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Psychopedagogical Study of Self-Efficacy and Problem-Solving in Aqidah Akhlak Learning for Sdg 4

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Abstract

Objectives: This study aims to assess the self-efficacy levels and problem-solving abilities of ninth-grade students at MTs Muhammadiyah Gemolong in Aqidah Akhlak learning. It also seeks to examine the correlation between self-efficacy and problem-solving abilities, contributing to the achievement of Sustainable Development Goal 4 (Quality Education). **Theoretical framework:** The research is based on Bandura's self-efficacy theory and problem-solving theory, applied to the context of Quality Education in Sustainable Development Goal 4. **Literature review:** Previous studies indicate a positive relationship between self-efficacy and problem-solving skills. However, research specifically examining this in Aqidah Akhlak learning is limited. **Method:** A quantitative correlational design was used in this study, which involved 87 ninth-grade students at MTs Muhammadiyah Gemolong. A simple random sampling technique selected 71 students as participants. Data were collected using validated self-efficacy questionnaires and problem-solving tests. The data were analyzed using the Kolmogorov-Smirnov normality test and Pearson's Product-Moment correlation, conducted with SPSS version 26.0. **Result:** The study found that 66.20% of students had moderate self-efficacy, and 67.61% exhibited moderate problem-solving ability. A significant positive correlation ($r = 0.247$, $p = 0.038$) was found between self-efficacy and problem-solving ability, indicating a low but positive relationship between the two variables. **Implications:** Enhancing self-efficacy can improve problem-solving skills in Aqidah Akhlak learning, supporting the goals of Sustainable Development Goal 4. **Novelty:** This study provides new insights into the relationship between self-efficacy and problem-solving abilities in Aqidah Akhlak learning, an area with limited research.

Keywords: self-efficacy, problem-solving ability, aqidah akhlak learning, psychopedagogical study, sdg 4.

INTRODUCTION

Education in the twenty-first century has undergone a fundamental transformation, emphasizing the development of higher-order thinking skills rather than rote memorization [1]. Among these essential skills, problem-solving ability is

increasingly recognized as a critical competence for success in both academic and real-life contexts [2]. In Islamic education, this competence is not merely cognitive but also moral and spiritual, closely linked to ethical reasoning and the internalization of Islamic values that guide decision-making in daily life [3]. This vision aligns with Sustainable Development Goal 4 (Quality Education), which advocates for inclusive, equitable, and transformative learning that promotes lifelong skills and moral awareness [4].

Despite this global emphasis, many students in Islamic secondary schools (madrasahs) still struggle to demonstrate adequate problem-solving performance, particularly in subjects such as *Aqidah Akhlak*, which require critical reflection, moral discernment, and value-based reasoning [5]. Problem-solving can be defined as the process of identifying, analyzing, and resolving a problem through cognitive and metacognitive strategies [6]. It involves applying knowledge and reasoning to novel situations, hallmarks of Higher Order Thinking Skills (HOTS). However, previous studies in Indonesia indicate that students' problem-solving skills remain moderate or low, partly due to conventional learning models that prioritize knowledge transmission over inquiry and reflection [7].

At MTs Muhammadiyah Gemolong, preliminary classroom observations revealed that ninth-grade students often encounter difficulties in solving conceptual and moral problems in *Aqidah Akhlak* lessons. Teachers reported that while most students can identify the core issue, they often struggle to construct logical, systematic, and value-oriented solutions. The learning process tends to be teacher-centered, leaving limited space for independent reasoning and reflective dialogue [8]–[10]. This condition corresponds with psychopedagogical perspectives that emphasize the interaction between psychological factors and pedagogical practices in shaping learning outcomes [11]. One of the most influential psychological factors is self-efficacy, the learner's belief in their ability to plan, organize, and execute actions to overcome challenges [12].

