PDTII
PERKUMPULAN DOSEN TARBIYAH ISLAM INDONESIA

The Effects of Islamic Religious Education Learning on Students' Motivation

Murharyana¹, Ibnu Imam Al Ayyubi*², Rifqi Rohmatulloh³, Shoutika Nawadya Ikromi⁴

¹ Sekolah Tinggi Agama Islam Darul Falah Bandung Indonesia; murharyana83@staidaf.ac.id
² Sekolah Tinggi Agama Islam Darul Falah Bandung Indonesia; ibnuimam996@staidaf.ac.id
³ Sekolah Tinggi Agama Islam Darul Falah Bandung Indonesia; rifqirohmatulloh@staidaf.ac.id
⁴ Sekolah Tinggi Agama Islam Darul Falah Bandung Indonesia; shoutikanawadya@gmail.com

Article Information	Abstract
Keywords: Motivation, Learning Outcomes, Islamic Religious Education, Problem-Based Learning.	This article aims to see whether there is a significant relationship or influence on students' learning motivation towards Islamic religious education at MTs Arrukhshatul 'Ulum West Bandung with heterogeneous social, cultural, and cognitive factors of students using quantitative research. The research method used was a survey method with correlation analysis to see the relationship between the independent variables, namely students' motivation, and the dependent variable, namely students' learning outcomes, using the Problem-Based Learning (PBL) learning model. The population of this research was class IX students at MTs Arrukhshatul 'Ulum, with a sample of 30 students. The research instruments in this study used questionnaires and tests. Testing of the data analysis requirements consisted of normality tests and linearity tests with the hypotheses used, namely correlation and regression tests. From the research conducted, it was found that the data of the student's learning motivation and students' learning outcomes using the Problem-Based Learning (PBL) learning model is usually distributed and has a strong correlation with the strength of the coefficient with a Correlation Coefficient value of 0.952. Besides that, an interaction between learning motivation and learning outcomes of 90.5 % and the other 9.5% are influenced by external factors. Because the data is normally distributed, it is continued with a regression test, which produces data that meets the linearity criteria with the regression equation Y=32.758+0.653X.
Kata kunci: *Motivasi,* *Hasil Belajar,* *Pendidikan Agama Islam,* *Pembelajaran Berbasis Masalah.*	*Abstrak* *Artikel ini bertujuan untuk melihat ada tidaknya hubungan atau pengaruh yang berarti akan motivasi belajar siswa dengan pembelajaran Agama Islam di MTs Arrukhshatul 'Ulum Bandung Barat, dengan keadaan sosial, budaya, dan faktor kognitif siswa yang heterogen dengan penelitian kuantitatif. Metode penelitian yang digunakan adalah metode survey dengan analisis korelasi untuk melihat keterkaitan akan variabel bebas yakni motivasi siswa dan variabel terikat yakni hasil belajar siswa menggunakan model pembelajaran Problem Based Learning (PBL). Populasi penelitian ini adalah siswa kelas IX di MTs Arrukhshatul 'Ulum dengan sampel sebanyak 30 siswa. Instrumen penelitian pada penelitian ini menggunakan angket dan tes. Pengujian persyaratan analisis data yang digunakan terdiri dari uji normalitas dan uji linearitas dengan hipotesis yang digunakan yakni uji korelasi dan regresi. Dari penelitian yang dilakukan diperoleh bahwa motivasi belajar siswa dengan hasil belajar siswa menggunakan model pembelajaran Problem Based Learning (PBL) data berdistribusi normal dan memiliki korelasi dengan kekuatan koefisien yang kuat dengan nilai Correlation Coefficient 0,952 serta interaksi antara*

motivasi belajar dengan hasil belajar sebesar 90,5%. Selain itu, 9,5% lainnya dipengaruhi oleh faktor eksternal. Dikarenakan data berdistribusi normal maka dilanjutkan dengan uji regresi yang menghasilkan data memenuhi dalam kriteria linearitas dengan persamaan regresi adalah $Y = 32{,}758 + 0{,}653X$.

INTRODUCTION

Islamic religious education (IRE) is one of the vital subjects in Indonesian education because the majority of the population is Muslim. This IRE is conducted to foster awareness of Islamic religious values and strengthen faith and taqwa in students (Murharyana, Al Ayyubi, & Rohmatulloh, 2023). It also has a significant influence on students' motivation in learning religious values in which the internal and external environment have been associated with Islamic culture that is hereditary and ingrained (Rambe, 2023). Creating Islamic religious education as a crucial subject can have a positive impact on students' development (Hasrah, 2023), both in terms of academic and non-academic as well as spiritual aspects (Rahayu & Sulaiman, 2022). Motivation is one of the critical factors in learning (Saenab, Muslimin, & Abdullah, 2019) and has a significant relationship with students' learning outcomes (Palittin, Wolo, & Purwanty, 2019). High motivation, followed by spiritual values, will affect students' success rate in learning. Students' motivation will affect how genuinely they digest the lessons delivered, how well they remember the material learned, and how well they apply the skills in their daily lives (Rahman, 2022). Motivated students will tend to be more enthusiastic about learning so that they will provide optimal learning outcomes; on the other hand, unmotivated students will tend to be less active and more easily bored when learning takes place so that their learning outcomes are less optimal (Bukhori, Al Ayyubi, Rohmatulloh, & Saepulloh, 2023).

