

Student Engagement as a Mediator of Academic Self-Efficacy and Academic Performance in Islamic Boarding School Students

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ABSTRAK

Masalah kinerja akademik yang masih merajalela di berbagai pondok pesantren sering kali dipicu oleh kurangnya partisipasi aktif dan keyakinan diri dalam kemampuan akademik para siswa. Tujuan dari penelitian ini adalah untuk melihat pengaruh efikasi diri akademik terhadap kinerja akademik dengan student engagement sebagai mediator pada siswa di pesantren. Metode dalam penelitian ini adalah penelitian kuantitatif dengan pendekatan *ex-post facto*. Sampel dalam penelitian ini ditentukan dengan menggunakan teknik multistage random sampling dengan jumlah 308 siswa. Instrumen yang digunakan dalam penelitian ini adalah skala efikasi diri akademik dengan dimensi level, generality, dan strength, skala student engagement dengan dimensi emotional engagement, cognitive engagement, dan behavioral engagement, dan kinerja akademik diukur dengan mengacu pada data nilai rapor. Data yang diperoleh dianalisis secara kuantitatif dengan menggunakan makro PROCESS v4.2 dari model 4 Hayes melalui aplikasi SPSS Versi 25. Hasil penelitian ini menunjukkan bahwa efikasi diri akademik, student engagement, dan kinerja akademik siswa di pondok pesantren berhubungan positif, dan student engagement berperan sebagai mediator antara efikasi diri akademik dan kinerja akademik. Siswa dengan efikasi diri yang tinggi lebih percaya diri dalam belajar dapat menyelesaikan masalah dengan lebih efektif dan lebih terlibat dalam pembelajaran, sehingga meningkatkan prestasi akademik.

ABSTRACT

Academic performance problems that are still rampant in various boarding schools are often triggered by students' lack of active participation and confidence in their academic abilities. This study aims to analyze the effect of academic self-efficacy on academic performance with student engagement as a mediator for students in Islamic boarding schools. The method in this study is quantitative research with an *ex-post facto* approach. The sample in this study was determined using multistage random sampling technique with a total of 308 student. The instruments used in this study were academic self-efficacy scale with dimensions of level, generality, and strength, student engagement scale with dimensions of emotional engagement, cognitive engagement, and behavioural engagement, and academic performance measured by referring to report card data. The data obtained were analysed quantitatively using the PROCESS v4.2 macro of the Hayes 4 model through the SPSS Version 25 application. The results of this study indicate that academic self-efficacy, student engagement, and academic performance of students in boarding schools are positively related, and student engagement acts as a mediator between academic self-efficacy and academic performance. Students with high self-efficacy are more confident in learning can solve problems more effectively and are more engaged in learning, thus improving academic achievement.

1. INTRODUCTION

Islamic boarding schools are educational institutions that study the Islamic religion in more depth by Government Regulation No. 55 of 2007. The implementation of Islamic boarding schools aims to instill

faith and devotion to Allah SWT, as well as provide opportunities for individuals to become experts in Islamic knowledge who can make a positive contribution to community development. In general, the society hopes that the current generation will have a good understanding of world science and religious knowledge which can be obtained through experience at Islamic boarding schools (Agustina & Rusmawati, 2022; Resya & Diantoro, 2021). As traditional educational institutions, Islamic boarding schools have a significant role in developing the intelligence of the younger generation, forming character, strengthening morality, and equipping them with knowledge. The main goal of Islamic boarding school educational institutions is to form a good personality, strengthen morals, and provide holistic learning (Fitri & Ondeng, 2022; Kariyanto, 2020).

Islamic boarding schools in Indonesia are experiencing rapid growth, in line with global demands to increase competitiveness. In Indonesia's educational development context, Islamic boarding schools need to modernize in line with the times. This modernization is expected to make Islamic boarding schools remain relevant to current world developments, but still maintain the basic values of Islamic teachings without experiencing a decline (Baz & Yildirim, 2023; Suradi, 2018). Islamic boarding schools are usually found at the Middle School and High School education levels, so most of the students are teenagers. Adolescence not only includes physical changes, such as the development of Adam's apple in boys and breast growth in girls but also involves a process of adaptation to psychological factors and the search for identity or identity. In facing these various changes, teenagers often experience "storm and stress," namely emotional turmoil accompanied by a lack of individual ability to manage emotions, are vulnerable to being influenced by the surrounding environment, and have strong attachments to peers. This can cause challenges in achieving emotional independence (Khafifah et al., 2023; Puhmann et al., 2023). These problems can disrupt teenagers' academic performance, causing their learning performance to be less than optimal, resulting in them getting low grades, becoming discouraged, and dropping out of school (Akhmad & Riyah, 2023; Damayanti, 2023).

The academic performance of Indonesian students can be seen from the results of the Program for International Student Assessment (PISA) data for the country of Indonesia in 2022 showing a decreasing score, namely literacy has a score of 359, mathematics has a score of 366, and science has a score of 383. Compared to 2018 the literacy score has a score of 371, mathematics has a score of 379, and science has a score of 396 (Hewi & Shaleh, 2020). Problems that often occur with students in Islamic boarding schools are a mixed curriculum (boarding school lessons with state lessons), difficulty adapting, making students stressed, resulting in reduced academic performance, very tight time, lack of student interest because there are still many students sent to Islamic boarding school because they forced by his parents (Akhmad & Riyah, 2023; Amna et al., 2020; Khafifah et al., 2023). Then the researcher also interviewed the head of the boarding school division at one of the Islamic boarding schools in Pekanbaru was revealed that the students were less enthusiastic about boarding or religion-based lessons, lacked interest in going to school at the boarding school, and did not feel comfortable at the boarding school because of the rules. which is strict, and there is little time for students to play, this happens because of the busy study schedule and also a lot of lessons. These problems are what make many students lazy to study, resulting in students getting low grades or learning outcomes and some are even not promoted because their report cards do not meet the Minimum Completeness Criteria (KKM) (Casinillo et al., 2023; Shofiah et al., 2023). This is what shows that the academic performance of students at Islamic boarding schools is less or not optimal.

