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The Effect of Extracurricular Activities and Learning Motivation on the Students' Mathematics Learning Achievement

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Abstract

This study aims to show (1) there is a significant positive effect of extracurricular activities on students' mathematics learning achievement at SMAN 2 Tolitoli (2) there is a significant positive effect of learning motivation on students' mathematics learning achievement at SMAN 2 Tolitoli (3) there is a significant positive effect of extracurricular activities and learning motivation on students' mathematics learning achievement at SMAN 2 Tolitoli. The sample used in this study amounted to 59 people from class XI MIPA. The instruments used in this study are questionnaires to see the perceptions of students regarding extracurricular activities and learning motivation, and the final grades of students' semester exams to see how students' mathematics learning achievement is. The data of this study were analysed using descriptive statistics and inferential statistics. The results obtained from this study are (1) there is a significant positive effect of extracurricular activities on student mathematics learning achievement with a contribution of 14.5% (2) there is a significant positive effect of learning motivation on student mathematics learning achievement with a contribution of 9.9%, (3) there is a significant positive effect of extracurricular activities and learning motivation on student mathematics learning achievement with a contribution of 16.1%. Further research is needed to deepen the influence of extracurricular activities and learning motivation on students' mathematics learning achievement. Further research is also needed to look at other factors that influence mathematics learning achievement, so that it can be of concern to teachers.

Keywords: Extracurricular Activities, Learning Motivation, Math Learning Achievement

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INTRODUCTION

Mathematics is one of the fields of study taught in schools starting from preschool to high school and even to universities. Mathematics is very important to be taught at school because by studying mathematics, one can train oneself to think rationally and calculate carefully and precisely when making a decision. Learning mathematics, students will have the ability to think logically, analytically, systematically, critically and creatively and be able to work together (Depdiknas, 2006). Therefore, mathematics is very important to be taught in human life because it has such a big role in the world of education. The purpose of learning mathematics according to Curriculum 2013 emphasises the modern pedagogical dimension of learning, namely using a scientific approach (Kemendikbud, 2016).

Learning is influenced by two factors, namely external factors and internal factors (Slameto, 2010). Internal factors are factors that come from within the individual which include health, intelligence or intelligence, learning styles, talents and interests. While external factors are factors that come from outside the individual including the family environment, school

environment and community environment. One of the examples of external factors and internal factors is extracurricular activities and learning motivation.

Extracurricular activities are a programme of activities that are carried out by students outside of class and outside of lesson hours (curriculum). The purpose of extracurricular activities is to assist in developing the potential of human resources (HR) possessed by students, both those related to the application of the knowledge they have obtained and in a special sense to assist students in developing what is potential and talent in themselves through mandatory and optional activities (Shilviana & Hamami, 2020).

In addition to external factors that are factors that can affect students' mathematics learning achievement, there are other factors that can affect students' mathematics learning achievement, namely internal factors, one of which is student learning motivation. According to Lomu & Widodo (2018) motivation is a series of efforts that encourage individuals or groups to take action to achieve desired goals or feel satisfaction with what is done. In this context, motivation can be considered as an internal process that stimulates, directs, and maintains behaviour over a specific period of time. Motivation can be a great encouragement to students in improving learning. Although a teacher provides good learning, if students do not have motivation in learning, then students will experience a decrease in learning achievement.

Learning achievement is one of the important things in education in all schools in the world, including Indonesia. Learning is the main activity in the education process at school. Learning is a conscious effort to change attitudes and behaviour (Emda, 2015). Learning achievement is the main highlight for the quality of education itself. Each learner has different achievements depending on the abilities they have, usually classified into three namely high, medium and low achievement. At the elementary, junior and senior high school levels, learning achievement is marked by report card grades every year, while in universities learning achievement is marked by GPA (cumulative achievement index) which is an accumulation of all grades in each semester. Student learning achievement is assessed from several aspects and certain assessment criteria, for example from the cognitive aspect, affective aspect and psychomotor aspect (Arumsari, 2017).

In conducting this research, there are several obstacles in its implementation. This research requires more time because the place to research is very far away so it requires more time. When taking data in the classroom, it is necessary to brief students in filling out the questionnaire due to the lack of similar research so that they do not know about the purpose and purpose of the questionnaire. However, this was not an obstacle in completing this research. The research conducted has a lot of empirical support from previous studies such as Nofianti (2018) which states that there is a significant influence of extracurricular activities and learning motivation on students' mathematics learning achievement. Another study conducted by Wulansari & Manoy (2021) which states that the presence of motivation in students will have a significant effect on students' mathematics learning achievement.

