The Correlation between Self-Regulated Learning and Academic Achievement in Arabic Language at Junior High School

Munawarotul Laily[1], Anyes Lathifatul Insaniyah[2]

[1,2]Pendidikan Bahasa Arab, Universitas K.H.Mukhtar Syafaat, Banyuwangi, Jawa Timur

Article Info

Corresponding Author:
Munawarotul Laily
Munawarotullaily29@gmail.com
Pendidikan Bahasa Arab,
Universitas K.H.Mukhtar Syafaat,
Banyuwangi, Jawa Timur

Abstract

This correlational study examined the relationship between Self-Regulated Learning (SRL) abilities and Arabic academic achievement among junior high school students. A total of 120 students from MTsN 2 Banyuwangi participated as respondents. Data were collected using a reliable 30-item SRL questionnaire ($\alpha = 0.89$) and report card scores. The results of the Pearson Product Moment correlation test showed a significant positive relationship between SRL and academic achievement ($r = 0.547$; $p < 0.001$). The coefficient of determination ($R^2 = 0.299$) indicated that SRL contributed 29.9% to the variation in achievement. These findings indicate that students with better self-regulation skills tend to achieve higher academic achievement in Arabic. Therefore, the integration of SRL strategy training into learning is recommended to support improved learning outcomes.

1. Introduction

Arabic language learning in madrasahs plays a strategic role in shaping students' religious literacy, but it often faces complex challenges such as differences in linguistic structure with Indonesian, which can reduce motivation and learning achievement (Uno, 2025). To overcome this, the learning approach needs to strengthen student independence through the development of Self-Regulated Learning (SRL) the ability to plan, monitor, and evaluate the learning process independently (Astuti & Rozikin, 2024). At MTs Negeri 2 Banyuwangi, the pressure to master Arabic as a tool for understanding religious texts has not been fully balanced with the development of students' SRL capacity, even though this ability is considered crucial for success in learning foreign languages, especially in the context of limited linguistic exposure (Chen, 2022).

In general, previous studies have consistently shown a positive relationship between SRL and academic achievement in various fields (Anthonysamy et al., 2020). However, these findings cannot be directly generalized to the specific context of Arabic language learning in Indonesian madrasahs, given their unique linguistic characteristics and socio-religious content. The existing literature is still dominated by studies on science, mathematics, and English (Kesuma et al., 2021), while the dynamics of SRL in Arabic language learning have been relatively unexplored. Furthermore, the effectiveness of SRL is known to be highly dependent on the context and field of study (Theobald, 2021), thus requiring specific research to understand its correlation with Arabic language achievement.

To fill this gap (Rani et al., 2025), this study proposes three main contributions. First, a contextual focus on 8th grade students at MTs Negeri in Banyuwangi a geographical and institutional setting that has not been widely studied. Second, it measures academic achievement that includes practical aspects of the madrasah curriculum, namely maharah kalam (speaking) and qira'ah (reading), in addition to cognitive scores. Third, it applies Zimmerman's modified SRL theoretical framework (Nilson & Zimmerman, 2023) to analyze self-regulation skills in language learning.

Based on this background, this study was designed to answer the question: "Is there a significant relationship between SRL levels and Arabic academic achievement in 8th grade students at MTsN 2 Banyuwangi?" The main objective is to test the correlation between the two variables. The hypothesis proposed is that there is a significant positive relationship between SRL and Arabic academic achievement (Hassan & Al-Rababah, 2025). This argument is based on the logic that students with high SRL will be better able to apply effective learning strategies, monitor their understanding, and manage their learning efforts, thereby encouraging better results in the cognitive and practical aspects of Arabic (Feraco et al., 2023; Z. Xu et al., 2023).

