Effects of Learning Discipline, Learning Environment, and Teacher Teaching Variations on Student Learning Achievement

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This article aims to examine several aspects, namely: 1) learning discipline on learning achievement; 2) the learning environment on learning achievement; 3) variations in teacher teaching on learning achievement; and 4) learning discipline, learning environment, and variations in teacher teaching on learning achievement. The location of this study was at six Madrasah Aliyah, both public and private, in the city of Kendari, with a total number of 1208 students. This research is a quantitative study with correlational techniques. Four questionnaires were used, namely: learning discipline, learning environment, teacher teaching variations, and learning achievement. The results showed that there was a significant influence on variables: 1) learning discipline on learning achievement; 2) learning environment towards learning achievement; 3) teacher teaching variations on learning achievement; and 4) discipline of learning, learning environment, and variations in the teaching of teachers to learning achievement.

Keywords: Discipline, Environment, variety of teaching, learning achievement

Introduction

Learning is a process of changing behaviour in a person thanks to experience and training, where distribution and training occur through interaction between individuals and their environment, both the natural environment and social environment (Hamalik, 1991). Gagne in Dimyati defines learning as a set of cognitive processes that change the nature of environmental stimuli, passing through the processing of information into new capabilities

(Dimyati, 2006). Therefore, learning is a series of soul-body, psycho-physical activities leading to the development of the whole human person, which involves the elements of creativity, taste and intention, cognitive, affective and psychomotor (AM, 2011). In line with that, learning is a mental/psychological activity that takes place in active interaction with the environment that results in changes in knowledge, understanding, skills and attitude values (Darsono, 2012).

The term achievement is defined differently by experts, including Purwadarminta, who states that achievement is the result that has been achieved (done) (Purwadarminta, 2005). While Winkel said that achievement is proof of effort that can be achieved (Winkel, 1983), the Tu'u defines achievement as the results achieved by someone when doing certain tasks or activities (Tu'u, 2004). Furthermore, Zainal Arifin defines achievement as the ability, skill, and attitude of a person to get things done (Arifin, 2011).

Based on the explanation of the two conceptions above, several constructs about learning achievement are built, including learning achievement is the result obtained in the form of impressions that result in changes in the individual as a result of learning activities (Purwanto, 1990). In addition, learning achievement is the result achieved by students from learning a certain level of mastery of science with a measuring instrument in the form of an evaluation expressed in the form of numbers, letters, words or symbols (Djamarah, 1994). Learning achievement is also interpreted as the results that have been achieved or obtained by a student in the form of grades on subjects, which result in changes in students as a result of activities in the learning process (Kencana, 2005). So that globally learning achievement is the mastery of knowledge or skills developed by subjects, usually indicated by test scores or grades given by the teacher (Tu'u, 2004). It can be concluded that learning achievement is the result that has been achieved by individuals as a business that is experienced directly and is an activity that aims to acquire knowledge, skills, intelligence, skills and so on, in certain conditions and situations.

Learning discipline in students will make a positive contribution to the achievement of learning achievement. A student who has a high learning discipline will be able to study well, which is shown by his attitude in learning seriously, aware of his duties and responsibilities as a student, directed and organised, so it is possible to achieve the best learning achievement. Walgito stressed that the discipline of learning must be instilled and owned by each individual because even if they have a good learning plan, there will still be a plan if there is no discipline (Walgito, 2004).

The student learning environment that influences learning achievement consists of family environment, school environment and community environment. The family environment consists of: how parents educate, relationships between family members, the atmosphere of

the home, the family's economic situation, understanding of parents, cultural background. The school environment consists of teaching methods, curriculum, teacher-student relations, student-student relations, school discipline, learning tools, school time, the standard of learning, building conditions, learning methods and homework assignments. The community environment consists of student activities in the community, mass media, associate friends, and forms of community life (Slameto, 2010). In line with the previous view, Aqib stated that the environment that affected students' learning achievement consisted of the family environment, school environment and community environment. The family environment consists of parents, home atmosphere and family economic situation. School environment consists of ways of presenting lessons that are not interesting, teacher-student relations, student-student relations, subject matter that is too high, learning tools at school, unfavourable study hours. The community environment consists of mass media, associate friends, activities in the community, and the style of the neighbour's life (Aqib, 2002). The learning environment as an external factor that affects student achievement according to the Syah can be classified into two, namely: social environment and non-social environment (Syah, 2003).

