LEARNING MOTIVATION AND LEARNING ENVIRONMENT ON MATHEMATICS LEARNING ACHIEVEMENT OF FIFTH GRADE ELEMENTARY SCHOOL STUDENTS

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ABSTRAK

The purposes of this research are: (1) the influence of learning motivation on mathematics learning achievement of fifth grade students of Advent 1 Tikala Manado Elementary School. (2) the influence of learning environment on mathematics learning achievement of fifth grade students of Advent 1 Tikala Manado Elementary School. (3) the influence of learning motivation and learning environment on the mathematics learning achievement of fifth grade students of Advent 1 Tikala Manado Elementary School. This type of research is causal associative research with survey research method. The population in this research were fifth grade students of Advent 1 Tikala Manado Elementary School, totaling 42 students. The sampling technique is the total sampling technique, because the population is less than 100 people so that the entire population is sampled. Methods in data collection (1) using a questionnaire. (2) using the value of the results of the midterm exam in mathematics. Data analysis techniques used are descriptive statistics, normality test, linearity test, hypothesis testing (partial test or t test and simultaneous test or F test). The research findings show that 1) There is a positive influence of Learning Motivation on Mathematics Learning Achievement, 2) There is a positive influence of Learning Environment on Mathematics Learning Achievement. 3) There is an influence of Learning Motivation and Learning Environment together on Mathematics Learning Achievement of fifth grade students of Advent 1 Tikala Manado Elementary School.

KEYWORDS : *Learning Motivation, Learning Environment, Mathematics Learning Outcomes*

A. INTRODUCTION

Each education provider in general has made efforts to improve student achievement. Many efforts have been made by schools to improve mathematics learning achievement including running additional hours or tutoring programs, and problem solving. However, the achievement of the results of each of these efforts from one school to another tends to differ due to various factors. Efforts to improve the quality of education can use the assessment of student learning achievement as a direct indicator of the quality of education. The quality of education will be higher as student learning achievement increases. Advent 1 Tikala Manado Elementary School as an institution that organizes learning activities always tries to realize high quality education. The school's high commitment to improving learning achievement is realized in various academic and non-academic activities.

Based on observations that have been made, in the fifth grade students of Advent 1 Tikala Elementary School, Manado City, there are 42 students but students who have reached the KKM (Minimum Completeness Criteria) score of less than 20% of students who have not been completed in achieving Mathematics Learning Achievement, for the KKM value applied for mathematics subjects is to reach a score of 70. This

can interfere with and hinder students in their efforts to achieve mathematics learning achievement as expected..

There are several factors of mathematics learning achievement (Goni et al., 2020). Besides that there are also factors that cause problems, one of which is learning mathematics is a scourge for students (Lumintang et al., 2023) and has implications for not optimizing student learning motivation. Motivation is one of the factors that determine the success of children in learning (Gara et al., 2022). In general, learning motivation that is not optimal often occurs in students. Students sometimes forget or even do not understand the purpose of learning at all, so their learning motivation is not optimal. Based on the facts in the field at Advent 1 Tikala Elementary School, Manado City, the learning motivation of fifth grade elementary school students who are not optimal is shown by the presence of students who are busy by themselves during lessons, secretly using cellphones, late entering class, paying less attention to teacher explanations, lack of response to material, and sleeping in class. It is suspected that this shows that low student learning motivation is one of the factors that affect math learning achievement. Low learning motivation is one of the factors that make students not achieve maximum math learning achievement.

Another factor that affects math learning achievement is the learning environment. According to (A. Rohman, 2011), the learning environment is everything that surrounds students when doing learning activities. Learning Environment factors come from the non-social environment and the social environment. The non-social environment is a physical factor which includes a place to study, the location of the school, learning tools, learning resources, school building conditions, classrooms, cleanliness of the school environment and learning support facilities, while social factors include the family environment, the student's social environment at home, and the school's social environment. Based on the facts in the field, it shows that a conducive learning environment creates a comfortable atmosphere for learning. Supportive learning environment conditions such as the availability of physical learning facilities, a comfortable place to study, a calm atmosphere, harmonious relationships with the social environment can provide encouragement to students to study mathematics so that students' mathematics learning achievement increases. Conversely, if the conditions of the learning environment are less supportive, it will reduce students' enthusiasm for learning so that students' math learning achievement will decrease.

B. METHOD
This research uses a quantitative approach with a survey research method. The survey research method is an information collection technique carried out by compiling a list of questions submitted to respondents. In this research, researchers examined the characteristics or causal relationships between all variables, without the intervention of researchers (Lestari & Yudhanegara, 2018). Causal relationship is a relationship that is cause-and-effect, one variable (independent) affects another variable (dependent) (Sugiyono, 2015). This causal associative by researchers is used to determine whether there is an influence of learning motivation and learning environment on the mathematics learning achievement of fifth grade students of Advent 1 Tikala Manado Elementary School. The population in this research were all fifth grade students of Advent 1 Tikala Manado Elementary School, totaling 42 students. The sampling technique used population samples where the number of samples is the same as the population because the population is less than 100 the entire population is used as a research sample (Sugiyono, 2015). So the sample in this research was a large number of the population of fifth grade students of Advent 1 Tikala Manado Elementary School totaling 42 students.

