



## The Relationship between Student Attitudes towards Learning Motivation and Student Achievement in Geography learning

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### ABSTRACT

**Purpose of the study:** The aim of this research is to determine the relationship between students' attitudes towards geography lessons and the relationship between learning motivation and students' geography learning achievement.

**Methodology:** This research is a descriptive study whose population is all high schools in Surakarta. The sample for this research was 79 students of class XI IPS. Data collection is carried out through questionnaires, tests, observations and documents. The data was then analyzed using multiple linear regression with three analysis prerequisites: normality test, multicollinearity test, and heterogeneity test.

**Main Findings:** The findings of this research are as follows. First, there is no positive correlation between students' attitudes towards Geography and their learning outcomes. This is indicated by a probability value of 0.231; which is higher than 0.05. Second, there is a positive relationship between student motivation and learning outcomes, with a probability value of 0.018. The third finding is that there is a simultaneous relationship between students' attitudes and motivation and their learning outcomes, with a probability value of 0.033.

**Novelty/Originality of this study:** The novelty of this research is that it provides information about the relationship between students' attitudes towards geography lessons and learning motivation with students' geography learning outcomes so that it can be used as material for consideration in learning strategies by Geography subject teachers.

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## 1. INTRODUCTION

Education is an effort or activity carried out deliberately, regularly and planned with the intention of changing or developing desired behavior[1]–[3]. Schools as formal institutions are a means of achieving educational goals. Through school, students learn various kinds of knowledge. The success of the learning process in schools is indicated by the achievement of good learning achievements thereby producing quality human resources[4]–[6].

In school education, learning shows changes in competence in the form of new skills, abilities and knowledge. The results of the learning process are reflected in learning achievement. However, in order to achieve satisfactory learning achievements, a learning process is needed[7], [8]. The learning process cannot be separated from various factors that influence and support its continuity. Every student is expected to obtain high

learning achievement, because high achievement is a sign of success from a good learning process and will certainly help in future success[9].

The successful implementation of learning in schools influences student learning achievement. Many factors cause good learning achievement in the learning process. These related factors both come from within the student (internal) and from outside the student (external)[10]. These factors are determinants of students' success in obtaining high learning achievements as expected. Based on this opinion, there are many factors that influence student learning achievement. Among them are factors that originate from within students in the form of attitudes towards geography lessons and student motivation to learn. Based on the author's preliminary research in high school on 10 students, the views or attitudes towards geography lessons for each student are different, because based on the results of temporary observations on 10 class XI social science students, students generally consider geography lessons to be less interesting and difficult to understand.

Attitude is the readiness to respond consistently in a positive or negative form to an object or situation[11], [12]. Students who have a positive attitude towards geography lessons can be seen from their action tendencies, namely approaching, liking, hoping that because they like it they will be encouraged to study better and ultimately will improve their achievement in studying geography. On the other hand, students who have a negative attitude towards geography lessons have a tendency to stay away from, avoid, hate geography lessons, they will ignore every learning process so that their learning achievements tend to be low.

Then, from the results of the researcher's conversation with the geography subject teacher for class geography lessons, thus disrupting the smoothness of the learning process, then from students' responses during the geography learning process who were less enthusiastic about following it where some students did not pay attention or listen to the teacher's explanations, there were still many students who complained when the teacher gave them assignments or homework.

Another factor that influences student learning achievement is learning motivation. Motivation is very important in the learning process because in the learning process we must pay attention to what can encourage students to learn well, motivation to think and motivation that can focus attention[13], [14]. Learning motivation can also be instilled in students by providing exercises or habits which are sometimes also influenced by environmental conditions which can make a student have better learning motivation so that they can achieve good learning achievements.

To increase students' learning motivation, teachers encourage students by first explaining competency standards and basic competencies so that students are encouraged to learn according to these goals. However, in reality, the learning motivation of class XI social science students at high school is still low. This is evidenced by the lack of enthusiasm of students in learning, such as lack of diligence in facing assignments, often students are late in submitting assignments, lack of interaction between students and teachers during the learning process such as asking questions or discussions and being reluctant to ask the teacher if they experience difficulties with the lesson.