Furthermore, in the learning process, a teacher is required to do variations in teaching; this is intended to attract and motivate students in learning. Teachers who are able to hold variations in teaching will create a pleasant learning atmosphere and prevent student boredom in learning. Thus, if the teacher is able to hold variations in teaching, then this will increase the enthusiasm and enthusiasm of student learning, which will certainly significantly influence student learning achievement.

Method

This research was conducted at public and private Madrasah Aliyah in Kendari City, Southeast Sulawesi. This research is a quantitative study with correlational techniques, is ex-post facto because it examines events that have occurred, to find out the factors that are likely to influence the event (Sukardi, 2010).

In this study the population was all students at Madrasah Aliyah in Kendari City, with a total of 1208 students as follows:

Table 1: Population of Aliyah Madrasah Students in Kendari City

Nu.	Madrasa	Amount
1	MAN 1 Kendari	618 Students
2	MAS Pesri Kendari	165 Students
3	MAS DDI Labibia	94 Students
4	MAS Indotec	89 Students

5	MAS Darul Mukhlisin	160 Students
6	MAS Asy-Syafiiyah	82 Students
	Total	1208 Students

While the sampling technique uses the formula from Taro Yamane, as stated by Bungin (Bungin, 2006), as follows:

$$n = \frac{N}{N.d^2 + 1}$$

Explanation :

n = Number of Samples
N = Total Population = 1208 respondents
d^2 = Precision (set at 10% with a confidence level of 95%)

Based on the formula above, the following sample size is obtained:

$$n = \frac{N}{N.d^2 + 1} = \frac{1208}{(1208).0,1^2 + 1} = \frac{1208}{13,08} = 92,35 \ (93)$$

With the formula above, the number of samples obtained are students of Madrasah Aliyah in Kendari as follows:

1) MAN 1 Kendari   618 / 1208 x 93 = 47,57 (48 respondents)
2) MA Pesri Kendari   165 / 1208 x 93 = 12,70 (13 respondents)
3) MA DDI Labibia   94 / 1208 x 93 =   7,23 (7 respondents)
4) MA Indotec   89 / 1208 x 93 =   6,85 (7 respondents)
5) MA Darul Mukhlisin   160 / 1208 x 93 = 12,31 (12 respondents)
6) MA Asy-Syafiiyah   82 / 1208 x 93 =   6,31 (6 respondents)

Based on these calculations, it can be described as in the following table:

Table 2: Number of Samples of Kendari City Madrasah Students

Nu.	Madrasa	Population	Sample
1	MAN 1 Kendari	618	48
2	MAS. Pesri Kendari	165	13
3	MAS. DDI Labibia	94	7
4	MAS. Indotec	89	7
5	MAS. Darul Mukhlisin	160	12
6	MAS. Asy-Syafiiyah	82	6

	Total	1208	93

Research Result
A. First Hypothesis Testing

The first hypothesis tested in this study was that there was a significant influence on the discipline of learning on the learning achievements of Madrasah Aliyah students in Kendari City. Statistically, the hypothesis can be formulated as follows:

$H_0: \rho = 0$ versus $H_1 : \rho \neq 0$

Test criteria: accept the hypothesis H0 if the p-value (significance of the calculated result = sig.) is greater than the value α (the chosen significance level = 0.05), instead of reject the hypothesis H_0 if value p greater than α. Based on the results of calculations using the SPSS 20 for windows program, a summary of the analysis of variance is obtained to test the model of the influence of learning discipline on student achievement in Madrasah Aliyah in Kendari City presented in the following table:

