Analysis of Factors Affecting Student Learning Achievement of Social Sciences Subjects in Muhammadiyah Middle School Rokan Hulu Regency

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ABSTRACT

The Social Sciences subject examination score in Muhammadiyah Rambah Middle School is still below the average. This phenomenon is inseparable from the low student achievement. This study aims to analyze the factors that influence student learning achievement. This type of research was quantitative research. The population in this study was VII grade students of SMP Muhammadiyah Rambah which was conducted in the even semester of the 2018/2019 school year. The sample was carried out using proportional random sampling technique with 76 respondents. Data collection using a questionnaire with a Likert scale and then the data were analyzed by path analysis. The results of the analysis show that learning discipline has an indirect effect on learning achievement through learning motivation of 0.0897, with a total influence is 0.351 with an effective contribution of 12.29%. The family environment has an indirect effect on learning achievement through learning motivation of 0.1054, with a total influence of 0.354 with an effective contribution of 12.56%. This shows that learning achievement can be improved if the quality of learning discipline, family environment and student motivation are improved.

1. Introduction

Unesco (in Zabadi, 2013) explained that quality is the heart of education which influences what students learn. How well students learn and what benefits students get from their education. Some efforts have made to ensure that students achieve learning outcomes and obtain values and skills that help them play a positive role in society are an issue on the policy agenda of almost every country.
In the Indonesia itself in accordance with the basis, functions and objectives of National Education Law (No. Article 3 of Law No. 20/2003), states that national education aims to develop capabilities and shape the dignified character and civilization of the nation in the context of educating the nation, aiming at developing the potential of learners to become human beings who believe in and have faith in God Almighty, have good character, be healthy, have good knowledge, competent, creative, independent and be a democratic and responsible citizen.

Based on this, in order to know and measure the level of success and quality of education, it is necessary to have certain benchmarks as technical specific references that can be used as guidelines for planning, implementing and evaluating quality improvement programs that will and have been implemented (Caska, 2016).

Student learning achievement is one indicator that can show the quality of success and the quality of education through student learning. To get a good learning achievement, students must achieve good grades. According to Riyani (2012), an efficient teaching and learning process will greatly affect the level of student success expressed by learning achievement. Learning achievement is the result of an assessment of the abilities, abilities and specific skills learned during the learning period.

The results of observations made through interviews with social studies teachers at SMP Muhammadiyah Rambah that learning achievement achieved by students on social studies subjects is not optimal. This is known through the UTS score in Social Sciences at Muhammadiyah Rambah Middle School, it was found that 65% of the completeness level could only be achieved by students while 35% of students had not yet reached the KKM. This means that there are still problems regarding student achievement, especially in social studies subjects. The achievements of students vary, some are high, medium and low. The conditions of learning outcomes above are influenced by various factors.

Student achievement is influenced by various factors, but can be classified into two groups. One other factor that influences learning achievement is psychological factors, in this case is achievement motivation. Motivation can be interpreted as a driving force from within and within the subject to carry out certain activities in achieving goals (Junita et al., 2018; Guswinda et al., 2019). This paper aims to analyze the Factors That Influence Learning Achievement in SMP Muhammadiyah Rambah.

2. Methodology

This type of research was quantitative descriptive conducted from June 2019 to July 2019 in Rambah District, Rokan Hulu Regency, Riau Province, Indonesia. Primary data about learning discipline, family environment, learning motivation and learning achievement was collected. The population was grade 7 students of
SMP Muhammadiyah Rambah. The technique used in this study was using the path analysis. To find the structural equation (linear model) or sub structural structural mathematical equation in the path diagram can be seen in Figure 1.

![Path Diagram](image)

Figure 1. Direct and indirect effects between variables

To explain figure 1, the formula is used:

a. Sub Structure I: \( y_1 = \rho_{y1x1} + \rho_{y1x2} + \epsilon \) and
b. Sub Structure II: \( y_2 = \rho_{y2x1} + \rho_{y2y1} + \rho_{y2x2} + \epsilon \).

Data collection techniques using a questionnaire with a Likert scale. Indicator descriptors in this study can be seen in Table 1.