Academic performance is a person's achievement and learning outcomes in the context of formal education, such as at school, college, or other educational institutions (Alhadabi & Karpinski, 2020; Commey-Mintah, 2023). Evaluation of academic performance may involve assessing performance in various courses, exams, assignments, projects, and other components of an educational program. Academic performance is often measured using an assessment system that includes grades, rankings, or achievement categories (Hayat et al., 2022; Waheed et al., 2020). These assessment criteria may vary depending on the level of education and the evaluation system implemented by the educational institution. Aspects of academic performance include understanding of material, ability to apply knowledge, critical thinking skills, participation in class, quality of written work, and other factors that reflect a person's academic achievement (Ala et al., 2022; Iglesias-Pradas et al., 2021). Academic performance can be influenced by several factors, including academic self-efficacy, namely an individual's belief in their ability to complete academic tasks and achieve success in the educational context (Abrantes & Casinillo, 2020; Zysberg & Schwabsky, 2021). Academic self-efficacy includes an individual's belief in his or her ability to overcome academic challenges, such as understanding course material, completing assignments, and achieving high academic achievement (Affuso et al., 2023; HP). Academic self-efficacy itself is self-efficacy in the academic scope, which is an important element in Bandura's Social Cognitive Theory, which reflects an individual's assessment of his or her ability to plan and carry out the steps necessary to achieve the expected level of performance (Alhadabi & Karpinski, 2020; Shofiah et al., 2023).

When individuals have low academic performance, they must instill academic self-efficacy in themselves, this is in line with research results that showed that academic self-efficacy was positively correlated with academic performance as seen from student learning outcomes. Then academic self-efficacy also has a positive influence which is based on students who have high academic self-efficacy having high motivation and academic performance (Meng & Zhang, 2023; Palapa, 2023). The research conducted by Shaked also shows positive results between academic self-efficacy and academic performance, this can be seen in students who are enthusiastic about learning and have a strong goal of getting good grades. These results are also strengthened by research conducted by previous study shows a strong relationship between academic self-efficacy and academic performance in students, especially female students (L. Wang & Yu, 2023).

Student engagement is also a factor that influences academic performance, where high involvement can improve students' cognitive abilities. Students who are actively involved tend to have a better understanding of the lesson material because they are more focused and pay attention. so that intense student involvement helps in remembering learning material, and creates conditions in which students can achieve good academic grades, this reflects high academic performance (Jamaluddin et al., 2022; Wang & Wang, 2023). Engaged students will be more likely to complete assignments on time and with quality. They will be more motivated to learn and improve their abilities. This is in line with research obtained research results that high student engagement will make students understand the lessons better, thereby increasing students' academic performance. Engaged students will be more likely to attend lessons attentively. It will be easier for them to understand the lesson material and answer questions correctly (Muthmainnah et al., 2023; Tafesse, 2020). Then other research engaged students will be more likely to complete assignments on time and with quality (Kuzminykh et al., 2021). They will be more motivated to learn and improve their abilities (Jamaluddin et al., 2022; Quibrantar & Ezezika, 2023). Other research involved students feeling more motivated to learn because they are interested in the subject matter and feel that learning is important to them, so students will maximize their academic achievement (Sahni, 2023).

Student engagement has a strong relationship with academic self-efficacy. According to Bandura Academic self-efficacy can influence students' behavior, thoughts, and emotions in learning. Students who have high academic self-efficacy will be more likely to try hard to study and be successful in learning (Uzun & Karataş, 2020; Zysberg & Schwabsky, 2021). Trying hard to learn is one of the factors for students to become engaged in learning. This is in line with research that explains the positive relationship between academic self-efficacy and student engagement. Then individuals who have high confidence make students actively involved in class. The research conducted by previous study proves that high academic self-efficacy makes students more active in class and involved in school activities (Meng & Zhang, 2023). Further research carried out by Alvarez Student involvement in the classroom and school environment is driven by the level of self-confidence possessed by the student (Ramli et al., 2023). Strong self-confidence can encourage students to be more confident and proactive because they are confident in their abilities. Then other researcher on Academic self-efficacy has a positive relationship with student engagement in students when studying online, so the higher the student's level of academic self-efficacy, the higher the student's level of student engagement when learning online (Salsabila & Kusdiyati, 2021).

Student engagement can increase academic self-efficacy because student engagement can influence how students view their ability to learn. Students who are engaged in learning will be more likely to feel that they can succeed in learning (Tomaszewski et al., 2020; F. Zhang et al., 2023). This can be explained by self-perception theory. According to self-perception theory, individuals form beliefs about themselves based on the experiences they have had. One of the experiences experienced by individuals is positive experiences, such as involvement in the learning process, which can increase the level of individual confidence in their abilities (Koban et al., 2023; Roswag et al., 2023). This is in line with research results that academic self-efficacy has a positive influence on academic performance (Gil Cordero et al., 2023). This influence can occur through engagement. Students who have high academic self-efficacy tend to be more involved in the teaching and learning process, which then encourages students to be more motivated to learn, try harder, and be more successful in academic tasks.

Various studies have been carried out on phenomena regarding academic performance has been done by previous researchers. However, the author has not found research on academic performance which is influenced by academic self-efficacy and student engagement as mediation for Islamic boarding school students. The novelty of this study considering that education in Islamic boarding schools continues to develop and has many students, it is important to research academic performance. This is what prompted the author to research the influence of academic self-efficacy on academic performance with student engagement as mediation for Islamic boarding school students. The aims of this study is to

analyze the effect of academic self-efficacy on academic performance with student engagement as a mediator for students in Islamic boarding schools.

2. METHOD

This research is quantitative research with an ex-post facto approach. Subjects in the research were students at the Dar-el Hikmah Pekanbaru Islamic boarding school. The population in this study was 1496 students. The sampling technique used in this research is multistage random sampling, which involves combining two or more sampling methods, the first stage is simple random sampling to determine the level of education, and the second stage is cluster random sampling to determine the class that will be the research subject. The number of samples in this research was 308 MTs students at the Darel Hikmah Islamic boarding school. The study used two scales for the academic self-efficacy scale modified from the academic self-efficacy (Sudirman et al., 2020). While for scale Student engagement was modified from the Student Engagement Scale developed by (Dogan, 2014). The academic self-efficacy scale and student engagement scale were prepared using a Likert-type scale with a range of 1-5 from not at all suitable to very suitable. The academic self-efficacy scale consists of 3 dimensions namely level, generality, and strength. Meanwhile, the student engagement scale consists of 3 dimensions namely emotional engagement, cognitive engagement, and behavioral engagement, then the academic self-efficacy scale and student engagement scale have been validated by two experts in the field of psychology. The results of this validation state that the instruments developed are suitable for widespread dissemination for research purposes, and for academic performance to be measured by referring to the latest report card data. Table 1 presents the instrument grid.