Students' attitudes towards geography lessons that are less positive or negative and different learning motivations are thought to cause the learning process to run smoothly so that the learning carried out by students is not successful. This research obtained data on completeness criteria in class XI social sciences in junior high schools. Where the students who completed their studies were 47 students or 42%, while the students who did not complete their studies were 65 students or 58%. This student's learning achievement in geography subjects is included in the low category. This is thought to be influenced by various factors, namely students' attitudes towards geography lessons and the learning motivation applied by students. The novelty of this research is that it provides information about the relationship between students' attitudes towards geography lessons and learning motivation with students' geography learning outcomes so that it can be used as material for consideration in learning strategies by Geography subject teachers.

Previous research results found that there was a positive and significant relationship between students' attitudes towards school, educational values, achievement motivation and academic achievement[15]. The difference is that previous research was carried out generally on all learning at the secondary school level. As a generalization of previous research, this research was conducted to determine the relationship between student attitudes towards student learning motivation and student achievement in geography learning.

The urgency of research in this area is to close the education gap by identifying factors that contribute to the achievement gap. Understanding how student attitudes and motivation impact academic outcomes can guide efforts to promote equity in education. Geography education plays an important role in fostering global citizenship and a sense of connectedness. Research in this area is critical to establishing educational practices that contribute to the development of informed and engaged citizens capable of addressing complex social challenges.

The results of the discussion of this research will be very helpful as an enrichment of students' learning resources, especially on the topic: Environment in class XI social sciences with Geography subjects in high school. This aims to make students know and aware that the lesson material can be applied every day, and to strengthen knowledge and understanding, concrete examples are needed around them. Education is a long-term

investment that has an important role in creating quality human resources who are responsible for themselves and their environment. The aim to be achieved in this research is to determine the relationship between students' attitudes towards geography lessons and the relationship between learning motivation and students' geography learning achievement.

## 2. RESEARCH METHOD

### 2.1 Research Desain

This research is quantitative research with a correlational approach. Quantitative research methods are a researcher's attempt to find knowledge by providing data in the form of numbers [2], [16]. The population is all research subjects [17]. In this study, the research subjects were class XI social science students at high school. The sample is a part or representative of the population studied [18], [19]. The sample used in this research was 57 class XI State High School students obtained by sampling using a random sampling technique.

#### 2.1. Research Instrument

Data collection techniques use questionnaires and test questions. A questionnaire is a number of written questions used to obtain information from respondents in the sense of reports about their personality, or things they know [20]. In this research, a questionnaire technique was used to obtain information regarding students' attitudes towards geography lessons and the learning motivation of class XI social science students. The component grid of students' attitudes towards geography lessons can be seen in the table below.

Table 1. Attitude Component Grid

Indicator	Sub Indicator	Item Number	Amount
1.1 Cognitive and affective components	1.1.1 Emotional attitude towards geography lessons:		
	a. Positive attitude towards geography lessons	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13	13
	b. Negative attitude towards geography lessons	14, 15, 16, 17, 18, 19, 20, 21, 22	9
1.2 Conative component	1.2.1 Behavioral tendencies	23, 24, 25, 26, 27, 28, 29	7

Next, student motivation instruments were used. The student motivation grid can be seen in the table below.

Table 2. Motivational Instrument Grid

Indicator	Sub Indicator	Item Number	Amount
Intrinsic Motivation	2.1.1 Desire to progress in increasing knowledge	30, 31	2
	2.1.2 The drive to acquire skills	32, 33	2
	2.1.3 Perseverance in facing tasks	34	1
	2.1.4 Enjoy learning	35, 36	2
	2.1.5 Tenacity in facing problems	37, 38, 39	3
	2.1.6 Needs for ideals	40, 41	2

Meanwhile, a test is a series of questions or exercises as well as other tools used to measure skills, knowledge, intelligence, abilities or talents possessed by individuals or groups. The source of the test in this research was the Geography book for high school class XI majoring in social sciences. The question grid used is shown in the table below.