The purpose of this study was to reveal the influence of extracurricular activities and learning motivation on students' mathematics learning achievement. This research is expected to be useful for students, teachers, and schools. Students are expected to be able to play an active role in extracurricular activities and also begin to foster learning motivation, both of which are important in developing student character to support mathematics learning achievement. Teachers are also expected to provide motivation and input to students to always participate actively in extracurricular activities and help students to foster their learning motivation. Then the school must also play an active role in seeing the extracurricular needs of students to support their learning.

LITERATURE REVIEW

Extracurricular Activities

Extracurricular activities or often referred to as "ekskul" in schools are additional activities outside of school hours which are expected to help shape the character of students

according to their respective interests and talents (Chairani & Juwita, 2019). Extracurricular activities are additional activities outside the structure of the programme carried out outside of regular class hours in order to enrich and broaden the knowledge and abilities of students, as well as to channel their talents and interests through extracurricular activities that are in accordance with their talents and interests (Wurdianto, 2020). Extracurricular activities can also be interpreted as learning activities that are not bound but help schools optimise student learning in the classroom (Oktafyan, 2017). Extracurricular activities can improve students' academic performance because these activities can help students to gain additional knowledge and skills (Kusuma et al., 2019).

Learning Motivation

Motivation is an important factor that spurs a person to achieve the desired learning goals (Lestari, 2017). Meanwhile, according to Zamsir et al., (2015) stated that motivation is a factor that makes a person aware and encourages him to influence his actions so that he is motivated to take an action with the desired goals and results. In line with this opinion, Novianti et al. (2020) stated that learning motivation has an important role in determining learning success. Motivation is an internal process that activates, guides, and maintains the action Lomu & Widodo (2018). In line with this opinion, Siswato (2010) states that learning motivation is the action of students to continue the learning process and try to focus on the subject matter. Emda (2015) stated that students will achieve success if students have good learning motivation. The above opinion shows that learning motivation is an encouragement for students to achieve the desired academic results.

METHOD

This study used a quantitative approach with the type of ex-post facto conducted in class XI MIPA SMA Negeri 2 Tolitoli with 3 research variables, with 2 independent variables and 1 dependent variable. The sample in this study was determined by simple random sampling technique which then took 2 classes, namely MIPA 1 and MIPA 2, totalling 59 people.

Data collection in this study used a questionnaire instrument to measure extracurricular activities (X_1) and learning motivation (X_2) with a Likert scale. To see students' mathematics learning achievement using the final grade of the semester exam of class XI MIPA SMAN 2 Tolitoli in Table 1 and Table 2.

Table 1. Extracurricular Activities Questionnaire

No.	Statement	Alternative Answer			
		SL	SR	KK	TP
1	I really enjoy participating in extracurricular activities at school.				
2	I am active in extracurricular activities out of my own desire.				
3	My learning activities are disrupted because I participate in extracurricular activities.				
4	I think that participating in extracurricular activities improves my learning performance in class.				
5	In extracurricular activities, the supervisor is ignorant and does not give directions.				
6	Participating in extracurricular activities makes me more diligent in my studies.				
7	I was given a warning when I disobeyed the rules in extracurricular activities				
8	I actively participate in extracurricular activities at school				
9	I participate in extracurricular activities because I want to get marks from the teacher.				

No.	Statement	Alternative Answer			
		SL	SR	KK	TP
10	The extracurricular activities I participate in are conducted outside of study time.				
11	The extracurricular coach at school lets me joke around in the activities.				
12	The knowledge I gain in extracurricular activities can support my lessons in class.				
13	My knowledge increases after participating in extracurricular activities				
14	Students who are negligent in extracurricular activities are given sanctions.				
15	The supervisor directs extracurricular activities so that they run well.				
16	I think the material presented in extracurricular activities is not interesting.				
17	After participating in extracurricular activities, the talents I have began to develop				
18	I do not actively participate in extracurricular activities at school.				
19	Participating in extracurricular activities at school makes me lazy to study at home.				
20	The extracurricular tutor motivates me to practice more.				
21	The extracurricular tutor tells me about mistakes in the activity rudely (yelling)				
22	Students get better grades				
23	I became a good problem solver				
24	I have better control over everything in my life.				
25	Extracurricular activities have a positive impact on learning outcomes				
26	I enjoy extracurricular activities at my school				
27	My parents encourage me to participate in extracurricular programmes at my school				
28	I participate in extracurricular activities on my own accord without coercion from others				
29	I do not obey the rules in participating in extracurricular activities at school				