Table 3: Summary Analysis of Variance for Testing the Linear Regression Model The effect of learning discipline on student achievement

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	374.015	1	374.015	51.847	.000[a]
	Residual	656.458	91	7.214		
	Total	1030.473	92			

Based on the description in table 3 above, it shows that the calculated F value is 51,847 and sig. (p) 0,0001. The p-value is smaller than the significance value, $p = 0.05$. Thus, hypothesis H0 is rejected, and hypothesis H1 is accepted. So, the linear regression model offered to predict the effect of learning discipline (X1) on student learning achievement (Y) is significant. Acceptance of the H_1 hypothesis can also be interpreted as follows "there is a significant influence of learning discipline on student achievement in Madrasah Aliyah in the city of Kendari".

B. Second Hypothesis Testing

The second hypothesis tested in this study is that there is a significant influence of the learning environment on the learning achievements of Madrasah Aliyah students in the city of Kendari. Statistically, the hypothesis can be formulated as follows:

$H_0: \rho = 0$ versus $H_1 : \rho \neq 0$

Test criteria: accept the hypothesis H_1 if the p-value (significance of the calculated result = sig.) is greater than the value of α (the chosen significance level = 0.05), otherwise reject the hypothesis of H_1 if the value of p is greater than α. The results of the analysis of variance analysis for the second hypothesis test are presented in the following table:

Table 4: Summary Analysis of Variance for Testing the Linear Regression Model The effect of the learning environment on student achievement

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	365.978	1	365.978	50.119	.000[a]
	Residual	664.495	91	7.302		
	Total	1030.473	92			

a. Predictors: (Constant), learning environment
b. Dependent variable: learning achievement

Based on the table above shows that the calculated F value of 50,119 and sig. (*p*) 0,0001. The p-value is smaller than the significance value $\alpha = 0.05$. Thus, hypothesis H_1 is rejected, and hypothesis H_1 is accepted. Thus, the linear regression model offered to predict the effect of the learning environment (X_2) on learning achievement (Y) is significant. Acceptance of the H_1 hypothesis can also be interpreted as a significant influence of the learning environment on the learning achievement of Madrasah Aliyah students in Kendari City.

C. Third Hypothesis Testing

The third hypothesis tested in this study is that there is a significant effect of teacher teaching variations on the learning achievement of Madrasah Aliyah in Kendari City. Statistically, the hypothesis is formulated as follows:

$H_0: \rho = 0$ versus $H_1 : \rho \neq 0$

Test criteria: accept the hypothesis H_0 if the p-value (significance of the calculated result = sig.) is greater than the value of α (the chosen significance level = 0.05), otherwise reject the hypothesis of H_0 if the value of p is greater than α. The results of the analysis of variance analysis for the third hypothesis test are presented in the following table:

Table 5: Summary Analysis of Variance for Testing Linear Regression Models The effect of teacher teaching variations on learning achievement

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	682.901	1	682.901	178.794	.000[a]
	Residual	347.572	91	3.819		
	Total	1030.473	92			

a. Predictors: (Constant), teacher teaching variations
b. Dependent variable: learning achievement

Based on the description in the summary analysis table of variance for the linear regression model test, the effect of teacher teaching variations on student achievement mentioned above shows that the calculated F value of 178,794 and sig. (p) 0,0001. The *p*-value is smaller than the significance value $\alpha = 0.05$. Thus, hypothesis H_0 is rejected, and hypothesis H_1 is accepted. So, the linear regression model offered to predict the effect of teacher teaching variation (X_3) on the learning achievement of Aliyah madrasa students in the city of Kendari (Y) is significant. Acceptance of the H_1 hypothesis can also be interpreted that there is a significant effect of teacher teaching variations on student achievement in Madrasah Aliyah in Kendari City.

