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CORE-PL Model and Student Independence: A Quantitative Study on Fiqh Learning Outcomes and Motivation in Secondary Schools

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Abstract

In the realm of Islamic education, increasing motivation and learning outcomes in Jurisprudence requires the application of innovative learning models that suit the characteristics of the material and student needs. This research aims to examine the influence of the CORE-PL (Connecting, Organizing, Reflecting, Extending - Project Learning) learning model on motivation and learning outcomes in Jurisprudence, as well as identifying its influence with learning independence as a control variable. This research uses a quasi-experimental design carried out at MAN 1 Tegal. The sampling technique was carried out through random assignment involving 69 class XI students, divided into experimental and control classes. Data was collected through tests (learning outcomes), questionnaires (learning motivation and learning independence), and analyzed using simple Analysis of Variance (ANOVA) and Analysis of Covariance (ANCOVA). The research results show that the CORE-PL model has a significant influence on increasing student motivation and learning outcomes. In addition, when learning independence is used as a control variable, the influence of the CORE-PL model becomes stronger, which has implications for a significant increase in motivation and learning outcomes in Jurisprudence. This study contributes to the development of relevant active learning methods in the field of Jurisprudence education, and emphasizes the importance of student learning independence in supporting the effectiveness of the CORE-PL model. This conclusion confirms that the use of the CORE-PL learning model can be an effective solution for improving the quality of the learning process and Fiqh learning outcomes in madrasah.

Kata Kunci:
Model Pembelajaran CORE-PL; Independensi Belajar Siswa; Motivasi Belajar; Hasil Belajar Mata Pelajaran.

Abstrak

Dalam ranah pendidikan Islam, peningkatan motivasi dan hasil belajar Fikih memerlukan penerapan model pembelajaran inovatif yang sesuai dengan karakteristik materi dan kebutuhan siswa. Penelitian ini bertujuan untuk menguji pengaruh model pembelajaran CORE-PL (Connecting, Organizing, Reflecting, Extending - Project Learning) terhadap motivasi dan hasil belajar Fikih, serta mengidentifikasi pengaruhnya dengan independensi belajar sebagai variabel kontrol. Penelitian ini menggunakan desain kuasi-eksperimen yang dilaksanakan di MAN 1 Tegal. Teknik pengambilan sampel dilakukan melalui random assignment dengan melibatkan 69 siswa kelas XI, yang terbagi dalam kelas eksperimen dan kontrol. Data dikumpulkan melalui tes (hasil belajar), angket (motivasi belajar dan independensi belajar), dan dianalisis menggunakan Analisis Varian (ANAVA) sederhana dan Analisis Kovarian (ANAKOVA). Hasil penelitian menunjukkan bahwa model CORE-PL memiliki pengaruh signifikan terhadap peningkatan motivasi dan hasil belajar siswa. Selain itu, ketika independensi belajar dijadikan variabel kontrol, pengaruh model CORE-PL semakin kuat, yang berimplikasi pada peningkatan signifikan terhadap motivasi dan hasil belajar Fikih. Studi ini berkontribusi dalam pengembangan metode pembelajaran aktif yang relevan di bidang pendidikan Fikih, serta menekankan pentingnya independensi belajar siswa dalam mendukung efektivitas model CORE-

PL. Kesimpulan ini menegaskan bahwa penggunaan model pembelajaran CORE-PL dapat menjadi solusi efektif untuk meningkatkan kualitas proses pembelajaran dan hasil belajar Fikih di madrasah.

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INTRODUCTION

Education is one of the key aspects in building competitive and quality human resources (Organisation for Economic Co-Operation and Development (OECD), 2019). However, PISA 2018 data shows that Indonesia still ranks 74th out of 79 countries in learning outcomes, reflecting serious problems in the effectiveness of learning in schools. This problem is not only caused by limited educational facilities, but also by low motivation (Wulandari & Mustika, 2023) of students to learn and the use of learning models that are not optimal and sometimes still conventional. Conventional methods that tend to be teacher-centered, make students passive, less involved in the learning process, and ultimately have an impact on low learning outcomes. Therefore, it is necessary to innovate learning models that encourage active student involvement while increasing motivation and learning outcomes.

Model CORE-PL (Connecting, Organizing, Reflecting, Extending - Project Learning) is a learning model that integrates elements of active and collaborative learning (Marope, 2015) and is project-based. CORE-PL aims to encourage students to be more engaged in the learning process through organizing their existing knowledge and extending understanding with practical applications in real projects. This model is believed to be effective in improving students' learning motivation and learning outcomes (Freeman et al., 2014; Ulger, 2018).

There are several advantages of this learning model, namely, (1) students are active in learning, (2) train students' memory, (3) train students' thinking about a problem, and (4) provide innovative learning experiences to students (Azhari et al., 2024; Djalilah et al., 2024). In addition, the CORE-PL approach is in line with the values of ta'lim in Islam, as exemplified by Rasullah SAW. In deliberations and discussions with friends. as stated in a hadith, namely عَنْ أَبِي هُرَيْرَةَ قَالَ مَا رَأَيْتُ أَحَدًا أَكْثَرَ مَشُورَةً لِأَصْحَابِهِ مِنْ رَسُولِ اللَّهِ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ which means It has been narrated from Abu Hurairah, he said, "*I have never seen anyone who consulted with the Companions more often than the Messenger of Allah (peace and blessings of Allah be upon him).* " This concept shows that participatory and collaborative learning has a strong foundation in the Islamic educational tradition.

However, previous research on the CORE-PL model is still limited to several general subjects and has not been widely applied in the context of learning Jurisprudence in madrasah. Fikih as a subject that is applicable in daily life requires a more innovative learning approach and is able to motivate students to understand and apply religious concepts. In addition, previous studies often ignore the role of learning independence as a control factor that can strengthen the relationship between learning

models and student learning outcomes (Suratimah et al., 2022; Sutarto et al., 2023). Learning independence plays an important role because independent students tend to be more responsible and have the ability to organize and evaluate their learning process effectively. In the context of learning Fikih, learning independence is very important because this subject requires students to understand religious concepts that are applicable in everyday life (Fatimah et al., 2023; Tanjung et al., 2022; Wasyilah et al., 2021).