Many factors can affect students' learning motivation, such as the learning methods used, the learning environment, social aspects, and others (Cline, 2000; Djonomiarjo, 2020; Suripta, 2021). Therefore, this research conducted on the effect of Islamic religious education learning on students' motivation is significant in identifying factors that affect students' learning motivation, as research conducted by (Rerung, Sinon, & Widyaningsih, 2017) states that there is a significant difference between learning carried out and the help of the suitable learning model so that a good learning process is not only related to teaching but also related to the overall learning process while still linking religious values to student learning. This statement means that an educator must understand the application of spiritual values to all students that he/she teaches to understand the concept of learning (Alp Christ, Capon-Sieber, Grob, & Praetorius, 2022; Yulianti & Gunawan, 2019). Learning environment factors, how parents educate, and students' pragmatic experiences are also very influential in effective learning (Yarmayani & Afrila, 2018). By understanding the Islamic teachings correctly, students will be motivated to carry out these teachings in their daily lives. Therefore, Islamic religious education introduces various values that can form positive character in students (Sukriyatun, Mujahidin, & Tanjung, 2023), such as the value of honesty, patience, generosity, empathy, and other values. Through learning, students will feel the benefits of applying and practising Islamic religious education when they feel that these values can make them even better than the previous ones (Chanifah, Hanafi, Mahfud, & Samsudin, 2021; Fahira, Satria, & Priadi, 2021).

Islamic religious education is one of the subjects taught during the study period at school. Theoretically, Islamic religious education has many goals and benefits that are macro and complex things and have a vital role in shaping the character and morality of students (M. Arif & Sulistianah, 2019). However, to achieve these goals, an effective and efficient learning method is

needed to support learning so that students do not feel bored and will feel motivated by the learning being carried out. One method that can be used to support learning in Islamic religious education is Problem-Based Learning (PBL). Where this learning method emphasizes the learning process, not just the result (Meilasari & Yelianti, 2020) but also stimulates students' motivation to be able to understand and get optimal results in learning, fosters students' curiosity in finding answers to problems faced, and improve students' problem-oriented thinking skills. The research conducted by (Anwar, Rahman, Nurwahidin, Sutrisno, & Saputra, 2023; Ima, Pattiasina, & Sopacua, 2023; Ma'arif, Zuana, & Sirojuddin, 2022) states that there was a significant effect in learning using Problem-Based Learning (PBL), although the study conducted was not Islamic religious education. Therefore, research conducted on students' learning motivation with the PBL learning method will be very different from previous research, which predominantly does not lead to Islamic studies (A. Arif, Al Ayyubi, & Gunawan, 2023). The PBL learning method will facilitate the learning process of students in accordance with the principles of Islamic education, such as fostering a desire to seek knowledge, creativity, intelligence, depth of mind, wisdom, and courage to innovate in finding solutions to problems faced in students' daily lives (Primadoniati, 2020).

PBL-based learning in Islamic religion subjects can motivate students to seek answers to religion-related problems and apply them in their lives (Saenab et al., 2019), PBL-based learning is not only done on exact material as done by (Parasamya, Wahyuni, & Hamid, 2017) in reviewing physics subjects and those conducted by (Rahmat, 2018) in the study of economics. In addition, this method can also increase students' participation in the learning process, so that they will feel that learning is not only related to them, but also according to their needs (Yasminah & Sahono, 2020).). The PBL learning method can increase students' interest and curiosity in the material being taught. For students who have a high sense of curiosity, this method will be very effective in achieving learning goals (Al Ayyubi, Nudin, & Bernard, 2018). Using PBL in Islamic religious education learning can make students to be able to be directly involved in the process of solving problems that are realistic and relevant to their daily lives. This does not only improves their ability to find problem solving but also improves other skills such as critical thinking skills, communication skills, and cooperation skills needed to solve problems together (Nursimah, Anwar, & Fadhil, 2021).

In research Azizah (Azizah, 2022) says that PBL-based Islamic religious education learning had a considerable impact on students' motivation. Students become more enthusiastic in carrying out learning activities. This increases because the problems faced are directly related to students' daily lives (Paradina, Connie, & Medriati, 2019). In addition, students are also more involved in the learning process and they will gain a deeper understanding of the material being taught. PBL also helps improve students' understandings to think and seek religious understandings in their own way, not by relying on information from teachers, books, or other sources. In learning Islam, it is important to pay attention to the issue of student motivation. Without adequate motivation, Islamic religion lessons will not run as expected. The use of PBL as a learning method is very useful for increasing student interest and motivation, because it can help students to find the true meaning of religion in their daily lives, and encourage them to act in accordance with religious values and rules. So this research needs to be done to see whether or not there is a significant relationship or influence on student learning motivation with Islamic Religion learning at MTs Arrukhshatul 'Ulum West Bandung, with heterogeneous social, cultural, and cognitive factors of students.

