20) states that among the factors that affect learning, the environment also affects learning achievement. The environment is a learning resource that has a lot of influence on the learning process that takes place in it. The environment is also one of the external factors that affect student learning and has an impact on student learning achievement". Hasbullah (2015: 36) asserts that "the learning environment is an educational environment for students".

Based on observations and interviews with Economics Teachers of SMA Negeri 1 Dolok Masihul, reports were obtained that student achievement was still low. This can be proven in the evaluation results obtained by students are not in accordance with the standard learning completeness criteria. The following is a table of final semester grades obtained is: that there are some students who did not pass economics subjects, namely 46 people, consisting of 22 people from class XI IPS 1 and 24 people from class XI IPS 2. So it can be said that 63.88% of all students at SMA Negeri 1 Dolok Masihul have poor learning achievements. Learning achievement is said to be complete if students as a whole are able to get scores above KKM.

Motivation and learning environment play a very important role in learning success. The motivation and learning environment allows students to be enthusiastic in the teaching and learning process, and the motivation, discipline and learning environment ensure that the quality of their learning outcomes is adequate. Students in the learning process have a

disciplined motivation and a strong learning environment, and it is clear that they are diligent and successful. High learning motivation is associated with high learning achievement. Even today, the relationship between motivation and environment only applies to learning and performance, not learning.

Based on the description above, it can be understood that learning motivation and learning environment are factors affecting student learning achievement, so it needs to be considered and studied in depth, so the author is interested in conducting a study entitled "The Effect of Learning Motivation and Learning Environment on Economic Learning Achievement of Class XI Social Studies Students of SMA Negeri 1 Dolok Masihul T.A 2022/2023".

2. Methodology

The research location that the researchers determined was SMA Negeri 1 Dolok Masihul on Jl. Mutiara No. 1, Pekan Dolok Masihul, Kec. Dolok Masihul, Kab. Serdang Bedagai, North Sumatra in the odd semester of T.A 2022/2023.

The population for this study was all class XII students majoring in social studies at SMA Negeri 1 Dolok Masihul. And the sample in this study is the total number of classes XII IPS 1 and XII IPS 2 with a total of 72 students. The sampling technique in this study used total sampling. The research conducted is a facto expo research with quantitative research methods.

Before this instrument was used as a data collection tool, for data analysis techniques in this study using the Microsoft excel 2010 program. So this research instrument is first tested for validity using content validity and reliability tests. The data collection techniques used are documentation and questionnaires. Before hypothesis testing, data analysis requirements are tested, in this case multiple linear regression analysis is calculated.

3. Results and Discussion

Validity Test

The validity test in this study is the validity of the content. This validity involves experts in the field of education such as economics teachers and economics tutors, each consisting of 3 experts. V-Aiken is used to test this validity. It was found that 17 questionnaires (1,4,5,6,8,9,13,14,15,16,17,19,20,22,23,24,25) had a high category while the rest were in the medium category. The average V-AIKEN is 0.83 so the instrument has a high level of validity. It provides information that the variables described through the questionnaire items have a high degree of accuracy for measuring learning motivation.

This validity involves experts in the field of education such as economics teachers and economics tutors, each consisting of 3 experts. V-Aiken is used to test this validity. It was found that 17 questionnaires (1,4,5,6,8,9,13,14,15,17,18,19,20,22,23,24,25) had a high category while the rest were in the medium category. The average V-AIKEN is 0.81 so the instrument has a high level of validity. It provides information that the variables described through the questionnaire items have a high degree of accuracy to measure the learning environment.

Reliability Test

Based on reliable tests that have been carried out on 25 questionnaires that are declared valid where the questionnaire variable learning motivation is reliable because $r_{\text{counts}} > r_{\text{table}}$ ($0.857 > 0.3365$). And the variable learning environment is reliable because $r_{\text{count}} > r_{\text{table}}$ ($0.739 > 0.3365$).

Normality Test

This research uses multiple linear regression analysis to analyze research data and then first test data normality. This normality test can be detected using *kolmogrov-Smirnov*. Provided that if $\text{sig} > 0.05$ so that the research data goes through each variable with a normal distribution.

