

The Role of Self Regulation in Moderating The Environmental Influences to The Learning Outcome

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Abstract

The purpose of the research is to describe the role of self regulation as the environmental influence moderation towards the learning outcome in the Integrated Islamic Primary School of Mayong in Jepara. This research used correlational method with ex post facto design. The data was collected through documentation and questionnaires, while the data analysis applied descriptive analysis and absolute difference value. The results of the research showed that self regulation was able to significantly moderate the environmental influences toward the learning outcome. There are three main environment to be concern in this study. They are family, school, and society environment. The optimum environments moderated were family and school environments. However, the society environment did not show significant influence towards learning outcome because the aspects did not recognize the students' existence as the society members. This research result was supported by the behavioral theory explaining that learning is a behavioral change which occurs through the stimulation (by environment) while response as the learning outcome. The results were also supported by social cognitive theory which emphasizes that the environment faced by individual is not randomly chosen, it is often chosen and changed by the individual using his behavior.

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INTRODUCTION

Education has a very strategic role in improving the quality of the human resources in an attempt to reach Indonesia's goals which are to realize public welfare and enrich the life of the nation. School, as the formal education institution, is a mean to achieve the education's purpose. In school, students learn various necessary things to prepare themselves to live the life. In formal education, learning shows positive change. Therefore, skills, proficiency, and new knowledge will be gained in the final stage. The results of those learning process are shown in the learning outcomes. Learning outcome is one of the ways to measure student's achievement in education. According to Hamalik (2015), learning outcome is the behavioral change of a person which could be observed and measured in the forms of knowledge, attitude, and skills. Those changes could be interpreted as the improvement and development of a person to be a better person and from the "not knowing" phase to the "knowing" phase.

The school expects the students to be able to achieve all assessment standards of every subject in accordance to the Minimum Mastery Criteria (MMC). Ironically, the initial observation results in Integrated Islamic primary school in Mayong, Jepara in 2017 shows that the students' learning outcome did not meet the MMC, thus it can be concluded that it was still low. Education problems are very complex. According to the data reported by UNESCO in Education for All Global Monitoring Report (EFA-GMR), the Education for All Development Index (EDI) of Indonesia in 2014 was ranked on 57 out of 115.

The low quality of the education could be seen in various scopes, such as the low quality teachers, lack of learning facilities and infrastructures, the irrelevancy of curriculum in cities and rural areas, parents' apathy in their children's education and unmotivated students. By reviewing the problems above, according to Djamarah (2010) there are three factors which could affect the students' learning process, namely family, school, and society.

Based on the previous studies about the influence of family, school, and society environments to the learning outcome, there is still a research gap found between researchers. Family, school, and society environment do affect the learning process, but there are inconsistent results from the previous studies or known as research gap. The research gap gives the researcher opportunity to propose a hypothesis by adding individual factor, which is Self-Regulation as the moderating variable. According to Suprijono, quoted by Thobroni (2011), students should have learning independence in order not to depend on others in performing tasks and to be responsible for what they have done.

This research aims to find out the influence of family, school, and society environments toward the learning outcome and to find out the role of self regulation in moderating the influences of those environments toward the learning outcome.

METHODS

The research methods used was correlational with ex post facto design. The population in this study was all of the students of Integrated Islamic Elementary School in Mayong, Jepara, there were 162 students which were derived from five schools. All students were taken as the research population; therefore this research did not apply sampling technique. The fourth grade students were chosen because they were in the earliest stage to implement self regulation as a moderating variable.

The data were collected through documentation and questionnaires. Documentation mode was used to find out the learning outcome variable (Y), whereas questionnaires were used to investigate respondents' answers from the family environment (X_1), school environment (X_2), society environment (X_3) and self-regulation variable (Z) by using 4-point Likert scales namely always, often, sometimes, and never.

The data was analyzed with descriptive and inferential analysis methods. Descriptive

analysis was used to elucidate the condition of the family, school, society environments and self regulation. Whereas the inferential analysis used were classic assumption test (normality, multicollinearity, heteroscedasticity and autocorrelation tests), moderation and multiple regression analysis, hypothesis test and coefficient of determination.