Table 2. Learning Motivation Questionnaire

No	Statement	Alternative Answer				
		TP	J	KD	SR	SL
1	I enjoy learning maths					
2	I find learning maths interesting					
3	I like maths that challenges me					
4	Understanding maths gives me a sense of achievement					
5	Getting good grades in maths is important to me					
6	If I have trouble learning maths, I try to find out why					
7	I put enough effort into learning maths					
8	I use strategies that ensure I learn maths well					

No	Statement	Alternative Answer				
		TP	J	KD	SR	SL
9	It is my fault if I don't understand maths					
10	I expect to do as well as or better than other students in the maths course					
11	I am confident I will do well on maths assignments and projects					
12	I believe I can master the knowledge and skills in the maths subject					
13	I am confident I will do well on maths tests					
14	I believe I can get an "A" in the maths course					
15	I think about how learning maths can help me get a good job					
16	I think about how the maths I am learning will help me					
17	I think about how learning maths can help my career					
18	I think about how I will use the maths I am learning					
19	The maths I am learning is relevant to my life					
20	I get nervous about how I will do on maths tests					
21	I get anxious when it comes time to do a maths test					
22	I worry about failing the maths test					
23	I worry that other students are better at maths					
24	I hate taking maths tests					

Data processing was carried out by conducting a series of tests to see the effect of extracurricular activities and learning motivation on students' mathematics achievement. The test was carried out by conducting an F test to see the level of influence of extracurricular activities and learning motivation.

RESULTS AND DISCUSSION

The Effect of Extracurricular Activities on Students' Mathematics Learning Achievement

Hypothesis Test of Extracurricular Activities on Students' Mathematics Learning Achievement

The hypothesis in this study was tested using the F test to determine whether or not there was an effect of extracurricular activities on students' mathematics learning achievement by paying attention to the significance of the F test results in SPSS Version 25 column Sig. in Table 3.

Table 3. Results of Hypothesis Test X_1 on Y

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	676.801	1	676.801	9.651	.003[b]
	Residual	3997.233	57	70.127		
	Total	4674.034	58			

Based on Table 1, the results of the Sig. = 0,003 < 0,05 so that in hypothesis one H_0 is rejected and H_1 is accepted so that it is proven that there is a significant effect of extracurricular activities on students' mathematics learning achievement.

Simple Linear Regression Analysis of Extracurricular Activities on Student Mathematics Learning Achievement

Simple linear regression analysis was conducted to determine the direction of influence between extracurricular activities as the independent variable and students' mathematics learning achievement as the dependent variable in Table 4.

Table 4. Results of Simple Linear Regression Analysis X_1 on Y

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	52.562	7.817		6.724	.000
	Kegiatan Ekstrakurikuler	.271	.087	.381	3.107	.003

Based on the regression results in Table 2, the Constant (a) value is 52,562. While the regression coefficient value of extracurricular activities (b) is 0,271 so that the regression equation is as follows.

$$Y = a + bX_1 \quad (1)$$

$$Y = 52{,}562 + 0{,}271X_1 \quad (2)$$

The regression equation above means that the consistent value of the student learning achievement variable (Y) is 52,562 and the extracurricular activities regression coefficient value is 0,271 which states that every additional one value of extracurricular activities, the learning achievement value increases by 0,271. The regression coefficient in the regression equation is positive, so it can be concluded that the direction of influence between extracurricular activities and students' mathematics learning achievement is positive.

Coefficient of Determination of Extracurricular Activities on Students' Mathematics Learning Achievement

The coefficient of determination (r^2) aims to see how much the X_1 variable contributes to variable Y. The results of the r^2 test using SPSS Version 25 can be seen in Table 5 below.

