




Research Article

The Effect of The Use of ChatGPT on Student's Learning Motivation in PAI Subjects at SMK Permata Negeri Garut

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The Effect of The Use of ChatGPT on Student's Learning Motivation in PAI Subjects at SMK Permata Negeri Garut

Abstract. This research was motivated by the problems that occurred at SMK Permata Negeri Garut, where the results of an interview with one of the students at SMK Permata Negeri Garut revealed that they were more enthusiastic about participating in the learning process in vocational subjects than other subjects because it involved more technology in the learning process which made them more enthusiastic and enthusiastic in participating in the learning process. This study aims to find out how

much influence the use of ChatGPT has on students' learning motivation in PAI subjects in class XI TKJ SMK Permata Negeri Garut. This research is based on the idea that students' learning motivation is influenced by the use of learning media, one of which is artificial intelligence-based learning media, namely ChatGPT. On this basis, the use of appropriate learning media can increase learning motivation, and vice versa. This study uses a quantitative approach and a descriptive method, with correlation analysis techniques. The population in this study is class students at SMK Permata Negeri Garut. The sample he used was class XI TKJ as many as 36 people. The data collection method uses observation, questionnaires, and interviews. In conclusion, this study shows that the use of ChatGPT significantly affects students' motivation to learn. Although the measurable level of relationship is low, the existence of statistical significance shows that ChatGPT has the potential to improve the quality of learning. These findings make an important contribution to the literature and understanding of the use of technology in educational contexts, as well as provide a prospective view for future research development and practical implementation.

Keywords: ChatGPT, Learning Motivation, Islamic Religious Education

INTRODUCTION

Islamic Religious Education is one of the important subjects in the education system in countries with a majority Muslim population. The main goal of this subject is to provide students with an in-depth understanding of Islamic values, teachings, history, and culture (Sitika et al. 2023). In the learning process, an appropriate learning media is needed to build learning motivation and improve student learning outcomes (Ekayani 2017).

Learning motivation refers to the internal and external impulses of each person that trigger, direct, and maintain a person's learning behavior. Meanwhile, cognitive learning outcomes include the achievement of knowledge, understanding, and intellectual skills acquired by students after going through the learning process (Arwitaningsih and Wahyuningsih 2024; Ekayani 2017). Learning motivation is an important factor in the learning process that affects the success of students in achieving educational goals (Nabillah and Abadi 2019). Learning motivation can come from internal and external encouragement that serves as the main driver that makes students interested and excited to be involved in learning activities (Adan 2023). Without adequate motivation, students tend to be passive, less participatory, and less effort in completing tasks that will ultimately negatively impact their learning outcomes. Learning motivation not only affects the level of involvement of learners in the learning process, but also improves their ability to maintain focus and concentration. Motivated learners will be more likely to allocate enough time and effort in studying the subject matter, looking for additional information, and working on assignments more thoroughly.

In addition, learning motivation also plays a role in increasing students' confidence and courage in facing academic challenges. Motivated learners will feel more confident in their ability to complete difficult tasks and face exams or tests more calmly. High motivation also encourages students to set higher learning goals and strive to achieve them diligently. This is the basis that learning motivation functions as a strong foundation for students' academic and personal development. The

importance of learning motivation in the learning process is also reflected in the increase in interaction between students and teachers as well as with peers. Motivated learners tend to be more active in participating in class discussions, asking questions, and sharing opinions so that this active interaction not only enriches the learning experience of the learners themselves, but also creates a dynamic and collaborative learning environment. In the context of Islamic Religious Education subjects, learning motivation is very important to arouse students' interest and enthusiasm in learning religious values and teachings. High motivation will encourage students to be more actively involved in learning activities, explore subject matter more deeply, and apply the knowledge gained in daily life. On the other hand, low motivation to learn can hinder the learning process and negatively impact student learning outcomes. This is in line with research conducted by Fitria, Elnin and Mahyudin who stated that the use of learning media is able to improve learning motivation and learning outcomes (Samsudin et al. 2024; Sartika, Desriwita, and Ritonga 2020).