Students with high self-efficacy perceive academic challenges as opportunities for growth and demonstrate greater persistence when facing difficult tasks [13]. Conversely, those with low self-efficacy are more likely to avoid complex problems and disengage from learning activities [14]. Several empirical studies have confirmed a positive correlation between self-efficacy and problem-solving ability [15], although contextual and pedagogical factors, such as teacher support and school environment, may moderate this relationship [16].

Given these considerations, this study adopts a psychopedagogical approach to examine the influence of self-efficacy on students' problem-solving ability in *Aqidah Akhlak* learning at MTs Muhammadiyah Gemolong. By integrating psychological theory and Islamic educational values, the research aims to contribute to the advancement of Sustainable Development Goal 4 (Quality Education) through empirical insights into how belief, reasoning, and moral learning interact within Islamic education [17], [18]. The findings are expected to inform teachers, curriculum developers, and policymakers about the importance of fostering self-efficacy as part of a holistic strategy for character and competence development in madrasah education.

LITERATURE REVIEW

Research on self-efficacy and problem-solving ability has increasingly emphasized their central role in shaping meaningful learning experiences, particularly within value-based educational settings such as Islamic studies. Self-efficacy, defined as an individual's belief in their capacity to organize and execute actions necessary to achieve specific goals, is widely recognized as a key psychological determinant of academic engagement and

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performance. Students who possess strong efficacy beliefs tend to demonstrate higher motivation, persistence, and resilience when encountering complex learning tasks. Conversely, low self-efficacy often correlates with avoidance behaviors, reduced confidence, and diminished willingness to tackle challenging academic activities [17], [18].

Problem-solving ability, meanwhile, is understood as a multifaceted cognitive process involving the identification, analysis, and resolution of various types of problems. Within educational contexts, problem-solving is not limited to procedural proficiency; it encompasses higher-order thinking, creativity, and the ability to apply conceptual understanding to new or unfamiliar situations. In Aqidah Akhlak learning, these skills acquire further moral and reflective dimensions. Students are not only expected to reason logically but also to articulate solutions grounded in ethical principles and Islamic values. Previous studies exploring the link between self-efficacy and problem-solving consistently highlight a positive association. Learners with higher self-efficacy tend to engage more deeply in reasoning processes, use more effective strategies, and persist longer during problem interpretation and solution planning. However, most existing research has focused on general subjects such as mathematics, science, or language learning. Investigations situated within Islamic education, particularly Aqidah Akhlak, remain limited despite the subject's inherent dependence on reflective judgment and moral reasoning [17], [18].

The integration of psychopedagogical principles provides an important lens for understanding how internal psychological factors interact with instructional practices. From this perspective, student learning outcomes are shaped not only by cognitive ability but also by beliefs, emotions, and the learning environment. Classrooms that rely heavily on teacher-centered instruction often restrict students' opportunities to develop autonomous reasoning, thereby hindering problem-solving development. In contrast, supportive, dialogic, and reflective pedagogies can strengthen self-efficacy by encouraging students to take intellectual risks and evaluate their reasoning processes more independently. Overall, the literature suggests that enhancing self-efficacy may serve as a strategic pathway for improving students' problem-solving skills, especially in subjects requiring ethical interpretation and conceptual understanding such as Aqidah Akhlak. This highlights the need for more empirical studies situated in Islamic educational contexts to better understand how these constructs interact in shaping holistic student development [19].

METHODOLOGY

This study employed a quantitative approach with a correlational design to determine the relationship between self-efficacy and students' problem-solving ability in *Aqidah Akhlak* learning. This design was selected to identify the degree of association between the two variables without manipulating them, allowing the researcher to measure how students' beliefs in their own capabilities influence their ability to solve moral and faith-based problems [20].

The research was conducted at MTs Muhammadiyah Gemolong, Sragen Regency, from September 2024 to April 2025. The population included all ninth-grade students in the academic year 2024/2025, totaling 87 students. The sample of 71 students was obtained using simple random sampling, which ensures that each member of the population has an equal chance of being selected, thus minimizing sampling bias [20].

