

The Effect of PJBL Model and Achievement Motivation on Student Learning Results of Class VIII Islamic MTs 12 Pidie on Integrated Social Science Subjects

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ABSTRACT

This study aims to analyze the differences in the learning outcomes of integrated social studies (geography) students who have high achievement motivation and are taught with a PJBL model and students who have high achievement motivation and are taught with conventional models. This type of research is quasi-experimental research (quasi-experimental) with a treatment by Block (2x2) research design with observational data collection techniques, interviews, and learning achievement tests. The results of the research on the 1) first hypothesis show that the p-value Sig. (2-tailed) is $0.004 < 0.05$, so H_0 is rejected so that it can be concluded that there is a difference in the average results of learning geography between the control and experimental groups; 2) second hypothesis because exact Sig. (2-tailed) $0.001 < 0.05$ then H_0 is rejected so it can be concluded that there are differences in geography learning outcomes of students with high motivation between the control and experimental groups; and 3) third hypothesis of geography learning outcomes of the results show that Sig. (2-tailed) $0.001 < 0.05$ then H_0 is rejected so it can be concluded that there are differences in geography learning outcomes for students with low motivation between the control and experimental groups.

Keywords: PJBL, Achievement Motivation, Student Learning, Islamic MTs 12 Pidie, Social Science.



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INTRODUCTION

The 21st-century education framework requires students to have the ability to work together, communicate, have high creativity, and the ability to think at a high level, critically and analytically (Sumanti, 2018). The independent curriculum is not material intensive but essential, the emphasis is on character building and learning is tailored to the competencies of students. The learning model that is suitable for this independent curriculum is a student-centered learning model where students are motivated to learn and increase achievement motivation students are directly involved in the learning process students are involved in thinking reasonably and responsibly so that students can motivate themselves. Models used include problem-based learning models or PJBL models. Moreover, social studies learning at the Junior High School/Islamic Junior High School level is a combination of branches of social studies, namely geography, history, economics, and sociology known as integrated social studies.

Based on the observations made by the author at Islamic MTs 12 Pidie facts and field phenomena, it was found that educators in carrying out the learning process, especially in

integrated social studies (geography) subjects, remained in the old way, namely educators lecturing until the learning hour ended, students were told to sit quietly and listen as if only educators were a source of knowledge so that learning becomes meaningless, boring, learning is carried out only to achieve the target. Learning that does not involve students in the learning process makes students lazy and unmotivated to learn coupled with the conditions of integrated social studies (geography) learning hours) learning schedule in the last hours. When this condition was confirmed to students it also stated that learning with pulpit lectures did not generate enthusiasm for learning so learning motivation was low as a result of which the minimum completeness criteria set by the school were not met. In response to the problem above, it is necessary to have a solution to overcome it.

Based on the facts and phenomena described above, the solution to increase learning motivation and learning outcomes of students' Integrated social sciences (geography) is to change the learning model. From educator-oriented learning, the model is changed to a learner-oriented learning model (Liu et al., 2022). Jusoff et al (2010) add, that one of the student-oriented learning models is the Project Based Learning (PJBL) learning model. Furthermore, Chan Lin (2008); Faturrahman (2016) explain, that PJBL is an activity that uses projects or learning tools to achieve a competency of knowledge and skills where the project in question is a series of activities consisting of various activities that require mutual coordination and specialization of support staff to complete them. Providing projects or problems to be completed by students can activate and increase student motivation to achieve achievement and learning outcomes in geography has increased.

METHODS

This type of research is a quasi-experimental research with a Treatment by Blok (2 x 2) research design (Katz, 2013) which can be seen in Table 1 below.

Tabel 1. Research design matrix

		B	
		B ₁	B ₂
A	A ₁	A ₁ B ₁	A ₁ B ₂
	A ₂	A ₂ B ₁	A ₂ B ₂

Description :

A: Learning Model

A₁: Model PJBL (Eksperimen)

A₂: Varied Lecture Methods (control)

B: Achievement motivation

B₁: High achievement motivation

B₂: Low achievement motivation

A₁ B₁: Group taught with PJBL model learning with high achievement motivation

A₁ B₂: Group taught with PJBL with low motivation.

A₂ B₁: The group taught with the lecture model is decorated with high-achievement motivation.

A₂ B₂: Group taught with lecture method with low achievement motivation and low achievement.

Data collection techniques with observation interviews and documentation The instrument used for learning outcomes is in the form of test questions in the form of essays and for questionnaire data achievement motivation using a measurement scale questionnaire using a Likert scale Before the instrument is tested first, a pre-requisite test of validity and reliability is carried out after that the requirements test is carried out, namely the homogeneity and normality test Data analysis with descriptive and inferential analysis, namely Two-way ANOVA (Fujikoshi, 1993).

RESULT AND DISCUSSIONS

3.1 Results

Analysis description

Descriptive questionnaire achievement motivation based on the respondent achievement level (TCR) of the experimental class with an average value of 5.25 with a respondent achievement level of 84.4 is in good criteria while for the control class, the average value of 4.34 with a respondent achievement level of 86.8 is also in good criteria. As for the learning test results, the average obtained for the control class amounted to 70, and for the control class, the average was 70 so it can be concluded that the learning outcomes of the experimental class were higher than the learning outcomes of the control class.

Inferential analysis

After going through a series of pre-requisite tests and requirement tests using SPSS Version 27, all instruments in the form of achievement motivation questionnaires and test questions used were declared valid and reliable because $r\text{-count} \geq r\text{-table}$ 0.05, so the research instrument was suitable for use. Then the hypothesis test is carried out.