Abdul Sakti, in his research, revealed that the use of appropriate learning media can increase interaction and collaboration between students such as digital tools and online learning platforms that allow students to communicate and collaborate on group projects, share resources, and provide feedback to each other (Sakti 2023). This more intense interaction can help students to develop social and cooperative skills, as well as deepen their understanding of the subject matter through discussion and exchange of ideas.

In the increasingly advanced digital era, technology has become an important part of learning. One of the technologies that has received attention in education is artificial intelligence-based technology such as ChatGPT (*Chat Generative Pre-Trained Transformation*) which is able to provide automatic responses in the form of text and can be used for interaction with students. Technological advances that are increasingly advancing like a sword that has two sides, illustrate that the presence of technological innovations not only brings positive impacts, but also has the potential to cause negative impacts. In an era filled with rapid technological advancements, the presence of innovation has brought tremendous changes in various aspects of human life. However, behind the glitter of progress, there is also a shadow lurking, namely the potential negative impact that can arise (Bimantoro et al. 2021). The presence of various artificial intelligence-based applications has become an inseparable substance in daily life from assisting in scheduling daily tasks to providing personalized recommendations, AI has become a reliable partner in various aspects of work and life. One prime example of the presence of beneficial AI is ChatGPT, an application that uses artificial intelligence to facilitate natural interaction between humans and machines. The presence of ChatGPT creates a polarization of views in the world of education, namely that ChatGPT as an artificial intelligence chatbot newly developed by OpenAI, ChatGPT has become the focus of controversy. In January 2023, study.com conducted a survey of 100 educators and 1,000 students over the age of 18. The survey results show that about 34% of educators expect the use of ChatGPT to be banned in higher education institutions or schools, while 66% support giving access to ChatGPT (Pontianak 2023). The use of artificial intelligence-based media is indeed a promising and very helpful option, but unconsciously it slowly harms oneself

(Astutik, Ayuni, and Putri 2023; Erdisna, Andini, and Suryana 2023; Lieb 2023). Meanwhile, the use of AI-based applications at the college level has a very significant role. The development of information and communication technology that is now a special concern is AI-based technology. The Director General of Islamic Education of the Ministry of Religion, Muhammad Ali Ramdhani at the Short Course on Quality Improvement of Lecturers of UIN Sunan Gunung Djati Bandung on Sunday, October 1, 2023 said "The current implementation of AI has a significant and substantive role in facilitating various human life activities, including in the field of education" (Faizin 2023).

The rapid development of AI-based science and technology can be seen from the rapid and wide spread in various aspects of life, one of which is in the education sector. Through these advances, PAI teachers can use AI-based technology as a learning medium that bridges students in the learning process to open the horizon of knowledge (Merentek et al. 2023; Puspika Sari 2023; Sitepu 2021). The use of learning media is indispensable in the learning process to support learning activities. However, the use of AI-based ChatGPT learning media needs special monitoring and guidance. AI-based ChatGPT can provide any information requested in a short time.

ChatGPT is an AI-based media that can provide all the information we want quickly by typing commands like a dialogue (Lieb 2023). ChatGPT is an AI based technology introduced by openai.com on November 22, 2022. ChatGPT can facilitate teachers and students to obtain information very quickly, extensive material explanations and variations in the use of vocabulary so that it can provide learning to students in the use of interesting vocabulary and foster students' motivation to learn.

The use of ChatGPT in the context of PAI learning is one of the promising alternatives. However, before adopting this technology widely, it is necessary to conduct in-depth scientific research to evaluate the influence of the use of ChatGPT on students' understanding of material and learning outcomes in PAI subjects. This research is important to conduct because PAI subjects often require a deep understanding of the concepts of Islamic religion, history, and culture. This challenge may make it difficult for some students to achieve optimal understanding. In addition, artificial intelligence technology such as ChatGPT, can be used to provide explanations, answer questions, and interact with students in PAI materials. However, the extent to which this technology can improve students' understanding and learning outcomes is not fully understood. ChatGPT has the potential to be tailored to the individual needs of students which can help in overcoming the understanding gap between students. In the digital age, it is important to evaluate how technology can contribute to learning, including in faith-based subjects such as PAI.