Table 5. Results of r^2Test for X_1on Y

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.381[a]	.145	.130	8.374

Based on Table 5, the coefficient of determination (r^2) is 0,145. It can be concluded that the effect of extracurricular activities on students' mathematics learning achievement is 14,5%.

The Effect of Learning Motivation on Students' Mathematics Learning Achievement

Hypothesis Test of Learning Motivation on Student Mathematics Learning Achievement

The hypothesis in this study was tested using the F test to determine whether or not there was an effect of learning motivation on students' mathematics learning achievement by paying attention to the significance of the F test results in SPSS Version 25 column Sig. in Table 6.

Table 6. Hypothesis Test Results X_1 on Y

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	464.769	1	464.769	6.294	.015[b]
	Residual	4209.265	57	73.847		
	Total	4674.034	58			

Based on Table 6, the results of the Sig. = 0,015 < 0,05 so that in hypothesis one H_0 is rejected and H_1 is accepted so it is proven that there is a significant effect of learning motivation on students' mathematics learning achievement.

Simple Linear Regression Analysis of Learning Motivation on Student Mathematics Learning Achievement

Simple linear regression analysis was conducted to determine the direction of influence between learning motivation as the independent variable and students' mathematics learning achievement as the dependent variable on Table 7 below.

Table 7. Results of Simple Linear Regression Analysis X_2 on Y

Model		*Unstandardized Coefficients*		*Standardized Coefficients*	*t*	*Sig.*
		B	*Std. Error*	*Beta*		
1	(Constant)	59.811	6.789		8.810	.000
	motivation to learn	.207	.082	.315	2.509	.015

Based on the regression results in Table 7, the Constant (a) value is 59,811. While the regression coefficient value of extracurricular activities (b) is 0,207 so that the regression equation is as follows.

$$Y = a + bX_1 \quad (1)$$

$$Y = 59{,}811 + 0{,}207X_1 \quad (2)$$

The regression equation above means that the consistent value of the student learning achievement variable (Y) is 59,811 and the value of the learning motivation regression coefficient is 0,207 which states that every additional 1 learning motivation value, the learning achievement value increases by 0,207. The regression coefficient in the regression equation is positive, so it can be concluded that the direction of influence between learning motivation and student mathematics learning achievement is positive.

Coefficient of Determination of Learning Motivation on Student Mathematics Learning Achievement

The coefficient of determination (r^2) aims to see how much the X_2 variable contributes to the Y variable. The results of the r^2 test using SPSS Version 25 can be seen in Table 8.

Table 8. Results of the r^2 Test for X_2 on Y

Model	*R*	*R Square*	*Adjusted R Square*	*Std. Error of the Estimate*
1	.315[a]	.099	.084	8.593

Based on Table 8, the coefficient of determination (r^2) is 0,099. It can be concluded that the effect of extracurricular activities on students' mathematics learning achievement is 9,9%.

The Effect of Extracurricular Activities and Learning Motivation on Students' Mathematics Learning Achievement

Hypothesis Test of Learning Motivation and Self-regulation on Student Mathematics Learning Achievement

The hypothesis in this study was tested using the F test to determine whether or not there was an effect of extracurricular activities and learning motivation on students' mathematics learning achievement by paying attention to the significance of the F test results in SPSS Version 25 column Sig. in Table 9 below.

Table 9. X_2 Hypothesis Test Results on Y

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	752.836	2	376.418	5.376	.007[b]
	Residual	3921.198	56	70.021		
	Total	4674.034	58			

Based on Table 9, the results of the Sig. = 0,007 < 0,05 so that in hypothesis 1 H_0 is rejected and H_1 is accepted so it is proven that there is a significant effect of extracurricular activities and learning motivation on students' mathematics learning achievement.

Simple Linear Regression Analysis of Extracurricular Activities and Learning Motivation on Student Mathematics Learning Achievement

Simple linear regression analysis was conducted to determine the direction of influence between extracurricular activities and learning motivation as independent variables and students' mathematics learning achievement as the dependent variable.