Hypothesis 1

H_0 : $m_1 = m_2$ (there is no difference in the average geography learning outcomes between the control and experimental groups)

H_1 : $m_1 \neq m_2$ (there is a difference in the average geography learning outcomes between the control and experimental groups)

$\alpha = 0,05$

Critical area: H_0 is rejected if the $p\text{-value Sig. (2-tailed)} < 0,05$

Test Statistic: $p\text{-value (Sig. (2-tailed))} = 0,004$

Table 1. Levenes test for Equality of Variance

Levenes test for Equality of Variance	T Test For Equality of Meanss								
	F	Sig	T	Df	Sig to tailed	Means Deference	STD error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Results Equa Learning Variances Assumed Not Assumed	134	717	-3,064	38	0,04	-3100	1,01	-514	-1052
			-3,04	37,245	0,04	3100	1,0122	-51508	1050

Hypothesis 2

Based on the results of data processing using SPSS Version 27, the following results are obtained.

Table 2. Hypothesis 2 Test (Frequencies)

High-Value Motivation		N
	Negative Difference	0
	Positiv Differences	16
	Ties	0
	Total	16

- a. High Motivation < Value
- b. High Motivation > Value
- c. High Motivation = Value

Table 3. Test Statistic

Test Statistics ^a Motivasi Nilai Exact Sig 2 (Tailed) 0,01 a. Sign Test b. Binomial Distribution used
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H₀: there is no difference in student learning outcomes with high motivation between the control and experimental groups

H₁: there are differences in student learning outcomes with high motivation between the control and experimental groups

$\alpha = 0,05$

Critical area: H₀ is rejected if the *p-value* Sig. (2-tailed) < 0,05

Test Statistic: *Exact* (Sig. (2-tailed)) = 0,001

Hypothesis 3

Based on the results of learning achievement data processing and achievement motivation questionnaires, the following data were obtained.

Table 4. Hypothesis 2 Test (Frequencies)

High-Value Motivation		N
	Negative Difference	0
	Positiv Differences	13
	Ties	0
	Total	13

- a. High Motivation < Value
- b. High Motivation > Value
- c. High Motivation = Value

Table 5. Test Statistic

Test Statistics ^a Motivasi Nilai Exact Sig 2 (Tailed) 0,01 a. Sign Test b. Binomial Distribution used
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Based on the Anova test (Sig.) < 0.05 (Alpha) it means that all hypotheses are accepted.

3.2 DISCUSSIONS

Research on the effect of the PJBL learning model and achievement motivation on student learning outcomes in the Integrated social science (Geography) subject in Class VII Islamic MTs 12 Pidie stated that of the three hypotheses proposed and processed with SPSS Version 27, all were accepted with details as follows.

Hypothesis 1

The first hypothesis states that the PJBL learning model has higher learning outcomes than students who are taught using the learning model and that the PJBL learning model is more effective for improving student learning outcomes. The results of this study are in line with the results of research conducted by Perdana (2014) that the learning model of PJBL has a significant effect on student learning outcomes. This research was conducted at JHS 4 Tulung Agung in class VIII. The high learning outcomes of students who are taught with the PJBL model are because the learning-based learning model provides space for students to carry out sharper analysis through project problems given to groups to be solved jointly to find solutions to these problems besides the PJBL learning model, In this case, students can interact face to face with heterogeneous group members and exchange opinions, there is dependence between groups so that they work together to achieve goals and also they are individually required to complete or master the material.

Hypothesis 2

The results of the hypothesis test of the two studies show that students who have high achievement motivation when taught using the PJBL model are more enthusiastic about learning and understand geography learning material more easily. The results of this study are in line with the opinion (Salman et al., 2017) that the use of various learning models can improve student learning outcomes. The results of his research in 2017 regarding the use of the PJBL model showed that students who were taught with this PJBL model scored higher than students who were taught without using a PJBL model, the research was conducted at VHS 2 Gorontalo. The results differ from students who have high motivation but are taught using conventional learning models. This shows that the use of learning models greatly influences learning outcomes even though the achievement motivation is high, but if the learning is monotonous and only teacher-centered, it will result in students being inactive and becoming lazy, so it's clear here. that the role of learning models to improve learning outcomes is very large because conventional learning models will not be able to arouse students' critical reasoning power.

Hypothesis 3

Based on the results of hypothesis testing using SPSS Version 27 that the application of the PJBL (PJBL) learning model is very effective in improving student learning outcomes. Motivation plays an important role in this learning process because motivation is the main driving force for a student to carry out learning process activities and can improve student learning outcomes. This is in line with research (Fitriyani et al., 2016) that learning motivation will affect student learning outcomes where students who have high learning motivation will have a positive impact on their learning outcomes meaning here if student learning motivation is high then it is likely that the learning outcomes will be better when compared with students who have the lowest motivation. Based on the overall analysis

described above, it is very appropriate to say that the PJBL model is very effective in improving learning outcomes, especially in geography subjects when compared to the use of conventional learning models. This means that the PJBL model has advantages that this learning model can improve learning outcomes. Based on the ANOVA test, it was found that the significance of 0.04 (Sig.) <0.05 (Alpha) means that all hypotheses are accepted. This shows that the learning model is suitable for learning, especially geography subjects on the subject of human and environmental and socio-cultural interactions.

CONCLUSIONS

Based on the results of research conducted at Islamic MTs 12 Pidie, it can be concluded that the use of the PJBL learning model on the subject of human interaction and the natural environment and social culture, in class VIII Islamic MTs 12 Pidie is very effective in the learning process because the model This enables students to think logically and critically systematically by the demands of the 21st-century curriculum and educational framework where students are required to be able to think critically, creatively, communicatively and collaboratively. The PJBL learning model opens up space or provides opportunities for students to identify problems and solve problems and find solutions to existing problems and they discuss and communicate in groups.

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