The study used primary data collected through two main instruments: a self-efficacy questionnaire and a problem-solving ability test. The self-efficacy questionnaire was developed based on Bandura's theory [21], consisting of 36 statements distributed across three dimensions: magnitude, strength, and generality, using a four-point Likert scale ranging from *strongly disagree (1)* to *strongly agree (4)*. The problem-solving test, on the other hand, consisted of essay-type questions constructed according to Polya's (1957) four

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steps of problem-solving: understanding the problem, devising a plan, carrying out the plan, and evaluating the results, adjusted to the context of *Aqidah Akhlak* learning.

Table 1. Self-Efficacy Questionnaire Instrument Grid

Dimension	Indicator	Number of Items	Item Numbers
Magnitude	Students' belief in their ability to complete tasks of varying difficulty	12	1–12
Strength	Students' confidence in maintaining effort and persistence despite challenges	12	13–24
Generality	Students' belief that their abilities apply across different situations or subjects	12	25–36
Total		**36 items**	

Table 2. Problem-Solving Ability Instrument Grid

Component (Polya's Step)	Indicator	Number of Items	Question Numbers
Understanding the Problem	Students identify key information and state what is asked	2	1–2
Devising a Plan	Students select strategies or formulas relevant to the *Aqidah Akhlak* case	2	3–4
Carrying Out the Plan	Students execute the plan accurately and logically	3	5–7
Evaluating the Result	Students review and interpret the outcome according to Islamic values	3	8–10
Total		**10 items**	

The instruments underwent expert validation by three specialists in Islamic education and educational psychology to ensure content validity [22]. Construct validity was examined using the Product-Moment correlation coefficient, and items were declared valid if the r-count value exceeded the r-table (0.497). The reliability test using Cronbach's Alpha yielded coefficients of 0.87 for the self-efficacy questionnaire and 0.82 for the problem-solving test, both exceeding the minimum threshold of 0.60(20), thus confirming their reliability.

Data analysis involved both descriptive and inferential statistics. Descriptive statistics were used to categorize the levels of students' self-efficacy and problem-solving ability into high, moderate, and low categories. Inferential analysis employed the Pearson product-moment correlation test to examine the relationship between the two variables. Prerequisite analyses were first conducted, including normality testing using the Kolmogorov–Smirnov method and linearity testing to ensure data suitability [23], [24].

All statistical analyses were conducted using SPSS version 26.0, with a significance level (α) = 0.05. The decision rule stated that if Sig. < 0.05, the null hypothesis (H_0) was rejected, indicating a significant positive relationship between self-efficacy and students' problem-solving ability in Aqidah Akhlak learning.

RESULTS AND DISCUSSION

This section presents the findings on the influence of self-efficacy on students' problem-solving ability in *Aqidah Akhlak* learning. The analysis includes descriptive and statistical assessments of the main indicators of self-efficacy (confidence, persistence, and self-

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regulation) and their relationship with students' ability to interpret, analyze, and apply moral reasoning in solving *Aqidah Akhlak*-related problems [25], [26].

Descriptive Analysis of Students' Self-Efficacy

The self-efficacy data were collected by distributing questionnaires to the research respondents, namely 71 Class IX students of MTs Muhammadiyah Gemolong for the 2024/2025 academic year. The data were analyzed using SPSS version 26.0. The calculation results are presented in the table below:

Table 3. Mean, Median, Mode, and Standard Deviation of Self-Efficacy Based

Variable	N	Mean	Median	Mode	Std. Dev
Self-Efficacy	71	57.831	58	51	7.863

The data above indicate that the average self-efficacy score of the 71 Class IX students at MTs Muhammadiyah Gemolong for the 2024/2025 academic year is 57.831. The median value is 58, while the mode is 51. Meanwhile, the standard deviation, representing the data variability for this variable, is 7.863.