RESEARCH METHODS

This research was conducted at MTs Arrukhshatul 'Ulum, West Bandung, by applying quantitative research. The research method used a survey with correlation analysis in order to see the relationship between the independent variable, namely students' motivation, and the dependent variable, namely students' learning outcomes, using the Problem-Based Learning (PBL) learning model. The population of this study were ninth-grade students at MTs Arrukhshatul 'Ulum, with a sample of 30 students. The research instruments in this study used questionnaires and tests. Test data analysis requirements used a normality test with Kolmogorov Smirnov and a linearity test with the hypothesis used, namely correlation and regression tests.

RESULTS AND DISCUSSION
RESULTS

Data processing of the results of this study is carried out with the help of the SPSS version 26 program.

Hypothesis

Alternative Hypothesis (H_1) and Null Hypothesis (H_0) are as follows:

H_0 : There is no correlation between students' learning motivation and students' learning outcomes using the Problem Based Learning (PBL) learning model.

H_1 : There is a correlation between students' learning motivation and students' learning outcomes using the Problem Based Learning (PBL) learning model.

The test criteria are:
1) Accept H_0 if significance ≥ 0,05;
2) Reject H_0 if significance value < 0,05.

Normality Test

The normality test is carried out to determine whether the data obtained comes from a normally distributed population or not. This is done as a condition for testing on inferential statistics. In this case, the researcher used the Kolmogorov Smirnov test in terms of conducting a normality test.

H_0 : Data is normally distributed

H_1 : Data is not normally distributed

Table 1. Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Motivasi_Siswa	.119	30	.200[*]	.966	30	.443
PBL	.103	30	.200[*]	.979	30	.790

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Based on the data on the Tests of Normality, the significance value for learning motivation and learning outcomes on Kolmogorov Smirnov is 0.200. From this data, it is obtained that the significant value is greater than 0.05. So, based on the decision-making criteria, it is concluded that the data is normally distributed. H_o is accepted, that is why the data is normally distributed.

Diagram 1. Normal Q-Q Plot
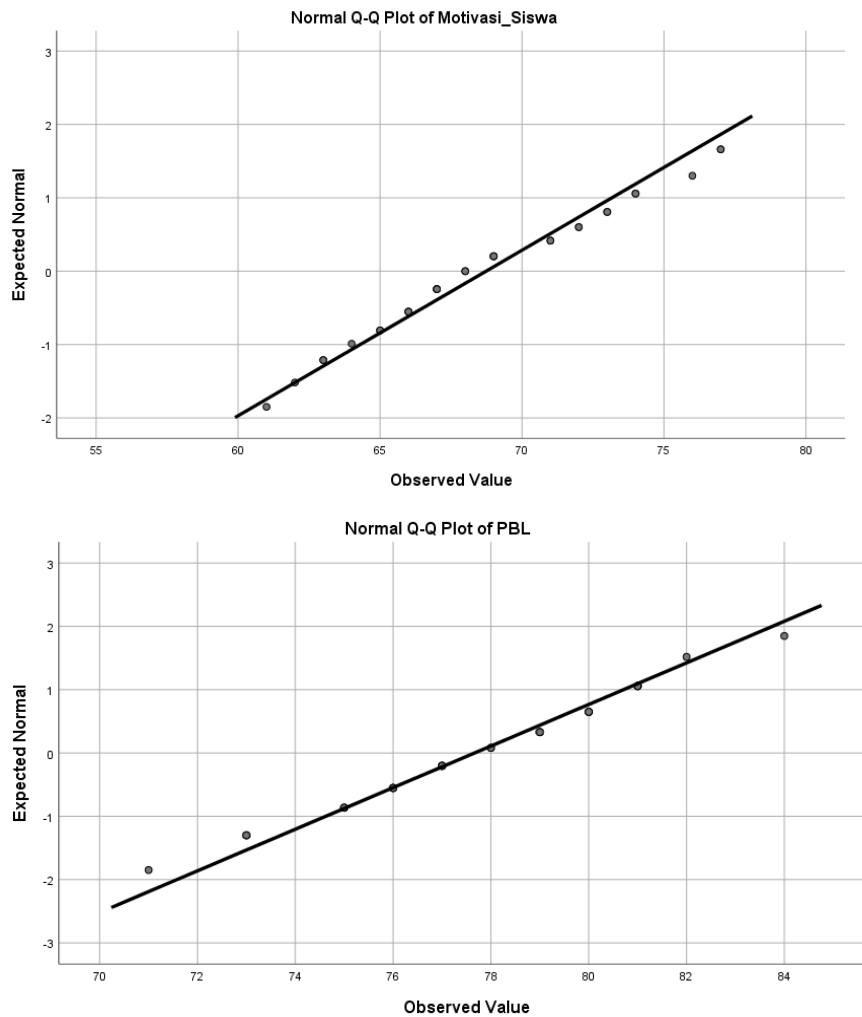
In the Normal Q-Q Plot diagram of learning motivation and learning outcomes, it can be seen that the data or points on the diagram spread around the diagonal line and were on the diagonal line. Therefore, the data can be said to be normally distributed.

Correlation Test

To see the strength of the relationship from the correlation value is as follows.

