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THE PROGRAM FOR SELF-REGULATED LEARNING: AN EMPIRICAL STUDY ON STUDENTS-SURVIVAL SKILLS IN *PESANTREN*

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Abstract

Pesantren plays a significant role in developing students' self-regulated learning (SRL) skills, which are reflected in their ability to set learning goals and manage their cognition, motivation, and behavior. However, previous studies did not explore SRL skills among students in pesantren, particularly in those with three secondary education units: MA (Madrasah Aliyah), SMA (Senior High School), and SMK (Vocational School). This study aimed to reveal the average SRL skills of students and their indicators in supporting survival skills (SS) in pesantren. Using a positivistic paradigm and a quantitative approach through survey methods, this research was conducted at Pesantren As-Syifa Al-Khoeriyyah Subang, West Java, Indonesia, involving 99 students from MA, SMA, and SMK levels as samples. Data were collected through a questionnaire consisting of 30 questions and analyzed using ANOVA. The results showed that the average SRL skill scores for MA students were 55.48, for SMA students 60.12, and for SMK students 57.72, with an overall average score of 57.77. The ANOVA significance test value of 0.012 (< 0.05) indicates a significant difference between groups. This study also highlighted that students' SRL skills, such as social independence, values, and behavior, were shaped through various programs implemented in the pesantren.

Keywords: *Self-Regulated Learning; Survival Skill; Pesantren; Islamic Education.*

A. Introduction

Pesantren is well-known for its programs that promote students' independence and equip them with essential survival skills (SS), making it a highly valuable educational institution. The independence of *pesantren* students includes not only physical survival skills but also spiritual, social, and academic autonomy (Isbah, 2020; Basri et al., 2024; Arif et al., 2024). According to Higgins et al., (2023), students' academic success is closely linked to their attitudes and independence in learning. Students who can self-regulate their learning often excel in planning their studies and managing motivation, which involves cognitive, affective, and psychomotor dimensions (Stephanou & Mpiontini, 2017). Zimmerman & Moylan, (2009) argue that self-regulated learning (SRL) empowers students to be active in their learning through metacognitive, motivational, and behavioral engagement.

Paris & Paris, (2001) define SRL indicators as including effective learning strategies, metacognition (reflecting on one's thinking and learning), and motivation and involvement with academic tasks. Blair & Razza, (2007) describe SRL as the self-regulation of emotions, thoughts, and behavior during learning. Pintrich, (2000) views SRL as an active, constructive process where students set learning goals and then monitor, regulate, and control their cognition, motivation, and behavior according to those goals and contextual factors. SRL enables students to recognize the functional relationship between their thinking patterns and future actions, making these skills essential for survival during and after their studies (Hyytinen et al., 2021; Husaini Zuhri & Huda, 2024).

Puustinen & Pulkkinen, (2001) explain that SRL consists of three main elements: self, regulation, and learning. "Self" refers to the individual's efforts to set and achieve personal goals; "Regulation" refers to the processes through which individuals manage their efforts to reach their targets and reduce conflicts with others; and "Learning" involves the primary activities aimed at achieving these goals. SRL skills thus provide students with a narrative about the significant efforts they are making to ensure future success. Meanwhile, teachers play a crucial role as facilitators, mediators, and guides in helping students define their identities (Chaudhry, 2017). This student-centered learning model proves valuable in classrooms, encouraging active and responsive learning.

SRL skills have garnered increasing attention globally as essential components of students' academic success and personal development. Recent studies highlight the pivotal role of SRL in fostering adaptability and resilience in diverse educational contexts. For instance, De Stasio & Di Chiacchio, (2015) demonstrate how metacognitive strategies within SRL frameworks enhance learning outcomes across various disciplines, particularly in hybrid learning settings. Similarly, Hemmler & Ifenthaler, (2024) explore SRL strategies among students in culturally diverse boarding schools, revealing the significant influence of institutional support and peer collaboration on students' self-regulation.

However, in the context of *pesantrens*, which are unique educational institutions blending Islamic and modern pedagogical approaches, research on SRL remains limited. While pesantren students are often lauded for their ability to manage rigorous academic demands alongside their spiritual commitments, the specific mechanisms by which they develop and sustain SRL skills have not been extensively studied (Basri et al., 2024; Permana, 2024). Furthermore, the dynamic interplay between *pesantren's* structured routines, community-oriented practices, and their impact on SRL development remains underexplored. Addressing this gap is crucial for understanding how *pesantren* students navigate their distinct educational environment and achieve success, thereby contributing to broader discussions on SRL in culturally and pedagogically unique settings.