The following table shows the frequency distribution of self-efficacy scores:

Table 4. Frequency Distribution of Self-Efficacy Data

No.	Criteria	Score Range	Frequency	Percentage	Category
1	$X \leq \bar{x}$ - SD	$X \leq 50$	11	15.49%	Low
2	$\bar{x}$ – SD < X < $\bar{x}$ + SD	51–65	47	66.20%	Medium
3	$X \geq \bar{x}$ + SD	$X \geq 66$	13	18.31%	High
	Total		71	100%	

Based on the table above, it is known that the number of Class X students at MTs Muhammadiyah Gemolong for the 2024/2025 academic year whose self-efficacy falls into the low category is 11 students (15.49%). Those in the medium category are 47 students (66.20%), and in the high category, there are 13 students (18.31%).

The distribution of students' self-efficacy levels can also be visualized in the form of a bar chart as follows:

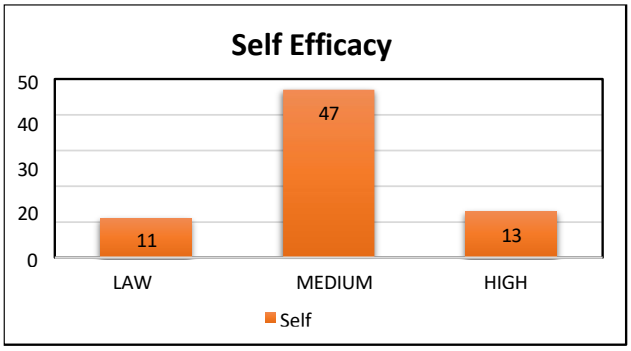

Figure 1. Bar Chart of Self-Efficacy Data

Meanwhile, to illustrate the percentage distribution of students' self-efficacy levels, it can be represented in the form of a pie chart as follows:

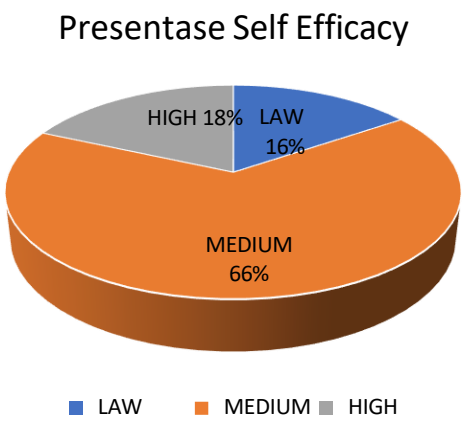

Figure 2. Presentase Self Efficacy

Based on the pie chart, the self-efficacy of Class IX students at MTs Muhammadiyah Gemolong for the 2024/2025 academic year is mostly in the medium category, with 47 students, representing 66.20% of the total.

Descriptive Analysis of Problem-Solving Ability

The data on students' problem-solving ability were obtained through a test consisting of problem-solving questions administered to 71 students. The data were analyzed using SPSS version 26.0. The calculation results are presented in the table below:

Table 5. Mean, Median, Mode, and Standard Deviation of Problem-Solving Ability

Variable	N	Mean	Median	Mode	Std. Dev
Problem-Solving Ability	71	40.901	40	36	6.986

The data above indicate that the average problem-solving ability score of the 71 Class IX students at MTs Muhammadiyah Gemolong for the 2024/2025 academic year is 40.901. The median value is 40, while the mode, or the most frequently occurring score, is 36. Meanwhile, the standard deviation, representing the data variability for this variable, is 6.986.

The following table shows the frequency distribution of students' problem-solving ability scores:

Table 6. Frequency Distribution of Problem-Solving Ability Data

No.	Criteria	Score Range	Frequency	Percentage	Category
1	$X \leq \bar{x}$ - SD	$X \leq 34$	11	15.49%	Low
2	$\bar{x}$ – SD < X < $\bar{x}$ + SD	35–47	48	67.61%	Medium
3	$X \geq \bar{x}$ + SD	$X \geq 48$	12	16.90%	High
	Total		71	100%	

Based on the table above, it is known that the number of Class IX students at MTs Muhammadiyah Gemolong for the 2024/2025 academic year whose problem-solving ability falls into the low category is 11 students (15.49%). Those in the medium category are 48 students (67.61%), and in the high category, there are 12 students (16.90%).