This study aims to fill the gap of previous research by examining the effect of CORE-PL model on learning motivation and learning outcomes of Jurisprudence, with learning independence as the control variable. The main focus of this research is to prove the effectiveness of the CORE-PL model compared to conventional methods in increasing the motivation and learning outcomes of grade XI students at MAN 1 Tegal. In addition, this study wanted to reveal the extent to which learning independence strengthened the effect of the CORE-PL model on both variables.

Using a quantitative approach through an experimental design, this research is expected to contribute significantly to the development of learning methods in madrasah. The findings of this study not only complement the shortcomings of previous research, but also serve as a reference for educators to apply learning models that are innovative, effective, and in accordance with the needs of students in learning Fikih.

RESEARCH METHOD

This research used quantitative approach with experimental method. The research subjects were 11th grade students at MAN 1 Tegal who participated in Fikih learning. This study aims to examine the effect of CORE-PL (Connecting, Organizing, Reflecting, Extending - Project Learning) learning model on learning motivation and learning outcomes, with learning independence as the control variable. This variable consists of independent variables: CORE-PL learning model. Dependent variable: Learning motivation and learning outcomes of Fikih. The control variable: learning independence.

This research design used a quasi-experiment design with pretest-posttest control group design. The research subjects were divided into two groups, namely the experimental group that received learning with the CORE-PL model and the control group that used conventional learning methods. Each group was given a pretest before treatment and a posttest after treatment to measure changes in the dependent variable.

The population in this study were all students of class XI MAN 1 Tegal. The research sample was selected using purposive sampling technique, with the criteria of students who have moderate to high levels of learning independence. The number of samples taken was 69 students, which were divided into two groups, namely 36 students for the experimental group and 33 students for the control group.

The research instruments used in this study include: Learning motivation questionnaire: To measure the level of student learning motivation. Fikih learning outcomes test: This test was used to measure students' cognitive achievement on the Fikih material taught. Learning independence questionnaire: To measure the level of

student learning independence which is used as a control variable. The learning motivation and learning independence questionnaire instruments have been tested for validity and reliability before being used in this study with 34 valid items out of 40 and 27 items out of 30. The Jurisprudence learning outcomes test has also been validated by subject matter experts.

This research was conducted in several stages as follows: Preparation stage: Collecting research instruments, testing the validity and reliability of instruments, and socializing with schools and students. Implementation stage: The experimental group was taught using the CORE-PL model for 8 meetings, while the control group was taught using conventional learning methods. After all meetings were completed. Data analysis stage: Data were analyzed using analysis techniques with the W-Stats@2016 application. Then the data were analyzed using descriptive statistics and inferential statistics. Analysis of Variance (ANOVA) technique was used to test whether there is an effect of CORE-PL on students' motivation and learning outcomes and Analysis of Covariance (ANOVA) was used to test whether there is a significant difference in learning motivation and learning outcomes between the experimental group and the control group after controlling for learning independence variables. Normality and homogeneity tests were conducted to ensure that the data met the assumptions before inferential analysis was conducted.

RESEARCH RESULTS AND DISCUSSION

Results

This study aims to examine the effect of CORE-PL learning model on learning motivation and learning outcomes of Jurisprudence, with learning independence as the control variable. The research was conducted on grade XI students of MAN 1 Tegal. The following are the research results based on data analysis:

Descriptive Statistics

At the initial stage, descriptive statistical analysis was carried out to see an overview of the data on learning motivation and learning outcomes of Jurisprudence after treatment (posttest) in both groups, namely the experimental group and the control group.

Table 1 Description of Learning Motivation

Variabel	Model Pembelajaran	Skor Terendah	Skor Tertinggi	Rerata	Simpang Baku
Motivasi belajar Fikih	CORE-PL	89	144	112,333	14,454
	Konvensional	85	112	97,545	5,729

Based on the results of the descriptive analysis in the table above, it can be seen that the learning motivation of 36 students with the CORE-PL learning model (experimental class) obtained the highest score of 144 and the lowest score of 89 with an average score of 112.333 and a standard deviation of 14.454. The learning motivation of 33 conventional class students (control class) obtained the highest

score of 112 and the lowest score of 85. From the control class scores, the average score was 97.545 and the standard deviation was 5.729.

Table 2 Description of Fiqh Learning Outcomes:

Variabel	Model Pembelajaran	Skor Terendah	Skor Tertinggi	Rerata	Simpang Baku
Hasil belajar Fikih	CORE-PL	64	100	88,361	8,118
	Konvensional	44	92	75,970	13,469

Based on the results of the descriptive analysis above, it can be seen that student learning outcomes with the CORE-PL learning model (experimental class) obtained the highest score of 100 and the lowest score of 64 with an average score of 88.361 and a standard deviation of 8.118. The learning outcomes of students in the conventional class (control class) obtained the highest score of 92 and the lowest score of 44. From the control class scores, the average score was 75.970 and the standard deviation was 13, 469.

Assumption Test Before conducting inferential tests, assumption tests are carried out including normality tests and homogeneity tests. The results of the normality test with Kolmogorov-Smirnov showed that the data on learning motivation and learning outcomes in both groups were normally distributed (0.200>0.05). The variance homogeneity test using Levene's Test also showed that the variance between groups was not homogeneous for learning motivation (0.007<0.05) and learning outcomes (0.000<0.05).