Islamic Religious Education at the Vocational School Level should be an important part to pay attention to, because the phenomenon that occurs often in the learning process, students at the vocational school level are more enthusiastic about participating in the vocational learning process than religious learning. This is based on the results of an interview with one of the students at SMK Permata Negeri Garut who revealed that they were more enthusiastic about participating in the learning process in vocational subjects than other subjects because it involved more

technology in the learning process which made them more enthusiastic and enthusiastic in participating in the learning process. In addition, based on the results of an interview with PAI subject teachers on Wednesday, May 8, 2024 at SMK Permata Negeri Garut, he revealed that there was a decrease in the value of student learning outcomes at SMK Permata Negeri Garut. So based on this phenomenon, teachers can utilize AI-based information and communication technology as a learning medium so that students can follow the learning process with enthusiasm, enthusiasm, high learning motivation and also obtain the expected learning results in accordance with learning objectives. With the presence of technological advances, it can provide information quickly and widely, can foster learning motivation and learning outcomes (Monalisa and Irfan 2023).

Based on initial observations made by researchers on Thursday, November 23, 2023 at SMK Permata Negeri Garut, there are PAI teachers who use ChatGPT as a learning medium where in the previous learning year they had never used AI-based learning media. The use of ChatGPT is mainly to adjust to the development of information and communication technology and integrate Artificial Intelligence-based media in learning. Efforts made by PAI subject teachers to implement this include: the introduction of AI-based media to students, the use of the ChatGPT application in the PAI learning process, the use of the ChatGPT application by students to solve problems raised by teachers and then the results are presented and discussed in front of the class.

The efforts that have been made by PAI teachers in the implementation of PAI learning are: First, implementing Artificial Intelligence-based technology in learning to provide a more varied learning experience. Second, it provides encouragement to students to improve digital literacy based on *Artificial Intelligence* technology. Third, using digital devices and AI-based ChatGPT applications in learning to improve students' learning motivation and learning outcomes.

However, the use of ChatGPT as a learning medium in the implementation of PAI learning has not maximally increased students' learning motivation and their cognitive learning outcomes. This is marked by the attitudes shown by students are very diverse and also have diverse learning outcomes. Sometimes in discussion learning activities, when teachers provide material and problems related to learning topics, even though they use AI-based ChatGPT which can provide information in a relatively short time, some students are enthusiastic about working, and some of them are ordinary. Even the PAI subject teacher at the school said that the learning outcomes of students tended to decrease. This can be seen from the results of students' daily tests in PAI subjects. In fact, in theory, by using ChatGPT, problems related to learning topics can be explained in a very short time and also a variety of vocabulary.

METHOD

This study uses a quantitative approach that emphasizes data analysis in numerical form which is then processed statistically. This approach will contain data that contains data about the relationship between research variables, namely the use of ChatGPT (X) on learning motivation (Y), then data processing is carried out

numerically with statistical calculations. The research method used is the descriptive method. The method in question is a method that focuses on solving problems that occur today through research that documents, analyzes, and classifies investigations through the stages of quantitative and qualitative research. The use of this method in this study is intended to describe the research data in the form of numbers into descriptive data.

The data collection technique uses observation, interviews and questionnaires. Meanwhile, the data analysis technique is with *the product moment* correlation technique, because in this study it will test the degree of relationship between the research variables. Observation is used to observe and record directly about the reality that occurs at the research site. The interview used in this study is an unguided interview where the researcher is free to ask questions to the resource person to get the necessary data. In this study, the researcher distributed a questionnaire in accordance with the research discussion about ChatGPT and learning motivation.

RESULTS AND DISCUSSION

Result

1. Validity Test

a. Variable X (Use of ChatGPT)

To determine the high and low validity of the instrument in variant X, a validity test was first carried out. After the validity data is known, then interpret the data. If the data does not meet the criteria of the level of significance with the following conditions:

- If the significance value > 0.05 , then the item is declared invalid
- If the significance value < 0.05 , then the instrument is declared valid.