The distribution of students' problem-solving ability levels can also be visualized in the form of a bar chart as follows:

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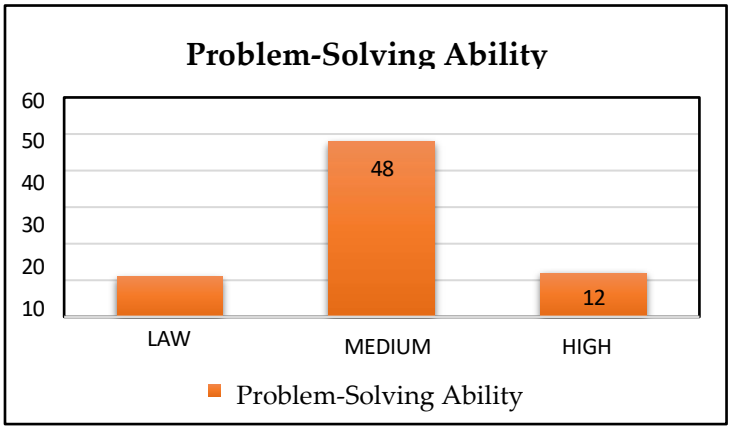

Figure 3. Bar Chart of Problem-Solving Ability Data

Meanwhile, to illustrate the percentage distribution of students' problem-solving ability, it can be represented in the form of a pie chart as follows:

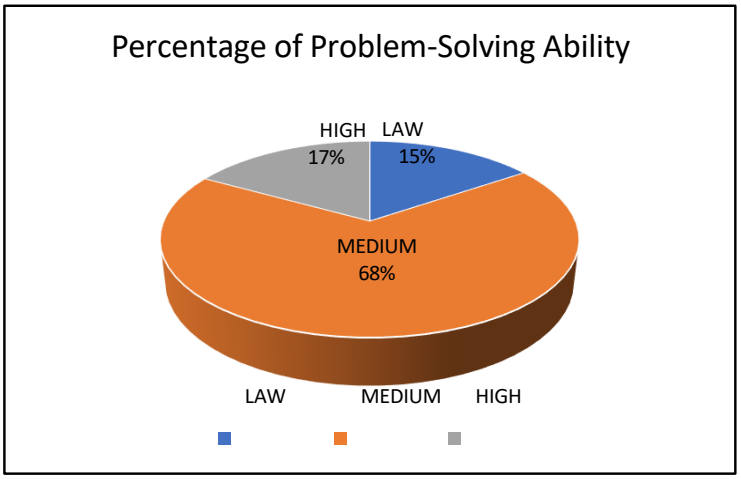

Figure 4. Precentage of Problem-Solving Ability

Based on the pie chart, the majority of students' problem-solving ability is in the medium category, with 48 students, representing 67.61% of the total.

Data Analysis Prerequisite Testing

Before conducting hypothesis testing, the data must first undergo prerequisite tests. In this study, the prerequisite test conducted was the normality test. This test is used to determine whether the research data are normally distributed or not. The normality test was performed using the one-sample Kolmogorov-Smirnov test with the assistance of SPSS 26.0.

If the significance value (Asymp. Sig) > 0.05, the data are considered normally distributed. However, if the significance value (Asymp. Sig) < 0.05, the data are considered not normally distributed.

Before performing the normality test using the one-sample Kolmogorov-Smirnov technique, an outlier check was conducted first. This aims to identify whether there are any extreme data points in both variables. The results of the outlier check using a boxplot are as follows:

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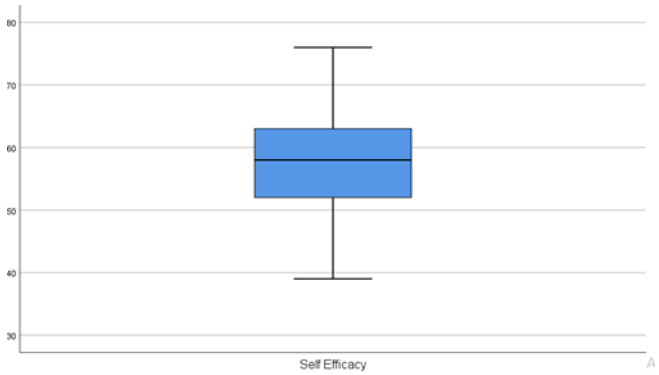