The normality test result is a significant value of α of 0.200. This finding means $0.200 > 0.05$, therefore it can be concluded that this study is normally distributed. The results of the normality test in this study can also be seen from the scattered points around the diagonal line and the distribution follows the direction or diagonal line contained in the P-plot diagram, so that the data is said to be normally distributed.

Linearity test

Linearity tests are carried out to determine whether each independent variable and dependent variable have a linear relationship or not. The test was carried out using the help of the SPSS program with $\alpha = 0.05$. The Linearity Test X1 with Y shows the significance value of *Deviation from Linearity* which is $0.121 > 0.05$. So it is concluded, in this study there is a linear relationship between the variables of Learning Motivation (X_1) and Learning Achievement (Y). The Linearity Test X2 with Y Shows the significance value of *Deviation from Linearity* which is $0.696 > 0.05$. So it is concluded, there is a linear relationship between the variables of Learning Environment (X_2) and Learning Achievement (Y) used in this study.

Multicollinearity Test

This test is used to see in a regression model whether there is a correlation between one independent variable with another independent variable. Tolerance results > 0.10 ($0.994 > 0.10$) for all independent variables. The Tolerance value of the Learning Motivation variable (X_1) is $0.994 > 0.10$ and the Learning Environment (X_2) is $0.994 > 0.10$. Similarly, the value of Inflation Factors (VIF) Variance < 10 ($1.006 < 10$) for all independent variables. The VIF value of the Learning Motivation variable (X_1) is $1.006 < 10$ and the Learning Environment (X_2) is $1.006 < 10$. Therefore, it is concluded that there is no multicollinearity among independent variables.

Data Analysis Techniques

Multiple Linear Regression

Multiple linear regression analysis is used to see how much influence the independent variable (learning motivation and learning environment) has on the dependent variable (learning achievement). So that the multiple linear regression equation is:

$$Y = a + b_1 X_1 + b_2 X_2$$
$$Y = 25.797 + 0.178 X_1 + 0.406 X_2$$

The description of the equation is as follows:

1. A constant score (a) of 25.797, means that learning motivation (X_1) and learning environment (X_2) are considered constant (have a value of 0), so that learning achievement (Y) is 25.797.
2. The regression coefficient score of the learning motivation variable (X_1) of 0.178 means that if learning motivation increases by 1%, so that student learning achievement will increase by 0.178 where the assumption of other independent variables is constant.
3. The regression coefficient score of the learning environment variable (X_2) of 0.406 means that if the learning environment has increased by 1%, so that student achievement will increase by 0.406 where the assumption of other independent

variables is constant.

Test the hypothesis

Test (T)

The t test (Partial Test) was carried out to see the significant influence of the independent variable, namely the learning motivation variable (X1) and the learning environment (X2) on the dependent variable, namely student learning achievement (Y). The t-test is carried out through the comparison of t count to t table where the stipulation when $t_{count} > t_{table}$ for a significance level of 95% ($\alpha = 0.05$) so that the hypothesis is accepted as a significant fiber. Conversely, if $t_{counts} < t_{table}$ for a significance level of 95% ($\alpha = 0.05$) so the hypothesis is rejected.

T Test Results

Coefficients ^a						
Type		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	25.797	13.451		1.918	.059
	Learning Motivation	.178	.076	.262	2.356	.021
	Learning Environment	.406	.166	.271	2.438	.017
A. Dependent Variable: Learning Achievement						

It can be seen the results of the learning motivation t test (X1) and learning environment (X2) including the following:

1. For the learning motivation variable (X1), t is obtained to $t_{calculate}$ 2.356, therefore $t_{calculate} > t_{table}$ ($2.356 > 1.995$) where the significance score is $0.021 < 0.05$ which means hypothesis 1 is accepted and proven to be statistically accurate for the level of $\alpha = 5\%$. So it can be concluded that the variable Learning Motivation (X1) has a positive and significant influence on the Learning Achievement of Class XI Social Studies Students of SMA N 1 Dolok Masihul.
2. For the learning environment variable (X2), a t_{count} of 2.438 is obtained, therefore $t_{calculate} > t_{table}$ ($2.438 > 1.995$) where a significant score of $0.017 < 0.05$ which means that hypothesis 2 is accepted and can be tested for statistical accuracy where the level of $\alpha = 5\%$. So it can be concluded that the Learning Environment variable (X2) has a positive and significant influence on the Learning Achievement of Class XI Social Studies Students of SMA N 1 Dolok Masihul.