Table 3 Descriptive Results of Student Learning Independence

Variabel	Model Pembelajaran	Skor Terendah	Skor Tertinggi	Rerata	Simpang Baku
Kemandirian	*CORE-PL*	68	105	81,417	9,915
	Konvensional	65	98	78,333	8,406

The table above shows that the learning independence of students who follow the CORE-PL learning model ranges from a low of 68 and a high of 105. Similar results are also obtained by students who follow the conventional learning model, which ranges from a low of 65 and a high of 98. Furthermore, the learning independence of students who study in classes with the CORE-PL learning model tends to have a higher concentration than students who follow the conventional learning model. This is indicated by the different retara values, respectively 81.417 for the CORE-PL class and 78.333 for the conventional class. The standard deviation (standard deviation) of learning independence in Jurisprudence subjects of students who studied in the CORE-PL learning model (9.915) was greater than that of students who studied with the conventional learning model (8.406). This result shows that the learning independence of the two groups of students has a tendency to spread almost the same, although the range of the results of the student learning

independence instrument in the CORE-PL learning model class is slightly higher than in the conventional learning model class.

Table 4 Analysis of Variance Results for Learning Independence Based on Learning Models

Sumber	Jumlah Kwadrat (JK)	Derajat Kebebasan (dk)	Rerata Kwadrat	F	F-Kriteria pd Taraf Signf. 5%	Kesimpulan
Antar	163,685	1	163,685	1,923	3,984	Tidak Signifikan
Dalam	5702,083	67	85,106			
Total	5865,768	68				

Based on the analysis results as in the table above, it can be seen that the value of F count = 1.923 is smaller than the significance criterion value at the 5 percent level, F table (0.05;1;67) = 3.984. The results of this analysis indicate that there is no significant difference in the level of learning independence between students who follow the CORE-PL learning model with conventional learning models (control) and those who follow the CORE-PL learning model. With this result, it can be concluded that there is no significant difference in the level of learning independence between groups/classes based on the learning model they follow. Where, students who learn with conventional learning models have the same tendency of learning independence level as students who learn with CORE-PL learning models. These results are the same as the learning model variable when students' learning independence is controlled.

Hypothesis Test

Hypothesis testing was carried out using analysis of variance (ANOVA) to determine the effect of the CORE-PL model on learning motivation and learning outcomes of Jurisprudence and analysis of covariance (ANOVA) to determine the effect of the CORE-PL model on motivation and learning outcomes of Jurisprudence after controlling for learning independence variables.

Table 5 Analysis of Variance Results for Learning Motivation:

Sumber	Jumlah Kwadrat (JK)	Derajat kebebasan (dk)	Rerata Kwadrat	F	F-Kriteria pd Trf Sign. 5%	Kes
Antar	4316,304	1	3765,123	30,167	3,984	Sign
Dalam	7362,333	67	124,809			
Total	11678,638	68				

The ANOVA test results show that there is a significant effect of using the CORE-PL model on student learning motivation ($F = 30.167$, $p < 3.984$). This shows that students taught with the CORE-PL model have higher learning motivation than students taught with conventional learning methods.

Table 6 Analysis of Variance Results for Fiqh Learning Outcomes:

Sumber	Jumlah Kwadrat (JK)	Derajat kebebasan (dk)	Rerata Kwadrat	F	F-Kriteria pd Trf Sign. 5%	Kes
Antar	2026,308	1	2643,681	21,837	3,984	Sign
Dalam	5416,242	67	121,064			
Total	7442,551	68				

R Kuadrat = 0,31047 R Kuadrat Disesuaikan= 0,300

The ANOVA test results show that there is a significant effect of using the CORE-PL model on student learning outcomes (F = 21.837, p < 3.984). This shows that students taught with the CORE-PL model have higher learning motivation than students taught with conventional learning methods.

Table 7 Results of the Analysis of Covariance of Fiqh Subject Learning Motivation by Learning Model, with Adjustments for Learning Independence

Sumber	Jumlah Kuadrat (JK)	Derajat Kebebasan (dk)	Rerata Kuadrat (RK)	F	P	Kes.
Antar	2693,565	1	2693,565	31,120	3,986	Sign.
Dalam	5712,489	66	86,553	-	-	-
Total disesuaikan	8406,054	67	-	-	-	-
Total terkoreksi	12127,304	68	-	-	-	-
R Kuadrat = 0,529; R Kuadrat disesuaikan = 0,515						

The ANOVA test results also showed a significant effect of the CORE-PL model on students' Jurisprudence learning motivation after controlling for learning independence (F = 31.120, p < 3.986). Students who participated in learning with the CORE-PL model showed a higher increase in learning motivation compared to the control group.

Table 5 Results of the Analysis of Covariance of Fiqh Subject Learning Outcomes by Learning Model, with Adjustments for Learning Independence

Sumber	Jumlah Kuadrat (JK)	Derajat Kebebasan (dk)	Rerata Kuadrat (RK)	F	F-Kreiteria pda taraf sign. 5%	Kesimpuln
Antar	2974,773	1	2974,773	25,899	3,986	Sign.
Dalam	7580,871	66	114,862	-	-	-
Total disesuaikan	10555,643	67	-	-	-	-
Total terkoreksi	10754,957	68	-	-	-	-
R Kuadrat = 0,295; R Kuadrat disesuaikan = 0,274						

The ANOVA test results also showed a significant effect of the CORE-PL model on students' Jurisprudence learning outcomes after controlling for learning independence ($F = 25.899$, $p < 3.986$). Students who participated in learning with the CORE-PL model showed a higher increase in learning outcomes compared to the control group.

Discussion

This study aims to explore the effect of CORE-PL learning model on students' motivation and learning outcomes in Jurisprudence subject. The CORE-PL learning model is rooted in a constructivist learning approach that emphasizes the importance of students' active involvement in the learning process. According to constructivist learning theory, students construct knowledge through interaction with a supportive learning environment, and this approach has been proven effective in increasing learning motivation (Vygotsky, 1978). In addition, previous research by (W. Johnson & T. Johnson, 2019) showed that learning strategies that integrate elements of reflection and collaboration, such as those in CORE-PL, have a positive impact on motivation.