<table>
<thead>
<tr>
<th>Variabel</th>
<th>Indicator</th>
<th>Deskriptor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning</td>
<td>a. Tight in entering class</td>
<td>• Enter Class On Time</td>
</tr>
<tr>
<td>Discipline (X1)</td>
<td>b. Obedience in attending lessons</td>
<td>• Never been rebuked by the teacher when entering class</td>
</tr>
<tr>
<td></td>
<td>at school</td>
<td>• Pay attention to the teacher during the learning process</td>
</tr>
<tr>
<td></td>
<td>c. Obedience in doing the task</td>
<td>• Follow every activity given by the teacher in the class</td>
</tr>
<tr>
<td></td>
<td>d. Obedience in obeying school</td>
<td>• Pay attention to the teacher during the learning process</td>
</tr>
<tr>
<td></td>
<td>rules</td>
<td>• Maintain order in the school environment of the daily activities.</td>
</tr>
<tr>
<td></td>
<td>e. Obedience to study at home</td>
<td>• Behave according to ethics, aesthetics and manners</td>
</tr>
<tr>
<td>Family</td>
<td>a. The way parents educate</td>
<td>• Comply with school administration rules</td>
</tr>
<tr>
<td>Environment (X2)</td>
<td></td>
<td>• Repeating lessons at home</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Doing homework given by the teacher</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Parents attention</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• How to care for parents</td>
</tr>
</tbody>
</table>
This study discussed the analysis of factors that affect student achievement in social studies subjects in SMP Muhammadiyah Rambah, Rokan Hulu district. These factors are learning discipline, family environment, and motivation. The following table illustrates the path of structure 1 can be seen in Table 2.

<table>
<thead>
<tr>
<th>Lane</th>
<th>Path coefficient</th>
<th>Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1 → X3</td>
<td>0.245</td>
<td>0.031</td>
</tr>
<tr>
<td>X2 → X3</td>
<td>0.288</td>
<td>0.012</td>
</tr>
<tr>
<td>X1 → Y</td>
<td>0.261</td>
<td>0.009</td>
</tr>
<tr>
<td>X2 → Y</td>
<td>0.249</td>
<td>0.013</td>
</tr>
<tr>
<td>X3 → Y</td>
<td>0.366</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Based on Figure 2, it is known that learning discipline, family environment and learning motivation have a significant effect on learning achievement both directly and indirectly.

Furthermore, to see the coefficient of determination R2 based on the SPSS results can be seen in Table 3.
Table 3. Structural Path coefficients 1 and 2

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.435&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.189</td>
<td>.167</td>
<td>7.388</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>.662&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.438</td>
<td>.415</td>
<td>5.886</td>
<td>1.640</td>
</tr>
</tbody>
</table>

- **Model Summary**:  
  a. 1. Predictors: (Constant), Lingkungan Keluarga (x2), Disipin Belajar (x1)  
  b. 1. Dependent Variable: Motivasi Belajar (x3)  
  a. 2. Predictors: (Constant), Lingkungan Keluarga (x2), Disiplin Belajar (x1), Motivasi Belajar (x3)  
  b. 2. Dependent Variable: Prestasi Belajar (y)

From Table 3, model 1 was obtained simultaneously by variables of learning discipline and family environment contributing to learning motivation with R Square of 0.189. As for the variables of the contribution of learning discipline, family environment, learning motivation on student achievement simultaneously in model 2, note R Square of 0.438. In accordance with the results of structural equations 1 and 2, we will present a combination of the structure of the path diagram 1 and the structure of the path diagram 2 which can be seen in Figure 2.

![Figure 2. Combined Structure Analysis 1 and Structure Analysis 2](image)

In Figure 2, it is known that learning discipline, family environment and learning motivation have a significant effect on student achievement both directly and indirectly. The following describes the direct and indirect effects of each variable that can be seen in Table 4.
Table 4. Direct and Indirect Contribution to Variables

<table>
<thead>
<tr>
<th>Variabel</th>
<th>Direct</th>
<th>Indirect</th>
<th>Total</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1 → X3</td>
<td>0.245</td>
<td>-</td>
<td>0.245</td>
<td>6.00%</td>
</tr>
<tr>
<td>X2 → X3</td>
<td>0.288</td>
<td>-</td>
<td>0.288</td>
<td>8.29%</td>
</tr>
<tr>
<td>X3→ Y</td>
<td>0.366</td>
<td>-</td>
<td>0.261</td>
<td>6.81%</td>
</tr>
<tr>
<td>X1→ Y</td>
<td>0.261</td>
<td>0.245 * 0.366 = 0.0897</td>
<td>0.351</td>
<td>12.29%</td>
</tr>
<tr>
<td>X2→ Y</td>
<td>0.249</td>
<td>0.288 * 0.366 = 0.1054</td>
<td>0.354</td>
<td>12.56%</td>
</tr>
</tbody>
</table>