RESULTS AND DISCUSSION

Descriptive analysis of the research was measured by finding the percentage or the average value, so that we find out the learning outcome variable criteria (Y), family environment (X₁), school environment (X₂), family environment (X₃), as follows:

Table 1. Descriptive Analysis of The Learning Outcome of Grade IV of Integrated Islamic Primary School in Mayong, Jepara

Interval	Criteria	Frequency	%
84-88	Excellent	16	10
79-83	Very Good	29	18
74-78	Good	65	40
69-73	Fair	51	31,4
< 68	Poor	1	0,6
Sum		162	100

Table 1 show that the learning outcome of students grade IV of Integrated Islamic Primary School in Mayong, Jepara was good. The analysis of the correlation of family environment and learning outcomes is presented in Figure 1 below.

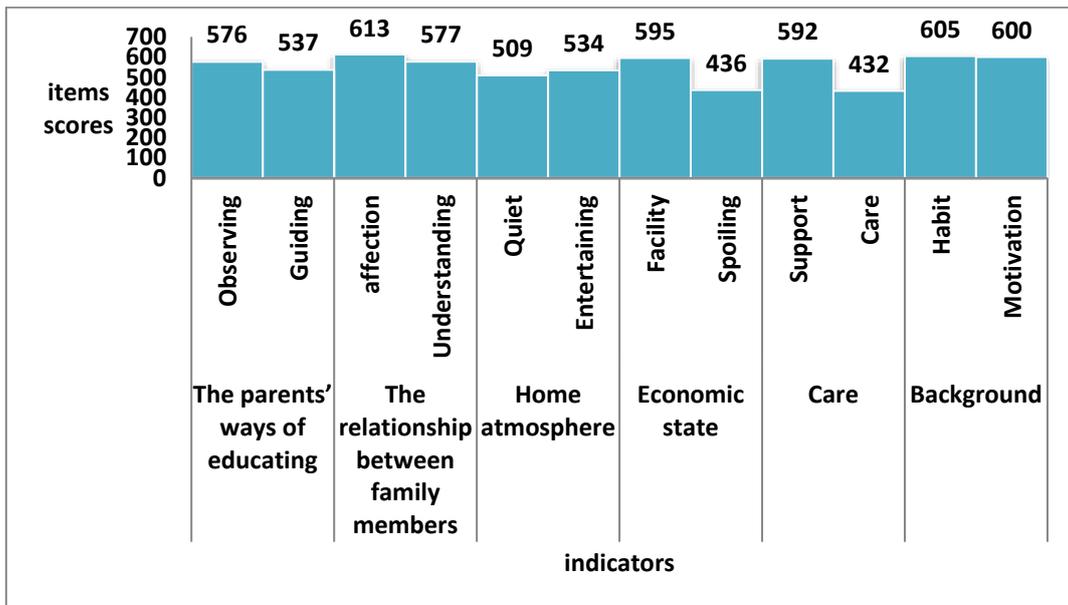


Figure 1. The Correlation of The Family Environment and Learning Outcomes

Based on the Figure 1, family environment influences the children to improve the results of learning. The aspect of family relationship provides most support with the indicator of "affection" as much as 613 scores. It means the better the family affection, the better the learning

outcomes. The analysis of the school environment is presented in the following Figure 2.