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2. Method

This study uses a quantitative approach with a correlational design to examine the relationship between Self-Regulated Learning (SRL) as the independent variable (X) and Arabic Academic Achievement as the dependent variable (Y). The study was conducted at MTsN 2 Banyuwangi during the period from March to May 2024.The research population consisted of all 170 eighth-grade students(Insaniyah & Hamam, 2020). The sample consisted of 120 students determined using the Slovin formula with an error rate (e) of 5% and selected using stratified random sampling based on parallel classes to ensure proportional representation. After the strata (classes) were determined, the final sample selection from each stratum was conducted using simple random sampling.

Instrumentation and Data Collection Procedures
Data were collected using two techniques:
1. Questionnaire: The SRL instrument consisted of 30 statements with a 4-point Likert scale (1 = Strongly Disagree to 4 = Strongly Agree) that measured four indicators:planning,monitoring,evaluation and motivation.
2. The questionnaire has been tested for content validity by two experts (Aiken's V > 0.80) and has excellent reliability (Cronbach's Alpha = 0.89).
3. Documentation Study: Academic achievement data was taken from the even semester report card scores for Arabic. These scores are a composite that has been standardized by the school, derived from cognitive assessments (daily tests, midterm exams, final exams) and skills assessments (maharah kalam and qira'ah). The study obtained ethical approval from the school. Informed consent was obtained from parents/guardians, and student participation was voluntary with a guarantee of data confidentiality.

Data analysis was performed using SPSS 25 software through the following stages:

1. Descriptive Statistics: to describe the characteristics of the sample and the distribution of variable scores (mean, SD, frequency).
2. Prerequisite Analysis Tests: including:
   a. Normality Test using Kolmogorov-Smirnov to ensure the data was normally distributed.
   b. Linearity Test to confirm the linear relationship between variables X and Y.
3. Inferential Analysis: After the assumptions of normality and linearity were met, the Pearson Product Moment Correlation technique was used to test the hypothesis. The significance level was set at $\alpha = 0.05$. No missing data was found in this dataset.

Figure 1. Research Process Flowchart

3. Result

Based on data from 120 respondents, an overview of the research variables was obtained. Students' Self-Regulated Learning (SRL) scores ranged from 70 to 102, with a mean of 87.45 and a standard deviation of 6.82. Arabic academic achievement scores ranged from 70 to 91, with a mean of 79.80 and a standard deviation of 5.41. Both data distributions met the assumption of normality based on the Kolmogorov-Smirnov test ($p > 0.05$). Academic achievement scores refer to the 0–100 assessment scale used by the school. To test the relationship hypothesis, a Pearson Product Moment correlation analysis was performed. The results of the analysis are presented in figure 1.

Figure 1. Results of Correlation Analysis between SRL and Arabic Academic Achievement

The analysis results produced a correlation coefficient (r) of 0.547 with a significance value (p) = 0.000 ($p < 0.01$). The r value indicates a positive linear relationship with moderate strength between the two variables. The p-value indicates that this relationship is statistically significant, so the null hypothesis (H_0) is rejected and the alternative hypothesis (H_1) is accepted. The coefficient of

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determination (R^2) of 0.299 reveals that the SRL variable contributes to or explains 29.9% of the variance in Arabic academic achievement(المروعي & الحجي, **2025**).

4. Discussion

The findings of this study confirm a significant positive relationship between Self-Regulated Learning (SRL) and Arabic academic achievement among students at MTsN 2 Banyuwangi (r = 0.547; p < 0.01). These results are in line with Zimmerman's SRL theoretical framework, in which the skills of planning, monitoring, and evaluating the learning process independently are the driving force behind academic achievement(K. M. Xu et al., 2025). In the context of Arabic language learning, which requires mastery of complex skills (maharah) and linguistic elements, students with high SRL seem to be better able to direct their cognitive and motivational efforts effectively(Kofahi & Husain, 2025).

The moderate correlation strength (r = 0.547) and effective contribution of 29.9% (R^2 = 0.299) indicate that although SRL is an important predictor, there is still 70.1% of achievement variation explained by other factors. This finding reinforces (Theobald, 2021) statement that the effectiveness of SRL is contextual. In the madrasah setting, factors such as family support, intrinsic religious motivation, teacher pedagogical quality, and the pesantren environment may play an equally significant role. This coefficient of determination also reflects the unique characteristics of Arabic as a subject that is not only cognitive but also affective-spiritual, where non-cognitive (Guo & Adenan, 2025) factors can make a significant contribution.