Therefore, this research uniquely examines SRL across three educational levels—MA *(Madrasah Aliyah)*, SMA (Senior High School), and SMK (Vocational School)—within *pesantren*, focusing on its role in developing students' resilience, creativity, and autonomy. While prior studies address SRL broadly, they often overlook the distinct socio-religious context and strict frameworks of *pesantren*. By addressing this gap, the research highlights how SRL fosters independence and adaptability, crucial for student's success during and beyond their *pesantren* education. Recent studies emphasize the need for culturally tailored SRL programs. For instance, Anyichie & Butler, (2017) highlight the importance of contextualized SRL approaches that

consider cultural and environmental factors, while Anyichie et al., (2023) underscore the integration of SRL in diverse educational settings, advocating for models that respect and adapt to local norms. This study provides a fresh perspective by situating SRL within the interplay of behavior, environment, and personal factors (Figure 1), offering actionable insights for stakeholders involved in educational policy and curriculum design in *pesantren* settings.

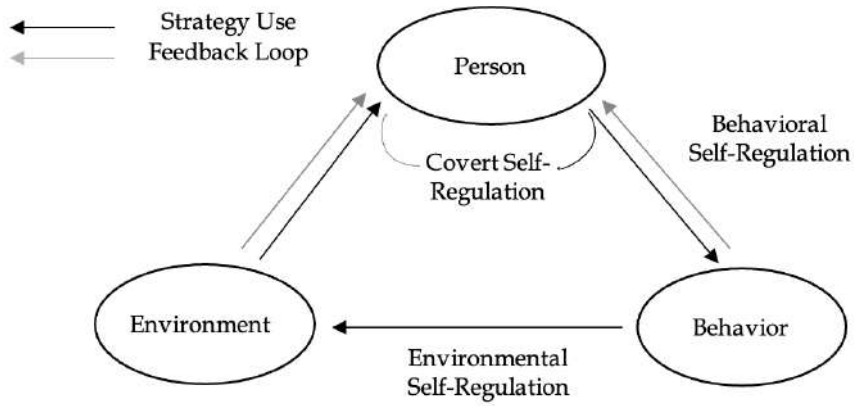

Figure 1. Zimmerman's self-regulated model (Zimmerman, 2000)

The SRL model depicted in Figure 1 above illustrates that behavioral self-regulation involves processes such as self-observation and the adjustment of learning strategies. Environmental self-regulation refers to students' adaptation to the learning context, while covert self-regulation pertains to self-monitoring and the management of cognition and emotions. Covert self-regulation is considered to be interdependent with behavioral, social, and environmental self-regulation processes. Students also utilize feedback from prior experiences to adjust their current SRL efforts. Pintrich, (2000) explains that students regulate themselves by setting learning goals and then attempt to monitor, regulate, and control their cognition, motivation, and attitudes, all of which are guided and constrained by the goals they have set by the learning context and environment. Pintrich's perspective aligns with Zimmerman's view of student self-regulation, which underscores the interaction between the individual and their context, emphasizing the need to balance motivational, cognitive, attitudinal, and contextual factors within the classroom.

The study of self-regulated learning in *pesantren* remains underexplored despite its critical role in shaping students' survival skills during and after their time at the *pesantren*. Existing literature highlights the potential of SRL programs to enhance students' mental resilience and spiritual growth through structured positive activities (Subchi et al., 2023). However, there is a lack of comprehensive studies addressing SRL skills among students at various educational levels, such as MA, SMA, and SMK, within the *pesantren* context. This research addresses this gap by examining the average SRL skills of students at Pesantren As-Syifa Al-Khoeriyyah and identifying key indicators that support their survival. The findings aim to provide valuable insights for educators and policymakers to optimize SRL programs, ensuring tangible benefits for student's personal and academic development within the unique environment of *pesantren*.

B. Method

This study employs a positivistic paradigm and a quantitative approach using survey methods. The positivistic paradigm was chosen because it enables objective and measurable assessment of students' SRL skills. The quantitative survey approach allows for the collection of broad and representative data from the student population, facilitating the identification of patterns and relationships between variables through statistical analysis. Surveys were selected for their efficiency in reaching large samples across various locations using mediums such as online or paper questionnaires, which accelerates data collection and reduces costs. Moreover, surveys provide the flexibility to design targeted questions aligned with the research objectives, ensuring that all aspects of SRL in the pesantren context are thoroughly examined.

The selection of Pesantren As-Syifa Al-Khoeriyyah as the research site is based on its reputation as a leading educational institution that integrates Islamic values with modern education across multiple educational levels. By focusing on the secondary education level within its branches in Subang, West Java—namely MA, SMA, and SMK—the study aims to capture the

unique interplay between academic, religious, and vocational training in shaping students' SRL skills. This specific context provides a rich setting for analyzing how *pesantren* frameworks influence self-regulation, resilience, and adaptability among students. However, the localized nature of the study may limit the generalizability of its findings to other *pesantren* or educational institutions with differing socio-cultural and operational contexts. Despite this, the insights gained offer valuable contributions to understanding SRL in similar environments and provide a foundation for future comparative research in broader settings.