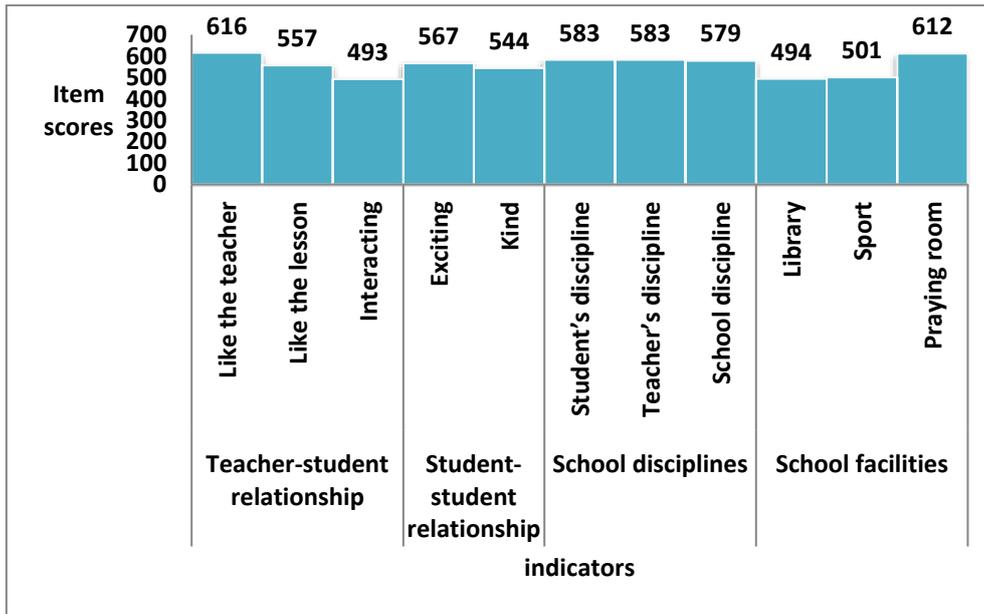


Figure 2. The Correlation of The School Environment and Learning Outcomes

Based on the Figure 2, school environment influences the students to improve the results of learning. The aspect of teacher-student relationship provides the most support with the indicator of "like the teacher" as much as 616

scores. It means the more the students like the teacher, the better their learning outcomes. The analysis of the society environment is presented in the Figure 3.

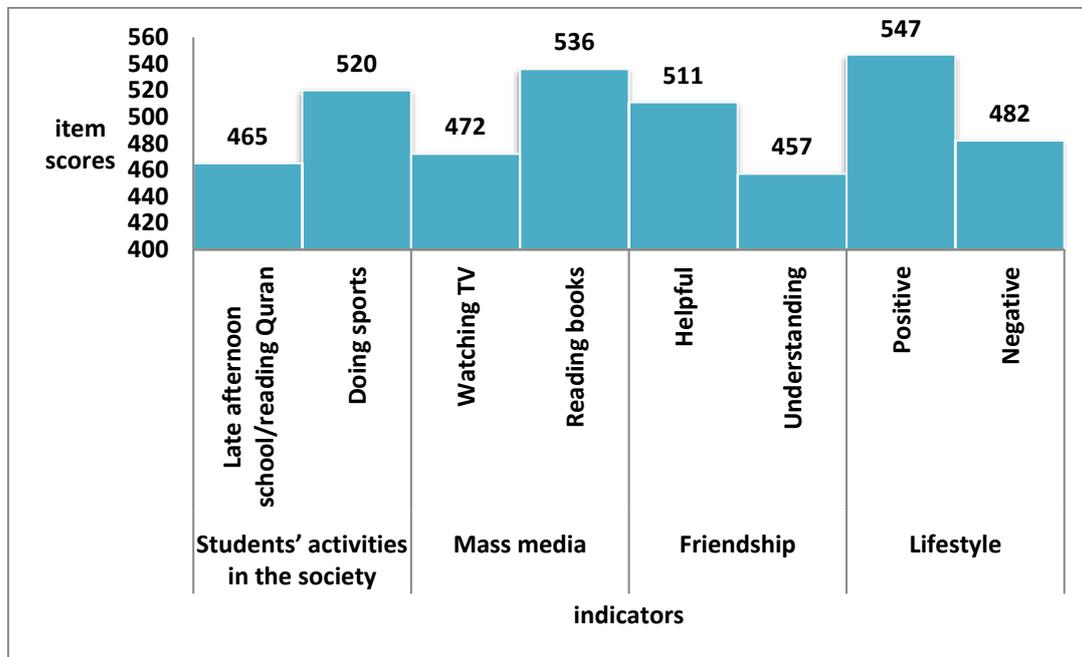


Figure 3. Acorrelations of The Society Environment and Learning Outcomes

Based on the Figure 3, society environment influences the students to improve the results of learning. Aspects of students'

lifestyle provide the most support to the total scores with the indicator of "positive" lifestyle" and 547 scores. It means the more positive a

student's life style, the better his or her learning outcomes.

