International Journal of Education, Vocational and Social Science
https://e-journal.citakonsulindo.or.id/index.php/IJEVSS
E-ISSN : 2963 4954
IJEVSS

The Effectiveness Of Implementing The Project Based Learning Model In Enhancing The Comprehension Of Islamic Education For The Junior High School Students

Aisha Mirani Wardani[1]
[1]Universitas Islam Negeri Salatiga, Indonesia
Edi Cahyono[2]
[2]Universitas Islam Negeri Salatiga, Indonesia

Corresponding Author : myracute20@gmail.com edi.cahyono@uinsalatiga.ac.id

Abstract

The purpose of this study is to provide empirical evidence on the application of the Project-Based Learning (PjBL) model in differentiating the level of comprehension of Islamic Education (PAI) among students. This research employs a quantitative method. The results of the study shows that 1) This indicates that there is no significant difference in student learning outcomes between Junior High School 1 and Junior High School 2 categories. The use of the PjBL model did not result in a different level of understanding compared to those who are not using it. 2) There is a significant difference in learning outcomes between male and female students. 3) There is no significant difference in the average educational level of the parents. 4) There is no significant difference in the average occupation category of the parents.

Keywords: PAI students' level of understanding, Project Based Learning (PjBL), learning model

INTRODUCTION

Education is a process of developing intelligence, noble character, and a life in harmony with the norms and values prevailing in society. Educational institutions are not only responsible for imparting knowledge but also play a more important role in instilling Islamic values and shaping the character of students in accordance with these values. Our education system is still hindered by suboptimal teaching and learning processes. This is because students are not sufficiently encouraged to develop critical thinking skills during the teaching and learning process,

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

resulting in a superficial understanding of the Islamic Education material taught (Hajriyanti et al., 2021). Therefore, teachers have a crucial role in improving the quality of education by conducting effective teaching and learning activities and being directly involved in guiding students.

Learning model is an influential element which has a function to support and achieve educational goals. The implementation of learning model will enhance students' motivation to learn (Handayani et al., 2020). Project-Based Learning (PjBL) is an innovative technique in the art of teaching. The teacher plays a role as a facilitator which gives a facility and support for the students to actively ask theoretical questions and motivates them to be active learners in the lesson (Anggraini & Siti, 2021). Learning model based on projects (PjBL) is a method that focuses on students (Student-centered learning), they are free to express their thoughts and ideas which can be applied in their projects, it aims to make them become more creative in doing the assignments (Anggelia Dewi et al., 2022).

Based on the observation conducted at Junior High School 01 and 02, there are some fundamental issues in the learning progress. Some students lack motivation to follow the Islamic lesson (PAI) due to the fact that the learning method only relies on preaching videos, religious discussions and QnA (Question and Answer). It is concerning since this lesson requires a lot of memorization, it makes them feel less enthusiastic.

Furthermore, this study also investigates the effectiveness of implementing project-based learning to students' comprehension towards the Islamic education (PAI) from the demographic perspective of the students. Demographics is a discipline that studies human population, including the amount of people, the structure, and growth. In short, it examines many aspects of populations, including the change, births, deaths, and migrations (Jati & Nono, 2013).

The importance of comparing the two schools lies in observing the differences resulting from the application of the Project-Based Learning (PjBL) model. From the observations, it is evident that students at SMPN I, who have been exposed to the PjBL model, are able to think more critically and creatively, enabling them to create projects. This is in contrast to the school that has not implemented the PjBL method yet and still uses traditional discussion and lecture methods. The differences between schools that have adopted the PjBL model and those that have not are quite pronounced. In schools that have implemented PjBL, the learning process requires students to be more active in their learning activities. Moreover, students become more creative, with teachers acting as facilitators to enhance the learning activities. In contrast, schools that have not fully implemented the PjBL model result in students being less critical in their learning activities.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

This is evident when educators provide a video preview; students cannot draw conclusions from the video without the teacher re-explaining the material being discussed.