Based on the results of statistical analysis, the mean value of student motivation in the experimental class using the CORE-PL model was 112.333 compared to 97.545 in the control class using the conventional method. This data underscores the effectiveness of the CORE-PL model in creating a deeper and more meaningful learning experience. This finding CORE-PL (*Connecting, Organizing, Reflecting, Extending, and Project Learning*) learning model has shown significant results in increasing students' learning motivation.

Research shows that students' learning motivation is strongly influenced by the learning approach used. Students who engage in active learning, as applied in the CORE-PL model, tend to have higher levels of motivation compared to those who follow conventional methods. This is in line with findings stating that students with different levels of motivation exhibit different learning behaviors, where highly motivated students are more likely to engage in experimental learning techniques and have positive emotional experiences during the learning process (Lasaiba et al., 2022). In the context of CORE-PL, the elements of reflection and active engagement allow students to go deeper into the subject matter, thus creating an enjoyable and meaningful learning experience. The model also gives students the opportunity to actively contribute to learning, which can increase their self-confidence and learning satisfaction. These findings suggest that the CORE-PL approach is not only relevant but also directly supports the enhancement of learning motivation through in-depth and experimental interactions.

Furthermore, research by (Segovia-González et al., 2023) emphasizes the importance of teacher credibility in motivating students. They found that students' perceptions of teacher credibility had a positive effect on their learning motivation (Grier-Reed & Williams-Wengerd, 2018; Ismail et al., 2018; Linton & Klinton, 2019). n the context of the CORE-PL model, teachers who are able to build good relationships with

students and demonstrate credibility in teaching can increase students' motivation to engage more actively in learning (González et al., 2023). As a concrete example, teachers can use two-way communication strategies that encourage students to express their ideas freely. In addition, teachers can provide constructive feedback at each stage of CORE-PL learning, such as when students reflect on their understanding or when organizing new information. This approach not only builds students' trust in teachers' abilities but also creates a supportive learning atmosphere, where students feel valued and motivated to participate more actively in every stage of learning. In addition, other research also shows that motivation is closely related to desired behavior in learning contexts, where motivated students are more likely to engage in more productive learning activities (McCarthy et al., 2020).

Furthermore, research by McCarthy showed that strengths-based learning models, such as the CORE-PL model, can increase student engagement and motivation. In this study, it was found that students who learn in an environment that supports and facilitates their individual strengths tend to be more motivated and able to access and persist in the curriculum (McCarthy et al., 2023). This suggests that the CORE-PL model, which integrates interactive and collaborative elements, can create a more positive learning atmosphere and support student motivation (Ngah et al., 2019; Wu & Mendel, 2020).

In the context of education, it is important to understand that learning motivation is not only influenced by teaching methods, but also by external factors such as parental support and learning environment (Albareda-Tiana et al., 2018; Uysal & Koç, 2020). Research shows that support from teachers and parents contributes significantly to students' learning motivation, which in turn affects their academic achievement (Putri et al., 2020). This support can be practically integrated in the CORE-PL model through a collaborative approach. For example, teachers can involve parents in the learning process by providing regular information about students' progress and encouraging them to support learning activities at home. In addition, in the “Reflecting” stage of the CORE-PL model, teachers can ask students to share their learning experiences with parents as part of the reflection task. Thus, the relationship between family support and the CORE-PL approach becomes more integrated, creating a synergy that can strengthen students' learning motivation (Azizah & Mardiana, 2024; Murharyana et al., 2023). Therefore, the implementation of the CORE-PL model must be accompanied by adequate support from all relevant parties to maximize students' motivation and learning outcomes by external factors such as parental support and learning environment. Research shows that support from teachers and parents contributes significantly to students' learning motivation, which in turn affects their academic achievement (Ma’arif et al., 2022; Murharyana et al., 2024).

Overall, the CORE-PL learning model is proven to be effective in increasing students' learning motivation. By integrating active and collaborative approaches, this model not only increases student engagement but also creates a more positive and meaningful learning experience (Bell, 2020). Recent studies support the importance of

this approach in educational contexts, showing that high learning motivation contributes to better academic achievement.

In addition to having a significant impact on students' learning motivation, the CORE-PL learning model has also been shown to contribute positively to improved learning outcomes. CORE-PL, which emphasizes active learning through systematic stages, allows students to be more involved in the learning process. This creates learning conditions that not only support concept understanding but also improve overall academic achievement. Thus, CORE-PL is not only a tool to motivate students but also provides much better learning outcomes compared to conventional methods.

Furthermore, the implementation of the CORE-PL learning model has a positive influence on students' learning outcomes in Fiqh subjects. The average learning outcome score of students in the experimental class reached 88.361, while students in the control class only achieved an average score of 75.970. This difference is statistically significant, as shown by the ANOVA analysis results with an F-statistic value of 25.066. This value is much larger than the F-table value, reinforcing that the use of the CORE-PL model has a real impact on improving students' learning outcomes in Fiqh subjects. This finding is consistent with various previous studies that support the effectiveness of project-based learning models in enhancing students' learning outcomes. CORE-PL encourages students to actively participate in the learning process, leading to a deeper understanding and practical application of the subject matter.

Theoretically, this finding is supported by the constructivism view developed by (Vygotsky, 1978), which emphasizes that effective learning occurs through social activities and direct experience. The CORE-PL model facilitates active learning through the stages of Connecting, Organizing, Reflecting, Extending, and Project Learning. Each stage is designed to help students connect new concepts with prior knowledge, organize information systematically, and apply these concepts in various contexts (Atiyah & Priatna, 2023). This approach provides a meaningful and relevant learning experience, which ultimately improves students' learning outcomes (Junsay, 2016; Syofitami & Noer, 2021).