Table 10. Results of Multiple Linear Regression Analysis X_1 and X_2 on Y

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	49.722	8.273		6.010	.000
	Kegiatan Ekstrakurikuler	.212	.104	.297	2.028	.047
	Motivasi Belajar	.100	.096	.153	1.042	.302

Based on the regression results in Table 10 the Constant (a) value is 49,722. While the regression coefficient value of extracurricular activities (b_1) is 0,212 and learning motivation (b_2) is 0,100 so that the regression equation is as follows.

$$Y = a + b_1X_1 + b_2X_2 \qquad (1)$$

$$Y = 49{,}722 + 0{,}212X_1 + 0{,}100X_2 \qquad (2)$$

The regression equation above shows that the value of the extracurricular activities variable and learning motivation increases by 1, the value of student mathematics learning achievement is 49,722 + 0,212 + 0,1. If the value of learning motivation remains 0 and extracurricular activities increases by 1, then the value of mathematics learning achievement (Y) increases by 0,212. If the value of extracurricular activities remains 0 and learning motivation increases by 1, then the value of mathematics learning achievement (Y) increases by 0,1. The regression coefficients are positive, so it can be concluded that the direction of influence between all independent variables, namely X_1 and X_2 onY, has a positive direction.

Coefficient of Determination of Extracurricular Activities and Learning Motivation on Student Mathematics Learning Achievement

The coefficient of determination (r^2) aims to see how much the contribution of all variables, namely X_1 and X_2 to variableY. The results of the r^2test using SPSS Version 25 can be seen in Table 11.

Table 11. Results of the r^2 Test for X_1 and X_2 on Y

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.401[a]	.161	.131	8.368

Based on Table 11, the coefficient of determination (r^2) is 0,161. It can be concluded that the effect of extracurricular activities and learning motivation on students' mathematics learning achievement is 16,1%.

DISCUSSION

The Effect of Extracurricular Activities on Students' Mathematics Learning Achievement

Based on research data conducted at SMAN 2 Tolitoli and has been processed and analysed, the results show that the direction of the influence of extracurricular activities on mathematics learning achievement is positive and the 5% significance level obtained the value of F count (9,651) > F table (4,007) and obtained the value of Sig. (0,003) < 0,05 then H_0 in the first hypothesis is rejected so that it can be concluded that extracurricular activities have a significant effect on the mathematics learning achievement of students in class XI MIPA SMAN 2 Tolitoli. The coefficient of determination of the research data tested using SPSS Version 25 shows a figure of 0,145, which means that extracurricular activities have an effect of 14,5% on the mathematics learning achievement of students in class XI MIPA SMAN 2 Tolitoli, which is in line with research conducted by Rahmawati et al. (2019) which shows the effect of extracurricular activities on student mathematics achievement by 7,1%.

Extracurricular activities are enrichment activities that are held outside of class hours and aim to enrich and expand the knowledge and abilities that students learn in different subjects. Extracurricular activities aim to develop students in relation to their personality, potential, talents, desires, and skills so that they are broader. In line with research conducted by Tamala et al. (2022) which shows the effect of extracurricular activities on students' mathematics learning achievement of 43,0% which indicates that extracurricular activities have a significant effect on students' mathematics learning achievement. Tamala et al. (2022) in their research stated that students' activities while participating in extracurricular activities had a considerable influence on students' mathematics learning achievement by 43,0%. If student activity in extracurricular activities increases, student mathematics learning achievement will also increase. In line with research conducted by Kurniawan (2021) which states that the high participation of students in extracurricular activities has a positive impact on increasing students' mathematics learning achievement.

The Effect of Learning Motivation on Students' Mathematics Learning Achievement

Based on research data conducted at SMAN 2 Tolitoli and has been processed and analysed, the results show that the direction of the effect of learning motivation on mathematics learning achievement is positive and the 5% significance level obtained the value of F count (6,294) > F table (4,007) and obtained the value of Sig. (0,015) < 0,05 then H_0 in the first hypothesis is rejected so that it can be concluded that learning motivation has a significant effect on the mathematics learning achievement of students in class XI MIPA SMAN 2 Tolitoli. The coefficient of determination of research data tested using SPSS Version 25 shows a figure of 0,099 which means that learning motivation has an effect of 9,9% on the mathematics learning achievement of students of class XI MIPA SMAN 2 Tolitoli which is in line with research conducted by Winata & Friantini (2019) which shows the effect of learning motivation on student mathematics learning achievement by 19,5%.

