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Achievement Results Are Seen From Discipline, Environment and Learning Strategy

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Abstract

The aim of this research is to determine the influence of learning discipline, learning environment and student learning strategies on learning achievement. This research uses quantitative methods with an associative approach. The results of the research conducted show that the learning discipline variable has a negative effect on learning achievement, with significant values as follows: 0.001 < 0.05. Furthermore, based on research conducted, it is stated that the learning environment does not have a positive effect on student learning achievement with a significant value of 0.337 > 0.05. And the learning strategy variables that have been tested show that the results have a positive effect on learning achievement, with significant values as follows: 0.04 < 0.05. From the tests carried out, 30% stated that in this research, if learning achievement was not influenced by learning discipline, learning environment and learning strategies, the results would be poor.

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INTRODUCTION

Learning achievement is the main determinant of success. Education is not only influenced by intellectual factors. Learning achievement is personal knowledge in certain subjects at school, as determined by teachers through tests. Regarding the psychological factors mentioned previously, educators mainly use cognitive as a measure to evaluate the learning success of their students. Rose (2011) stated that discipline is a process designed to educate humans with predetermined qualities. The most important thing is to improve the quality of mental health and character. Serena (2021), it was found that low learning discipline can hinder students in getting good grades, thus affecting their learning achievement. Latief (2021), found that students with the habit of studying regularly or in a regular manner online can achieve satisfactory learning performance in line with what is desired. Samrin, et al. (2020) stated that learning achievement itself can be increased or improved by increasing learning discipline. In a study by Wahab (2021), it was found that good learning discipline does not necessarily have a significant impact on learning performance.

Learning environment is a learning atmosphere in the classroom that is produced by a pattern of personal relationships that is not vacuum. The non-vacuum learning atmosphere emphasizes relationships between students. The best learning environment is necessary to form a relationship between teachers and students. An optimal learning environment requires teachers to use all their decisions and actions in managing teaching to achieve the school's overall educational goals.. Robyansyah, et al (2022), found that a better learning environment leads to better learning achievement in cadets. On the other hand, Zulfikar (2022) highlights that students can achieve well when they are in a good learning environment. And in a study by Setiyawan (2021), found that the learning environment has an influence, even though it is small. Utomo. (2018) stated that learning strategies are aimed at helping students learn as well as possible. There are two main learning strategies, namely teacher-centered pedagogy and student-centered pedagogy. Learning strategies are developed by considering the condition of students and the school's infrastructure. There is a possibility that the learning strategies implemented by teachers do not support students when studying Introductory Social Science lessons such as social, cultural, economic and history. Therefore, students consider Social Sciences lessons difficult and boring, so their learning achievement is also less than optimal. So far, Social Sciences has been considered difficult and boring because learning is only teacher-centred. Widyadari (2019) stated that students who use problem solving teaching tactics that focus on free mathematics problems tend to be more successful than students who use high metacognitive abilities who like problem solving teaching tactics. Annaja (2021), found that using more effective learning strategies during the learning process will increase learning achievement. Djaka Maulana, et al. (2022), it was found that students who used structural learning strategies had better abilities in learning compared to students who used exposure-based learning strategies. On the other hand, Maharani(2022) highlighted students who have superior learning performance when students find the right learning style. Meanwhile, Esa Suci Lestari (2019), stated that there was no significant impact between learning strategies on learning performance.

Based on research results, social studies lessons have been given in every class, but there are still several gaps found between students who achieved the best, good and quite good grades. There were 3 students who got a score of 86-90, 41 students who got a score of 80-85 and there were 5 students who got a score of 75. This condition shows that the students' learning achievement is good. Students' learning achievements in learning Social Science subjects have succeeded in meeting the KKM score standard, namely reaching 75. This is because students still lack the ability to understand Social Science subjects, so they experience difficulties. It should be noted that this hinders and hinders students' efforts to achieve the expected achievements in social studies lessons. There are three influences that can cause student

learning performance, the first is learning discipline.

RESEARCH METHODS

After conducting research in this study which used quantitative research with an associative approach, at the beginning of the research a field survey was carried out first using parametric statistical analysis. The population in this study used classes VII A and VII B in Social Sciences lessons, totaling 75 students. Then the sample in this research used the Slovin formula and from the calculated data a sample of 49 students was obtained. The sampling technique used to determine the sample is using a simple random sampling technique. And the data collection used in this research was obtained from questionnaires, surveys and interviews conducted with 49 students.