This approach provides a meaningful and relevant learning experience, which ultimately improves students' learning outcomes (Ayu Setyowati et al., 2024) showed that project-based learning increases students' analytical abilities in understanding learning materials in depth. This is because the learning model gives students the opportunity to actively engage in the learning process, supporting the development of their creativity and critical thinking skills by handling various problems. Through the application of Project Learning, students are trained to create products or works and use the data they obtain in real contexts, which certainly enhances their analytical abilities in understanding the material in depth (Hakim & Abidin, 2024). Like religious education and Fiqh, CORE-PL, which emphasizes the use of projects in learning, provides students with direct experience, so they not only memorize concepts but also practice them.

In this study, CORE-PL allows students to better understand Fiqh concepts through the Extending stage, where they apply the material in real projects. This is also in line with the findings of (Arisona, n.d.) which state that project-based learning improves learning outcomes because students are faced with real situations that require independent and collaborative problem-solving.

Thus, it can be concluded that CORE-PL is not only effective in increasing motivation but also has a significant impact on students' learning outcomes. Its success is supported by constructivism theory, information processing theory, and previous research that confirms the importance of active, reflective, and experience-based learning. This finding affirms the relevance of innovative learning models such as CORE-PL in improving the quality of learning at various levels and subjects, especially in Fiqh subjects, which demand conceptual understanding and the application of religious practices.

Furthermore, the results of this study also indicate that the implementation of the CORE-PL learning model has a significant influence on students' learning motivation, especially when learning independence is used as a control variable. This finding is consistent with previous theories and research that emphasize the importance of student independence and participatory learning approaches in increasing learning motivation.

The CORE-PL learning model consists of the stages of Connecting, Organizing, Reflecting, and Extending, which provide students with the freedom to connect new knowledge with existing knowledge, organize information independently, and reflect on and expand their understanding. In this study, it was found that students' learning motivation increased significantly when learning independence was controlled. This means that students with high levels of learning independence are better able to utilize this project-based learning to manage their own learning, leading to increased motivation.

This research aligns with the Self-Determination theory proposed by (Ryan et al., 2022), which states that students' intrinsic motivation grows when they have autonomy in the learning process. The CORE-PL model provides space for students to manage their own learning, which increases their sense of responsibility and intrinsic motivation. More independent students tend to be more motivated in learning environments that emphasize active participation and self-reflection.

The results of this study support previous research conducted by (Shin, 2018) which showed that the use of project-based learning models, such as PJBL, significantly increases student motivation because it gives them the freedom to manage their own projects, which also enhances creativity, communication, and collaboration skills. Student motivation increases when they feel they have control over their learning process. This study is also supported by (Nurhamidah & Nurachadijat, 2023), who found that project-based learning models increase motivation. This learning model provides opportunities for students to work independently in building knowledge and producing tangible products, which can contribute to increased learning motivation.

Additionally, research by (Susanti et al., 2020) shows that students who have independence in learning tend to be more responsible and actively involved in cognitive, affective, and social aspects. Because when learning methods encourage active involvement, students gain personal satisfaction in the learning process. This finding supports the results of this study that students with good learning independence respond positively to project-based learning models because they have the opportunity to make decisions in the learning process.

This finding can also be explained through the Constructivism theory by Piaget (1973) and Vygotsky (1978), which emphasizes that effective learning occurs when students are actively involved in building understanding through interaction with their environment. CORE-PL provides a framework that allows students to learn actively and independently, which impacts their intrinsic motivation. With control over learning independence, students have more opportunities to regulate and manage the learning process, making them feel more motivated.

In the context of this study, the Reflecting and Extending stages in the CORE-PL model help students to be more independent in reflecting on what they have learned and applying it in real projects, which further encourages their learning motivation. This is supported by research (Mustafa, 2018; Purwanto et al., 2023) which found that reflection and application in project-based learning increase student learning motivation because this approach allows students to play a more active role in the learning process. Project-based learning provides opportunities for students to engage directly in relevant activities, which in turn can increase their sense of ownership and involvement in learning. This aligns with the concept that active student participation can contribute to a more meaningful learning experience.

This research provides important implications for teachers in designing learning that can increase student learning motivation. The use of the CORE-PL model, which gives students the freedom to engage actively and independently in the learning process, is not only effective in improving learning outcomes but also learning motivation. Teachers need to encourage student learning independence through strategies that provide greater learning independence in project management and reflection. Furthermore, this study also shows that it is important for teachers to consider student learning independence when implementing learning models like CORE-PL. Research by (Pratiwi et al., 2020; Purwanto et al., 2023) also suggests that teachers need to provide space for students to take more responsibility in their own learning, as this can increase student motivation and confidence.

Moreover, when the implementation of the CORE-PL (Connecting, Organizing, Reflecting, Extending - Project Learning) learning model has a significant influence on students' learning outcomes, especially when the learning independence variable is controlled. In this case, the CORE-PL learning model is able to maintain its effectiveness, giving the impression that this model is relevant to support student-centered learning with varying levels of independence. The CORE-PL learning model, which combines several stages of active thinking processes, allows students to connect new knowledge

with prior knowledge, organize material independently, reflect on learning, and apply knowledge in real projects. In this study, it was found that students with high learning independence were able to utilize this learning model more effectively, thus significantly improving their learning outcomes compared to students with low learning independence.

This research is consistent with the Self-Regulated Learning theory proposed by (Zimmerman, 2010), which states that students who have the ability to regulate their learning independently tend to have better learning outcomes because they can control important aspects of their learning, such as time management, motivation, and self-evaluation (Anggraeni & Purnomo, 2023; Suhermanto et al., 2024). The CORE-PL model supports this ability by giving students the freedom to participate actively and manage the learning process independently (Gea et al., 2022; Margaretha et al., 2023).

The research results above are supported by the study of (Jamaludin et al., 2020) that innovative learning models like CORE improve student learning outcomes because they allow students to organize knowledge independently and apply it in real situations. This research supports the finding that CORE-PL, with controlled learning independence, enables students to achieve better learning outcomes through a deeper and more structured learning process.