Figure 5. Outlier Check for the Self-Efficacy Variable Using a Boxplot

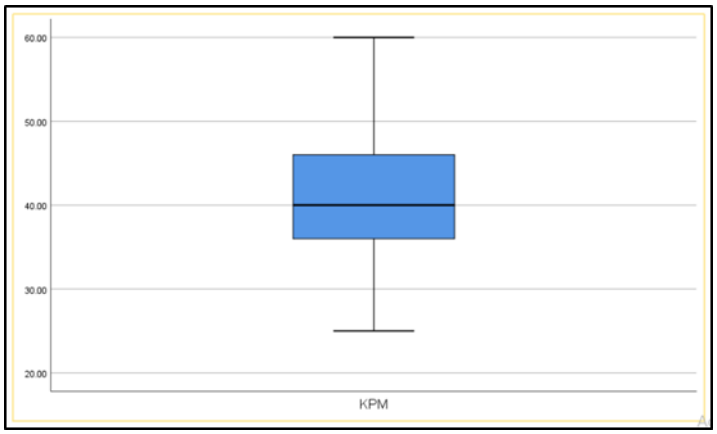

Figure 6. Outlier Check for the Problem-Solving Ability Variable Using a Boxplot

From the figure above, it can be concluded that there are no extreme data points in either variable. Therefore, the next step is to conduct the normality test using the one-sample Kolmogorov-Smirnov technique with SPSS version 26.0. A summary of the normality test results for both research variables is presented in the table below (full calculations can be seen in Appendix 9):

Table 7. Kolmogorov-Smirnov Normality Test Results Using SPSS Version 26.0

No.	Variable	Asymp. Sig (2-tailed)	Significance Level	Conclusion
1	Self-Efficacy (X)	0.200	0.05	Normal
2	Problem-Solving Ability (Y)	0.200	0.05	Normal

Based on the table above, the self-efficacy variable (X) has an Asymp. Sig value of 0.200, and the problem-solving ability variable (Y) also has an Asymp. Sig value of 0.200. Since the Asymp. Sig values of both variables are > 0.05; it can be concluded that the data for self-efficacy (X) and problem-solving ability (Y) are normally distributed. As the data are normally distributed, the next step is to conduct parametric hypothesis testing.

Hypothesis Testing

Hypothesis testing was conducted after the data were collected and the prerequisite normality test was performed, aiming to determine whether the proposed research hypothesis is accepted or rejected [27], [28]. In this study, parametric testing was applied using the product-moment correlation technique with SPSS version 26.0. If the Sig. (2-tailed) < 0.05, H_0 is rejected and H_a is accepted; conversely, if the Sig. (2-tailed) > 0.05, H_0 is accepted and H_a is rejected. A summary of the hypothesis test results is presented as follows:

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Table 8. Hypothesis Test Results

Variable	N	α	Sig. (2-tailed)	Correlation Coefficient	Decision
Self-Efficacy and Problem-Solving Ability	71	0.05	0.038	0.247	H_a accepted

Based on the table above, the hypothesis test using the product-moment correlation technique shows a Sig. (2-tailed) value of 0.038. Since 0.038 < 0.05, H_0 is rejected and H_a is accepted. This indicates a positive relationship between self-efficacy and problem-solving ability. In other words, the higher a student's self-efficacy, the higher their problem-solving ability, and vice versa.