Table 1. Instrument Grid

Variables	Dimensions	Indicator
Academic self-efficacy	Level	<ul style="list-style-type: none"> Efficacy expectancy on the level of difficulty task Analyzing options behaviors that will be to use Avoiding situations and behaviors that are considered beyond the limits of of one's abilities
	Generality	<ul style="list-style-type: none"> Expectations that are limited to specific areas of behavior Expectations that spread across multiple areas of behavior.
	Strength	<ul style="list-style-type: none"> Persevere in effort Tenacity in effort
Student engagement	Emotional engagement	<ul style="list-style-type: none"> Positive reaction to the teacher Positive reaction to academics Positive reaction to school
	Cognitive engagement	<ul style="list-style-type: none"> An increased understanding of the value An importance of academic work Application of academic tasks
	Behavioral engagement	<ul style="list-style-type: none"> Participation in class discussion Involvement in academic and co-curricular activities Perseverance and resiliency when faced with challenging tasks

The collected data was analyzed descriptively and inferentially. Descriptive data and prerequisite tests use the SPSS version 25 program to determine the number of respondents, mean, standard deviation for each variable, normality test, multicollinearity test, and heteroscedasticity test. The inferential analysis uses SPSS version 25 with statistical mediation techniques using the PROCESS v4.2 macro from the 4 Hayes model to determine the influence between variables and see the possible role of student engagement as a mediation of the influence of academic self-efficacy on academic performance.

3. RESULT AND DISCUSSION

Result

Subject demograpich In this study are students who attend Islamic boarding schools aged 13-17 years and consist of men and women can be seen in Table 2.

Table 2. Subject Demographic Data

Demographic Data	N	Percentage
Gender		
Man	131	42.5%
Woman	177	57.5%
Age		
13 years old	41	13.3%
14 years	103	33.4%
15 years	41	13.3%
16 years	82	26.7%
17 years	41	13.3%

In Table 2 it can be seen that the subjects in this study were 308 students, namely 131 students for males with a percentage of 42.5%, and for females, there were 177 students with a percentage of 57.5%. Then for students aged 13 years, there are 41 students with a percentage of 13.3%, for 14 years old there are 103 students with a percentage of 33.4%, 15 years old there are 41 students with a percentage of 13.3%, 16 years old there are 82 students with a percentage of 26.7%, and 17 years old numbered 41 students with a percentage of 13.3%. Furthermore, hypothetical and empirical descriptive statistics can be seen in Table 3.

Table 3. Descriptive Statistics Data

Variable Data	N	Range	Min	Max	Standard Deviation	Mean
Hypothetical						
Academic Self-Efficacy	308	192	32	160	21.3	96
Student Engagement	308	108	18	90	12	54
Empirical						
Academic Self-Efficacy	308	53	60	169	10.47	138.95
Student Engagement	308	34	40	84	5,351	66.50
Academic Performance	308	5	85	90	1,345	87.26

In Table 3, it can be seen that the data range for hypothetical academic self-efficacy is 192, while student engagement is 108. The minimum value for hypothetical academic self-efficacy is 32, while for student engagement is 18. The maximum value for hypothetical academic self-efficacy is 160, while student engagement is 90. The standard deviation value of hypothetical academic self-efficacy is 21.3, while student engagement is 12. The mean value of hypothetical academic self-efficacy is 96, while student engagement is 54. Then for the empirical data range academic self-efficacy is 53, student engagement is 34, and academic performance is 5. The minimum empirical value for academic self-efficacy is 60, student engagement is 40, and academic performance is 85. The maximum empirical value for academic self-efficacy is 169, student engagement is 84, and academic performance is 90. The empirical standard deviation value for academic self-efficacy is 10.47, student engagement is 5.351, and academic performance is 1.345. The empirical mean value of academic self-efficacy is 138.95, student engagement is 66.50, and academic performance is 87.26. Next, categorize academic self-efficacy, student engagement, and academic performance in Table 4.

Table 4. Categorization of Academic Self-Efficacy, Student Engagement, and Academic Performance

Variabel	Score	Amount	Category	Percentage
Academic Self-efficacy	$X < 74.7$	14	Low	4.5%
	$74.7 \leq X < 117.3$	13	Medium	4.3%
	$117.3 \leq X$	281	High	91.2%
Student Engagement	$X < 42$	15	Low	4.9%
	$42 \leq X < 66$	127	Medium	41.2%
	$66 \leq X$	166	High	53.9%
Academic Performance	$X < 86.15$	95	Low	30.8%
	$86.15 \leq X < 88.56$	163	Medium	52.9%
	$88.56 \leq X$	50	High	16.3%

In [Table 4](#) it can be seen that the academic self-efficacy of students in the low category is 14 students with a percentage of 4.5%, for the medium category there are 13 people with a percentage of 4.2%, and in the high category there are 281 students with a percentage of 91.2%. Then the student engagement categorization of students in the low category was 15 students with a percentage of 4.9%, in the medium category there were 127 students with a percentage of 41.2%, and in the high category, there were 166 students with a percentage of 53.9%. Then for the academic performance category, students in the low category numbered 95 students with a percentage of 30.8%, for the medium category there were 163 students with a percentage of 52.9%, and in the high category, there were 50 students with a percentage of 16.3%. Furthermore, the normality test can be seen in [Table 5](#).

Table 5. Normality Test Results

	Statistics	Significance (P)	Information
Academic Self-Efficacy	0.504	0.198	Normal
Student Engagement	0.320	0.134	Normal
Academic Performance	0.478	0.176	Normal

In [Table 5](#) you can see the results of the Kolomogorov-Smirnov normality test for academic self-efficacy of 0.504 with a significance value of 0.198 ($P > 0.05$), which means the data is normally distributed, then student engagement is 0.320 with a significance value of 0.134 ($P > 0.05$), the data is normally distributed, and academic performance of 0.478 with a significance value of 0.176 ($P > 0.05$). The data is also normally distributed. Furthermore, the linearity test can be seen in [Table 6](#).