Table 2. Correlation values

Coefficient Interval	Relationship Strength
$0,00 - 0,19$	Very Low
$0,20 - 0,39$	Low
$0,40 - 0,59$	Moderate
$0,60 - 0,79$	Strong

0,80 − 1,00	Very Strong

Source: (Sugiyono, 2013)

Table 3. Correlations

		Motivasi_Siswa	PBL
Motivasi_Siswa	Pearson Correlation	1	.952[**]
	Sig. (2-tailed)		.000
	N	30	30
PBL	Pearson Correlation	.952[**]	1
	Sig. (2-tailed)	.000	
	N	30	30

**. Correlation is significant at the 0.01 level (2-tailed).

Based on the data in the Correlations, the significance value for learning motivation and learning outcomes is 0.000. From this data, it is obtained that the significant value is smaller than 0.05. Based on the decision-making criteria, H_o is rejected. Therefore, it can be concluded that there is a correlation between student learning motivation and student learning outcomes using the Problem Based Learning (PBL) learning model or it can be said that students' learning motivation affects students' learning outcomes using the Problem Based Learning (PBL) learning model. While the value of the Correlation Coefficient is 0.952 and is in the interval 0,80 − 1,00. Based on the interpretation guidelines, it can be said that the relationship between students' learning motivation and students' learning outcomes can be said to be very strong. From the Correlations display, it can also be seen that the learning motivation variable and learning outcomes using the PBL learning model have a ** sign so that it can be concluded that the two variables are significantly correlated.

Regression Test

Table 4. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.952[a]	.905	.902	.952

a. Predictors: (Constant), Motivasi_Siswa

Based on the data on the Model Summary, the R Square value or the coefficient of determination which shows how well the regression model formed by the interaction between students' learning motivation and students' learning outcomes using the PBL learning model is obtained 0,905 or 90,5% which can be interpreted that students' learning motivation has an influence on students' learning outcomes using the PBL learning model and the remaining 90,5% on students' learning outcomes using the PBL learning model and the rest, namely 9,5% is influenced by other factors outside of students' learning outcomes using the PBL learning model.

Table 5. ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	243.271	1	243.271	268.220	.000[b]
	Residual	25.396	28	.907		
	Total	268.667	29			

a. Dependent Variable: PBL

b. Predictors: (Constant), Motivasi_Siswa

Based on the data in the Analysis of Variance (ANOVA), the regression significance value is 0,000. From these data, it is obtained that the significant value is smaller than 0.05. Based on the decision-making criteria, H_o is rejected. It can be concluded that the linear regression equation model meets the linearity criteria. Therefore, the regression model can be used to predict students' learning outcomes variables using the PBL learning model.

Table 6. Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	32.758	2.748		11.923	.000
	Motivasi_Siswa	.653	.040	.952	16.377	.000

a. Dependent Variable: PBL

Based on the data in the Coefficients obtained with the constant coefficient and variable coefficients in the Unstandardized Coefficients B column, the regression equation model is $Y = 32,758 + 0,653X$. Thus, it can be said that if students' learning motivation is equal to zero, students' learning outcomes using the PBL learning model are equal to 32,758 with regression coefficient 0,653 which means that if students' learning motivation increases by one unit, students' learning outcomes using the PBL learning model will increase 1,653.

DISCUSSION

Motivation is a metaphor that is often used in conveying or explaining a success or failure. Motivation is concerned with the factors that stimulate behavior towards the underlying motives of people's needs (Quchani, Haji Arbabi, & Sabur Smaeili, 2021; Tang, Wong, Li, & Cheng, 2020), so that students who have high learning motivation will be directly proportional to their achievements, but the high and low motivation can be known by the fighting spirit possessed by these students. Intrinsic and extrinsic factors that exist in students' learning motivation are related to the desire for learning needs, hopes, and aspirations, as well as to recognition, a supportive environment, and activities that are fun or not boring. The learning process is a dynamic aspect (Alkouatli, 2018; Alwi & Mumtahana, 2023; Sanjaya, 2010). Students who are categorized as the ones who are not or underachieving are not caused by their abilities, but by their learning motivation. The characteristics of learning motivation include (1) desire for success; (2) stimulus and need for learning; (3) expectations and goals; (4) awards; (5) curiosity; and (6) supportive

environment. The principles of learning motivation according to (Rahman, 2021) are (1) motivation as a basic driving force in stimulating learning activities; (2) intrinsic motivation is more important than extrinsic motivation; (3) motivation in the form of rewards is better than punishment; (4) motivation will be inherently correlated with learning needs; and (5) motivation towards optimism. Thus, there are several forms and ways to foster student motivation in learning activities, namely by giving ranks, prizes, being competitive, Ego-Involvement, giving tests, knowing the results, punishment, interest, and curiosity.