Table 3. Question grid

Competency standards	Basic competencies	Class/Semester	Material	Question Indicator	No. Question
Analyze biosphere and anthropospheric phenomena	1.1 Explain the meaning of biosphere phenomena	XI/I	Biosphere and factors of existence of flora and fauna	• Describe the meaning of geosphere phenomena	1, 2, 3
	1.2 Analyze the distribution of flora and fauna		Distribution of flora and fauna in the world, in	• Identify factors that influence the existence of flora and fauna	4, 5, 6, 7

	Indonesia	<ul style="list-style-type: none"> <li>Identify the distribution of flora and fauna on the earth's surface</li> <li>Analyze the distribution of flora and fauna in Indonesia</li> <li>Conclude the relationship between the distribution of flora and fauna and the physical conditions of the environment</li> </ul>	8, 9 10, 11 12, 13, 14, 15, 16, 17, 18, 19, 20, 21
1.3. Explain the meaning of the phenomenon anthroposphere	Quantity and quality of population	<ul style="list-style-type: none"> <li>Explain the impact of damage to flora and fauna on the existence of life</li> </ul>	22, 23, 24, 25, 26, 27, 28, 29, 30, 31
1.4. Analyzing population aspects	Population aspect	<ul style="list-style-type: none"> <li>Explain the differences between population census, population registration and types of census</li> <li>Analyze population composition based on age and gender</li> <li>Identify the high and low quality of the population based on education and health levels</li> </ul>	32, 33, 34, 35 36, 37, 38, 39, 40, 41, 42, 43 44, 45, 46, 47, 48, 49, 50

### 2.3. Data Analysis Techniques

The data analysis techniques used in this research are descriptive statistics and inferential statistics. Descriptive statistical analysis aims to describe or explain the picture studied through sample data without carrying out analysis and making generally accepted conclusions [21], [22]. Descriptive statistical analysis discusses several things related to average (mean), standard deviation, maximum value, minimum value, and amount of research data. Inferential statistical analysis relates to data analysis to draw conclusions about the data. The inferential statistics used in this research is multiple linear regression which consists of a simultaneous regression test (F test), coefficient of determination test (adjusted R<sup>2</sup>), and partial regression test (T test).

## 3. RESULTS AND DISCUSSION

### 3.1. Standard Deviation Testing

Below are presented the results of the product moment correlation test. To find out the results of hypothesis testing 1, 2 and 3, we can look at the significance value and compare it with the predetermined significance value, which is 0.05. To see more clearly the results of the hypothesis testing correlation test, you can see the following table:

Table 4. Descriptive Statistical Results

	N	Minimum	Maximum	Mean	Std. Deviation
Attitude	57	81.00	107.00	94.8772	5.19639
Motivation	57	48.00	85.00	69.2281	7.45467
Performance	57	31.43	97.14	70.6268	15.59040
Valid N (listwise)	57				

Based on the table above in the descriptive statistical test on the average standard of attitude, the minimum score of 81 and the maximum score of 107 students is considered medium, with a minimum score of 48 and the maximum score of 85, the average standard of student motivation is included in high, and the average standard of achievement is Student learning is included in the high category with a minimum achievement score of 31 and a maximum score of 97.

### 3.2. Hypothesis Testing X1

The attitude variable has a calculated t value of 1.211 and a significance value of 0.231. The probability value is  $>0.05$ , this means that attitude has no significant effect on learning achievement. Attitude has a positive sign towards learning achievement, meaning that the greater the attitude, the greater the learning achievement and vice versa, the smaller the attitude, the smaller the learning achievement. Based on the explanation above, Hypothesis 1: "attitude influences learning achievement" is rejected.

### 3.3. Hypothesis Testing X2

Hypothesis 2 is the relationship between learning motivation and learning achievement. The motivation variable has a calculated t value of 2.436 and a significance value of 0.018. The probability value is  $<0.05$ , this means that motivation has a significant effect on learning achievement. A positive attitude towards learning achievement means that the greater the motivation, the greater the learning achievement and vice versa, the smaller the motivation, the smaller the learning achievement. Based on the explanation above, Hypothesis 2: "motivation influences learning achievement" is accepted. The results of the anova test are shown in the table below.