Table 6. Multicollinearity Test Results

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Academic Self-Efficacy	0.989	1.011
	Student Engagement	0.989	1.011

In [Table 6](#) you can see the multicollinearity test for the academic self-efficacy tolerance value $0.989 > 0.10$ and VIF $1.011 < 10$, and student engagement tolerance $0.989 > 0.10$ and VIF $1.011 < 10$. So it can be concluded that there are no symptoms of multicollinearity in the regression model. This research also conducted a heteroscedasticity test to evaluate whether there were inconsistent variations in residuals between observations in the regression model. If the residual variation between observations remains, the model is said to be homoscedastic. Identification of heteroscedasticity is carried out through scatterplot analysis, where if the points on the graph are scattered randomly around zero on the Y axis, then there is no indication of heteroscedasticity. Heteroscedasticity test results is show in [Figure 1](#).

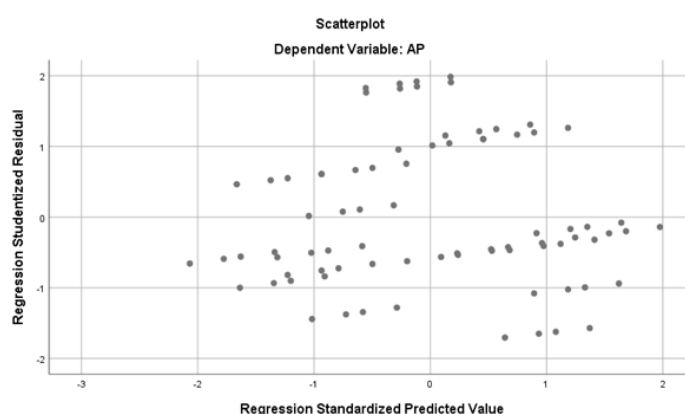


Figure 1. Heteroscedasticity Test Results With Scatterplot

In [Figure 1](#), it can be seen that the scatter plot shows the points scattered randomly without a clear pattern around the diagonal line. Although the points vary above and below zero on the Y-axis, no signs of heteroscedasticity are visible. Therefore, the regression model can be trusted to predict academic performance based on academic self-efficacy and student engagement. Next, the simple regression test can be seen in [Table 7](#).

Table 7. Simple Regression Test

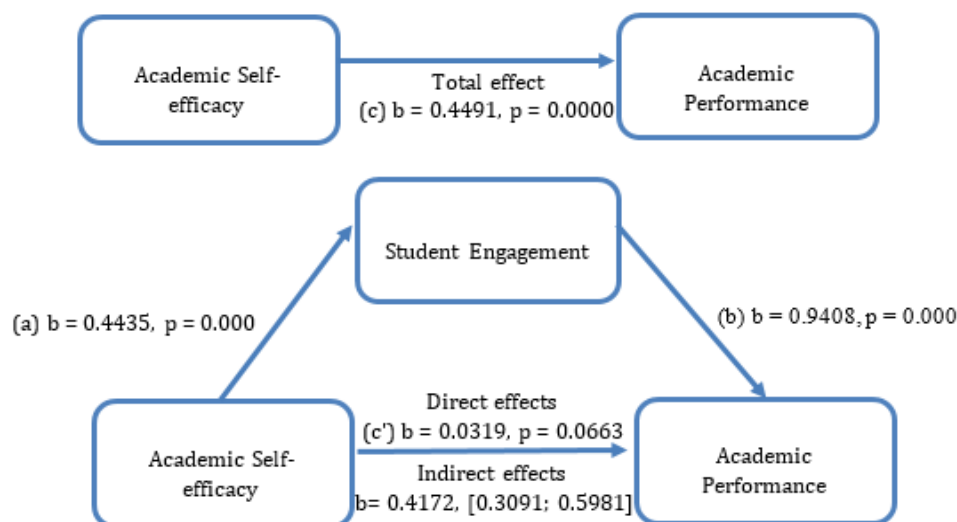
Path in the mediation process	b	S.E	t	p	R	R2
Path c						
Academic Self-efficacy to Academic Performance	0.4491	0.070	6.3864	0,000	0.587	0.343
Path a						
Academic Self-efficacy to Student Engagement	0.4435	0.068	6.4819	0,000	0.592	0.350
Path b						
Student Engagement in Academic Performance	0.9408	0.047	19.9438	0,000	0.945	0.893

In [Table 7](#) it can be seen that path c shows that academic self-efficacy influences academic performance with a value of 0.449 with a significance of 0.000 ($p < 0.05$) and can predict 34.3% of the variance in academic performance. The path shows that academic self-efficacy influences student engagement with a value of 0.443 with a significance of 0.000 ($p < 0.05$) and can predict 35% of the variance in student engagement. Then pathway b student engagement can influence academic performance with a value of 0.940 with a significance of 0.000 ($p < 0.05$) and can predict 89.3% of academic performance. Next, the mediation model regression test using Process Macro Hayes v4.2 regression can be seen in [Table 8](#).

Table 8. Mediation Model Regression Test

Effect	b	p	LLCI	ULCI
Indirect Effects	0.4172		0.3091	0.5891
Direct Effects	0.0319	0.0663	-0.0385	0.1023
Total Effect	0.449	0.0000	0.3091	0.5891

In [Table 8](#) you can see the results of the mediation test, it is known that there is no direct effect occurring in the mediation model, as seen from the LLCI score which is below 0, namely -0.0385 with a significance of 0.0663. Furthermore, there is an indirect effect (through mediation) of 0.417. This effect is significant as seen from the LLCI and ULCI scores which exceed 0 (0.3091 and 0.5891). This shows that academic self-efficacy influences academic performance with student engagement as mediation, so it can be concluded that there is full mediation in this relationship. More details can be seen in [Figure 2](#).