Based on Table 4, it is known that the discipline of learning has an indirect effect on learning achievement through learning motivation of 0.0897, with a total influence of 0.351 with an effective contribution of 12.29%. The family environment has an indirect effect on learning achievement through learning motivation of 0.1054, with a total influence of 0.354 with an effective contribution of 12.56%.

3. Results and Discussion

Effect of Learning Discipline on Learning Motivation

Based on data analysis, the results show that there is a significant influence between learning discipline on student motivation. If more students are disciplined in learning will increase student motivation.

There is a relationship between work motivation and employee work discipline and there is a correlation between work motivation and employee work discipline. This means that high work motivation is needed in an organization or agency in order to achieve the goals of the organization or agency. Although studies differ in place, subject and object of research, but have similarities in the variables of motivation and discipline, learning and working together is a process of activity that requires energy and concentration to get the desired outcome or goal (Yoesana, 2013; Marina et al., 2018).

Research in line says that character learning, discipline and student motivation at school can play a role in increasing student achievement. There is a significant influence between learning discipline on learning motivation (Prasasty, 2017; Haditama et al., 2018).

Based on the description above it can be said that the discipline of learning can influence student learning motivation. Meaning the better the discipline of learning applied to students the more motivated students to learn.

Effect of Family Environment on Learning Motivation

Based on data analysis and hypothesis testing that has been done in this study, the results obtained indicate that there is a significant influence between the family environment on student motivation.
A research result shows that parents' attention has a significant influence and contributes to learning motivation. Attention that is well received by children at home will lead to encouragement or good learning motivation in children. The results of the study are in line shows that there is an influence of parenting parents on biology learning achievement in class VIII MTSN 2 Maros. Types of parenting parents have a good influence on learning achievement (Haditama et al., 2018; Anas, 2019).

In line with the results of research conducted by Yarnefi et al. (2019) that there is an influence of the family environment on students' motivation to choose the major of social studies as the top choice in SMA Negeri 2 Tambang, in Kampar Regency, Riau Province.

Based on the description above it can be said that the family environment is able to influence student learning motivation.

**Effect of Learning Discipline on Learning Achievement**

Based on data analysis and hypothesis testing that has been done in this study, the results obtained indicate that the discipline of learning has a significant effect on learning achievement directly.

Patterns of student behavior in accordance with the rules make students a good person and ready to face the lessons taught by the teacher. The implication is that students who have high learning discipline have high learning readiness so that when learning students will easily absorb the lessons taught by the teacher and student learning outcomes will be good too (Thoha et al., 2016).

In line with research that states the discipline of learning formed in students will cause high motivation to learn. Students who have high discipline in themselves realize that having high learning motivation will add to the smooth learning process (Haditama et al., 2018). Based on the description above it can be said that good learning discipline is able to influence student achievement with good results.

**Effect of Family Environment on Learning Achievement**

Based on data analysis from the hypothesis testing that has been done in this study, the results obtained indicate that there is a significant influence between the family environment on student achievement.

The results of the study stated that family factors partially have a positive and significant influence on learning outcomes. The family factor is the closest environment for students to get an education because the environment in the family has been formed since the beginning of birth in the world. Then it can be concluded that the presence or absence of student behavior, whether or not learning in the family environment depends on how the child is raised and educated in the family environment (Wijaya et al., 2017).
The results of this study are reinforced by the statement in which a research found that there is a significant influence between the learning environment with the learning achievement of Islamic Education Management students of IAIN Batusangkar. The learning environment here includes the family environment and the school environment (Asvio et al., 2017). Based on the description above it can be said that the family environment is able to influence student achievement.

**Effect of Learning Motivation on Learning Achievement**

Based on data analysis and hypothesis testing that has been done in this study, the results obtained indicate that there is a significant influence between student motivation on student achievement. If students are motivated to learn it will improve student learning achievement. Not all students have the motivation to learn. Motivation is a way to improve student achievement.