Furthermore, (Kusmiyati, 2023) also found that the level of student independence determines varied learning outcomes in the categories of very good and good. Higher independence can facilitate students' ability to control their cognitive and metacognitive aspects, which are important in more challenging learning, such as project-based learning (CORE-PL). This is also in line with the constructivism theory by Piaget (1973) and Vygotsky (1978), which provides a strong theoretical foundation for the CORE-PL model. According to constructivism, effective learning occurs when students are actively involved in building their own knowledge, not just passively receiving information (Islomovich, 2023). CORE-PL provides opportunities for students to organize knowledge through Reflecting and Organizing, and apply that knowledge in real projects through the Extending and project learning stages. When learning independence is controlled, students with varying levels of learning independence show higher learning outcomes with the CORE-PL learning model than in conventional classes, where theoretically, those with high independence also have high learning outcomes because they are more prepared to manage their learning independently.

This research has important implications for the education world, especially in the use of project-based learning models like CORE-PL. Teachers in madrasahs and secondary schools can use this model to improve student learning outcomes, especially by encouraging learning independence. Teachers should develop strategies that encourage students to manage their own learning, including giving students greater responsibility in organizing materials and working on challenging projects. With learning independence as a control variable, this finding also shows that students with higher independence tend to be more successful in implementing project-based learning models. Therefore, teachers need to facilitate the development of students' learning

independence by integrating learning approaches that support independence and self-reflection in daily learning.

CONSLUSION

This research reveals that the CORE-PL learning model is significantly more effective than conventional methods in enhancing students' motivation and learning outcomes in Fiqh subjects at Madrasah Aliyah. The surprising finding is that although students' learning independence did not show significant differences between the control and experimental classes, the CORE-PL model still had a significant positive impact on motivation and learning outcomes when independence was controlled. This result could only be determined after in-depth analysis, including ANCOVA testing, which demonstrated the model's influence even with the independence variable held constant.

This research confirms previous findings stating that constructivism-based learning models, such as CORE and Project Learning, can improve students' motivation and learning outcomes. However, this study also contributes a new perspective by showing that the effectiveness of the CORE-PL model does not entirely depend on students' levels of independence. This provides insight that innovative learning models, such as the development of the CORE-PL learning model, can function flexibly in various learning conditions, making it a relevant approach for educational contexts in Madrasah Aliyah.

This study has several limitations that need to be considered. First, the research was only conducted on eleventh-grade students at one Madrasah Aliyah, so the results may not be generalizable to different educational levels or locations. Second, this study only involved one subject, namely Fiqh, so the application of the CORE-PL model in other subjects has not been explored. Third, the aspect of learning independence as a control variable requires further analysis to understand its specific role in this learning model. Therefore, further research involving a larger sample, different educational levels, and more varied subjects is needed to obtain a deeper and more comprehensive understanding. With broader and deeper results, more appropriate educational policies can be formulated to improve the quality of learning in various contexts.

REFERENCES

Albareda-Tiana, S., Vidal-Raméntol, S., Pujol-Valls, M., & Fernández-Morilla, M. (2018). Holistic approaches to develop sustainability and research competencies in pre-service teacher training. *Sustainability (Switzerland)*, *10*(10). https://doi.org/10.3390/su10103698

Anggraeni, L., & Purnomo, H. (2023). Penerapan Merdeka Belajar Materi Pkn Pada Karakter Profil Pelajar Pancasila. *Attadrib: Jurnal Pendidikan Guru Madrasah Ibtidaiyah*, *6*(2), Article 2. https://doi.org/10.54069/attadrib.v6i2.584

Arisona, R. D. (n.d.). *Project Based Learning Untuk Membangun Karakter Fiqh Al-Biah Pada Pembelajaran IPS*. 98–110.

Atiyah, K., & Priatna, N. (2023). Analysis of the Connecting, Organizing, Reflecting and Extending (CORE) Model to Improving the Mathematical Reasoning Ability

Students. *SJME (Supremum Journal of Mathematics Education)*, *7*(2), 157–167. https://doi.org/10.35706/sjme.v7i2.7746

Ayu Setyowati, O., Purwanto, A., & Sarifah, I. (2024). The Influence Of Project-Based Learning And Eco-Literacy On Students' Higher-Order Thinking Skills. *Eduvest - Journal of Universal Studies*, *4*(7), 5838–5848. https://doi.org/10.59188/eduvest.v4i7.1336

Azhari, B., Johar, R., Ramadhani, E., Mailizar, M., & Safrina, K. (2024). Mathematics Learning Model for Children with Dyscalculia through Special Intervention. *Jurnal Ilmiah Peuradeun*, *12*(3), Article 3. https://doi.org/10.26811/peuradeun.v12i3.1528

Azizah, I., & Mardiana, D. (2024). Learning Transformation: Increasing Student Achievement through Discovery Learning. *Dirasah International Journal of Islamic Studies*, *2*(2), Article 2. https://doi.org/10.59373/drs.v2i2.42

Bell, R. (2020). Adapting to constructivist approaches to entrepreneurship education in the Chinese classroom. *Studies in Higher Education*, *45*(8), 1694–1710. https://doi.org/10.1080/03075079.2019.1655724

Djalilah, S. R., Muzakar, A., Suhardi, M., & Kartiko, A. (2024). Unveiling Success: Exploring the Impact of Training and Commitment on Madrasah Tsanawiyah Principal Performance. *Nazhruna: Jurnal Pendidikan Islam*, *7*(2), Article 2. https://doi.org/10.31538/nzh.v7i2.4907

Fatimah, F. S., Asy'ari, H., Sandria, A., & Nasucha, J. A. (2023). Learning Fiqh Based on the TAPPS (Think Aloud Pair Problem Solving) Method in Improving Student Learning Outcomes. *At-Tadzkir: Islamic Education Journal*, *2*(1), Article 1.