**Figure 2. Student Engagement Variable Mediation Analysis Chart**

Discussion

Based on the research results obtained, students at the Dar-el Hikmah Pekanbaru Islamic boarding school have high academic self-efficacy. This shows that students believe that they can achieve

success in religious studies and other subjects taught at Islamic boarding schools (Hayat et al., 2020; Solihin et al., 2020). Students who have high academic self-efficacy tend to be actively involved in learning (Adams et al., 2020; Sökmen, 2021). This is in line with the findings obtained that student engagement in Islamic boarding schools is in the high category. Then the academic performance of Islamic boarding school students is also high, this is due to high academic self-efficacy and student engagement which makes students more confident and involved in learning which makes students more performant in learning to achieve success (Olivier et al., 2019; Wu et al., 2020).

The results of this research also found that academic self-efficacy can influence students' academic performance in Islamic boarding schools. Students who are confident in their academic abilities are more motivated to learn and achieve success. Confidence in students' abilities provides a strong intrinsic drive to achieve academic goals, thereby increasing their level of motivation to study diligently and strive hard (Drago et al., 2018; Hidajat et al., 2023). This is in line with research Yokoyama's research results show that academic self-efficacy is positively related to students' academic performance. Other research shows positive results between academic self-efficacy and academic performance, seen from students who are enthusiastic about learning and have a strong goal of getting good grades (Boahene et al., 2019). Then other research of academic self-efficacy research influence academic performance which can have a positive impact on student academic achievement and help students achieve their full potential (Shi et al., 2018).

Academic self-efficacy in this research can also influence student engagement at Islamic boarding schools. Students who have high academic self-efficacy see academic challenges as opportunities to learn and develop, not as obstacles that cannot be overcome. Students are more engaged in overcoming obstacles and seeking help when needed (Ahmed et al., 2018; Sriwiyanti & Saefudin, 2022). In line with research by Kuo et al., (2021) High academic self-efficacy encourages students to be actively involved in class, such as asking questions, answering questions, and doing assignments. Then research Salsabila and Kusdiyati (2021) The results of academic self-efficacy research on student engagement have a close relationship with the learning process. The higher the academic self-efficacy, the greater the student will be actively involved in learning (Adams et al., 2020; Azila-Gbettor et al., 2021). Then research by other study proves that high academic self-efficacy makes students more active in class and involved in school activities (Hettinger et al., 2023).

Student engagement in this research can also influence the academic performance of students at Islamic boarding schools. Engaged students participate more often in class discussions, ask questions, and interact with teachers and fellow students. This active participation can improve students' understanding of the material being studied and help them overcome learning difficulties (2019; Palos et al., 2019). In line with research obtained research results that high student engagement will (Bowden et al., 2021; Delfino, 2011) make students understand the lessons better, thereby increasing students' academic performance (Lei et al., 2018). Engaged students will be more likely to attend lessons attentively. It will be easier for them to understand the lesson material and answer questions correctly. Then other research engaged students will be more likely to complete assignments on time and with quality. They will be more motivated to learn and improve their abilities (Simpson & Burnett, 2019). Then research other research engaged students will feel more motivated to learn because they are interested in the subject matter and feel that learning is important to them, so that students will maximize their academic performance (Sahni, 2023).

Finally, it was found that academic self-efficacy did not significantly influence academic performance through the mediating role of student engagement, this shows that there is full mediation in this relationship. So student engagement becomes an important link between academic self-efficacy and academic performance. In line with research found the higher the academic self-efficacy towards academic performance, the more active the students' involvement in pesantren, which in turn has a positive impact on academic performance (Meng & Zhang, 2023). Students with high levels of academic self-efficacy have stronger confidence in their ability to learn. These positive experiences encourage them to spend more time and effort to achieve their academic goals. Apart from that, they tend to be more focused on facing challenges in the learning process (Selvaraj et al., 2021; Tomaszewski et al., 2020). This can be explained by self-perception theory. According to self-perception theory, individuals form beliefs about themselves based on the experiences they have had. One of the experiences experienced by individuals is positive experiences, such as involvement in the learning process, which can increase the level of individual confidence in their abilities (Gil Cordero et al., 2023; Koban et al., 2023; Roswag et al., 2023).

The implications of this research can provide knowledge about the importance of strengthening students' academic self-efficacy. Teachers need to design strategies that can help students build confidence in their ability to learn and achieve academic success, and student involvement in the learning process has a crucial role in achieving academic performance. Students who are more involved in learning

have a greater possibility of achieving higher academic performance. Student engagement, which influences the way students learn and their learning outcomes, has been proven to act as a mediator between academic self-efficacy and academic performance. It is thus important for students to have confidence in their ability to face and engage in academic challenges.

Given the limitations of the study, the findings of this study are suggestive, not decisive. Firstly, this research has a narrow subject, namely only taking from one Islamic boarding school. This has no substantive influence on the research results; however, this may hinder the feasibility of extending the study findings to other populations. Therefore, researchers encourage further research to be carried out to compare research results with other populations. It is also important to consider how gender differences will influence students' academic performance, this of course requires further research which is still a limitation of the author. As well as other factors that influence academic performance such as motivation, social support, emotional intelligence, and learning and teaching methods have not yet been explored in research so further research is needed.

4. CONCLUSION

The results of this research show that academic self-efficacy, student engagement, and academic performance of students in Islamic boarding schools are positively related. Apart from that, the research results confirm that academic self-efficacy can improve academic performance by increasing student engagement. The research results highlight that academic self-efficacy is useful for improving academic performance. Students with high self-efficacy are more confident in learning can more effectively solve problems and are more involved in learning, thereby increasing academic performance, while students with low self-efficacy choose to avoid challenges, thereby reducing academic performance. The results of this research also expand research on the relationship between academic self-efficacy, student engagement, and academic performance. It is recommended for further research to consider other factors in improving student academic performance such as motivation, social support, emotional intelligence, and learning and teaching methods which have not yet been explored in this research.