After being analyzed using the SPSS data processing application version 26, the following data was obtained:

Table 1. Validity Test Results of X Variables

Variabel X	Skor	Kategori
Item 1	0.002	Valid
Item 2	0.037	Valid
Item 3	0.001	Valid
Item 4	0.001	Valid
Item 5	0.000	Valid
Item 6	0.044	Valid
Item 7	0.003	Valid
Item 8	0.297	Invalid
Item 9	0.002	Valid
Item 10	0.000	Valid
Item 11	0.746	Invalid
Item 12	0.000	Valid
Item 13	0.010	Valid
Item 14	0.011	Valid
Item 15	0.029	Valid

Item 16	0.000	Valid
Item 17	0.012	Valid
Item 18	0.000	Valid
Item 19	0.007	Valid
Item 20	0.091	Invalid

Based on table 1 above, it is known that valid items are items number 1, 2, 3, 4, 5, 6, 7, 9, 10, 12, 13, 14, 15, 16, 17, 18, and 19 because they have a significance score of less than 0.05. The validity of these items shows that seventeen of the twenty items are valid in measuring the use of ChatGPT.

b. Variable Y (Learning Motivation)

To determine the high and low validity of the instrument in the Y₁ variant, a validity test was first carried out. After the validity data is known, then interpret the data. If the data does not meet the criteria of the level of significance with the following conditions:

- If the significance value > 0.05 , then the item is declared invalid
- If the significance value < 0.05 , then the instrument is declared valid.

After being analyzed using the SPSS data processing application version 26, the following results were obtained:

Table 2. *Validity Test Results of Y Variables*

Item	Score r Calculate	Information
1	0,002	Valid
2	0,000	Valid
3	0,001	Valid
4	0,008	Valid
5	0,015	Valid
6	0,012	Valid
7	0,008	Valid
8	0,002	Valid
9	0,000	Valid
10	0,007	Valid
11	0,170	Invalid
12	0,000	Valid
13	0,000	Valid
14	0,000	Valid
15	0,510	Invalid
16	0,002	Valid
17	0,215	Invalid
18	0,000	Valid
19	0,001	Valid
20	0,000	Valid
21	0,029	Valid
22	0,006	Valid
23	0,000	Valid
24	0,001	Valid
25	0,000	Valid

Based on table 2 above, it is known that valid items are items number 1, 2, 3, 4, 5, 6, 7, 9, 10, 12, 13, 14, 16, 18, 19, 20, 21, 22, 23, 24, and 25 because they have a significance score of less than 0.05. The validity of these items shows that twenty-two of the twenty-five items are valid in measuring learning motivation.

2. Reliability Test

a. Variable X (Use of ChatGPT)

In this study, data reliability was measured using Cronbach's Alpha through the SPSS 26 application with the following conditions:

- If Cronbach's Alpha Value > r table, then the questionnaire is declared reliable
- If the value of Cronbach's Alpha < r table, then the questionnaire is declared unreliable

After the analysis was carried out using the SPSS statistical processing application version 26, the following results were obtained:

Table 3. Reliability Test Results of X Variable

Reliability Statistics	
Cronbach's Alpha	N of Items
.767	20

The results of the reliability test can be seen in the Reliability Statistics table with the Cronbach Alpha Technique. Based on the table above, it can be seen that Cronbach's Alpha score is 0.767. Thus, because Cronbach's Alpha score (0.767) > r table (0.329) with a significance level of 5% ($\alpha = 0.05$) and N as much as 36, it can be concluded that the variable X questionnaire is declared reliable.

b. Variable Y (Learning Motivation)

In this study, data reliability was measured using Cronbach's Alpha through the SPSS 26 application with the following conditions:

- If Cronbach's Alpha Value > r table, then the questionnaire is declared reliable
- If the value of Cronbach's Alpha < r table, then the questionnaire is declared unreliable

After the analysis was carried out using the SPSS statistical application version 26, the following results were obtained:

Table 4. Reliability Test Result of Y Variable

Reliability Statistics	
Cronbach's Alpha	N of Items
.870	25

The results of the reliability test can be seen in the Reliability Statistics table with the Cronbach Alpha technique. Based on the table above, it can be seen that Cronbach's Alpha score is 0.870. Thus, because the score of Cronbach's Alpha (0.870) > r table (0.329) with a significance level of 5% ($\alpha = 0.05$) and N is 36, it can be concluded that the variable questionnaire Y₁ is declared reliable.