Freeman, S., Eddy, S. L., McDonough, M., Smith, M. K., Okoroafor, N., Jordt, H., & Wenderoth, M. P. (2014). Active learning increases student performance in science, engineering, and mathematics. *Proceedings of the National Academy of Sciences of the United States of America*, *111*(23), 8410–8415. https://doi.org/10.1073/pnas.1319030111

Gea, S. H., Setiawati, D. T., Sukriyah, E., Siahaan, A., & Amiruddin. (2022). PAI Teachers' Self Reflections on Differentiation Learning in the Independent Learning Curriculum. *Munaddhomah: Jurnal Manajemen Pendidikan Islam*, *3*(2), Article 2. https://doi.org/10.31538/munaddhomah.v3i2.263

Grier-Reed, T., & Williams-Wengerd, A. (2018). Integrating universal design, culturally sustaining practices, and constructivism to advance inclusive pedagogy in the undergraduate classroom. *Education Sciences*, *8*(4). https://doi.org/10.3390/educsci8040167

Hakim, M. N., & Abidin, A. A. (2024). Platform Merdeka Mengajar: Integrasi Teknologi dalam Pendidikan Vokasi dan Pengembangan Guru. *Kharisma: Jurnal Administrasi Dan Manajemen Pendidikan*, *3*(1), Article 1. https://doi.org/10.59373/kharisma.v3i1.47

Islomovich, I. T. (2023). Theoretical and Methodological Basis of Implementing the Principles of Academic Independence To the Management of Higher Education Institutions. *International Journal of Advance Scientific Research*, *03*(05), 94–99. https://doi.org/10.37547/ijasr-03-05-15

Ismail, A. B. T., Sawang, S., & Zolin, R. (2018). Entrepreneurship education pedagogy: Teacher-student-centred paradox. *Education and Training*, *60*(2), 168–184. https://doi.org/10.1108/ET-07-2017-0106

Jamaludin, G. M., Al Ghozali, M. I., & Fauzi, R. (2020). The CORE Model for Improving students behavior and learning outcomes the production technology

development of Social Sciences Learning. *MUDARRISA: Jurnal Kajian Pendidikan Islam*, *12*(1), 34–50. https://doi.org/10.18326/mdr.v12i1.34-50

Junsay, M. (2016). Reflective learning and prospective teachers' conceptual understanding, critical thinking, problem solving, and mathematical communication skills. *Research in Pedagogy*, *6*(2), 43–58. https://doi.org/10.17810/2015.34

Kusmiyati, K. (2023). Implementation of the self-organized learning environments learning model to enhace learning outcomes and student independence. *Jurnal Pijar Mipa*, *18*(3), 392–397. https://doi.org/10.29303/jpm.v18i3.4776

Lasaiba, M. A., Lasaiba, D., Arfa, A. M., & Lasaiba, I. (2022). Structural Equation Modeling Partial Least Square for Modeling the Relationship of Readiness, Creativity and Motivation to Students' Problem-Solving Ability. *Edunesia: Jurnal Ilmiah Pendidikan*, *4*(1), 67–79. https://doi.org/10.51276/edu.v4i1.317

Linton, G., & Klinton, M. (2019). University entrepreneurship education: A design thinking approach to learning. *Journal of Innovation and Entrepreneurship*, *8*(1), 1–11. https://doi.org/10.1186/s13731-018-0098-z

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.

Margaretha, D. A., Nadlif, A., Astutik, A. P., & Hasan, S. (2023). Independent Learning-Independent Campus Policy Innovation at State Aliyah Madrasas. *Nidhomul Haq : Jurnal Manajemen Pendidikan Islam*, *8*(1), Article 1. https://doi.org/10.31538/ndh.v8i1.2942

Marope, P. T. M. (2015). Overcoming inequalities in teaching and learning. *Prospects*, *45*(3), 275–277. https://doi.org/10.1007/s11125-015-9364-z

McCarthy, E. M., Liu, Y., & Schauer, K. L. (2020). Strengths-based blended personalized learning: An impact study using virtual comparison group. *Journal of Research on Technology in Education*, *52*(3), 353–370. https://doi.org/10.1080/15391523.2020.1716202

McCarthy, E. M., Liu, Y., Schauer, K. L., Yurniati, D., Syofyan, E., Usman, M., Suratimah, S., Rahmatullah, A. S., Madjid, M. N., García, A. J., Froment, F. A., Bohórquez, M. R., Hariyanto, D., Arafat, Y., Wardiah, D., Putri, I. A. S., Yasa, P. N. S., Ningsih, N. L. A. P., Emda, A., … Lasaiba, I. (2023). Motivation in Learning. *Lantanida Journal*, *5*(2), 16–37. https://doi.org/10.9734/ajess/2020/v10i430273

Murharyana, M., Ayyubi, I. I. A., Rohmatulloh, R., & Ikromi, S. N. (2024). The Effects of Islamic Religious Education Learning on Students' Motivation. *At-Tadzkir: Islamic Education Journal*, *3*(1), Article 1. https://doi.org/10.59373/attadzkir.v3i1.44

Murharyana, M., Ayyubi, I. I. A., Rohmatulloh, R., & Suryana, I. (2023). Behavior Change of Darul Falah Senior High School Students After Attending Tabligh Akbar. *Dirasah International Journal of Islamic Studies*, *1*(2), Article 2. https://doi.org/10.59373/drs.v1i2.17

Mustafa, A. M. S. (2018). Improving Positive Learner Motivation towards Islamic Studies. *International Journal of English Literature and Social Sciences*, *3*(6), 1170–1176. https://doi.org/10.22161/ijels.3.6.33

Ngah, R., Junid, J., & Osman, C. A. (2019). The links between role of educators, self-directed learning, constructivist learning environment and entrepreneurial endeavor: Technology entrepreneurship pedagogical approach. *International*

Journal of Learning, Teaching and Educational Research, *18*(11), 414–427. https://doi.org/10.26803/ijlter.18.11.25

Nurhamidah, S., & Nurachadijat, K. (2023). Project Based Learning dalam Meningkatkan Kemandirian Belajar Siswa. *Jurnal Inovasi, Evaluasi Dan Pengembangan Pembelajaran (JIEPP)*, *3*(2), 42–50. https://doi.org/10.54371/jiepp.v3i2.272

Organisation for Economic Co-Operation and Development (OECD). (2019). OECD Multilingual Summaries PISA 2018 Results (Volume I) What Students Know and Can Do. *OECD Publishing*, *I*(Volume I), 2018–2020.