5. REFERENCES

- Abrantes, L. F., & Casinillo, L. F. (2020). The impact of broken homes on students' academic performance. *Indonesian Journal of Educational Research and Review*, 3(3), 113-122. <https://doi.org/10.23887/ijerr.v3i3.28592>.
- Adams, A.-M., Wilson, H., Money, J., Palmer-Conn, S., & Fearn, J. (2020). Student engagement with feedback and attainment: the role of academic self-efficacy. *Assessment & Evaluation in Higher Education*, 45(2), 317-329. <https://doi.org/10.1080/02602938.2019.1640184>.
- Affuso, G., Zannone, A., Esposito, C., Pannone, M., Miranda, M. C., De Angelis, G., Aquilar, S., Dragone, M., & Bacchini, D. (2023). The effects of teacher support, parental monitoring, motivation and self-efficacy on academic performance over time. *European Journal of Psychology of Education*, 38(1), 1-23. <https://doi.org/10.1007/s10212-021-00594-6>.
- Agustina, F. R., & Rusmawati, D. (2022). Hubungan antara efikasi diri akademik dengan student engagement pada santri di pondok pesantren mahasiswa bina khoiril insan semarang. *Jurnal Empati*, 11(5), 332-336. <https://doi.org/10.14710/empati.0.36741>.
- Ahmed, U., Umrani, W. A., Qureshi, M. A., & Samad, A. (2018). Examining the links between teachers support, academic efficacy, academic resilience, and student engagement in Bahrain. *International Journal Of Advanced And Applied Sciences*, 5(9), 39-46. <https://doi.org/10.21833/ijaas.2018.09.008>.
- Akhmad, R. A., & Riyah, K. (2023). Hubungan motivasi belajar dan iklim pesantren dengan prestasi belajar kemuhammadiyahsantri di pondok pesantren muhammadiyah. *Journal on Education*, 6(1). <https://doi.org/10.31004/joe.v6i1.4414>.
- Ala, N. A., Ishyaku, A. M., Adamu, S. B., & Onojah, A. O. (2022). Computer-animation on nce students' academic performance in vertebrate anatomy and physiology in colleges of education. *Indonesian Journal Of Educational Research and Review*, 5(3), 449-459. <https://doi.org/10.23887/ijerr.v5i3.52872>.
- Alhadabi, A., & Karpinski, A. C. (2020). Grit, self-efficacy, achievement orientation goals, and academic performance in University students. *International Journal of Adolescence and Youth*, 25(1), 519-535. <https://doi.org/10.1080/02673843.2019.1679202>.
- Amna, Z., Safira, S., Sari, K., & Faradina, S. (2020). Correlation of mental toughness with academic achievement in modern pesantren students in aceh indonesia. *Psikoislamika : Jurnal Psikologi Dan*

- Psikologi Islam*, 17(2), 100–111. <https://doi.org/10.18860/psikoislamika.v17i2.10105>.
- Azila-Gbettor, E. M., Mensah, C., Abiemo, M. K., & Bokor, M. (2021). Predicting student engagement from self-efficacy and autonomous motivation: A cross-sectional study. *Cogent Education*, 8(1). <https://doi.org/10.1080/2331186X.2021.1942638>.
- Baz, F. Ç., & Yildirim, A. (2023). Evaluation on regional boarding schools in terms of management and educational processes. *ISPEC International Journal of Social Sciences & Humanities*, 7(1), 195–209. <https://doi.org/10.5281/zenodo.7790836>.
- Boahene, K. O., Fang, J., & Sampong, F. (2019). Social media usage and tertiary students' academic performance: Examining the influences of academic self-efficacy and innovation characteristics. *Sustainability (Switzerland)*, 11(8), 1–17. <https://doi.org/10.3390/su11082431>.
- Bowden, J. L.-H., Tickle, L., & Naumann, K. (2021). The four pillars of tertiary student engagement and success: a holistic measurement approach. *Studies in Higher Education*, 46(6), 1207–1224. <https://doi.org/10.1080/03075079.2019.1672647>.
- Casinillo, L. F., Agravante, N., Baldevia, A. C. N., & Tang, E. C. O. (2023). Influence of parenting styles on students' performance under modular distance learning. *Indonesian Journal of Educational Research and Review*, 6(3), 520–530. <https://doi.org/10.23887/ijerr.v6i3.68287>.
- Commey-Mintah, P. (2023). The contingencies of emotional intelligence on the academic performance of trainee teachers in selected colleges of education in Ghana. *Indonesian Journal of Educational Research and Review*, 6(3), 634–644. <https://doi.org/10.23887/ijerr.v6i3.57206>.
- Damayanti, D. P. (2023). Model dukungan holistik terhadap pendidikan anak di pondok pesantren. *EDUKASIA: Jurnal Pendidikan Dan Pembelajaran*, 4(2), 2121–2128. <https://doi.org/10.62775/edukasia.v4i2.556>.
- Delfino, A. P. (2019). Student engagement and academic performance of students of partido state university. *Asian Journal of University Education*, 15(3), 42–55. <https://doi.org/10.24191/ajue.v15i3.05>.
- Dogan, U. (2014). Validity and reliability of student engagement scale. *Bartın Üniversitesi Eğitim Fakültesi Dergisi*, 3(2), 390–390. <https://doi.org/10.14686/BUEFAD.201428190>.
- Drago, A., Rheinheimer, D. C., & Detweiler, T. N. (2018). Effects of locus of control, academic self-efficacy, and tutoring on academic performance. *Journal of College Student Retention: Research, Theory & Practice*, 19(4), 433–451. <https://doi.org/10.1177/1521025116645602>.
- Fitri, R., & Ondeng, S. (2022). Pesantren di Indonesia: lembaga pembentukan karakter. *Al Urwatul Wutsqa: Kajian Pendidikan Islam*, 2(1), 42–54. <https://journal.unismuh.ac.id/index.php/alurwatul/article/view/7785>.
- Gil Cordero, E., Ledesma Chaves, P., Han, H., & Ariza Montes, J. A. (2023). Analysis of university professors in economic sciences: PMH scale and technostress as main antecedents of academic self-perception. *Journal of Men's Health*, 23(1). <https://doi.org/10.22514/jomh.2023.014>.
- Hayat, A. A., Emad, N., Sharafi, N., & Keshavarzi, M. H. (2022). A comparative study of students' academic optimism and hope, and their relationships with academic achievement. *Shiraz E-Medical Journal*, 23(11). <https://doi.org/10.5812/semj-121136>.
- Hayat, A. A., Shateri, K., Amini, M., & Shokrpour, N. (2020). Relationships between academic self-efficacy, learning-related emotions, and metacognitive learning strategies with academic performance in medical students: a structural equation model. *BMC Medical Education*, 20(1), 76. <https://doi.org/10.1186/s12909-020-01995-9>.
- Hettinger, K., Lazarides, R., & Schiefele, U. (2023). Motivational climate in mathematics classrooms: teacher self-efficacy for student engagement, student- and teacher-reported emotional support and student interest. *ZDM - Mathematics Education*, 55(2), 413–426. <https://doi.org/10.1007/s11858-022-01430-x>.
- Hewi, L., & Shaleh, M. (2020). Refleksi Hasil PISA (The Programme For International Student Assessment): Upaya Perbaikan Bertumpu Pada Pendidikan Anak Usia Dini. *Jurnal Golden Age*, 4(01), 30–41. <https://doi.org/10.29408/jga.v4i01.2018>.
- Hidajat, H. G., Hanurawan, F., Chusniyah, T., Rahmawati, H., & Gani, S. A. (2023). The role of self-efficacy in improving student academic motivation. *KnE Social Sciences*. <https://doi.org/10.18502/kss.v8i19.14362>.
- Iglesias-Pradas, S., Hernández-García, Á., Chaparro-Peláez, J., & Prieto, J. L. (2021). Emergency remote teaching and students' academic performance in higher education during the COVID-19 pandemic: A case study. *Computers in Human Behavior*, 119. <https://doi.org/10.1016/j.chb.2021.106713>.
- Jamaluddin, N., Daud, M., & Indahari, N. A. (2022). Student engagement dan prestasi akademik pada mahasiswa. *Jurnal Psikologi Talenta Mahasiswa*, 1(4).