Efforts are needed to increase students' learning motivation, because learning motivation is not fixed, changing, oscillating, or dynamic so that there should be a strong stimulus from within and outside students in participating in learning activities. The roles of students' motivation in supporting learning includes (1) becoming a driver and booster of learning activities; (2) clarifying the learning objectives to be carried out; (3) holding selectivity to support learning goals; (4) creating existence of internal and external motivation for students in learning; and (5) producing achievements for students. Since learning is the most vital activity in the educational process holistically, the success and failure achieved by students in education depend on the teaching and learning activities that are experienced by students. The essence of learning is a transformative activity for students of changes in behavior due to the process formed from the experiences they gain, both in interactions and objects that are in their learning environment. According to (Alonso-Fernández, Calvo-Morata, Freire, Martínez-Ortiz, & Fernández-Manjón, 2019; Thamrin, Ghasya, & Pranata, 2023), there are two crucial factors in learning outcomes, namely internal factors and external factors for students. Internal factors that can fundamentally affect students' learning outcomes include habit, optimism, curiosity, learning motivation, character, learning attitudes, concentration, and management in learning. While external factors that affect students learning outcomes include educators, environment, curriculum, facilities, and infrastructure (Archambault, Leary, & Rice, 2022; Chang & Yang, 2022). Therefore, it can be said that students' learning motivation is integrated into internal factors that must exist in students as one of the factors in achieving learning outcomes.

In learning outcomes, of course, it cannot be separated from the assessment carried out as an indicator and parameter for educators in analyzing the goals to be achieved for students. The objectives of the assessment include (1) lnowing the progress made by students; (2) knowing the position of students; (3) knowing the efforts made by students in learning; (4) knowing the cognitive capacity of students; and (5) knowing the results of learning methods carried out in learning (Andriani & Rasto, 2019). By having motivation, students will feel encouraged to learn in order to achieve goals and objectives that they believe in with awareness. Motivation is vital for students in driving behavior in a better and positive direction in order to determine whether or not the goals to be achieved and expected success or goals (Dick & Carey, 1977). The main factor in learning for students is motivation because it can lead to more basic and primordial learning actions. Therefore, students can solve the problems they face and avoid skepticism and can also filter out the biggest distractions in life that take up the largest portion in the context of their time in learning (González-Calatayud, Prendes-Espinosa, & Roig-Vila, 2021; Wiewiora & Kowalkiewicz, 2019).

The Problem Based Learning (PBL) learning model is a helper in improving students' skills in order to face the problems of globalization. The PBL learning model presents a

real problem as the first step for students to analyze learning to be resolved by investigation and application in problem solving (Trianto, 2009). Problem Based Learning (PBL) is a learning model that exposes students to the real world in starting learning and is included in innovative learning because it can provide conditions or learning atmosphere that is not passive and not boring for them. The characteristics of the PBL learning model lie in the correlative to students' real life that can be learned concretely or abstractly. By using PBL learning model, it is expected that students can get more authentic knowledge and not only from text book but also from the other aspects. Students can be more critical, creative, capable of solving problems, and more able to work together in teamwork because they will face the real world that needs to be civilized, as well as self-internalization and communicative in searching and managing information. Problem Based Learning (PBL) is more oriented to the learning process, so that educators, as facilitators for students, will help them to achieve their skills and hone their abilities more authentically with social conditions in differentiated season of life (Tan, 2007). The PBL learning model can occur if educators can create a classroom atmosphere that is not rigid in guiding the exchange of ideas for students to be able to disseminate it in the hope that students can be motivated in finding their ideas by a priori inquiry or inference.

The main characteristics of Problem Based Learning (PBL) are the problems that arise at the beginning of learning by asking questions that are authentic, concrete, easy to understand, focused on the discipline being studied, useful, and macro to the learning objectives so that it is not rigid if the ideas that arise can be drawn from end to end infinitely (Sujatmika, 2016). Besides that, according to (Tan, 2007), the characteristics of the PBL learning model are (1) creating problems used at the beginning of learning; (2) creating problems based on the real world; (3) creating problems need multiple perspectives; (4) making students motivated and challenged to learn; (5) promoting self-direct learning; (6) having non-single source of knowledge; and (7) holding communicative, cooperative, and collaborative learning. Therefore, the implementation of the Problem Based Learning (PBL) learning model consists of five stages including (1) the process of orienting students to the problems given at the beginning of learning; (2) organizing students; (3) guiding individual and collective investigations; (4) presenting and exposing student learning outcomes; and (5) analyzing and evaluating learning outcomes for problem solving by students.

The Problem Based Learning (PBL) learning model has a positive effect on students' learning outcomes. Based on the results of data analysis from 30 students, the data obtained is normally distributed using the Kolmogorov Smirnov test and on the Normal Q-Q Plot diagram. It can be seen that the data or points on the diagram spread around the diagonal line and are on the diagonal line. Besides that, there is a correlation between students' learning motivation and students' learning outcomes using the Problem Based Learning (PBL) learning model or it can be said that students' learning motivation affects students' learning outcomes using the Problem Based Learning (PBL) learning model. This is evidenced by the significance value for learning motivation and learning outcomes which is 0.000 and is classified as a very strong correlation with a Correlation Coefficient value of 0.952. The R Square value or the determination coefficient is obtained 0,905 meaning that students' learning motivation has an influence 90,5% on

students' learning outcomes using the PBL learning model and the rest, namely 9,5% is influenced by other factors outside of students' learning outcomes using the PBL learning model. Because the regression significance value is 0,000, it can be said that the linear regression equation model meets the linearity criteria. The regression model can be used to predict students' learning outcomes variables using the PBL learning model with the regression equation is $Y = 32,758 + 0,653X$ which can be interpreted that if students' learning motivation is equal to zero. Then, students' learning outcomes using the PBL learning model is as large as 32,758 with regression coefficient 0,653 which means that if students' learning motivation increases by one unit, students' learning outcomes using the PBL learning model will increase 1,653.