Learning motivation is an encouragement that comes from within a person to continue learning and developing to achieve the desired goals and satisfaction that aims to support the abilities of a person. In line with research conducted by Novianti et al. (2020) which shows the effect of learning motivation on students' mathematics learning achievement by 34,3% so that it can be concluded that motivation plays an important role in improving students' mathematics learning achievement. According to Wulansari & Manoy (2021), motivation has an important role in determining the mathematics learning achievement obtained by students, which is shown in the results of their research that learning motivation has a close relationship with

students' mathematics learning achievement, so from this we can conclude that motivation is needed to improve students' mathematics learning achievement, especially in the learning process. In line with research conducted by Sripatmi et al. (2019) which states that there is a positive influence between learning motivation and student mathematics learning achievement by 16,2%.

The Effect of Extracurricular Activities and Learning Motivation on Students' Mathematics Learning Achievement

Based on the research data conducted at SMAN 2 Tolitoli and has been analysed, the results show that the direction of the influence of extracurricular activities and learning motivation on mathematics learning achievement is positive and at a significance level of 5%, the value of F count (5,376) > F table (3,159) and obtained Sig value. (0,007) < 0,05 then H_0 in the third hypothesis is rejected so that it can be concluded that there is a significant influence between extracurricular activities and learning motivation on the mathematics learning achievement of students in class XI MIPA SMAN 2 Tolitoli. The coefficient of determination of research data tested using SPSS version 25 shows a figure of 0,161, which means that extracurricular activities and learning motivation together have an effect of 16,1% on the mathematics learning achievement of students in class XI MIPA SMAN 2 Tolitoli in line with research conducted by Nofianti (2018) which states that extracurricular activities and learning motivation have their respective roles in having a positive impact on student achievement. The results of the study also show a good relationship between extracurricular activities and learning motivation in encouraging learning not only limited to students but also to teachers who are required to innovate in order to make students interested in participating in extracurricular activities and maintaining learning motivation.

Adiyanto (2016) in his research discussing extracurricular activities and learning motivation stated that the two variables together have an influence on students' mathematics learning achievement. Students' activeness in extracurricular activities is able to train and develop other abilities possessed by students to be developed so that this can have an influence on mathematics learning achievement. High learning motivation will make students able to make plans in learning, monitor every step of their learning with confidence and responsibility in evaluating the learning results obtained. Extracurricular activities and learning motivation are very important for students, especially when doing learning, according to the results of this study which state that these two factors have an effect of 16,1% on students' mathematics learning achievement so that more attention needs to be paid to student activeness in extracurricular activities and how to increase learning motivation to spur their willingness in the learning process. This is certainly a challenge for teachers and the surrounding environment to help students improve their learning achievement.

CONCLUSION

Extracurricular activities are one of the external factors that can have an impact on student learning achievement. The high and low achievement of students' mathematics learning can be seen from the activeness and participation of students in extracurricular activities, the higher the activeness and participation of students, the higher the achievement achieved in accordance with the results of the study which stated that extracurricular activities had a significant effect of 14,5%.

The results of this study also show that learning motivation has an influence on students' mathematics learning achievement. Learning motivation is an internal factor owned by students to be grown and also improved to be able to produce good learning achievements. That is because with the learning motivation possessed by students, the better their mathematics learning achievement. With the learning motivation possessed by students, it is expected to be able to boost their learning achievement, the higher the student's learning motivation, the higher the learning achievement he gets. In this study, the contribution of learning motivation to students' mathematics learning achievement was 9,9%.

Extracurricular activities and learning motivation simultaneously affect students' mathematics learning achievement with a contribution of 16,1%. Students with active extracurricular activities and high learning motivation can think more creatively in solving things. This can help in solving problems, especially in mathematics where we are required to be able to think creatively and never give up. With high learning motivation, the student will definitely not give up easily to solve a problem. Therefore, a balance is needed between activeness in extracurricular activities and also learning motivation that comes from within humans.

RECOMMENDATION

Seeing the results of this research which only looked at the influence of extracurricular activities and learning motivation on students' mathematics learning achievement, it is hoped that future researchers can discuss extracurricular activities and student learning motivation in more depth so that there is more discussion and study of these two things because they have a significant influence on learning achievement. students, especially in the field of mathematics.

Apart from discussing extracurricular activities and learning motivation, further researchers can discuss other factors that influence student learning achievement so that in conducting learning educators can determine good strategies so as to maximize the absorption of knowledge shared with students and the results obtained by students are also maximized in accordance with what students absorb.

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