3. Normality Test

a. Variable X (Use of ChatGPT)

Furthermore, to obtain a decision on whether or not the distribution is normal in the use of ChatGPT, a data normality test was carried out using the SPSS statistical processing application version 26, the following output was obtained:

Table 5. *Test of Normality of X Variable Data*

Tests of Normality						
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Penggunaan_ChatGPT	.118	36	.200*	.955	36	.152
*. This is a lower bound of the true significance.						
a. Lilliefors Significance Correction						

Based on table 5 above, it shows that the results of the calculation of the degree of significance of the normality test of the variables used by ChatGPT in class XI students of TKJ SMK Permata Negeri Garut are 0.200 (Kolmogorov-Smirnov) and 0.152 (Shapiro-Wilk). The score shows that it is greater than α 0.05 or 5%. This means that the variable data on the use of ChatGPT in class XI TKJ SMK Permata Negeri Garut students is normally distributed.

b. Variable Y (Learning Motivation)

Furthermore, to obtain a decision on whether or not the distribution is normal in the use of ChatGPT, a data normality test was carried out using the SPSS statistical processing application version 26, the following data was obtained:

Table 6. *Test of Normality of Y Data*

Tests of Normality						
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Motivasi_Belajar	.152	36	.034	.937	36	.041
a. Lilliefors Significance Correction						

Based on the table above, it shows that the results of the calculation of the degree of significance of the normality test of learning motivation variables in class XI TKJ SMK Permata Negeri Garut students are 0.034 (Kolmogorov-Smirnov) and 0.041 (Shapiro-Wilk). The score shows that it is smaller than α 0.05 or 5%. This means that the data on learning motivation variables in class XI TKJ SMK Permata Negeri Garut students are abnormally distributed.

4. Hypothesis Testing

The calculation at this stage is intended to measure the degree of relationship between the use of ChatGPT and learning motivation in students in class XI TKJ SMK Permata Negeri Garut. To determine the height of the relationship between variables, it is done by following the guidelines for interpreting the correlation coefficient in table 7 below:

Table 7. *Score and Correlation Coefficient*

Score	Interpretation
0,00 – 0,199	Very Low
0,20 – 0,399	Low
0,40 – 0,599	Keep
0,60 – 0,799	Strong
0,80 – 1,000	Very Strong

To calculate the correlation coefficient of both variables, it is possible to use the *Spearman-Rank correlation formula*, because one of the variables is abnormally distributed. To determine the criteria for the relationship or influence of variables, the following guidelines are used:

- If the value of Sig. (2-tailed) < 0.05, there is a significant influence
- If the value of Sig. (2-tailed) > 0.05, there is no significant influence

Furthermore, to find out the correlation coefficient of the two variables, a Spearman-Rank correlation test was carried out because one of the data was abnormally distributed. For the correlation analysis using the help of the SPSS version 26 statistical data processing application, the following data were obtained:

Table 8. Correlation Coefficient of Variable X with Y

Correlations				
			Penggunaan_ChatGPT	Motivasi_Belajar
Spearman's rho	Penggunaan_ChatGPT	Correlation Coefficient	1.000	.365*
		Sig. (2-tailed)	.	.029
		N	36	36
	Motivasi_Belajar	Correlation Coefficient	.365*	1.000
		Sig. (2-tailed)	.029	.
		N	36	36

*. Correlation is significant at the 0.05 level (2-tailed).

Based on the calculations in table 8 above, it is known that the correlation coefficient between the use of ChatGPT and learning motivation is 0.365, meaning that the relationship between the use of ChatGPT and learning motivation is 0.365 and is relatively low because it is in the range of 0.20 – 0.399. Furthermore, from the table above, the significance score is 0.029 < 0.05, so there is a significant relationship, or in other words there is a significant influence between the use of ChatGPT on learning motivation.

DISCUSSION

1. The use of ChatGPT in PAI subjects at SMK Permata Negeri Garut

To find out the use of ChatGPT in PAI subjects in class XI TKJ SMK Permata Negeri Garut, the researcher distributed a questionnaire to 36 respondents of class XI TKJ SMK Permata Negeri Garut. After analysis, the average score of the questionnaire results was obtained with a score of 3.73. Referring to table 4.10, the score is categorized as high because it is in the range of 3.40 – 4.19. This means that the use of learning media such as ChatGPT at SMK Permata Negeri Garut is high.