Table 5. ANOVA test results

	Model	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1613.627	2	806.814		
	Residual	11997.768	54	222.181	3.631	.033 <sup>a</sup>
	Total	13611.395	56			

From the ANOVA test or F test, the calculated f value was 3,631 with a probability significance value of 0.033. Because this significance value is smaller than 0.05, this means that attitude and motivation simultaneously or together have a significant relationship to learning achievement. Furthermore, the test results for the coefficient of determination of the summary model are shown in the table below.

Table 5. Results of the Model Summary Determination Coefficient Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.344 <sup>a</sup>	.119	.086	14.90573

This shows that 8.6% of learning achievement can be explained by the independent variables of attitude and motivation. While the rest is explained by other factors outside the research model.

### 1. The relationship between student attitudes towards geography lessons (X1) and student learning achievement (Y)

The results of this study indicate that there is no positive relationship between students' attitudes towards geography lessons and learning achievement with a small level of correlation, namely 0.465. A positive correlation coefficient means that there is a tendency for students' increasingly positive attitudes towards geography lessons to be followed by higher learning achievement. Conversely, the more negative a student's attitude towards geography lessons will be followed by lower learning achievement.

Hypothesis testing proves that there is a non-positive relationship between students' attitudes towards geography lessons and the geography learning achievement of class XI social science students in high school. Thus, the hypothesis proposed in this research is rejected, meaning that there is a tendency that the more positive students' attitudes towards geography lessons will be followed by high learning achievement and vice

versa, the more negative students' attitudes towards geography lessons will be followed by low learning achievement.

## 2. Relationship between Learning Motivation (X2) and Student Learning Achievement (Y)

Based on calculations obtained using SPSS, the motivation variable has a calculated t value of 2.436 and a significance value of 0.018. The probability value is  $<0.05$ , this means that motivation has a significant effect on learning achievement. A positive attitude towards learning achievement means that the greater the motivation, the greater the learning achievement and vice versa, the smaller the motivation, the smaller the learning achievement. Based on the explanation above, Hypothesis 2: "motivation influences learning achievement" is accepted.

Based on the results of these calculations, this second hypothesis can be accepted. Thus, there is a tendency that the higher the learning motivation will be followed by high learning achievement and conversely the lower the learning motivation will be followed by low learning achievement.

The results of this study indicate that there is a significant relationship at the 5% real level between learning motivation and student learning achievement in class XI geography subjects in social sciences in high school, because  $r_{xy} = 0.450 > r_{table} = 0.294$ . The relationship between students' learning motivation and learning achievement is positively correlated, with an r value of 0.450. The correlation coefficient is positive, meaning that the higher the student's learning motivation, the higher their learning achievement will tend to be. Vice versa, the lower the student's learning motivation, the lower their geography learning achievement will tend to be.

Hypothesis testing proves that there is a positive, quite strong and significant relationship between learning motivation and geography learning achievement for class XI social science students in high school. Thus, the hypothesis proposed in this research is accepted, meaning that there is a tendency that the higher the student's learning motivation, the higher the student's achievement in learning geography. On the other hand, the lower the learning motivation, the lower the geography learning achievement achieved by class XI social science students in high school. A person undertakes an effort because of motivation. Having good motivation in learning will show good results. In other words, with diligent effort, especially based on motivation, someone who studies will be able to produce good achievements. The intensity of a student's motivation will greatly determine the level of learning achievement.

## 3. Relationship Between Students' Attitudes Towards Geography Lessons (X1), and Learning Motivation (X2), and with Class Students' Geography Learning Achievement (Y)

Based on calculations using the following SPSS program: From the ANOVA test or F test, the calculated f value is 3,631 with a probability significance value of 0.033. Because this significance value is smaller than 0.05, this means that attitude and motivation simultaneously or together have a significant relationship to learning achievement.

The relationship between students' attitudes towards geography lessons and geography learning achievement and learning motivation and geography learning achievement does not have exactly the same value, where there is a difference in the calculated value of 0.015. The results of calculating the relationship between students' attitudes towards geography lessons are greater than the results of calculating the relationship between learning motivation and geography learning achievement because based on the theory someone takes it because of a motive. Attitude is a condition that allows an action or behavior to occur. So if a person does not have a certain attitude towards an event or situation that exists within him, then that person will not be moved by his motives for a particular action or deed.