The correlation coefficient obtained from SPSS version 26.0 is 0.247. According to Sugiyono (2019:33), the interpretation of correlation coefficients is as follows:

Table 9. Correlation Interval and Level of Relationship

Correlation Interval	Level of Relationship
0.00 – 0.199	Very low
0.20 – 0.399	Low
0.40 – 0.599	Moderate
0.60 – 0.799	Strong
0.80 – 1.000	Very strong

The correlation coefficient of 0.247 falls within the 0.20–0.399 interval, indicating a low level of relationship between self-efficacy and problem-solving ability in students. This means self-efficacy only slightly contributes to problem-solving ability.

The contribution can be quantified using the coefficient of determination (KD):

$KD = r^2 \times 100\%$

$KD = 0{,}247^2 \times 100\%$

$KD = 0{,}0612 \times 100\%$

$KD = 6{,}12\%$

Based on this calculation, it can be concluded that self-efficacy contributes 6.12% to problem-solving ability.

This quantitative study aimed to describe the levels of self-efficacy and problem-solving ability among students and to analyze the relationship between these two variables [29], [30]. The results indicated that students' self-efficacy scores ranged from 39 to 76, with a mean of 57.83, a median of 58, a mode of 51, and a standard deviation of 7.86. The frequency distribution showed that 15.49% of students had low self-efficacy, 66.20% were in the medium category, and 18.31% were high, suggesting that overall self-efficacy was at a moderate level. According to Bandura [31]–[33], efficacy expectations determine the effort individuals exert and their persistence when facing obstacles, implying that students with moderate self-efficacy have sufficient confidence in their abilities but still require guidance and support [34]. Similarly, Hatta noted that students with moderate self-efficacy can motivate themselves and persist in completing tasks, though they may not always be certain of the outcomes [35], [36].

Regarding problem-solving ability, scores ranged from 25 to 60, with a mean of 40.90, a median of 40, a mode of 36, and a standard deviation of 6.99. The frequency distribution indicated that 15.49% of students had low problem-solving ability, 67.61% were moderate,

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and 16.90% were high, showing that most students were in the moderate category. According to Polya, problem-solving involves understanding the problem, planning a solution, executing the plan, and reviewing the results. Students with moderate problem-solving ability can understand and plan solutions sufficiently but may still require guidance for more complex tasks [37], [38].

Hypothesis testing using the product-moment correlation in SPSS 26.0 showed a significance value of 0.038 (<0.05) and a correlation coefficient of 0.247, indicating a positive but low relationship between self-efficacy and problem-solving ability (Sugiyono, 2019). The coefficient of determination revealed that self-efficacy contributed 6.12% to problem-solving ability, suggesting that other factors account for 93.88% of students' problem-solving performance. Factors influencing problem-solving include affective elements (motivation, stress, anxiety, patience, and confidence), cognitive abilities (literacy, critical and creative thinking, logic, and conceptual knowledge), and external factors such as learning models, environment, and external motivation [39]–[41]. In conclusion, there is a positive relationship between self-efficacy and problem-solving ability. While the contribution of self-efficacy is relatively low, students with higher self-efficacy tend to demonstrate better problem-solving skills, highlighting the importance of building students' confidence alongside other cognitive and environmental supports.

Analysis

The findings presented in the study illustrate a comprehensive psychopedagogical examination of ninth-grade students' self-efficacy and problem-solving abilities in Aqidah Akhlak learning at MTs Muhammadiyah Gemolong. The descriptive data show that both variables fall predominantly within the moderate category, with 66.20% of students demonstrating moderate self-efficacy and 67.61% exhibiting moderate problem-solving ability. These distributions indicate that students possess a foundational level of confidence and reasoning skill, yet they do not consistently reach high levels of autonomous or advanced thinking.

The statistical analysis strengthens this interpretation. A significant positive correlation ($r = 0.247$, $p = 0.038$) confirms that increases in self-efficacy are associated with enhanced problem-solving ability. Although the correlation is categorized as low, the significance level indicates that self-efficacy remains an influential variable. The coefficient of determination (6.12%) further clarifies that while self-efficacy contributes meaningfully to problem-solving, the majority of variation is explained by other cognitive and contextual factors, such as learning models, classroom environment, teacher strategies, and students' emotional regulation. The instrument design and validation process presented in the file supports the reliability of the findings. With Cronbach's Alpha values of 0.87 for self-efficacy and 0.82 for problem-solving, both measures meet strong reliability standards. The normality tests also confirm that the data are suitable for parametric analysis, strengthening the validity of the correlation results.