ChatGPT is an application based on artificial intelligence technology that can respond to anything ordered in the form of questions. ChatGPT is widely chosen by teachers and students because the responses given are more structured and can solve problems in a short time (ElSayary 2024; H.I.A 2023). The technology applied in learning media makes it easier for teachers and students to access to increase

creativity in designing teaching and learning activities that focus on digitalization. The various technologies and learning media available are now easily accessible, making the learning process more flexible in terms of place and time. The use of learning media also strengthens direct interaction between teachers and students, which in turn motivates students to explore their knowledge more. This statement is in line with what was conveyed by Nailus and Hasanudin that ChatGPT as a tool can increase student interaction and participation in the learning process, as well as provide quick access to convey information (Nailus and Hasanudin 2023).

2. Students' Learning Motivation in PAI Subjects at SMK Permata Negeri Garut

Learning motivation is one of the important factors that affect the academic success of students. In this study, based on the results of data analysis, it was shown that the average score of learning motivation of students in class XI TKJ SMK Permata Negeri Garut was 3.52, which was included in the high category based on the scale range of 3.40 - 4.19. This indicates that most respondents have good motivation to learn. High learning motivation generally reflects the enthusiasm and commitment of students in achieving their academic goals, as well as showing a strong desire to achieve achievements.

According to the theory of motivation as expressed by Maslow in his hierarchy of needs, the need for recognition and achievement can be a key driver in increasing an individual's motivation to learn (Uno 2021). In the context of education, this need is reflected in the form of encouragement to get good grades, praise from teachers, and recognition from peers. This high average score can indicate that a supportive learning environment and reward for achievement can play a big role in motivating students.

In addition, the theory of *self-determination* put forward by Deci and Ryan states that intrinsic motivation, which comes from personal interest and enjoyment in learning, is also very important (Alamri et al. 2020; Ryan and Deci 2020). A high average score of learning motivation may also reflect the presence of strong intrinsic motivation among students. They may learn not only to achieve high grades, but also because they really enjoy the learning process itself and feel challenged by the material being studied.

In a practical context, the results of this study underline the importance of the role of teachers and the school environment in maintaining and increasing students' learning motivation. Teachers can use a variety of strategies such as providing constructive feedback, creating a positive and challenging classroom atmosphere, and providing opportunities for students to feel autonomy in learning. Students' already high learning motivation can be maintained and even further enhanced, which will ultimately have a positive impact on their academic achievement.

3. The Effect of the Use of ChatGPT on Students' Learning Motivation at SMK Permata Negeri Garut

Based on the results of data analysis, the correlation coefficient between the use of ChatGPT (X) and learning motivation (Y₁) was 0.365, which was categorized as a low correlation based on the range of 0.20 - 0.399. A correlation score of 0.365

indicates a positive but weak relationship between the use of ChatGPT and learning motivation. Nonetheless, this relationship remains important and could be the basis for further research. The low-correlation category indicates that while ChatGPT may exert an influence on learning motivation, there are other factors that may be more dominant in influencing students' learning motivation.

In addition, the significance score obtained was 0.029, which is smaller than < 0.05 . This shows that the use of ChatGPT has a significant effect on learning motivation. The significance score is $0.029 < 0.05$, which means that this result is statistically significant. In other words, there is strong enough evidence to state that the use of ChatGPT does affect learning motivation.

According to the theory of *Self-Determination* put forward by Deci & Ryan in 1985, learning motivation is influenced by the need for competence, autonomy, and connectedness (Aqillah, Laurenza, and Rosida 2024; Siswanto 2023; Wang et al. 2019). ChatGPT can provide personalized and adaptive assistance, which in this case can allow students to feel more competent and independent in the learning process. This means that they can adjust answers and assistance according to individual needs. That way, ChatGPT can help students feel more competent because they get guidance that suits their current level of understanding (ElSayary 2024; Naamati-Schneider 2024). For example, if students are having difficulty on a particular topic of discussion, ChatGPT can simplify explanations, provide examples, or offer different ways to understand the material. Conversely, if students are already proficient in using ChatGPT, ChatGPT can challenge them with more in-depth questions.