MATERIALS

Project Based Learning (PjBL)

According to Douglas, a project is an intensive experience that engages students in activities that interest them and are relevant to their studies. These projects can involve community members and backgrounds and often result in exhibitions or products aimed at a real purpose or audience (Fleming, 2000).

The definition of a learning model based on a project is a learning method that enhances students' creativity. Project-Based Learning is a longterm learning method that requires the students to create projects for overcoming daily life issues, in fact this learning model prioritizes problem-solving skills resulting in the solution and product (Sari & Siska, 2018). Project-based learning creates an opportunity for the teachers to set up learning activity, a system that includes variation of project assessments (Trianto, 2014).

The Merdeka Curriculum

The Merdeka Curriculum is a curriculum with diverse interdisciplinary learning, where the content is optimized to give students enough time to deepen concepts and strengthen competencies. Teachers have the flexibility to choose various teaching tools, allowing learning to be tailored to students' needs and interests. Projects are developed based on specific themes set by the government to enhance the achievement of the Pancasila Student Profile. These projects are not aimed at achieving specific learning outcomes and are not tied to subject content (Kemendikbudristek, 2022).

Comprehension

Comprehension is a way to connect thinking and learning. Achieving complete understanding requires a process where learning and thinking go hand in hand (Aprinawati, 2018). Comprehension is not the final goal that is easy to be achieved but the culmination of a long and serious learning process. For those who neglect to understand and analyze the material, comprehension is hard to achieve. The ability to summarize effectively demonstrates thorough understanding. Achieving understanding requires seriousness and perseverance (Putra, 2016).

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

Demography

Demography is the study of populations, including their size, structure, and growth. It also examines changes in populations, such as births, deaths, and migration. These changes result in diverse conditions and compositions of populations based on age and gender (Jati & Nono, 2013). Gender is a contributing factor to emotional intelligence (Goleman & Hermaya, 2002). Patton states that family factors like parental education level, parental occupation, and parental income are categorized as family factors (Patton, 2002). Demographic factors such as population dynamics, population composition, and the number and distribution of populations are considered influential for human literacy rates. Population composition itself can be differentiated based on social characteristics such as education level and marital status (Adiutomo & O.B. Samosir, 2011).

METHOD

Research Type

This type of research falls into the category of verificative research, which aims to verify or test the validity of existing theories and research findings. Based on data analysis, this research is quantitative, a process of discovering knowledge that uses numerical data as an analytical tool to investigate and understand known and studied information. According to Creswell, quantitative research involves measuring variables with research instruments so that data, consisting of numbers, can be analyzed based on statistical procedures (Kusumastuti et al., 2020). This research investigates data on the application of the Project Based Learning (PjBL) model in Junior High Schools. The data used are questionnaires from students of two public Junior High Schools in Sumowono. The reason the researcher chose this study is the importance of expanding references to the use of this learning model.

Primary data were collected through field research by conducting surveys. In this case, the researcher used questionnaires. Secondary data were taken from the school curriculum, teaching journals, teaching modules, student project results in the form of images, and documents related to the application of the PjBL model in Islamic religious education learning.

The research location is in Semarang Regency. More precisely, this research was conducted at Junior High School 01 and Junior High School 02 in Sumowono district. The research was conducted from January 2 to March 30, based on the research problem.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

Population is an influential element in a research which decides the direction and results of the research (Pratama & Cahyono, 2021). The population in this study are all students in Junior High School 01 and Junior High School 02 Sumowono. The sample of this study are the Islamic religious teacher and students in grade VII at Junior High School 01 and Junior High School 02 Sumowono.

The sample has an important role in a research which allows the researcher to investigate the population effectively and accurately. (Pratama & Cahyono, 2021). The sampling technique used is purposive sampling with the following criteria: seventh-grade students with the total of 106 people are divided into two schools, 53 are from Junior High School 01 Sumowono and 53 others from Junior High School 02 Sumowono.