Someone will succeed in learning if there is motivation in him. This is evidenced from the results of Rahayu's (2013) study which showed that learning motivation had a significant effect on learning outcomes in accounting subjects which showed that learning motivation also had a role in improving learning outcomes.

Motivation is very influential on learning achievement, motivation is also one of the factors that allows students to be more focused and concentrated and can cause excitement so that students can be more happy in accepting the teaching and learning process. Motivation to learn has a significant effect on learning outcomes (Riyani, 2015; Sholihah et al, 2016).

In contrast to research that states learning motivation does not have a significant effect on learning outcomes. Learning motivation does not affect the learning outcomes obtained by students. Highly motivated students may not necessarily have higher learning outcomes than students who are low motivated. High motivation but no effort given to conduct learning activities will not affect learning outcomes with maximum results. So learning motivation cannot stand alone influencing student learning outcomes (Wijaya et al., 2017).

In line with previous research states that motivation has a significant effect on learning outcomes in Madrasah Aliyah Al Muhajirin, F Trikoyo Village, Tugumulyo District, Musi Rawas Regency (Wahyudin, 2019). The results of other hypotheses show that the motivation factor significantly affects the mathematics learning achievement of eighth grade students of Namlea Middle School. Intrinsic motivation and extrinsic motivation have a positive effect on mathematics achievement. Motivation is the most dominant factor in influencing achievement (Zakaria et al., 2019).

Based on the description above it can be said that learning motivation can influence student achievement.
Effect of Learning Discipline on Learning Achievement through Learning Motivation

Based on data analysis and testing of hypotheses that have been carried out in this study, the results obtained indicate that there is a significant influence between learning discipline on learning achievement through student motivation. This means that there is a direct and indirect effect of the application of the discipline of learning on learning achievement.

Students with a discipline of learning and high motivation to learn will likely be able to obtain good learning outcomes. They will be sincere and concentrate in following learning in class, students will come to school on time and always obey the school rules, if they are at home, students will learn regularly and systematically. Therefore, to get good learning outcomes required high learning motivation in students (Haditama et al., 2018).

In line with research shows that teachers who apply to the classroom discipline strategy affect the effectiveness, motivation and achievement of learning English. The results of the path analysis show that teachers who use engagement and recognition strategies (discipline with punishment) are more often perceived to be more effective teachers. He also revealed that in classrooms where the teacher manages students' negative behavior by using punishment strategies. Teaching effectiveness was found to mediate the effect of punishment on motivation while motivation mediated the effect of punishment strategies on achievement. Motivation was found to have the strongest effect on achievement (Rahimi et al., 2015; Sakinah et al, 2018).

Based on the description above it can be said that the discipline of learning can influence learning achievement through student learning motivation.

Effect of Family Environment on Learning Achievement through Learning Motivation

Based on data analysis and hypothesis testing that has been done in this study, the results obtained indicate that there is a significant influence between the family environment on learning achievement through learning motivation. This means that there is a direct and indirect effect of the family environment on learning achievement.

Proper attention given by parents in children's learning activities will lead to enthusiasm for learning, so that children are motivated to learn better. With high learning motivation of course the learning achievement obtained is also getting better (Haditama et al., 2018).

Parents have a strong influence on what every child wants to pursue, especially education. The ideals will affect student enthusiasm for learning, one of the factors that influence students' interest in choosing social studies majors in high school is ideals, meaning that ideals higher than students will have higher student
interest in choosing social science majors (Yarnefi et al., 2018). Although the study differs in place, subject and object of research, but have similarities in family environment and motivation variables, where the family is an environment that is able to provide encouragement of ideals, enthusiasm and motivation for students to achieve the desired results or goals. Based on the description above it can be said that the family environment can influence learning achievement through student learning motivation.

4. Conclusion

The results showed that the factors that influenced learning achievement were external factors consisting of learning discipline and family environment, while internal factors were learning motivation. Thus, learning achievement is influenced by learning discipline and family environment through learning motivation as an intervening variable. Based on the results of this study, learning discipline has the lowest effective contribution to learning motivation and low impact on student achievement. This can be used as a reference for schools to provide guidance and increase learning discipline for students and teachers as well as for collaboration with parents. One thing that should be considered is how to improve learning discipline while still trying to pay attention to the factors that influence the formation of learning discipline itself so that student achievement can be achieved well.

References


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