The source of data in the research were students of Advent 1 Tikala Manado Elementary School. Data collection using questionnaires and documents. The questionnaire used has two components, namely learning motivation and learning environment. Source of document data, namely in the form of odd semester midterm exam results for the 2023-2024 school year in mathematics subjects.

For data analysis techniques in this research, descriptive statistical analysis techniques were carried out, normality tests using the One Sample Kolmogorov-Smirnov Test with the provisions if Asymp. Sig> 0.05 then the data is normally distributed, linearity test for testing using Test For Liniarity with the provision that if Deviation from Linearity> 0.05 then the two variables have a linear relationship, and hypothesis testing using partial test or t test and simultaneous test or F test.

C. RESULT AND DISCUSSION
Descriptive data analysis on the Learning Motivation variable shows that the range or range of values is 56; the minimum score or lowest score is 91; the maximum score or highest score is 147; then the mean data or average score is 124.12, for the score Std. Deviation or standard deviation of 13.067; and data variance or data variance of 170.742. Furthermore, descriptive data analysis on the Learning environment variable shows that the range or range of values is 60; the minimum score or lowest value is 82; the maximum score or highest value is 142; then the mean data or average score is 120.19, for the Std score. Deviation or standard deviation of 13.067; and data variance or data variance of 277.524. While the descriptive data analysis on the Mathematics learning achievement variable shows that the range or range of values is 14; the minimum score or lowest score is 80; the maximum score or highest score is 94; then the mean data or average score is 88.93, for the Std. Deviation or standard deviation of 3.460; and data variance or data variance of 11.970.

After descriptive data analysis, the analysis is continued with prerequisite testing, namely normality test and linerity test. The normality test was carried out on all data, namely Learning Motivation data, Learning Environment data and Mathematics Learning Achievement data using the SPSS 23 One Sample Kolmogorov-Smirnov test with the provisions if Asymp. Sig> 0.05 then the data is normally distributed. Based on normality testing using spss, a significance value of 0.796> 0.05 was obtained for the Learning Motivation variable. Furthermore, the significance value is 0.397> 0.05 for the Learning Environment variable. While the significance value for the Mathematics Learning Achievement variable is 0.132> 0.05. It can be concluded that the significance results of the three variables, both the Learning Motivation variable, the Learning Environment and the Mathematics Learning Achievement variable, get a significance value greater than the test criteria (sig 0.05), so it can be stated that the three data groups in the research are normally distributed.

After the data is normally distributed, then the linearity test is carried out. The linearity test aims to determine whether two variables have a linear relationship or not significantly. Testing using Test For Liniarity with the provisions if Deviation from Linearity> 0.05 then the two variables have a linear relationship. Based on data analysis using spss, the results of the linearity test of the Learning Motivation variable with the Mathematics Learning Achievement variable have a significance value of 0.362> 0.05. These results indicate that the Learning Motivation variable with Mathematics Learning Achievement has a linear relationship, because the significance value is more than 0.05. Furthermore, the linearity test on the Learning Environment variable with the Mathematics Learning Achievement variable found a significance value of 0.516> 0.05. This result shows that the Learning Environment variable and the Mathematics Learning Achievement variable have a

linear relationship, because the significance value is more than 0.05. After the prerequisite test is fulfilled, namely that the data is normally distributed and has linearity, then proceed to hypothesis testing.

Testing the first and second hypotheses is done with the t test to determine the partial influence of the independent variable on the dependent variable. This test is by comparing the probability value or p-value (sig-t) with the significance level of 0.05. If the p-value is smaller than 0.05 then Ha is accepted, and vice versa if the p-value is greater than 0.05 then Ha is rejected.

Table 1 SPSS output testing of hypothesis 1 and 2

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	93.962	6.306		14.901	.000
	Learning Motivation	1.022	.042	.284	1.525	.000
	Learning Environment	.219	.033	.192	1.574	.001

a. Dependent Variable: Math Learning Outcomes

The results of the t test as in table 1 for testing the first hypothesis show that the Learning Motivation variable (X1) obtained a t count of 1.525 with a probability / significance value of 0.000 < 0.05. Thus, the first hypothesis is accepted, which means that there is a significant positive influence of Learning Motivation (X1) partially on Mathematics Learning Achievement (Y).