Based on the calculation of the correlation between students' attitudes towards geography lessons and learning motivation with geography learning achievement, there is a positive relationship with a fairly strong and significant level of strength between students' attitudes towards geography lessons and learning motivation and geography learning achievement for class XI social science students in high school. This is shown by the multiple correlation value of 0.508 with a fairly strong and significant level of relationship closeness, where calculated  $R = 0.508 > r_{table} = 0.294$  at a significance level of 5%. This means that there is a fairly strong and significant positive relationship between students' attitudes towards geography lessons and learning motivation with the geography learning achievement of class XI. The more motivation to learn, the higher the student's achievement in learning geography. On the other hand, the more negative the student's attitude towards geography lessons and the lower the student's learning motivation, the lower the geography learning achievement achieved by class XI social science students in high school.

Learning is an effort to achieve certain goals, namely to achieve changes in behavior. One of the results of achieving learning outcomes is the learning achievements achieved by students. There are many factors related to achieving learning achievement, including students' attitudes towards geography lessons and learning motivation. Attitude is the readiness to respond consistently in a positive or negative form to an object or situation[23]-[25]. Attitude is a student's tendency to face a lesson based on his assessment of the lesson.

Students' assessments of lessons are obtained through direct experience based on interactions in learning, but can also be based on indirect experiences such as news or stories.

Students who have a positive attitude towards geography lessons can be seen from their action tendencies, namely approaching, liking, hoping that because they like it they will be encouraged to study better and ultimately will improve their achievement in studying geography. On the other hand, students who have a negative attitude towards geography lessons have a tendency to stay away from, avoid, hate geography lessons, they will ignore every learning process so that their learning achievements tend to be low.

Motivation is a desire that exists in a person so that it encourages his behavior to carry out a certain action or activity to achieve a desired goal [26]-[30]. Motivation is very influential in achieving learning achievement. So motivation can be said to be a mental impulse that moves and directs an individual's behavior, including learning behavior. Motivation can function as a driving force for business and achievement [31]-[35]. A person undertakes an effort because of motivation. Having good motivation in learning will show good results. In other words, with diligent effort and especially based on motivation, someone who studies will achieve good results.

Attitude and motivation are closely related to learning achievement. A positive learning attitude is closely related to motivation. Attitude is a person's driving force for an act or action to occur. Meanwhile, motivation is the driving force to achieve success [36]-[39]. So in conclusion, the more positive the student's attitude towards geography lessons and the higher the learning motivation, the higher the student's achievement in learning geography. On the other hand, the more negative the student's attitude towards geography lessons and the lower the student's learning motivation, the lower the geography learning achievement achieved.

This research is in line with research conducted by Boudadi, which states that if students' learning attitudes are high, then their learning achievements will also be high and if students' learning motivation increases, then their learning achievements will also increase [40]. The difference between this research and previous research is in the subjects targeted and the school level. The findings of this research have several implications for educators, policy makers, and practitioners in the field of geography education. Understanding the distinct relationships between student attitudes, motivation, and achievement can inform the development of targeted interventions and teaching strategies. By combining the insights gained from this research, educators can create more engaging and effective learning environments, fostering positive attitudes and motivation among students. This study is limited by research findings that may be influenced by the characteristics of the sample population selected for participation. If the sample does not represent a diverse range of students, the generalizability of the results may be limited.

#### 4. CONCLUSION

Based on the research results, it can be concluded that the results of this research analysis found that there is no relationship between attitude and achievement. This is proven by the probability value (sig.) of 0.231 which is above 0.05. because attitude does not show increased value in student learning achievement. Then, the results of this research analysis found that there is a positive relationship between motivation and achievement. This is proven by the probability value (sig.) of 0.018 which is below 0.05. The results of this research analysis found that there is a mutual relationship between attitude and motivation and achievement. This is proven by the probability value (sig.) of 0.033 which is below 0.05. Recommendations for further research are to conduct a comprehensive literature review to gain a deeper understanding of existing theories, models and studies related to students' attitudes, motivation and achievement in learning geography.

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