D. Fourth Hypothesis Testing

The fourth hypothesis tested in this study is that there is a significant influence together with the discipline of learning, learning environment, teacher teaching variations on the learning achievement of Madrasah Aliyah in Kendari City. Statistically, the hypothesis is formulated as follows:

$H_0: \rho = 0$ versus $H_1 : \rho \neq 0$

Test criteria: accept the hypothesis H_0 if the *p*-value (significance of the calculated result = sig.) is greater than the value of α (the chosen significance level = 0.05), otherwise reject the hypothesis of H_0 if the value of *p* is greater than α. The calculation results obtained by the analysis of variance summary to test the models offered (overall test model) as in the following table:

Table 6: Summary of Variance Analysis for Double Linear Regression Modeling Tests

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	725.055	3	241.685	70.428	.000[a]
	Residual	305.418	89	3.432		
	Total	1030.473	92			

a. Predictors: (Constant), learning environment, learning discipline, teacher teaching variations
b. Dependent variable: learning achievement

As seen in Table 6 above, the calculated F value is 70,428 and sig. (p) 0,0001. The *p*-value is smaller than the significance value $\alpha = 0.05$. Thus, hypothesis H_0 is rejected, and hypothesis H_1 is accepted. So, the multiple linear regression model offered to predict the effect of the independent variable on the dependent variable is significant. Acceptance of the H_1 hypothesis can also be interpreted as there is a significant influence of learning discipline, learning environment, teacher teaching variations together on the learning achievements of Madrasah Aliyah in Kendari City.

Discussion
A. Effect of Learning Discipline on Learning Achievement

Discipline is a "mirror" of one's personality. The ability or strength that is in a student is needed as a way to understand the main characteristics of the discipline. Discipline is a process of directing or controlling desires, impulses or interests for the sake of an idea to achieve more effective and reliable actions, can also be understood how to act chosen persistently, and actively directed themselves even in the face of obstacles or disturbances.
The term discipline in Indonesian contains the meaning of order, namely obedience or obedience to the rules or regulations that apply to create an orderly situation (Depdiknas, 2002). This is in line with Moeliono's opinion that discipline is obedience or obedience to the rules of procedure, or norms, etc. (Moeliono, 2008). Thus, discipline can be interpreted as an order that shows the obedience of someone in following the rules or rules of order because someone or caused by something that comes from outside, for example, because they want to get praise and others. Usually, order occurs first and then develops into discipline, so that disciplined people will become individuals who are regular, obedient or obedient to the rules of order that have been determined.

Based on the description above, it can be understood that discipline is the obedience of students to the rules set during the process of teaching and learning activities at school, the indicators measured are 1) The accuracy of entering and leaving school, 2) Obedience in

using clothes and attributes, 3) Accuracy in doing the tasks, 4) Compliance with the teacher's orders, 5) Regularity in learning.

B. Effect of Learning Environment on Learning Achievement

The learning environment, in general, can be interpreted as all kinds of conditions and places that can support the occurrence of learning. Therefore, the learning environment here has two meanings. The first refers to the meaning of the physical environment that is often used as a place for the teaching and learning process. The second refers to the meaning of the non-physical environment or everything that is a learning atmosphere, both created by the teacher through structuring the tasks that must be done by students and through the selection of strategies and teaching styles.

Imam Gunawan said that the learning environment could be interpreted in the form of "objects, people, circumstances, and events around students that can influence their development, either indirectly or directly, either intentionally or indirectly intentional" (Gunawan, 2011).

This is in line with Clayton's opinion that the functions carried out by the family include the functions of education, socialisation, protection, feelings among family members, religion, economy, recreation, biology, and compassion. The family in carrying out the educational function, the dominant role of the father and mother in fostering the success of education for their children. A good and conducive family environment will stimulate children to study harder and achieve higher learning outcomes (Rchard, 1999).

Likewise, Ahmad Rohani stated that a person's development in his life could never be separated from the existence of innate factors and environmental factors. According to him that environmental factors are more influential in terms of forming habits, personalities, attitudes and values (Rohani, 2004). This shows that the environment is one component in a learning process that can conditionally affect individual behaviour and is also one of the factors that play an essential role in student achievement.