CONCLUSIONS

Based on this study, it was concluded that students' learning motivation and students' learning outcomes using the Problem-Based Learning (PBL) learning model data are typically distributed and have a correlation with a muscular coefficient strength with a correlation coefficient value of 0,952 and interaction between learning motivation and learning outcomes is 90.5% and external factors influence the other 9.5%. Because the data is normally distributed, it is continued with the regression test, which results in the data fulfilling the linearity criteria with the regression equation $Y = 32,758 + 0,653X$. Efforts are needed to increase students' learning motivation because students' learning motivation is dynamic, so the Problem-Based Learning (PBL) learning model is expected to be a reference in further research on students' learning outcomes, which in this study it has a strong influence in the study of Islamic religious education, where previous studies PBL models are often used in exacta studies dominantly. Therefore, the motivation formed by students in the PBL learning model can be expanded for future studies to see in the non-exact studies whether there will be an influence or not on students' learning outcomes. However, this must be seen and considered in the research locus, which in this study is in West Bandung, where most of the people have been closely related to Islamic studies since early childhood and even from generation to generation. Research limitations in this study were carried out in one school located in West Bandung, so it is recommended that further research be carried out in more than one school to be able to make comparisons in different regions or school locations.

REFERENCES

Al Ayyubi, I. I., Nudin, E., & Bernard, M. (2018). Pengaruh pembelajaran berbasis masalah terhadap kemampuan pemecahan masalah matematis siswa SMA. *JPMI (Jurnal Pembelajaran Matematika Inovatif)*, *1*(3), 355–360. https://doi.org/10.22460/jpmi.v1i3.p355-360

Alkouatli, C. (2018). Pedagogies in Becoming Muslim: Contemporary Insights from Islamic Traditions on Teaching, Learning, and Developing. *Religions*, *9*(11), 1–18. https://doi.org/10.3390/rel9110367

Alonso-Fernández, C., Calvo-Morata, A., Freire, M., Martínez-Ortiz, I., & Fernández-Manjón, B. (2019). Applications of data science to game learning analytics data: A systematic

literature review. *Computers & Education*, *141*, 103612. https://doi.org/10.1016/j.compedu.2019.103612

Alp Christ, A., Capon-Sieber, V., Grob, U., & Praetorius, A.-K. (2022). Learning processes and their mediating role between teaching quality and student achievement: A systematic review. *Studies in Educational Evaluation*, *75*, 101209. https://doi.org/10.1016/j.stueduc.2022.101209

Alwi, M., & Mumtahana, L. (2023). The Principal's Strategy in Improving the Quality of Teacher Performance in the Learning Process in Islamic Elementary Schools. *Kharisma: Jurnal Administrasi Dan Manajemen Pendidikan*, *2*(1), 66–78. https://doi.org/10.59373/kharisma.v2i1.18

Andriani, R., & Rasto, R. (2019). Motivasi belajar sebagai determinan hasil belajar siswa. *Jurnal Pendidikan Manajemen Perkantoran*, *4*(1), 80. https://doi.org/10.17509/jpm.v4i1.14958

Anwar, K., Rahman, A., Nurwahidin, M., Sutrisno, S., & Saputra, N. (2023). The Influence of School Culture and Work Motivation on School Quality in Vocational Schools. *Tafkir: Interdisciplinary Journal of Islamic Education*, *4*(3), 430–445. https://doi.org/10.31538/tijie.v4i3.661

Archambault, L., Leary, H., & Rice, K. (2022). Pillars of online pedagogy: A framework for teaching in online learning environments. *Educational Psychologist*, *57*(3), 178–191. https://doi.org/10.1080/00461520.2022.2051513

Arif, A., Al Ayyubi, I. I., & Gunawan, H. S. (2023). Pengaruh Model Quantum Teaching Terhadap Minat Belajar Anak Usia Dini Di Ra Al Hidayah Citapen. *Jurnal El-Audi*, *4*(1), 18–25. https://doi.org/10.56223/elaudi.v4i1.71

Arif, M., & Sulistianah, S. (2019). Problems in 2013 Curriculum Implementation for Classroom Teachers in Madrasah Ibtidaiyah. *Al Ibtida: Jurnal Pendidikan Guru MI*, *6*(1), 110–123. https://doi.org/10.24235/al.ibtida.snj.v6i1.3916

Azizah, R. (2022). Pengaruh Model Problem Based Learning Terhadap Implementasi Pembelajaran PAI Siswa Madrasah Diniyah Nurul Huda Pasuruan. *TARBAWI: Jurnal Pendidikan Agama Islam*, *7*(01), 1–15. https://doi.org/10.26618/jtw.v7i01.4742

Bukhori, H. A., Al Ayyubi, I. I., Rohmatulloh, R., & Saepulloh, S. (2023). Efektivitas Manajemen Dalam Penerapan Model Pembelajaran Tipe Mind Mapping Untuk Meningkatkan Hasil Belajar Siswa. *Islamic Management: Jurnal Manajemen Pendidikan Islam*, *6*(01), 65–78. http://dx.doi.org/10.30868/im.v6i01.3445