Using multiple linear regression as a data analysis tool requires several tests of classical prerequisites and assumptions, and the results of multiple linear regression can be used as a prediction tool. The classic prerequisite and assumption tests are:

1. Normality Test formula, tested using graphs and the Kolmogorov-Smirnov (KS) test.The QQ plot of compares the quantiles of the data with the expected quantiles from a theoretical normal distribution. Quantiles of the theoretical to normal distribution can be calculated using the inverses cumulative distribution function (CDF). The general formula is

$$Q_i = F^{-1}\left(\frac{i-0.5}{n}\right)$$

Q_i = the ii-th quantile,
F^{-1} = the inverse function of the normal cumulative distribution,
i = the quantile number,
n = the number of samples.

$$D = \max |F_n(x) - F(x)|$$

D = the KS test statistic
$F_n(x)$ = function of the cumulative distribution in the form of empirical data
F(x) = the cumulative distribution function of the are theoretical distribution
(the distribution in this case is normal)
Which means the p value is calculated based on the Kolmogorov distribution. This is a complex calculation that is not calculated directly but can be estimated using tables. And if the p value is greater than the significance level then that is chosen.

2. The multicollinearity test is tested by looking at the Variance Inflatio Factor (VIF) value and tolerance value. The Varience Infation Factor itself measures how much the estimated variance of the regression coefficient increases due to multicollinearity in the model. It measures the severity of multicollinearity among predictor variables. The formula for calculating the VIF of each predictor variable Xjin a multiple regression model is:

$$VIF_j = \frac{1}{1-R_j^2}$$

VIF_j = Variance InflationFactor for predictor variable X_j
R_j^2 = Coefficient of determination (R^2) obtained by regressing X_j on all other
predictor variables.

If the VIF value is 1, this indicates that there is no multicollinearity, whereas if the resulting value is > 5, it indicates that there is a problem so that multicollinearity tends to be high.

3. Heteroscedasticity test formula, tested using the scatterplot test and the Glejser tes. Perform a regression of the absolute residuals (|ei|) on the independent variables.
$|ei|=\beta_0+\beta_1X_{1i}+\beta_2X_{2i}+...+\beta_kX_{ki}+ui$
Where:
|ei||ei| is the absolute residual for observation ii.
$X_{ki}X_{1i,}X_{2i},...,X_{ki}$ are the independent variables.
$\beta_k\beta_0,\beta_1,\beta_2,...,\beta_k$ are the coefficients to be estimated.
$_{ui}$ is the error term.
Test the significance of the coefficients $\beta_k\beta_1,\beta_2,...,\beta_k$. Typically, a t-test is used for this purpose. If any of the coefficients are statistically significant, it suggests the presence of heteroscedasticity. In summary, both the scatterplot test and the Glejser

test are useful tools for detecting heteroscedasticity in regression analysis. If heteroscedasticity is detected, appropriate measures may need to be taken, such as transforming variables or using robust standard errors.

RESULTS AND DISCUSSION

Research on learning discipline in the school environment states that most students' learning discipline is in the low category, reaching 58.34%. Thus, the student learning discipline and student learning environment are mostly in the good category, which reaches 72.92%, while the majority of learning strategies are in the good category, which reaches 54.17%.

After obtaining the research data, a data normality test was carried out. Based on the results of this test, both discipline, environmental and learning strategy variable data showed a normal distribution. Based on the results of the multicollinearity test, multicollinearity did not occur. The heteroscedasticity test carried out in this research can be seen in the scatterplot graph and Glajser test. Based on tests carried out with heteroscedasticity, the p-value is > 0.05, so the conclusion is that the regression equation model does not experience heteroscedasticity. In this study, the data obtained was obtained using multiple regression analysis.

Table 1. Results of multiple regression analysis

Information	Mark
Constant	81,669
Learning discipline coefficient	-,182
Learning environment coefficient	,048
Learning strategy coefficient	,100
F_{count}	6,585
Significance F	,001[b]
R	,552[a]
R^2	,305
T_{count} learning discipline variable	-4,066
Significance of the learning discipline variable t	,000
T_{count} learning environment variables	,970
Significance of learning environment variables	,337
t_{hitung} learning strategy variables	2,110
Significance of learning strategy variables	,040

Source: Primary data, processed

Learning Discipline Variables Influence on Student Achievement

In fact, low learning discipline can hinder students in getting good grades, thus affecting their learning achievement. In a study by Latief (2021), it was found that students with the habit of studying regularly or with a strong online discipline can achieve satisfactory learning performance equivalent to what is desired. On the other hand, the study by Samrin, (2020) highlighted that learning achievement can be increased or improved by increasing learning discipline. Wahab, (2021) good learning discipline does not necessarily have a significant impact on learning achievement. Despite the many findings emphasizing the importance of learning discipline, there is little research on the influence of learning discipline on certain types of tasks, such as projects that involve collaboration with other people or tasks that require complex time management.