The research sample was selected using purposive sampling, where the researcher determined the sample based on specific criteria. The total sample consisted of 99 students, with 33 from MA, 33 from SMA, and 33 from SMK. In terms of gender, the sample included 50 males and 49 females. The ages of the students ranged from 15 to 18 years old, with an average age of 16.5 years for MA students, 17 years for SMA students, and 17.5 years for SMK students. This study ensured an even distribution of the sample to achieve representative results. The research data was collected through a questionnaire that included indicators of SRL and survival skills from the *Comprehensive School Counseling Program Guide* (CSCPG) (Johnson & Dinnall, 2009). These indicators covered: (1) the ability of students to distinguish between situations requiring peer support and those needing professional adult assistance; (2) the ability to solve problems effectively and make safe, healthy decisions; (3) understanding the emotional and physical dangers of drug abuse; (4) understanding the relationship between rules, laws, safety, and the protection of individual rights; and (5) the ability to manage stress and conflict.

After collecting the data, the researchers conducted validity and reliability tests on the questionnaire, which consisted of 30 questions to determine the calculated r-value based on five indicators of the CSCPG. The validity test results showed that the calculated r value for the first indicator was 0.432, the second indicator was 0.573, the third indicator was 0.518, the fourth indicator was 0.307, and the fifth indicator was 0.612. All questions were declared valid because the calculated r value was greater than the table r value of 0.164 (with 99 respondents at a significance level of 0.5). For the

reliability test using Cronbach's alpha, the first indicator scored 0.812, the second indicator 0.804, the third indicator 0.810, the fourth indicator 0.842, and the fifth indicator 0.780. All question items from the 5 indicators were declared reliable because Cronbach's alpha value was greater than 0.6.

Before conducting the parametric test with ANOVA, the researchers first performed prerequisite tests, namely normality and homogeneity tests. The normality test aims to determine whether the data are normally distributed, while the homogeneity test aims to determine whether the population variances are equal. If the data are found to be normal and homogeneous, the final testing can proceed with ANOVA, which includes descriptive analysis, significance testing, and mean equality testing (Tukey HSD). All data were analyzed through tabulation using a Likert scale of 1, 2, 3, 4, and 5 (1 being the lowest score and 5 the highest) according to the score table in the research instrument. After determining the total score, the average score was calculated with the help of SPSS 26.

C. Result and Discussion

In this section, the researchers present several key findings related to the average self-regulated learning (SRL) skills among students at the SMA, MA, and SMK levels. The study addresses two primary research questions: first, examining the average SRL skills of students, and second, analyzing how these SRL skills contribute to their survival skills both during their time at the *pesantren* and after they leave. The researchers underscore the significance of SRL skills in fostering both academic and non-academic success. The results of this study are intended to offer valuable insights into how various educational environments and programs at different secondary education levels impact the development of SRL skills. Furthermore, these findings aim to guide *pesantren* administrators and educators in designing more effective programs that enhance students' self-regulated learning and student survival skills (SSS), better preparing them for future challenges.

1. Result

Before conducting statistical analyses using ANOVA, the researchers first performed normality and homogeneity tests. The normality test is used

to assess whether the data comes from a population that follows a normal distribution or falls within a normal range. In this study, the normality tests applied were the Kolmogorov-Smirnov and Shapiro-Wilk tests. Additionally, the homogeneity test is a statistical procedure that evaluates whether two or more sample groups come from populations with the same variance. In essence, homogeneity ensures that the data set being studied shares consistent characteristics. The results of the normality test are as follows:

Table 1. Normality test data

		Kolmogorov-Smirnov[a]			Shapiro–Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Student Survival Skills	MA	.099	33	.200*	.959	33	.235
	SMA	.110	33	.200*	.964	33	.327
	SMK	.149	33	.060	.931	33	.068

The decision to refer to Table 1 above is based on the principle that if the normality test values obtained from the Kolmogorov-Smirnov and Shapiro-Wilk tests are greater than 0.05, the data are considered to be normally distributed. According to the normality test results presented in Table 1, all data sets are normally distributed. The significance values for the samples are 0.20 and 0.23 for the MA student sample, 0.20 and 0.32 for the high school student sample, and 0.60 and 0.68 for the vocational school student sample. Therefore, the normality test is complete and the analysis can proceed with homogeneity testing and statistical analysis using ANOVA (Table 2).