This positive relationship can be explained through Zimmerman's SRL phases. In the planning phase, students with high SRL set specific goals, such as memorizing 10 new vocabulary words per day, which guide their learning efforts(Andriyani & Asroriyah, 2025). In the performance phase, they tend to use metacognitive strategies such as recording kalam exercises for evaluation or creating concept maps for qawa'id. In the reflection phase, they evaluate mistakes(Habib et al., 2025) and adjust strategies, a process that is crucial in mastering Arabic grammatical patterns, which are often different from those in Indonesian.

These findings are consistent with general research on SRL and academic achievement (Anthonysamy et al., 2020), as well as specific studies in foreign language learning (Chen, 2022). However, this study provides a new nuance by showing that this pattern also applies in the context of Arabic language learning in Indonesian madrasahs, a setting that has not been widely explored. These results support and expand on the findings of (Susanto et al., 2024) regarding the lack of self-regulation strategies among religious school students by showing the direct consequences on achievement. While the correlations found are stronger than some studies in similar contexts, this may be influenced by the homogeneity of the sample and the characteristics of madrasahs, which emphasize learning discipline.

Limitations that need to be acknowledged. First, the correlational design does not allow for causal conclusions. Second, the use of a sample from a single madrasah (Prihono et al., 2025) limits the generalizability of the findings. Third, SRL data were collected through self-reports, which are potentially biased. Fourth, the measurement of academic achievement relied on report card grades, which, although standardized, may still contain elements of teacher subjectivity and do not fully capture all aspects of language proficiency.

Based on these limitations and findings, further research is highly recommended. First, experimental research is needed to test the effectiveness of SRL interventions in improving Arabic language achievement. Second, qualitative research can explore in depth the practices and challenges of implementing SRL in the madrasah context. Third, future research can measure mediator/moderator variables such as teacher support, intrinsic motivation, or access to digital technology. Fourth, replication of the study with a larger and more diverse sample from various types of madrasahs in Indonesia is needed to strengthen the external validity of the findings.

Practically, these findings emphasize the importance of explicitly integrating SRL skills training into the Arabic language learning curriculum. Teachers can design activities that train goal planning, learning reflection, and strategy evaluation, for example through learning journals or independent projects. Schools can provide workshops for students to develop effective learning strategies appropriate to the characteristics of the Arabic language.

5. Conclusion

Based on the data analysis and discussion, this study concludes that there is a significant positive relationship between Self-Regulated Learning (SRL) and Arabic Academic Achievement among eighth-grade students at MTsN 2 Banyuwangi. The correlation is confirmed by a Pearson coefficient of $r = 0.547$ ($p < 0.01$), which is categorized as a moderate association. Thus, the proposed hypothesis is accepted.

The coefficient of determination ($R^2 = 0.299$) indicates that SRL accounts for 29.9% of the variance in Arabic academic achievement. This supports the view that students with better self-regulation skills such as goal setting, strategic planning, self-monitoring, and reflective evaluation tend to achieve higher learning outcomes in Arabic. However, the remaining 70.1% of the variance is influenced by other factors not examined in this study, such as motivation, family environment, teacher pedagogy, and school support.

These findings highlight the importance of fostering SRL competencies in the context of Arabic language learning in madrasahs. It is recommended that teachers and curriculum designers integrate SRL strategies including metacognitive training, autonomous learning tasks, and self-assessment practices into daily instruction to help students become more independent and effective

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learners.

This study has several limitations, including its correlational design, use of a single school sample, and reliance on self-reported SRL measures. Future research could employ experimental or mixed-methods approaches, involve more diverse madrasah settings, and investigate the role of contextual and motivational factors that interact with SRL to shape Arabic learning outcomes.

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