- <https://doi.org/https://doi.org/10.26858/jtm.v1i4.33255>.
- Kariyanto, H. (2020). Peran pondok pesantren dalam masyarakat modern. *Jurnal Pendidikan Edukasia Multikultura*, 2(2), 67–82. <https://doi.org/http://dx.doi.org/10.29300/jem.v2i2.4646.g3089>.
- Khafifah, K. A., Hasanah, U., & Zulfa, V. (2023). Hubungan antara stres akademik dengan academic performance pada santri madrasah aliyah pondok pesantren al hamid. *JKKP (Jurnal Kesejahteraan Keluarga Dan Pendidikan)*, 10(01), 27–37. <https://doi.org/10.21009/JKKP.101.03>.
- Koban, L., Andrews-Hanna, J. R., Ives, L., Wager, T. D., & Arch, J. J. (2023). Brain mediators of biased social learning of self-perception in social anxiety disorder. *Translational Psychiatry*, 13(1), 292. <https://doi.org/10.1038/s41398-023-02587-z>.
- Kuo, T. M., Tsai, C.-C., & Wang, J.-C. (2021). Linking web-based learning self-efficacy and learning engagement in MOOCs: The role of online academic hardiness. *The Internet and Higher Education*, 51, 100819. <https://doi.org/10.1016/j.iheduc.2021.100819>.
- Kuzminykh, I., Ghita, B., & Xiao, H. (2021). The relationship between student engagement and academic performance in online education. *2021 5th International Conference on E-Society, E-Education and E-Technology*, 97–101. <https://doi.org/10.1145/3485768.3485796>.
- Lei, H., Cui, Y., & Zhou, W. (2018). Relationships between student engagement and academic achievement: A meta-analysis. *Social Behavior and Personality: An International Journal*, 46(3), 517–528. <https://doi.org/10.2224/sbp.7054>.
- Meng, Q., & Zhang, Q. (2023). The influence of academic self-efficacy on university students academic performance: the mediating effect of academic engagement. *Sustainability*, 15(7), 5767. <https://doi.org/10.3390/su15075767>.
- Muthmainnah, Al Yakin, A., & Ibna Seraj, P. M. (2023). Impact of metaverse technology on student engagement and academic performance: the mediating role of learning motivation. *International Journal of Computations, Information and Manufacturing (IJCIM)*, 3(1), 10–18. <https://doi.org/10.54489/ijcim.v3i1.234>.
- Olivier, E., Archambault, I., De Clercq, M., & Galand, B. (2019). Student self-efficacy, classroom engagement, and academic achievement: comparing three theoretical frameworks. *Journal of Youth and Adolescence*, 48(2), 326–340. <https://doi.org/10.1007/s10964-018-0952-0>.
- Palapa, A. (2023). Examining academic self efficacy to achieve student academic performance: evidence from computer-based training. *Jurnal Kependidikan: Jurnal Hasil Penelitian Dan Kajian Kepustakaan Di Bidang Pendidikan, Pengajaran Dan Pembelajaran*, 9(1), 80. <https://doi.org/10.33394/jk.v9i1.7074>.
- Paloş, R., Maricuţoiu, L. P., & Costea, I. (2019). Relations between academic performance, student engagement and student burnout: A cross-lagged analysis of a two-wave study. *Studies in Educational Evaluation*, 60, 199–204. <https://doi.org/10.1016/j.stueduc.2019.01.005>.
- Puhlmann, L. M., Derome, M., Morosan, L., Kilicel, D., Vrtička, P., & Debbané, M. (2023). Longitudinal associations between self-reported attachment dimensions and neurostructural development from adolescence to early adulthood. *Attachment & Human Development*, 25(1), 162–180. <https://doi.org/10.1080/14616734.2021.1993628>.
- Quibrantar, S. M., & Ezezika, O. (2023). Evaluating student engagement and experiential learning in global classrooms: A qualitative case study. *Studies in Educational Evaluation*, 78, 101290. <https://doi.org/10.1016/j.stueduc.2023.101290>.
- Ramli, M., Cahyadi, A., Mizani, H., Hendryadi, & Mais, R. G. (2023). Loneliness, academic self-efficacy, and student engagement in the online learning environment: the role of humor in learning. *Research and Practice in Technology Enhanced Learning*, 19, 002. <https://doi.org/10.58459/rptel.2024.19002>.
- Resya, N. F. S., & Diantoro, F. (2021). Sistem pendidikan nasional di pondok pesantren. *Al-Ishlah: Jurnal Pendidikan Islam*, 19(2), 209–230. <https://doi.org/https://doi.org/10.35905/alishlah.v19i2.2134>.
- Roswag, M., Häusser, J. A., Abdel Hadi, S., Hubert, P., & Mojzisch, A. (2023). Organizations affect their employees' vaccine readiness: A self-perception theory perspective. *Applied Psychology: Health and Well-Being*, 15(4), 1603–1618. <https://doi.org/10.1111/aphw.12457>.
- Sahni, J. (2023). Is Learning Analytics the Future of Online Education? *International Journal of Emerging Technologies in Learning (IJET)*, 18(02), 33–49. <https://doi.org/10.3991/ijet.v18i02.32167>.
- Salsabila, A. S., & Kusdiyati, S. (2021). Pengaruh academic self efficacy terhadap student engagement pada mahasiswa selama pembelajaran dalam jaringan (daring). *Prosiding Psikologi*, 7(2). <https://doi.org/http://dx.doi.org/10.29313/v0i0.28402>.
- Selvaraj, A., Radhin, V., KA, N., Benson, N., & Mathew, A. J. (2021). Effect of pandemic based online education on teaching and learning system. *International Journal of Educational Development*,