This study used questionnaires as the tool to collect the data from the students. In this case, questionnaires were given to the students in Junior High School 01 Sumowono, where they have been implementing the PjBL model and Junior High School 02 Sumowono, the school which has not applied the PjBL yet. The questionnaire forms were given to them and distributed in each class after obtaining a formal permission from both institutions.

The measurement scale used to measure the dependent and independent variables is the *Likert* Scale, which tests agreement or disagreement with statements made in the questionnaire forms. Respondents assign a score by giving points from 1 to 7 to the statements in the questionnaire.

Tabel 1. Respondent Answer Score Range

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

Based on the explanation in the table, a score of 1 indicates that respondents tend to disagree with the statements in the questionnaire. Conversely, if the respondent's score is close to 7, it shows that they tend to agree with the statements in the questionnaire. The scores in the questionnaire reflect the respondents' level of agreement with the statements, where a high score indicates strong agreement and a low score indicates strong disagreement.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

Data Analysis Technique

Instrument Validation

Validity Testing

Validity indicates how accurate and correct a research instrument is in measuring what it is supposed to measure. A valid instrument must have a high level of validity and accurately represent the concept or variable it aims to measure. A low level of validity indicates that the instrument cannot be used to measure what it is supposed to measure (Pratama & Cahyono, 2021).

Validity testing using the Pearson correlation test is an appropriate statistical method for measuring the linear relationship between two numerical variables measured on a ratio scale (Yanti & Ilham, 2020).

Reliability Testing

Reliability testing has a function to confirm that the research instrument can create consistent answers from the respondents. Research instrument is considered reliable if it possesses a high CronbachAlpha score. The CronbachAlpha score higher than 0.80 indicates that the research is reliable (Pratama & Cahyono, 2021).

Normality Testing

The normality test has a purpose to ensure that the data obtained from the field follows a certain distribution pattern, in this case, a normal distribution. A normal distribution is a bell-shaped data distribution pattern, with the majority of the data centered around the mean or median (Haniah, 2013).

The population of this study are the seventh-graders in both schools and each class has 30 students. The sample collection technique in this study is the total sampling. The primary data collection was conducted by distributing the questionnaires to them and measuring their comprehension on Islamic education. Data analysis was conducted using Kolmogorov Smirnov testing.

Difference Testing

The t-test or mean difference test is a useful tool for comparing two methods of assessing the effectiveness of a particular exercise method. By using the t-test, researchers can determine

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

if there is a significant difference between two groups and whether one method is more effective than another (Budiwanto, 2004).

The t-test, also known as the difference test, is a parametric/inferential statistical tool used to find the average score differences between two samples/groups. The difference test helps researchers to prove or reject hypotheses proposed at the beginning of the study. This research used statistical analysis to test hypotheses using the Independent Sample t-test and One Way ANOVA selected as the appropriate statistical methods. These methods compare the averages of two different samples and are processed using SPSS 23 software (Kurniawan, 2019). The data analysis tool in this study used the Independent Sample t-test calculated using SPSS 23 software.

RESULTS

According to the descriptive analysis results above, it shows that the total male respondents are 49 people (46,2%) meanwhile the females are 57 people (53,7%). Based on the respondents' ages, 96 people are between 11-13 years old (90,5%), and the other 10 people are 14-15 years old (9,4%). The distribution of respondents based on their parents' last education level, namely elementary school or equivalent, consists of 37 people (34,9%). Those parents who finished high school or equivalent are 32 people (30,1%), undergraduate degrees are 4 people (3,7%), and postgraduate degrees only consist of 1 person (0,9%). Based on the parents' occupation as an Architect is only 1 respondent (0,9%), Teachers: 2 respondents (1,8%), Employees: 14 respondents (13,20%), Merchants: 10 respondents (9,4%), Army veteran only 1 respondent (0,9%), being employed in Perhutani: 1 respondent (0.9%), Farmer: 41 respondents (38.6%), Civil Servant (PNS): 2 respondents (1.8%), Sales: 1 respondent (0.9%), Private Sector Employee: 1 respondent (0.9%), Military (TNI): 1 respondent (0.9%), Entrepreneur: 8 respondents (7.5%), Self-employed: 20 respondents (18.8%), and Driver: 2 respondents (1.8%).