Before conducting the hypothesis test, classic assumption test which included linearity, normality, multicollinearity and heteroscedasticity tests were conducted. Based on the linearity test results, the significance value of linearity for family, school, society environment and self regulation variables obtained was less than 0.05, therefore, it can be concluded that among the family environment (X_1), school environment (X_2), society environment (X_3) there was a linear connection towards the learning results. Normality test was conducted by using Kolmogorov Smirnov test and the value obtained was above 0.05. Therefore, it can be concluded that the residual data distributed normally. Multicollinearity test was conducted by investigating the VIF (variance inflation factor) is a tool to measure the closeness of correlation between independent variable or X and tolerance values. In this research, all independent variables had tolerance value of more than 10 (10%) and VIF value of less than 10. Thus, it can be concluded that there was no multicollinearity among the independent variables in regression model. Whereas, the results of heteroscedasticity test with plot graph, between the prediction value of the non-free variables (ZPRED) and its residual (SRESID), points spread above and below 0 on the Y axis, in this case, it did not form certain pattern and there was no heteroscedasticity. It can be concluded that there was no heteroscedasticity in the regression model.

Regression analysis was done to test the hypothesis by conducting t-test, moderation test with absolute difference value t-test in this research was used to find out the direct effects of family, school, and community environment variables towards the learning results. Moderation test was used to find out the indirect effects of family, school and community environment through self regulation towards the learning results.

The Influence of Family Environment to The Learning Outcome

Based on the results of the study, family environment is known as having a positive and significant influence on learning outcomes. This shows that the increasing influence of family environment affects the increase of learning outcome of the students of grade IV of Integrated Islamic Primary School of Mayong sub-district in Jepara district. The result of this study is supported by behavioristic theory explaining that learning is a behavior change that can be observed, measured, and assessed concretely. Changes will occur through stimuli that generate reactive behavioral relationships based on mechanistic laws.

The result of this study is supported by previous research that explains that family environment influences the learning outcome. Research conducted by Khafid & Soroso (2007) states that partially, family environment influences the learning outcomes. Research by Kumar & Lal (2014) indicates that children with a good family environment are found to have high academic achievement compared with ones with a low family environment. Suryanti and Haryanto (2014) state that parent's attention is also affect children's learning achievement. Nurhayati (2015) argues that there is a positive and significant influence on the level of attention of parents towards children's learning achievement.

The Influence of School Environment to The Learning Outcome

Based on the results of the study, it is found that the school environment has a positive and significant effect on the learning outcomes. This shows that the increasing influence of school environment affects the increase of learning outcome of the fourth grade students of Integrated Islamic Primary School of Mayong sub-district in Jepara district. The result of this study is supported with behavioristic theory that explains that the main things in the learning process are the input in the form of stimulus and the output in the form of responses. Stimulus anything that the teacher gives to the learner,

while the response is the reaction or the learner's response to the stimulus provided by the teacher. The process that occurs between the stimulus and the response is not important to notice because it can not be observed and can not be measured. The process that can be observed is the stimulus and response (Thobroni, M., 2016).

The result of this study is confirmed by the opinion expressed by Slameto (2013) who states that school life could affect student's learning outcome or achievement. The result of this study is supported by previous research which explains that the school environment has an effect on the learning outcomes. Research conducted by Adeyemo (2012) shows that school physical environment has a significant influence on students' academic achievement in physics in junior high school. Odeh, et al. (2015) conducted a research indicating that schools should provide a conducive environment that has a good atmosphere for teaching and learning. The environment should be safe; the students should be fairly treated by teachers; happy to be in school; and feeling as a part of the school. The research finding is accordance with the research result of Arumsasi, et al. (2015) that there is a positive influence of environmental adaptability to the learning achievement.