Test (F)

The simultaneous hypothesis test (F-test) aims to determine whether all independent variables, namely learning motivation (X1) and learning environment (X2) simultaneously (simultaneously) have an influence on the dependent variable, namely student learning achievement (Y). Simultaneous tests are carried out through the comparison of F count against F table thus $F_{calculate} > F_{table}$ for a significance level of 95% ($\alpha = 0.05$) so that the hypothesis is accepted as well as significant. Conversely, if $F_{hitung} < F_{table}$ for a significance level of 95% ($\alpha = 0.05$) then the hypothesis is rejected.

F Test Results

Anova ^a						
Type	Sum Squares	Of	Df	Mean Square	F	Sig.

Model Summary ^b						
Type	R	R Square	Adjusted R Square	Std. Error Of The Estimate	Durbin-Watson	
1	.399 ^a	.759	.135	8.831	1.132	
A. Predictors: (Constant), Learning Environment, Learning Motivation						
B. Dependent Variable: Learning Achievement						
1	Regression		979.811	2	489.906	6.237
	Residuals		5420.189	69	78.553	
	Total		6400.000	71		
a. Dependent Variable: Learning Achievement						
b. Predictors: (Constant), Learning Environment, Learning Motivation						

The results of Test F are known that the F_{calculate} score is 6.237, thus F_{calculate} > F_{table} (6.237 > 3.12) and a significant score of 0.003 < 0.05 which means that hypothesis 3 is accepted and tested statistically for a significant level of $\alpha = 5\%$. So it can be concluded that the variables Learning Motivation (X1) and Learning Environment (X2) simultaneously or simultaneously have a positive and significant influence on the Learning Achievement of Class XI Social Studies Students of SMA N 1 Dolok Masihul.

Coefficient of Determination (R²)

This test is carried out to determine how the percentage of influence of the independent variable on the dependent variable. If R² leads to the number 1, then the greater the contribution of the independent variable to the dependent variable. The score of the coefficient of determination can be seen in R Square. The R Square score is said to be good if it is above 0.5 because R Square ranges from 0 (zero) and 1 (one).

Results of the coefficient of determination (r²)

The result obtained is a coefficient of determination score (R²) of 0.759 or R² = 0.759 x 100% = 75.9%. So it was concluded that Learning Motivation and Learning Environment simultaneously contributed 75.9% to the Learning Achievement of Class XI Social Studies Students of SMA N 1 Dolok Masihul, then the remaining 24.1% was influenced by other variables that were not studied in this study.

4. Conclusion

In accordance with the results of statistical testing and discussion of the results of research that has been carried out by researchers on the Effect of Learning Motivation and Learning Environment on Economic Learning Achievement Class XI Social Studies State High School 1 Academic Year 2022/2023, several conclusions were obtained, including: It can be proven that there is a positive influence of Bela jar's Motivation on Bela Achievement Economics for Class XI Students of SMA N 1 Dolok Masihul T.A 2022/2023. This finding proves that good learning motivation will cause students' economic learning achievement to be good and vice versa, therefore effort is needed in improving students' economic learning achievement. Many things can be done by the school, for example, educators must increasingly motivate students, improve the quality of the teaching and learning process, innovate and provide interesting activities to utilize learning methods, there are rewards delivered by educators for students, therefore students are more eager to complete something, and produce a conducive learning environment to support learning activities and fostering the motivation to learn of the learners.

It can be proven that there is a positive influence of the Learning Environment on the Achievement of Economics Students of Class XI SMA N 1 Dolok Masihul for the 2022/2023 Academic Year. This shows that a conducive learning environment will cause students' economic learning achievement to be high and vice versa, so efforts are needed to improve the learning environment better so that it can help improve student economic learning achievement, such as raising awareness and involving students to participate in maintaining and creating a comfortable learning environment.

It can be proven that there is a positive influence of Learning Motivation and Learning Environment on the Economic Achievement of Class XI Students of SMA N 1 Dolok Masihul for the 2022/2023 Academic Year. A student who has high learning motivation will affect good economic learning achievement. The teaching and learning process will be better comfortable if supported by a conducive learning environment. Therefore, to achieve optimal economic learning achievement, a student must have high learning motivation and a conducive and comfortable learning environment.

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