After the respondents were selected, there are some of them who are not qualified based on the purposive sampling and there was an outlier in some of them, hence, those respondents must be ejected from the research sample. Thus, the total number of respondents who are qualified based on the criteria are 86 people.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

International Journal of Education, Vocational and Social Science
https://e-journal.citakonsulindo.or.id/index.php/IJEVSS
E-ISSN : 2963 4954
IJEVSS

Testing and Data Analysis Results

Instrument Validation

Validity Testing

Table of Validity Testing

	Variabel	Item	Pearson Correlation	Status
	Comprehension	1	626**	Valid
		2	636**	Valid
		3	626**	Valid
		4	677**	Valid
		5	699**	Valid
		6	693**	Valid
		7	789**	Valid
		8	667**	Valid
		9	675**	Valid

Source : possessed primary data (2024)

The Item-Total Statistics table in the Corrected Item-Total Correlation column. Each value in this column is compared to the r value in the r table with n = 51 respondents, yielding a value of 0.2706. The values compar ed are the Corrected Item-Total Correlation values. Valid questions are those that have a Corrected Item-Total Correlation above the r table value. The validity test passes.

Reliability Testing

Table of Reliability Testing

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.851	.852	9

Source : possessed primary data (2024)

From the table above, it is observed that the Cronbach's Alpha value is 0.851 with a number of items or questions in the quiz being 9, and the questionnaire consisting of 9 questions.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

It can be said that the questionnaire used in the study is valid because the Cronbach's Alpha value > 0.6. The results of reliability testing and indicator achievement calculations in the Questionnaire can be interpreted according to the following Cronbach's Alpha model criteria.
Reliability Testing Criteria based on Cronbach Alpha model (Validity, U. (2013).

1. 0,80 – 1,00 = Excellent/ High
2. 0,60 – 0,80 = Acceptable/ Good
3. 0,40 – 0,60 = Questionable/Relatively low
4. 0,20 – 0,40 = Poor/ Low
5. 0,00 – 0,20 = Unacceptable/ Very Low

The validity of the test instrument, or its reliability, can be determined by examining the Cronbach's Alpha value. In Table 4.3, Cronbach's Alpha value is 0.851. It can be concluded that r calculated > r table 5%, namely 0.851 > 0.279. This indicates that the understanding of Islamic Religious Education (PAI) is reliable. The instrument used is reliable for testing variables in the research.

Normality Testing

Table of Normality Testing

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	Df	Sig.
SMP1	.091	53	.200*	.975	53	.331
SMP2	.066	53	.200*	.987	53	.826
*. This is a lower bound of the true significance.						
a. Lilliefors Significance Correction						

Source : possessed primary data (2024)

The sample size (N) is 53, indicating a large sample (>50), thus the Kolmogorov-Smirnov test table was used for the normality test results. From this table, the Sig. value is 0.200, which means 0.200 > 0.05, indicating that the data is considered normally distributed.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

International Journal of Education, Vocational and Social Science
https://e-journal.citakonsulindo.or.id/index.php/IJEVSS
E-ISSN : 2963 4954
IJEVSS

Difference Testing
Islamic Education (PAI) Comprehension

Table of Group Statistics Testing Result

	Category	*N*	*Mean*	*Std. Deviation*	*Std. Error Mean*
Comprehension	Junior High School 1	53	4.9392	.72356	.09939
	Junior High School 2	53	4.7610	1.02865	.14130

Source : possessed primary data (2024)

Based on the "group statistics" table output above, it is known that the number of learning outcomes data for category Junior High School 1 consists of 53 students, while for category Junior High School 2 it also consists of 53 students. The average learning outcome or mean score for category Junior High School 1 is 4.9392, whereas for category Junior High School 2 it is 4.7610. Therefore, based on descriptive statistics, it can be concluded that there is a difference in the average learning outcomes between students in category Junior High School 1 and category Junior High School 2.