Chang, C.-Y., & Yang, J. C. (2022). Concept mapping in computer-supported learning environments: A bibliometric analysis. *Interactive Learning Environments*, *0*(0), 1–18. https://doi.org/10.1080/10494820.2022.2043385

Chanifah, N., Hanafi, Y., Mahfud, C., & Samsudin, A. (2021). Designing a spirituality-based Islamic education framework for young muslim generations: A case study from two Indonesian universities. *Higher Education Pedagogies*, *6*(1), 195–211. https://doi.org/10.1080/23752696.2021.1960879

Cline, E. B. M., Hugh F. (2000). It Won't Happen Soon: Practical, Curricular, and Methodological Problems in Implementing Technology-Based Constructivist Approaches in Classrooms. In *Computers As Cognitive Tools*. Routledge.

Dick, W., & Carey, L. M. (1977). Needs Assessment and Instructional Design. *Educational Technology*, *17*(11), 53–59.

Djonomiarjo, T. (2020). Pengaruh model problem based learning terhadap hasil belajar. *Aksara: Jurnal Ilmu Pendidikan Nonformal*, *5*(1), 39–46. http://dx.doi.org/10.37905/aksara.5.1.39-46.2019

Fahira, V., Satria, R., & Priadi, A. (2021). Pelaksanaan Pembelajaran Pendidikan Agama Islam dalam Menanamkan Nilai-Nilai Kejujuran. *An-Nuha*, *1*(4), 448–460. https://doi.org/10.24036/annuha.v1i4.105

González-Calatayud, V., Prendes-Espinosa, P., & Roig-Vila, R. (2021). Artificial Intelligence for Student Assessment: A Systematic Review. *Applied Sciences*, *11*(12), 5467. https://doi.org/10.3390/app11125467

Hasrah, S. (2023). Meta Analisis Pengaruh Model Problem Based Learning Terhadap Hasil Belajar Siswa Sd. *Darul Ilmi: Jurnal Pendidikan Agama Islam.*, *1*(1), 18–24.

Ima, W., Pattiasina, J., & Sopacua, J. (2023). Model to increase motivation and learning outcomes in learning history. *Journal of Education and Learning (EduLearn)*, *17*(2), 206–214. https://doi.org/10.11591/edulearn.v17i2.20703

Ma'arif, M. A., Zuana, M. M. M., & Sirojuddin, A. (2022). Improving Islamic Self-Motivation for Professional Development (Study in Islamic Boarding Schools). In *Supporting Modern Teaching in Islamic Schools*. Routledge.

Meilasari, S., & Yelianti, U. (2020). Kajian Model Pembelajaran Problem Based Learning (PBL) dalam Pembelajaran di Sekolah. *BIOEDUSAINS: Jurnal Pendidikan Biologi Dan Sains*, *3*(2), 195–207. https://doi.org/10.31539/bioedusains.v3i2.1849

Murharyana, M., Al Ayyubi, I. I., & Rohmatulloh, R. (2023). Pendidikan Akhlak Anak Kepada Orang Tua Dalam Perspektif Al-Quran. *Piwulang: Jurnal Pendidikan Agama Islam*, *5*(2), 175–191. http://dx.doi.org/10.32478/piwulang.v5i2.1515

Nursimah, N., Anwar, K., & Fadhil, M. (2021). *Model Pembelajaran Problem Based Learning Untuk Meningkatkan Hasil Belajar Siswa Pada Mata Pelajaran Pendidikan Agama Islam Di Sma Negeri 14 Tebo*. UIN Sulthan Thaha Saifuddin Jambi.

Palittin, I. D., Wolo, W., & Purwanty, R. (2019). Hubungan motivasi belajar dengan hasil belajar siswa. *Magistra: Jurnal Keguruan Dan Ilmu Pendidikan*, *6*(2), 101–109. https://doi.org/10.35724/magistra.v6i2.1801

Paradina, D., Connie, C., & Medriati, R. (2019). Pengaruh Model Pembelajaran Problem Based Learning Terhadap Hasil Belajar Siswa Di Kelas X. *Jurnal Kumparan Fisika*, *2*(3 Desember), 169–176. https://doi.org/10.33369/jkf.2.3.169-176

Parasamya, C. E., Wahyuni, A., & Hamid, A. (2017). Upaya peningkatan hasil belajar fisika siswa melalui penerapan model pembelajaran problem based learning (pbl). *Jurnal Ilmiah Mahasiswa Pendidikan Fisika*, *2*(1), 42–49.

Primadoniati, A. (2020). Pengaruh Metode Pembelajaran Problem Based Learning Terhadap Peningkatan Hasil Belajar Pendidikan Agama Islam. *Didaktika: Jurnal Kependidikan*, *9*(1), 77–97. https://doi.org/10.58230/27454312.13

Quchani, M., Haji Arbabi, F., & Sabur Smaeili, N. (2021). A comparison of the effectiveness of Clark and ACT parenting training on improving the emotional-behavioral problems of the child with divorced single mothers. *Learning and Motivation*, *76*, 101759. https://doi.org/10.1016/j.lmot.2021.101759

Rahayu, R., & Sulaiman, S. (2022). Pengaruh Strategi Problem Based Learning Terhadap Hasil Belajar Pendidikan Agama Islam Siswa. *An-Nuha*, *2*(3), 551–563.