The family environment (home) must be created conducive conditions for students, namely a democratic atmosphere that is open, loving each other, and trusting each other and creating an atmosphere of religious life. Two-way communication between parents and students is very important to be built for student development. With this foundation, students will develop into harmonious personalities, i.e. students are more sensitive to the needs and demands of the environment, and more aware of their life goals so that they become more motivated and more confident in achieving the desired goals (Suratno, 2014).

C. The Effect of Teacher Teaching Variations on Learning Achievement

The variety of teaching is the most critical factor in organising teaching in the classroom. Therefore, in carrying out teaching the teacher must think the system means that in the implementation of teaching the teacher must have a uniqueness so that students do not feel bored in obtaining lessons.

The variation of teaching is certainly essential as an effort to achieve maximum achievement in learning. However, in achieving maximum achievement, maximum effort is also needed, such as how to teach teachers, which must be varied to avoid students' boredom in learning. The variety of teaching is the most critical factor in organising teaching in schools. Therefore, in carrying out teaching the teacher must think the system means that in the implementation of teaching the teacher should have the uniqueness so that students do not feel bored in learning.

It is undeniable that in the teaching and learning process sometimes students, even teachers experience burnout. This indeed becomes a problem for the achievement of learning objectives, by it to overcome the boredom, it is necessary to create a variety of situations and conditions of teaching and learning. The use of learning variations must be arranged according to a clear plan that is based on the reference of learning objectives.

The results showed that for these learning activities to be accepted by students, teachers need to try to arouse their enthusiasm for learning. The more appropriate the style or method of teaching the teacher, the opportunity to obtain student learning outcomes in accordance with expectations will be even greater. And even good learning achievements will be easily achieved by students. Therefore variations in teacher teaching are one of the factors that can influence student learning achievement (Masruri, 2004).

For students, the teacher's teaching style is seen as positive, energetic, energetic, fun, and all have a close relationship to the achievement of maximum learning achievement. Variations in teaching styles performed by teachers will create a dynamic, lively learning atmosphere, and improve good communication between teachers and students. Besides those variations in teaching styles can also be a positive stimulus to the ongoing learning process. So it can be concluded that the teacher's teaching style can improve student learning achievement (Suparman, 2010).

Teachers who often teach with variety, in the context of understanding the material, will produce students who are better when compared to teachers who merely explain and do not vary in teaching. This is because learning activities are not only dominated by the teacher, students just sit, be quiet, listen, and just accept whatever is given by the teacher, do not ask

questions and do not raise problems. This style of teaching is less effective because students do not participate actively in the learning process (Daryanto, 2010).

Variations in teaching need to pay attention to the progress of technology products so that teachers can create new approaches that use digital media. For example, storytelling is no longer directly involving teachers but has utilised digital facilities (Hung, Hwang, & Hwang, 2012). However, teachers must pay attention to the negative potentials of using technology products in learning activities, such as the use of smartphones (Chu, 2014), (Hwang, Wu, Zhuang, & Huang, 2013).

Conclusions and Recommendations

This study found that there was a high influence of learning discipline on learning achievement. Means that learning achievement can be improved or improved by building a strong learning discipline. On the other hand, the learning environment also shows a high influence on learning achievement. Thus, the creation of a conducive learning environment is a must to improve learning achievement. Likewise, the role of the teacher in the classroom, especially creating variations in teaching, also gives a strong influence on learning achievement. Therefore the variation of teaching must be one of the actions taken by the teacher in learning. This review confirms that the discipline of learning, the learning environment, and teacher teaching variations contribute to a high influence on learning achievement.

This study proposes several recommendations in the context of increasing student achievement, namely: first, the importance of each school formulating strategies for developing student learning discipline. Second, every school must have a high commitment to creating a conducive learning environment. Third, continuous improvement of teacher competency, making it possible to conduct learning practices that not only vary but more importantly are relevant to the current needs of students.

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