Table of Independent Sample T-test Result

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Comprehension	Equal variances assumed	5.715	.019	1.032	104	.305	.17820	.17275	-.16437	.52077
	Equal variances not assumed			1.032	93.337	.305	.17820	.17275	-.16483	.52123

Source : possessed primary data (2024)

Based on the output above, the value of Sig. Levene's test for equality of variances is 0.019

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

< 0.05, indicating that the variances of the data between category Junior High School 1 and category Junior High School 2 are heterogeneous. Therefore, the interpretation of the independent samples t-test output refers to the values in the "equal variances assumed" table.

According to the output in the "equal variances assumed" section, the sig. value (2-tailed) is 0.305 > 0.05. Thus, it can be concluded that there is no significant difference in student learning outcomes between category Junior High School 1 and category Junior High School 2 when using the PjBL learning model. The understanding of students is similar whether using the PjBL learning model or not.

Gender

Table of Independent Sample T-test Result

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Comprehension	Equal variances assumed	*3.684*	.058	-2.730	104	.007	-.45920	.16821	-.79276	-.12565
	Equal variances not assumed			-2.676	89.002	.009	-.45920	.17162	-.80020	-.11820

Source : possessed primary data (2024)

Based on the output above, the value of Sig. Levene's test for equality of variances is 0.058 > 0.05, indicating that the variances of the data between male and female genders are homogeneous or equal. Therefore, the interpretation of the independent samples t-test output refers to the values in the "equal variances assumed" table.

According to the output in the "equal variances assumed" section, the sig. value (2-tailed) is 0.007 < 0.05. Thus, it can be concluded that there is a significant difference in student learning outcomes between male and female genders.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

International Journal of Education, Vocational and Social Science
https://e-journal.citakonsulindo.or.id/index.php/IJEVSS
E-ISSN : 2963 4954
IJEVSS

Parents Education

Table of One Way ANOVA

Comprehension					
	Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Between Groups	1.744	4	.436	.541	.706
Within Groups	81.344	101	.805		
Total	83.087	105			

Source : possessed primary data (2024)

Based on the "ANOVA" table output above, the sig value is 0.706 > 0.05, therefore it can be concluded that there is no significant difference in the average parental education categories.

Parents Occupation

Table 4.12 One Way ANOVA Testing Result

Comprehension					
	Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Between Groups	9.217	14	.658	.811	.655
Within Groups	73.870	91	.812		
Total	83.087	105			

Source : possessed primary data (2024)

Based on the "ANOVA" table output above, the sig value is 0.655 > 0.05, therefore it can be concluded that there is no significant difference in the average parental occupation categories.

Table of Hypothesis Testing Result

No.	Hypothesis	Conclusion
1.	e implementation of the Project-Based Learning (PjBL) model can differentiate the level of understanding of Islamic Education (PAI) among students.	Not Supported

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

2.	The implementation of PjBL model can differentiate the level of understanding of Islamic Education (PAI) among students based on gender.	Supported
3.	The implementation of PjBL model can differentiate the level of understanding of Islamic Education (PAI) among students based on parents' education.	Not Supported
4.	The implementation of PjBL model can differentiate the level of understanding of Islamic Education (PAI) among students based on parents' occupation.	Not Supported

Source : possessed primary data (2024)

DISCUSSIONS

The Effectiveness of Project Based Learning Implementation Can Differentiate Comprehension Level of Students' Islamic Education (PAI)

Based on the difference test results, the level of understanding of Islamic Religious Education (PAI) among students at SMPN I and SMPN II shows no difference between those using the Project Based Learning (PjBL) model and those not using it. This means there is no difference in the level of understanding between schools that implement the PBL model and those that do not.