This adaptability can also encourage student independence in learning. ChatGPT can trigger them to learn independently because it can be accessed at any time without having to wait for a teacher, which gives them the opportunity to explore the material at their own pace, repeat explanations if necessary, or even deepen their understanding without fear of being wrong. This approach not only helps students master the material, but also develops confidence and better problem-solving skills.

CONCLUSION

As the results of the analysis and discussion that have been described earlier, the researcher concludes the results as follows; The results of the Spearman-Rank correlation test showed that there was a significant influence between the use of ChatGPT on students' learning motivation in PAI subjects in class XI TKJ SMK Permata Negeri Garut. A low correlation coefficient, which is 0.365, indicates that the relationship is in the low category, but the statistical significance (Sig. 2-tailed) is 0.029.

In conclusion, this study shows that the use of ChatGPT significantly affects students' learning motivation and cognitive learning outcomes. Although the measurable level of relationship is low, the existence of statistical significance shows that ChatGPT has the potential to improve the quality of learning. These findings make an important contribution to the literature and understanding of the use of technology in educational contexts, as well as provide a prospective view for future research development and practical implementation.

BIBLIOGRAPHY

- Adan, S. I. A. 2023. "The Importance of Learning Motivation in Improving Student Learning Outcomes." *INCAN: Journal of Education and Teaching* 1(2):76–86.
- Alamri, Hamdan, Victoria Lowell, William Watson, and Sunnie Lee Watson. 2020. "Using Personalized Learning as an Instructional Approach to Motivate Learners in Online Higher Education: Learner Self-Determination and Intrinsic Motivation." *Journal of Research on Technology in Education* 52(3):322–52.
- Aqillah, Hawwa Nasywa, Audesty Anggraeny Laurenza, and Hilda Rosida. 2024. "Peer to Peer Interaction Patterns for Mental Health and Student Learning Motivation." 7(3).
- Arwitaningsih, Ria Putranti, and Retno Wahyuningsih. 2024. "AL-AFKAR: Journal for Islamic Studies The Relationship between Teachers' Learning Methods in Teaching and Student Learning Motivation with Learning Outcomes of PAI Subjects at SDN Bugel 01 Polokarto." 7(3):37–50. doi: 10.31943/afkarjournal.v7i3.1291.The.
- Astutik, Puji Astutik, Nur Afif Ayuni, and Ayunda Mahdalena Putri. 2023. "Artificial Intelligence: The Impact of the Shift in the Utilization of Human Intelligence with Artificial Intelligence for the World of Education in Indonesia." *Sindoro Cendikia Pendidikan* 1(10):101–12. doi: <https://doi.org/10.9644/sindoro.vii10.1219>.
- Bimantoro, Arya, Wanda Alifiyah Pramesti, Satria Wira Bakti, M. Aryo Samudra, and Yusuf Amrozi. 2021. "The Ethical Paradox of Information Technology Utilization in the 5.0 Era." *Journal of Information Technology* 7(1):58–68. doi: 10.52643/jti.v7i1.1425.
- Ekayani, Ni Luh Putu. 2017. "The Importance of Using Learning Media to Improve Student Learning Achievement." *Journal of the Faculty of Education, Ganesha Singaraja University of Education* , 2(1):3.
- ElSayary, Areej. 2024. "An Investigation of Teachers' Perceptions of Using ChatGPT as a Supporting Tool for Teaching and Learning in the Digital Era." *Journal of Computer Assisted Learning* 40(3):931–45.
- Erdisna, Erdisna, Silfia Andini, and Fabriano Suryana. 2023. "Digital Entrepreneurship 4.0."
- Faizin, Muhammad. 2023. "Director General of Pendis Asks Lecturers to Adapt AI Development." *Arina.Id*. Retrieved (<https://arina.id/berita/ar-t3Mtd/dirjen-pendis-minta-dosen-adaptif-perkembangan-ai>).
- H.I.A, Pontjowulan. 2023. "Implementation of the Use of ChatGPT Media in Digital Era Learning." *Journal of Educational and Cultural Studies* 2(2):1–8.
- Lieb, Robert. 2023. *Exoanthropology Dialogues With AI*. Sydney: Punctum Books.
- Merentek, Theo Chanra, Dani Lantang, Victory Nicodemus Joufree Rotty, and Harol Reflie Lumapow. 2023. *Education Policy*. Ukit Press.
- Monalisa, Monalisa, and Ade Irfan. 2023. "Teachers' Challenges in Implementing the Independent Curriculum." *Basicedu Journal* 7(5):3228–33. doi: 10.31004/basicedu.v7i5.6055.
- Naamati-Schneider, Lior. 2024. "Enhancing AI Competence in Health Management: Students' Experiences with ChatGPT as a Learning Tool." *BMC Medical Education* 24(1):1–16. doi: 10.1186/s12909-024-05595-9.