Pratiwi, L., Nurhayati, T., Patimah, P., & Atikoh, N. (2020). The Effect of Independence Education in Islamic Boarding School on the Development of Emotional Intelligence of Elementary School Students. *Al Ibtida: Jurnal Pendidikan Guru MI*, *7*(1), 85. https://doi.org/10.24235/al.ibtida.snj.v7i1.5147

Purwanto, Y., Saepudin, A., & Sofaussamawati. (2023). The Development of Reflective Practices for Islamic Religious Education Teachers. *Jurnal Pendidikan Islam*, *9*(1), 107–122. https://doi.org/10.15575/jpi.v0i0.24155

Putri, I. A. S., Yasa, P. N. S., & Ningsih, N. L. A. P. (2020). The Influence of Teacher Teaching and Guidance of Parents on Student Achievement with Mediation of Learning Motivation in Santo Yoseph Denpasar. *Jurnal Ekonomi & Bisnis JAGADITHA*, *7*(2), 138–147. https://doi.org/10.22225/jj.7.2.2498.138-147

Ryan, R. M., Deci, E. L., Sydney, N., & Womans, E. (2022). *Self-Determination Theory*. 1–7.

Segovia-González, M. M., Ramírez-Hurtado, J. M., & Contreras, I. (2023). Analyzing the Risk of Being a Victim of School Bullying. The Relevance of Students' Self-Perceptions. *Child Indicators Research*, *16*(5), 2141–2163. https://doi.org/10.1007/s12187-023-10045-x

Shin, M.-H. (2018). Effects of Project-based Learning on Students' Motivation and Self-efficacy. *English Teaching*, *73*(1), 95–114. https://doi.org/10.15858/engtea.73.1.201803.95

Suhermanto, Mansyuri, A., Ma`arif, M. A., & Sebgag, S. (2024). Implementation of Character Education in PAI Subjects in the Independent Curriculum. *Fikroh: Jurnal Pemikiran Dan Pendidikan Islam*, *17*(1), Article 1. https://doi.org/10.37812/fikroh.v17i1.1394

Suratimah, S., Rahmatullah, A. S., & Madjid, M. N. (2022). Factors Supporting Learning Achievement: The Influence of Students' Disciplinary and Motivational Factors of Learning. *International Journal of Social Service and Research*, *2*(8), 684–695. https://doi.org/10.46799/ijssr.v2i8.141

Susanti, I. N., Yuspendi, Y., & Megarini, M. Y. (2020). The effect of autonomy training on student engagement in junior high school students. *Indigenous: Jurnal Ilmiah Psikologi*, *5*(2), 151–163. https://doi.org/10.23917/indigenous.v5i2.9149

Sutarto, Indrawati, & Wicaksono, I. (2023). STEM-CP Modul Based Science to Improve Student Independence and Learning Outcomes in Junior High School Science Learning. *Journal of Education, Society and Behavioural Science*, *36*(7), 106–113. https://doi.org/10.9734/JESBS/2023/v36i71241

Syofitami, R. A., & Noer, S. H. (2021). The Effect of CORE Learning Model towards Students' Mathematical Reflective Thinking Skills: A Meta Analysis Study. *Jurnal Pendidikan MIPA*, *22*(1), 90–97. https://doi.org/10.23960/jpmipa/v22i1.pp90-97

Tanjung, R. F., Ritonga, A. A., & Yahfizham, Y. (2022). The Effect of Using Edmodo Learning Media and Learning Motivation on Fiqih Learning Outcomes. *Munaddhomah: Jurnal Manajemen Pendidikan Islam*, *3*(2), Article 2. https://doi.org/10.31538/munaddhomah.v3i2.266

Ulger, K. (2018). The effect of problem-based learning on the creative thinking and critical thinking disposition of students in visual arts education. *Interdisciplinary Journal of Problem-Based Learning*, *12*(1), 3–6. https://doi.org/10.7771/1541-5015.1649

Uysal, N., & Koç, A. (2020). The Influence of Two Different Learning Approach on Oncology Nursing Education. *Indonesian Nursing Journal of Education and Clinic (Injec)*, *5*(2), 116. https://doi.org/10.24990/injec.v5i2.300

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes.* Harvard University Press.

W. Johnson, D., & T. Johnson, R. (2019). Cooperative Learning: The Foundation for Active Learning. *Active Learning - Beyond the Future*. https://doi.org/10.5772/intechopen.81086

Wasyilah, W., Yusrizal, Y., & Ilyas, S. (2021). Application of Self Directed Learning Model to Improve Student's Independence and Critical Thinking Skills. *Jurnal Penelitian Pendidikan IPA*, *7*(4), 651–659. https://doi.org/10.29303/jppipa.v7i4.784

Wu, D., & Mendel, J. M. (2020). Patch Learning. *IEEE Transactions on Fuzzy Systems*, *28*(9), 1996–2008. https://doi.org/10.1109/TFUZZ.2019.2930022

Wulandari, P., & Mustika, D. (2023). The Role of Teachers as Learning Motivators for Pekanbaru Elementary School Students. *Scaffolding: Jurnal Pendidikan Islam Dan Multikulturalisme*, *5*(2), 870–887. https://doi.org/10.37680/scaffolding.v5i2.2997

Zimmerman, B. J. (2010). *Becoming a Self-Regulated Learner: An Overview*. *September 2013*, 37–41. https://doi.org/10.1207/s15430421tip4102