Looking at the average learning comprehension scores for both groups, there is a slight difference in average scores between classes using PjBL and those not using it. However, this difference is not significant. Therefore, based on descriptive statistics, it can be concluded that there is no difference in the average understanding of Islamic Religious Education (PAI) among seventh-grade students at Junior High School 1 and Junior High School 2 Sumowono between the group using the PjBL model and the conventional group not using it.

This finding contradicts the initial hypothesis stating that the PjBL model enables students to actively engage in the learning process. Students are also able to develop creativity and critical thinking skills, understand Islamic teachings more contextually, and exhibit responsibility and independence in learning, becoming active and highly motivated learners.

The findings of this study do not support Citra Sari's research (2023), which suggests that PjBL allows for more flexible and adaptive learning to cater to students' needs and interests, thereby enhancing their engagement and motivation. It encourages students to think critically, solve problems, and generate new ideas within the context of Islamic education. By implementing

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

PjBL, students' learning experiences in Islamic Religious Education can potentially become more positive and profound.

Based on this research, data collected from SMPN I and SMPN II show no differences. PjBL can enhance students' interest, motivation, and creativity, but it only impacts psychomotor and affective aspects, not cognitive understanding of Islamic Religious Education. This aligns with Kurniawan et al.'s (2018) study, which found no significant differences in cognitive learning outcomes between PjBL and other learning models. However, PjBL does significantly influence students' affective and psychomotor domains. Regarding learning motivation, there is no significant difference between PjBL and other learning models.

Based on the analysis of PBL implementation, students' understanding of PAI remains equally high, as evidenced by high comprehension scores above 5. However, this high level of understanding is likely not solely due to PjBL, as there is no difference in outcomes when comparing those who use PBL and those who do not.

Other factors can enhance students' understanding of PAI: a) Internal Factors: Individual development is influenced by internal factors inherent since birth. These internal factors, as explained below, can affect students' abilities to understand lessons: 1) Intelligence, 2) Motivation (Prawira, 2012), 3) (Sardiman, 2012). b) External Factors: 1) Family, 2) School, and 3) Community environment. Interaction with peers and involvement in social activities in the community also influence students' learning processes (Umar, 2020).

The Implementation of PjBL Can Differentiate Comprehension Level of Students' Islamic Education (PAI) Based from Gender

Based on the difference test results, there is a significant difference in the understanding of Islamic Religious Education (PAI) between female and male students. It was found that females have a higher level of understanding.

This finding aligns with previous research indicating that gender can influence learning comprehension. Females are generally known to be more diligent and consistent in their studies, making it easier for them to grasp lessons taught in school compared to males, who may sometimes disregard lessons (Azizah et al., 2022). This suggests that gender has the potential to be a differentiating factor in students' understanding of Islamic Religious Education (PAI).

Gender can differentiate the level of understanding provided by the PjBL learning model compared to non-PjBL models. When students are exposed to the PjBL model, females, known for

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

their diligence and consistency in learning, may find it easier to comprehend the lessons given compared to males, who may sometimes not pay attention, thereby affecting their level of understanding (Azizah et al., 2022).

The Implementation of PjBL Can Differentiate Comprehension Level of Students' Islamic Education (PAI) Based from Parents Education

As mentioned in the results above, there is no significant difference of students Islamic education comprehension level based on parents' education category. This result is unsuitable with the third hypothesis mentioning that parents' educational level affects students' achievements and learning motivation. The parents' role in their kids' education, especially by giving supervision and guidance at home has proven to bring positive impacts for the students' achievements and learning motivation (Halmuniati et al., 2022). The economic limitations, lack of knowledge and lower education level often encourage their children to work in non-formal sectors. It happens mainly because they have limited access to learning facilities and the pressure to help their parents doing the work.