- Nabillah, Tasya, and Agung Prasetyo Abadi. 2019. "Factors Causing Low Student Learning Outcomes." *Proceedings of the 2019 National Seminar on Mathematics and Mathematics Education 2019* 2(1):662.
- Nailus, Saadah, and Cahyo Hasanudin. 2023. "Implementation of ChatGPT as an Innovation of Indonesian Learning Media in the Society 5.0 Era." *National Seminar Online Synergy* 1(1):596.
- Pontianak, Financial Education and Training Center. 2023. "Chat Generative Pre-trained Transformer Opportunities, Challenges, or Threats in the World of Education?" *Ministry of Finance, Financial Education and Training Center*. Retrieved November 16, 2023 (<https://bppk.kemenkeu.go.id/balai-diklat-keuangan-pontianak/artikel/chat-generative-pre-trained-transformer-peluang-tantangan-atau-ancaman-dunia-pendidikan-003642>).
- Puspika Sari, Herlini. 2023. "Character Education in the Society 5.0 Era: An Analysis of Ibn Miskawaih's Thought." *Al-Thariqah Journal of Islamic Religious Education* 8(2):356–57. doi: 10.25299/al-thariqah.2023.vol8(2).15026.
- Ryan, Richard M., and Edward L. Deci. 2020. "Intrinsic and Extrinsic Motivation from a Self-Determination Theory Perspective: Definitions, Theory, Practices, and Future Directions." *Contemporary Educational Psychology* 61(April):101860. doi: 10.1016/j.cedpsych.2020.101860.
- Sakti, Abdul. 2023. "Improving Learning Through Digital Technology." *Journal of Engineering Research (JUPRIT)* 2(2):212–19. doi: <https://doi.org/10.55606/juprit.v2i2.2025>.
- Samsudin, Mandasia, Bambang Sumardjoko, Muhammad Wildan Shohib, and University of Muhammadiyah Surakarta. 2024. "AL-AFKAR: Journal for Islamic Studies on the Use of Multimedia in PAI Learning at SMK Muhammadiyah Kupang." 7(3):1492–1503. doi: 10.31943/afkarjournal.v7i3.1062.Use.
- Sartika, Fitria, Elni Desriwita, and Mahyudin Ritonga. 2020. "The Utilization of Learning Media in Improving PAI Motivation and Learning Outcomes in Schools and Madrasas." *Humanities, Scientific Studies of General Courses* 20(2):65–77. doi: 10.21831/hum.v20i2.32598.
- Siswanto, Romi. 2023. "Evaluation of the Use of E-Learning in Economic Education: A Review of Literature Studies." *Anthropocene: Journal of Social Studies and Humanities* 2(1):46–52. doi: 10.33830/antroposen.v2i1.5229.
- Sitepu, Ekalias Noka. 2021. *Digital-Based Learning Media*. Vol. 1.
- Sitika, Achmad Junaedi, Mifa Rezkia Zianti, Mita Nofiarti Putri, Muhamad Raihan, and Hurul Aini. 2023. "Development of Islamic Religious Education Curriculum as an Effort to Strengthen Religious Values." *Journal on Education* 06(01):5899–5909. doi: <https://doi.org/10.31004/joe.v6i1.3792>.
- Uno, Hamzah B. 2021. *Theory of Motivation and Its Measurement: Analysis in the Field of Education*. Jakarta: Bumi Aksara.
- Wang, C. K. John, Woon Chia Liu, Ying Hwa Kee, and Lit Khoo Chian. 2019. "Competence, Autonomy, and Relatedness in the Classroom: Understanding Students' Motivational Processes Using the Self-Determination Theory." *Heliyon* 5(7).