The results of this research are in line with the results of research by Vina Aulia Al Haq (2019) Where it is revealed that there is a positive influence of learning motivation on learning achievement. The results of this research also agree with Sumadi Suryabrata in (Djaali, 2015) motivation is a condition contained in a person that encourages him to carry out certain activities in order to achieve goals. Students who do not know about their purpose of learning at school will certainly affect their learning motivation. Therefore, learning motivation is one of the most important factors in influencing the learning process, because without realizing it, learning motivation can be influenced by active and passive students in participating in the learning process in the classroom. This condition can affect the learning outcomes and achievements that students will obtain. This means that learning motivation which is an internal and external encouragement in students who are learning to make changes in behavior in general with several indicators or elements that support. Students also learn without coercion so that children have the urge to always be active in learning and make it possible to improve their learning outcomes.

Furthermore, in testing hypothesis 2 presented in table 1, it can be concluded that the Learning Environment variable (X2) obtained t count of 1.574 with a probability of 0.001 <0.05. Thus, the second hypothesis is accepted, which means that there is a significant positive influence of Learning Environment (X2) partially on Mathematics Learning Achievement (Y). The results of this research support the research of Reni Puspita (2019) which states that the results of the analysis obtained that both partially and simultaneously the independent variable learning environment has a positive and significant influence on the learning achievement variable.

Therefore, the learning environment factor has an influence on the success of the learning process. According to (F. Rohman, 2018), the learning environment is everything that surrounds students when doing learning activities. Learning Environment Factors come from the non-social environment and the social environment (Nabillah & Abadi, 2020). The non-social environment formed from facilities and infrastructure (Nurfirdaus & Sutisna, 2021), namely physical factors which include a place to study, the location of the school, learning tools (Choiri, 2017), learning resources, school building conditions, classrooms, cleanliness of the school environment (Hanipah et al., 2022) and learning support facilities, while social factors include the family environment, the social environment of students at home, and the social environment of the school. A conducive learning environment certainly creates a comfortable atmosphere for learning (Arianti, 2019). Supportive Learning Environment conditions such as the availability of physical learning facilities, a comfortable place to study, a calm atmosphere, harmonious relationships with the social environment can provide encouragement for students to learn mathematics so that students' mathematics Learning Achievement increases. Conversely, if the conditions of the Learning Environment are less supportive, it will reduce students' enthusiasm for learning so that students' mathematics Learning Achievement will decrease. One of them is a school environment that is less conducive (Gampu et al., 2022).

The success of a learning process can be measured based on the results obtained by each student (Saputra, 2020). In the learning process, there is a need for learning discipline that must be considered. Teachers should not only provide teaching material to their students (Rasam & Sari, 2018). Teachers must also instill a disciplined attitude in learning to their students. Students must also have an early awareness of the importance of discipline in learning (F. Rohman, 2018) so that the learning process can take place well and can obtain learning achievements.

Furthermore, the third hypothesis testing was carried out using the simultas test (F test). The F test shows whether all independent variables have a joint influence on the dependent variable. The results of the F test can be seen in the table below:

Table 1 SPSS output testing of hypothesis 3

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	88.235	2	46.117	1.332	.000[b]
	Residual	482.551	39	12.373		
	Total	490.786	41			

a. Dependent Variable: Math Learning Outcomes
b. Predictors: (Constant), Learning Environment, Learning Motivation

Based on table 2 above, the F count is 1,332 with a probability of 0.000 which is below 0.05. This shows that all independent variables, namely Learning Motivation and Learning Environment, have a significant influence simultaneously (together) on the Mathematics Learning Achievement of fifth grade elementary school students.

Based on these results, it can be seen that Learning Motivation and Learning Environment affect the Mathematics Learning Achievement of fifth grade elementary school students. The findings of this research support the findings of (Utaminingtyas et al., 2021) which state that math learning outcomes are influenced by learning motivation and learning environment. This is in accordance with the opinion of (Purwanto, 2013), which states that the factors that influence learning can be divided into two groups, namely: Factors that come from within the student (individual factors) and factors that come from outside the student (social factors). Individual factors consist of maturity / growth factors (Syafi'i et al., 2018), intelligence, training, motivation and personal factors. Meanwhile, social factors include family factors / household conditions, teachers and their teaching methods, tools used in teaching and learning, conditions and opportunities available and social motivation. Learning activities are carried out by every student, because through learning they gain experience from the situation they face. Thus learning is related to changes in the individual as an achievement of his experience in the environment.

D. CONCLUSION

Based on the results of the research and discussion that has been stated previously, the researcher draws the following conclusions:

1. There is significant and a positive influence of Learning Motivation on Mathematics Learning Achievement.
2. There is significant and a positive influence of Learning Environmenton Mathematics Learning Achievement .
3. There is a significant and simultaneous influence (together) of the Learning Motivation variable and the Learning Environment variable on the Mathematics Learning Achievement of fifth grade students at Advent 1 Tikala Manado Elementary School.

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