The Implementation of PjBL Can Differentiate Comprehension Level of Students' Islamic Education (PAI) Based from Parents Occupation

According to the results mentioned above, there is no significant difference of students Islamic education comprehension level based on parents' occupation category. This shows similar idea with the fourth hypothesis mentioning that students with family background working in non-formal sectors namely farming, gardening, trading, mainly have limited access to excellent learning facilities (Halmuniati et al., 2022). This issue was caused by the economic constraints of the parents, and sometimes the students are required to help their parents do the jobs.

CONCLUSION

Based on the analysis results in this study, several conclusions can be drawn as follows:

1. The implementation of the PjBL learning model cannot differentiate the level of students' understanding of Islamic Religious Education (PAI), but it can enhance students' creativity, make learning more meaningful, and motivate students to be more enthusiastic during lessons.
2. The implementation of the PjBL learning model can differentiate the level of students'

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

understanding of PAI based on gender. According to the difference test results, gender can differentiate students' understanding levels, as female students tend to be more diligent, industrious, and consistent compared to male students.

3. The implementation of the PjBL learning model cannot differentiate the level of students' understanding of PAI based on parental education. Based on the difference test results, the educational background of parents does not differentiate students' understanding levels. This implies that students' learning motivation is not solely based on their parents' educational background.
4. The implementation of the PjBL learning model cannot differentiate the level of students' understanding of PAI based on parental occupation. According to the difference test results, the parental occupation background does not differentiate students' understanding levels. This is due to the lack of facilities that support motivation in learning.

Limitation

This study has some limitations which later can be used as an opportunity for other researchers to conduct further investigation in the future research. Those limitations are listed below:

1. This study has very few samples. The respondents of this study are only 106 from two public schools. It is still considered as limited because it was nothing compared to the whole middle school students in Sumowono Regency, hence the results were not representative.
2. This study cannot comprehensively model factors, meaning there are still many other factors that can influence students' level of understanding, especially in the subject of Islamic Religious Education (PAI). This study only models one independent variable, which is the project-based learning (PjBL) model, in influencing the variable of students' understanding of PAI.

Recommendation

The further recommendation theoretically suggests improving the amount of research samples and expanding the areas of observation, not only including the public schools but also the private institutions as well. These two things can make the further studies become more valid in

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

presenting the results of students' level of comprehension, specifically those who have been implementing project-based learning.

Moreover, adding more independent variables which can influence students' level of understanding other than project-based learning, so that there are more comprehensive and variative research models.

On the other hand, practical recommendation from this study suggests that teachers should focus more attention on male students in the learning process. It has been proven that female students exhibit higher average understanding compared to male students. Therefore, the PjBL teaching model is more effective when applied to female students. Prioritizing male students in lesson delivery can potentially achieve balanced levels of understanding.

REFERENCES

Adiutomo, S. M., & O.B. Samosir. (2011). Dasar-dasar Demografi. Salemba Empat.

Anggelia Dewi, Ika Puspitasari, & Shokhibul Arifin. (2022). Penerapan Model Project-based Learning ditinjau dari Kurikulum Merdeka dalam Mengembangkan Kreativitas Belajar Pendidikan Agama Islam. Jurnal Pendidikan Agama Islam Al-Thariqah, 7(2), 398–408.

Anggraini Putri Dewi, & Siti Sri Wulandari. (2021). Analisis Penggunaan Model Pembelajaran Project Based Learning Dalam Peningkatan Keaktifan Siswa. Jurnal Pendidikan Administrasi Perkantoran (JPAP), 292–299.

Aprinawati, I. (2018). Penggunaan Model Peta Pikiran (Mind Mapping) untuk Meningkatkan Pemahaman Membaca Wacana Siswa Sekolah Dasar. Jurnal Basicedu, 2(1), 140–147.

Azizah, N. R. , Imamuddin, M., Aniswita, & Rahmat, T. (2022). Pemahaman Konsep Matematika Siswa Berdasarkan Jenis Kelamin. Dalam Juring (Journal for Research in Mathematics Learning) p (Vol. 5, Nomor 3).

Budiwanto, S. (2004). Teknik Analisis Statistika. Malang: FIK UM.