Rahman, S. (2021). Pentingnya Motivasi Belajar Dalam Meningkatkan Hasil Belajar. *Merdeka Belajar*, (November), 289–302. https://doi.org/10.17509/jpm.v4i1.14958

Rahman, S. (2022). Pentingnya motivasi belajar dalam meningkatkan hasil belajar. *Prosiding Seminar Nasional Pendidikan Dasar*.

Rahmat, E. (2018). Penerapan model pembelajaran problem based learning (PBL) untuk meningkatkan prestasi belajar siswa. *Jurnal Penelitian Pendidikan*, *18*(2), 144–159. https://doi.org/10.17509/jpp.v18i2.12955

Rambe, P. (2023). The Impact of Problem-Based Learning Learning Methods on the Development of Islamic Education Learning. *JOINME (Journal of Insan Mulia Education)*, *1*(1), 25–30.

Rerung, N., Sinon, I. L. S., & Widyaningsih, S. W. (2017). Penerapan model pembelajaran problem based learning (PBL) untuk meningkatkan hasil belajar peserta didik SMA pada materi usaha dan energi. *Jurnal Ilmiah Pendidikan Fisika Al-Biruni*, *6*(1), 47–55. https://doi.org/10.24042/jipfalbiruni.v6i1.597

Saenab, S., Muslimin, A. A., & Abdullah, A. (2019). Pengaruh Model Pembelajaran Problem Based Learning Terhadap Motivasi Belajar Pendidikan Agama Islam Peserta Didik Kelas VII DI SMP NEGERI 1 duampanua kabupaten pinrang. *PILAR*, *10*(2).

Sanjaya, W. (2010). *Strategi Pembelajaran Berorientasi Standar Proses Pendidikan*. Jakarta: Prenada Media Group.

Sugiyono. (2013). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Bandung: Alfabeta.

Sujatmika, S. (2016). Pengaruh metode pembelajaran problem based learning terhadap prestasi belajar ditinjau dari gaya belajar dan kemandirian. *Sosiohumaniora: Jurnal Ilmiah Ilmu Sosial Dan Humaniora*, *2*(1). https://doi.org/10.30738/sosio.v2i1.494

Sukriyatun, G., Mujahidin, E., & Tanjung, H. (2023). Model Pembelajaran Problem Based Learning dalam Meningkatkan Inovasi Siswa pada Mata Pelajaran Pendidikan Agama Islam SMP di Kota Bogor. *Edukasi Islami: Jurnal Pendidikan Islam*, *12*(02). http://dx.doi.org/10.30868/ei.v12i2.3935

Suripta, S. (2021). Peningkatan Hasil Belajar Fisika Melalui Model Problem Based Learning (PBL). *Tafkir: Interdisciplinary Journal of Islamic Education*, *2*(1), 80–97. https://doi.org/10.31538/tijie.v2i1.39

Tan, A. (2007). *KarakteristikProses Pembelajaran Berbasis Masalah*. Jakarta: PT Prestasi Pustakarya.

Tang, S. Y. F., Wong, A. K. Y., Li, D. D. Y., & Cheng, M. M. H. (2020). Millennial generation preservice teachers' intrinsic motivation to become a teacher, professional learning and professional competence. *Teaching and Teacher Education*, *96*, 103180. https://doi.org/10.1016/j.tate.2020.103180

Thamrin, L., Ghasya, D. A. G., & Pranata, R. (2023). The Practicality of Developing a Multi-Split Model Based on the Hands-on-Mind Approach as a Reconstruction of Basic Literacy and Character Values. *Jurnal Ilmiah Peuradeun*, *11*(3), 949–964. https://doi.org/10.26811/peuradeun.v11i3.905

Trianto. (2009). *Mendesain Model Pembelajaran Inovatif Progresif*. Jakarta: Kencana.

Wiewiora, A., & Kowalkiewicz, A. (2019). The role of authentic assessment in developing authentic leadership identity and competencies. *Assessment & Evaluation in Higher Education*, *44*(3), 415–430. https://doi.org/10.1080/02602938.2018.1516730

Yarmayani, A., & Afrila, D. (2018). Analisis faktor lingkungan belajar yang mempengaruhi hasil belajar siswa. *Jurnal Ilmiah Dikdaya*, *8*(1), 135–149. http://dx.doi.org/10.33087/dikdaya.v8i1.95

Yasminah, Y., & Sahono, B. (2020). Penerapan Model Pembelajaran Problem-Based Learning Untuk Meningkatkan Partisipasi Dan Prestasi Belajar Siswa. *Diadik: Jurnal Ilmiah Teknologi Pendidikan*, *10*(1), 167–174. https://doi.org/10.33369/diadik.v10i1.18142

Yulianti, E., & Gunawan, I. (2019). Model pembelajaran problem based learning (PBL): Efeknya terhadap pemahaman konsep dan berpikir kritis. *Indonesian Journal of Science and Mathematics Education*, *2*(3), 399–408. https://doi.org/10.24042/ijsme.v2i3.4366