- 85(May), 102444. <https://doi.org/10.1016/j.ijedudev.2021.102444>.
- Shi, Y., Peng, C., Yang, H. H., & MacLeod, J. (2018). Examining interactive whiteboard-based instruction on the academic self-efficacy, academic press and achievement of college students. *Open Learning: The Journal of Open, Distance and e-Learning*, 33(2), 115–130. <https://doi.org/10.1080/02680513.2018.1454829>.
- Shofiah, V., Taruna, R., & Asra, Y. K. (2023). Academic self-efficacy as a mediator on the relationship between academic motivation and academic achievement of college students during the online learning period. *International Journal of Islamic Educational Psychology*, 4(1). <https://doi.org/10.18196/ijiep.v4i1.18247>.
- Simpson, D. B., & Burnett, D. (2019). Commuters versus residents: The effects of living arrangement and student engagement on academic performance. *Journal of College Student Retention: Research, Theory & Practice*, 21(3), 286–304. <https://doi.org/10.1177/1521025117707516>.
- Sökmen, Y. (2021). The role of self-efficacy in the relationship between the learning environment and student engagement. *Educational Studies*, 47(1), 19–37. <https://doi.org/10.1080/03055698.2019.1665986>.
- Solihin, I., Hasanah, A., & Fajrussalam, H. (2020). Core ethical values of character education based on islamic values in islamic boarding schools. *International Journal on Advanced Science, Education, and Religion*, 3(2). <https://doi.org/10.33648/ijoaaser.v3i2.51>.
- Sriwiyanti, S., & Saefudin, W. (2022). Spiritual well-being, self-efficacy, and student engagement of muslim juveniles during an educational program in prison. *Muslim Education Review*, 1(1), 106–130. <https://doi.org/10.56529/mer.v1i1.7>.
- Sudirman, S. A., Nurmandi, A., & Bashori, K. (2020). English Writing Skills Through Perception of Siri’Cultural Values: Optimism, Social Support, And Academic Self-Efficacy. *Jurnal Cakrawala Pendidikan*, 39(2), 242–256. <https://doi.org/10.21831/cp.v39i2.26118>.
- Suradi, A. (2018). Analisis dampak transformasi pendidikan pesantren terhadap penanaman jiwa keikhlasan santri di pondok pesantren. *Ta'allum: Jurnal Pendidikan Islam*, 6(1). <https://doi.org/10.21274/taalum.2018.6.1.197-218>.
- Tafesse, W. (2020). The effect of social networking site use on college students' academic performance: the mediating role of student engagement. *Education and Information Technologies*, 25(6), 4747–4763. <https://doi.org/10.1007/s10639-020-10162-y>.
- Tomaszewski, W., Xiang, N., & Western, M. (2020). Student engagement as a mediator of the effects of socio-economic status on academic performance among secondary school students in Australia. *British Educational Research Journal*, 46(3), 610–630. <https://doi.org/10.1002/berj.3599>.
- Uzun, K., & Karataş, Z. (2020). Predictors of Academic Self Efficacy: Intolerance of Uncertainty, Positive Beliefs about Worry and Academic Locus of Control. *International Education Studies*, 13(6), 104–116. <https://doi.org/10.5539/ies.v13n6p104>.
- Waheed, H., Hassan, S.-U., Aljohani, N. R., Hardman, J., Alelyani, S., & Nawaz, R. (2020). Predicting academic performance of students from VLE big data using deep learning models. *Computers in Human Behavior*, 104, 106189. <https://doi.org/10.1016/j.chb.2019.106189>.
- Wang, L., & Yu, Z. (2023). Gender-moderated effects of academic self-concept on achievement, motivation, performance, and self-efficacy: A systematic review. *Frontiers in Psychology*, 14. <https://doi.org/10.3389/fpsyg.2023.1136141>.
- Wang, Y., & Wang, Y. (2023). Exploring the relationship between educational ICT resources, student engagement, and academic performance: A multilevel structural equation analysis based on PISA 2018 data. *Studies in Educational Evaluation*, 79, 101308. <https://doi.org/10.1016/j.stueduc.2023.101308>.
- Wu, H., Li, S., Zheng, J., & Guo, J. (2020). Medical students' motivation and academic performance: the mediating roles of self-efficacy and learning engagement. *Medical Education Online*, 25(1). <https://doi.org/10.1080/10872981.2020.1742964>.
- Zhang, F., Schunn, C., Chen, S., Li, W., & Li, R. (2023). EFL student engagement with giving peer feedback in academic writing: A longitudinal study. *Journal of English for Academic Purposes*, 64, 101255. <https://doi.org/10.1016/j.jeap.2023.101255>.
- Zhang, S., Hightower, A., & Shi, Q. (2021). Teacher preparation, motivation, and self-efficacy: A comparative study of new teachers in japan and the United States. *Indonesian Journal Of Educational Research and Review*, 4(3), 368. <https://doi.org/10.23887/ijerr.v4i3.39010>.
- Zysberg, L., & Schwabsky, N. (2021). School climate, academic self-efficacy and student achievement. *Educational Psychology*, 41(4), 467–482. <https://doi.org/10.1080/01443410.2020.1813690>.