Fleming, D. S. (2000). A Teacher's Guide to Project-Based Learning. AEL is an Equal Opportunity.

Hajriyanti, S., Hawi, A., & Syarnubi. (2021). Pengaruh Penerapan Strategi Firing Line Terhadap Pemahaman Siswa Pada Mata Pelajaran Pendidikan Agama Islam Kelas Vii Di SMPN Sukaraya Kecamatan Karang Jaya Kabupaten Musi Rawas. Jurnal PAI Raden Fatah, 3(1), 56

Halmuniati, H., Rahmawati, R., Isa, L., Asmin, L. O., Zainuddin, Z., & Wui, L. (2022). Analisis Tingkat Pendidikan Orangtua Terhadap Pemahaman Konsep Fisika Siswa Sekolah Menengah di Kecamatan Kontukowuna. Jurnal Phi: Jurnal Pendidikan Fisika dan Fisika Terapan, 8(2), 31

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

Handayani Astri May, Uki Suhendar, & Senja Putri Merona. (2020). Model Pjbl Dengan Lembar Kwl Dalam Meningkatkan Kemampuan Berpikir Kreatif Matematis. Historigram: Jurnal Pendidikan Matematika, 342–354.

Haniah, N. (2013). Uji Normalitas Dengan Metode Liliefors. http://statistikapendidikan.com

Jati, G. W., & Nono Hery Yoenanto. (2013). Kecerdasan Emosional Siswa Sekolah Menengah Pertama Ditinjau Dari Faktor Demografi.

Kemendikbudristek. (2022). Buku Saku FAQ Tanya Jawab Kurikulum Merdeka Kemendikbudristek. Kemendikbudristek RI.

Kurniawan, I. (2019). Analisis Keuntungan Investasi Emas Dengan Ihsg.

Kusumastuti Adhi, Ahmad Mustamil Khoiron, & Taofan Ali Achmadi. (2020). Metode Penelitian Kuantitatif. CV Budi Utama.

Patton. (2002). Kecerdasan emosional di tempat kerja. Terjemahan Zaini Dahlan. Pustaka Delaprasta.

Pratama, A. A. N., & Edi Cahyono. (2021). Metodologi Penelitian Bisnis Dengan Pendekatan Kuantitatif. LaksBang PRESSindo.

Prawira, P. A. (2012). Psikologi Pendidikan Dalam Perspektif Baru. Ar-Ruzz Medi.

Putra, D. R. (2016). Pengaruh Tingkat Pendidikan Formal Dan Pemahaman Agama Islam Orang Tua Terhadap Kecerdasan Spiritual Anak Di Desa Tanjung Agung Kecamatan Seginim.

Sardiman. (2012). Interaksi dan Motivasi Belajar Mengajar. Raja Grafindo Persada.

Sari, R. T., & Siska Angreni. (2018). Penerapan Model Pembelajaran Project Based Learning (PjBL) Upaya Peningkatan Kreativitas Mahasiswa. Jurnal VARIDIKA, 30(1), 79–83. https://doi.org/10.23917/varidika.v30i1.6548

Suyono, A. (2016). Pengaruh Latar Belakang Sosial Ekonomi Orang Tua Terhadap Prestasi Belajar Yang Dimediasi Oleh Fasilitas Belajar.

Trianto. (2014). Mendesain Model Pembelajaran Inovatif, Progresif, dan Kontekstual. Prenamedia Group.

Umar, J. (2020). Analisis Tingkat Pemahaman Terhadap Mata Pelajaran Agama Islam Pada Siswa SMP 1 Delima Pidie.

Winkel, W. (2000). Bimbingan Konseling. Grasindo.

Yanti Cici Apriza, & Ilham Julian Akhri. (t.t.). Perbedaan Uji Korelasi Pearson, Spearman Dan Kendall Tau Dalam Menganalisis Kejadian Diare. 6(1), 51–58. https://doi.org/10.22216/jen.v6i1.5256

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License