From a psychopedagogical perspective, the study demonstrates that effective learning in Aqidah Akhlak requires more than conceptual understanding. It demands reflective reasoning, moral judgment, and the confidence to navigate value-laden problems. The moderate levels observed across variables imply that students still require structured support to strengthen higher-order thinking processes. Overall, the analysis underscores the need for learning approaches that integrate psychological empowerment—particularly self-efficacy development—with value-based, student-centered pedagogies to enhance problem-solving outcomes within Islamic education.

CONCLUSION

This study provides important insights into the psychopedagogical relationship between self-efficacy and problem-solving ability among ninth-grade students at MTs

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Muhammadiyah Gemolong within the context of Aqidah Akhlak learning. The descriptive findings show that both variables fall predominantly within the moderate category, with 66.20% of students exhibiting moderate self-efficacy and 67.61% demonstrating moderate problem-solving ability. These results indicate that while students possess sufficient confidence and reasoning capability to engage with learning tasks, many still struggle to consistently apply higher-order thinking processes required for complex conceptual and moral challenges. The correlation analysis, which reveals a significant positive relationship between self-efficacy and problem-solving ability ($r = 0.247$, Sig. $= 0.038 < 0.05$), confirms that students with stronger efficacy beliefs tend to be more capable in interpreting, analyzing, and solving problems presented in Aqidah Akhlak learning. Although the correlation coefficient is categorized as low, it nevertheless affirms that self-efficacy functions as an important psychological predictor influencing students' cognitive performance. The coefficient of determination, which shows that self-efficacy contributes 6.12% to problem-solving ability, further suggests that other psychological, cognitive, environmental, and pedagogical factors account for the remaining variance. These findings align strongly with the framework of Sustainable Development Goal 4 (Quality Education), which emphasizes inclusive, equitable, and transformative learning. SDG 4 highlights the need for education systems to cultivate competencies such as critical thinking, moral reasoning, persistence, and confidence—all of which are directly linked to self-efficacy and problem-solving skills. Strengthening students' self-belief is therefore not only a pedagogical necessity but also a strategic contribution to achieving global education targets, particularly in promoting lifelong learning skills and character-based development in Islamic education settings. The results also demonstrate the relevance of psychopedagogical approaches that integrate cognitive processes, emotional regulation, and value-based learning. Aqidah Akhlak, as a subject grounded in moral and spiritual reasoning, requires students to navigate ethical dilemmas through reflective and systematic thinking. This underscores the importance of instructional models that are student-centered, interactive, and inquiry-based to support the development of these competencies. In conclusion, fostering self-efficacy through supportive learning environments, reflective dialogue, active learning strategies, and value-integrated instruction is essential for enhancing students' problem-solving abilities. Strengthening these two dimensions simultaneously not only improves academic outcomes but also fulfills broader educational aspirations embedded in SDG 4, contributing to a more holistic and transformative Islamic education framework.

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Author Contribution

Jiyanto, Desti Widiani, and Lilik Istiqomah contributed equally to this research. All authors participated in conceptualization, data collection, analysis, and manuscript preparation. Jiyanto acted as project leader and final editor, while Desti Widiani supported funding and translation. Lilik Istiqomah strengthened theoretical analysis. All authors reviewed and approved the final manuscript.

Conflicts of Interest

The authors declare that the study titled Psychopedagogical Study of Self-Efficacy and Problem-Solving in Aqidah Akhlak Learning for SDG 4 was conducted independently without any financial or personal conflicts of interest. None of the authors—Jiyanto, Desti Widiani, or Lilik Istiqomah—received external influence that could compromise the objectivity or integrity of this research.

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