Table 2. Cronbach's Alpha

Variable Instrument	SPSS	Criteria	Interpretation
Learning discipline	0,624	Reliabel	Strong
Learning environment	0,486	Not reliabel	Enough
Learning strategies	0,742	Reliabel	Strongh

Source: Primary data, processed

Based on hypothesis testing in learning disciplines (X1), the model partially has a correlation and influence on learning achievement, with a t value of -0.624 < t table -2.009 and a significant value of 0.001 < 0.05, then Ha is accepted. Study discipline has a negative and significant effect on study achievement. cWhen there is a lack of discipline in study, performance in study also decreases by -18.2%.

Learning Environment Variables Influence on Student Achievement

The learning environment referred to in these findings is measured using three indicators including the family environment starting from parental guidance techniques, relationships between families, living situation, family financial conditions, parental attention and cultural basis, then the school environment such as teaching facilities, the relationship between teachers and students. , student-student relationships, student-family relationships, school sanctions and regulations and the community environment including student social activities, mass media, peers, community way of life.

Table 3. Durbin Watson Value

Model	R	R Square	Adjusted R Square	Std Error of the Estimate	Durbin-Watson
1	,262[a]	,069	,007	3,352	1,616

a. Predictors : (Constant), Total_X3, Total_X1, Total_X2
b. Dependent Variable: Y

Source: Primary datas, processed.

The results of the Durbin Watson autocorrelation test were obtained at 1.616. Decisions using the Durbin Watson test can be made if the dL and DU values already exist or have been calculated. By making the following decisions. No autocorrelation , positive autocorrelation , no decision . The dL value was 1.414, the dU value was 1.672, the 4-dL value was 2.586 and the 4-dU value was 2.328. Thus it is found that the value DW (1,616) So the results above are considered without decision in this research.

The Influence of Strategies on Achievement

These findings support previous findings carried out by Widyadari (2019) showing that students who use problem solving teaching tactics that focus on free mathematics problems tend to be more successful than students who use high metacognitive abilities who like problem solving teaching tactics. In a study by Annaja (2021), it was found that using more effective learning strategies during the learning process will increase learning achievement. In a study by Maulana, et al. (2022), it was found that students who used structural learning strategies had better abilities in learning compared to students who used exposure-based learning strategies. On the other hand, a study by Maharani, et al (2022) highlights students who have superior learning performance when students find the right learning style.

Based on the hypothesis test above regarding Learning Strategy (X3) which partially has a relationship and influence on learning achievement, with a t value of 2.110 < ttable 2009 and a significant value of 0.04 < 0.05, then Ha is accepted. Learning strategies have a positive and significant effect on learning achievement.

Table 4. Multiple Regression Test

Independent Variables	Coefficient B
(Constant)	81,669
X1	-0,182
X2	0,048
X3	0,100

Source: Primary data, processed.

Seen from table 4 above, it can be developed using a multiple linear regression equation model as follows: Learning achievement = $\alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3$ 81.669 + (-0.182) X1 + 0.048 X2 + 0.100 X3. Constant (Intercept) is 81.669. This result means that if learning discipline, learning environment and learning strategies do not exist then learning achievement will be 81.669. Learning discipline obtained a test score of -0.182, this shows that there is a negative linear relationship between learning discipline and student learning achievement and if the learning discipline value increases, the learning achievement value tends to decrease by 0.182, and assuming the other variables remain constant. The learning environment coefficient is 0.048, this shows that there is a positive linear relationship between the student's learning environment and achievement and if the learning environment value increases, the learning achievement value tends to increase by 0.048 and assuming other variables remain constant, then the student's learning strategy test value is 0.100, indicating that there is positive linear relationship between learning strategies and learning achievement, this shows

that if the value of the learning environment increases, the value of learning achievement tends to increase by 0.100 assuming other variables remain constant.

CONCLUSION

Based on the tests carried out in this research, the research results show that the learning discipline variable has a relationship and influence on student learning achievement, with a calculated t value of -4.066 < t table 2.014 and a significant value of 0.000 < 0.05. It can be concluded that Ha is accepted and H0 is rejected, this shows that there is a significant influence between learning discipline on student learning achievement. Then the student learning environment from the tests carried out shows that there is a relationship and influence on student learning achievement with a calculated t value of 0.970 < t table 2.014 and a significant value of 0.337 > 0.05, which means Ha is rejected and H0 is accepted, this shows that there is no influence significant relationship between the learning environment and student achievement in Social Sciences subjects. Furthermore, students' learning strategies show a relationship and influence on learning achievement, with a calculated t value of 2.110 > t table 2.014 and a significant value of 0.040 < 0.05 so that Ha is accepted and H0 is rejected so it can be concluded that there is a significant influence between students' learning strategies. on learning achievement.

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