The Influence of Society Environment to The Learning Outcome

Based on the results of the hypothesis test, society environment is found that having not a positive and significant influence on learning outcomes. It happens because the existing aspect in the variable of society environment has not been able to answer the existence of students as members of the society. For example, there is no sufficient sport facility and library in the society. In addition, some of friends had negative influences to the children. Therefore; the society environment has no impact on student's learning outcome. Nevertheless, some efforts to optimize the society environment needs to be done in order to make it could affect the learning outcomes.

The Role of Self Regulation in Moderating The Influence of Family Environment to The Learning Outcome

Based on the result of hypothesis test, it is known that family environment along with self regulation will improve student learning outcome. The result of this study is supported by the theory of Bandura's social cognitive that states that humans can think and regulate their own behavior, therefore that they are merely the pieces that become the object of environmental influences.

The results of this study are supported by previous research conducted by Asizah & Hendrati (2013). Their research shows a positive relationship between the intensity of children-parent communication and the self-regulation of teenagers in an Islamic dormitory. It means the higher the intensity of children-parent communication, the higher the self-regulation, and vice versa. Sugiyana's research (2015) shows a significant result of self-regulated learning and parent's attention toward the learning achievement. Azizah's research (2016) indicates that there is a positive and significant influence of family care patterns on student achievement which is determined by self-regulation as a moderating variable.

The Role of Self Regulation in Moderating The Influence of School Environment to The Learning Outcome

Based on the result of hypothesis test, it is known that school environment along with self regulation will improve student learning outcome. The result of this study is supported by the theory of Bandura's social learning that states that humans can think and regulate their own behavior; therefore that they are merely the pieces that become the object of environmental influences (Alwisol, 2012).

The result of this study is supported by previous research conducted by Florez (2011) that indicates when teachers deliberately teach self-regulation as part of everyday experience, teachers is helping the children who become actively involved in the learning and lead to success in school and life. Ellianawati &

Wahyuni's research results (2012) show that teaching materials based on SRL could help the students to be able to learn independently. The learning conducted has received positive responses and is proven to improve self-perception that is expected to trigger student's intrinsic motivation to implement sincerity, discipline, and confidence in their daily lives. Puspasari, et al. (2015) argues that there is a positive and significant influence of the role of self-regulated learning in moderating the influence of peer environment on the learning achievement. Self regulated learning as the moderating variable could strengthen the influence of peer environment on the learning achievement. This shows that the better or the higher the interaction of peer environment with the support of student's self-regulated learning, the better the learning achievement will be. Suid, et al. research results (2017) show that in developing the attitude of student independence, the teacher should be able to improve all aspects of independence attitudes, especially on responsibility and decision-making. The development of student's self-reliance can be done by developing a democratic teaching-learning process; encouraging children to actively participate in decision making in school activities; giving children the freedom to explore the environment; driving students to curiosity; implementing no discrimination; establishing a good and friendly relationship with students.

The Role of Self Regulation in Moderating The Influence of Society Environment to The Learning Outcome

Based on the results of the hypothesis test, self regulation has no influence in moderating the influence of society environment to the learning outcomes.

It happens because the existing aspect in the variable of society environment has not been able to answer the existence of students as members of the society. Based on the results above, self-regulation can be categorized as a quasi moderating variable. On one hand, it means that self-regulation moderates the influence of the family environment and the

school environment. On the other hand, it does not moderate the influence of the society environment toward the learning outcomes. Self regulation is also an independent variable. It acts as predictor variable that influences student's learning outcome.

CONCLUSION

Based on data presented and discussions explained, it can be concluded that there is a positive and significant impact of the implementation of family environment on the learning outcome of primary school students. There is a positive and significant impact on the implementation of school environment on the learning outcomes of primary school students. There is no positive and significant impact on the implementation of society environment on the learning outcomes of primary school students. There is a positive and significant impact on the implementation of family environment and self-regulation as a moderating variable on the learning outcomes of primary school students. There is a positive and significant impact on the implementation of school environment and self-regulation as a moderating variable on the learning outcomes of primary school students. There is no positive and significant impact on the implementation of society environment and self-regulation as a moderating variable on the learning outcomes of primary school students.

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