Table 2. Test of homogeneity of variances

		Levene Statistic	df1	df2	Sig.
Student Survival Skills	Based on Mean	5.555	2	96	.085
	Based on Median	4.540	2	96	.113
	Based on the Median and with adjusted df	4.540	2	90.931	.113
	Based on trimmed mean	5.555	2	96	.085

Table 2 indicates that the significance value obtained is 0.085, which is greater than 0.05. This suggests that the data from the sample group are homogeneous, meaning they are consistent. Therefore, it can be concluded that the three research samples: MA, SMA, and SMK students—exhibit

similar survival skills, and thus the assumption of homogeneity required for the ANOVA test is satisfied.

Before conducting the ANOVA test, the researchers will first analyze the characteristics of the data, specifically the average survival skills of the students (Figure 2), to identify initial indications of the differences in averages across the student groups, as revealed by the descriptive statistical values.

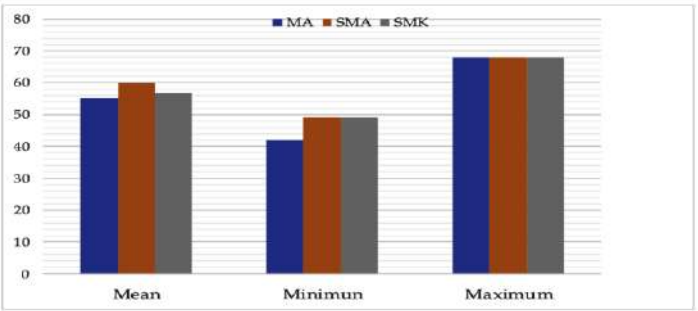

Figure 2. Statistical descriptive value

As shown in Figure 2 above, the average survival skills score for MA students is 55.48, with a minimum score of 42.00 and a maximum score of 68.00. For SMA students, the average score is 60.12, ranging from a minimum of 49.00 to a maximum of 68.00, while SMK students have an average score of 57.72, with scores ranging from 49.00 to 68.00. These descriptive statistics indicate differences in scores across the three groups (MA, SMA, and SMK). The highest average score is observed among SMA students, at 60.12. To determine whether these differences are statistically significant, the researcher will conduct an ANOVA test, as detailed in Table 3 below.

Table 3. ANOVA test results

ANOVA					
Student Survival Skills					
	Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Between Groups	354.808	2	177.404	4.618	.012
Within Groups	3688.303	96	38.420		
Total	4043.111	98			

Table 3 displays a significance value of 0.012. According to standard statistical interpretation, if the significance value is greater than 0.05, it indicates that the sample means are similar or not significantly different. Conversely, if the value is less than 0.05, it suggests that the sample means differ significantly. Since the value in this case is 0.012, which is less than 0.05, we can conclude that the average values of the MA, SMA, and SMK samples are significantly different. Table 4 presents the results of the Tukey HSD analysis between the samples.

Table 4. Results of multiple comparisons with Tukey's HSD

Tukey HSD						
(I) SSS	(J) SSS	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	Upper Bound
MA	SMA	-2.24242	1.52593	.009	-5.8751	1.3902
	SMK	-4.63636*	1.52593	.310	-8.2690	-1.0037
SMA	SMK	2.39394	1.52593	.264	-6.0266	1.2387
	MA	2.24242	1.52593	.009	-1.3902	5.8751
SMK	MA	4.63636*	1.52593	.310	1.0037	8.2690
	SMA	2.39394	1.52593	.264	-1.2387	6.0266
*. The mean difference is significant at the 0.05 level.						

Table 4 above presents the results of multiple comparisons, specifically identifying three means or significant differences through analysis of variance. First, the average difference between the MA and SMA scores was -2.242. This value was calculated by subtracting the SMA mean of 60.12 from the MA mean of 55.48, resulting in a difference that ranges from -5.875 (the lower bound) to 1.390 (the upper bound) at the 95% confidence level. The output also reveals that the significance level for the MA and SMA samples is 0.310, which is greater than 0.05. Therefore, it can be concluded that the average scores for MA and SMA students are statistically the same, and the difference in descriptive average scores between the two groups is not significant.

Additionally, the average difference between the SMA and SMK groups is 2.393. This value is calculated by subtracting the SMK average score of 57.72 from the SMA score of 60.12. As a result, the difference in average scores ranges from -6.026 (the lower bound) to 1.238 (the upper bound) at

the 95% confidence level. However, to determine whether this average difference is statistically significant, we examine the significance value, which is 0.264 (greater than 0.05). This suggests that the average values of the two groups are similar, indicating that the difference between them is not statistically significant.

Next, the authors analyze the average difference between the SMK and MA groups, which is 4.636. This value is derived by subtracting the MA average score of 55.48 from the SMK score of 57.72. The difference in average scores ranges from 1.003 (lower bound) to 8.269 (upper bound) at a 95% confidence level for SMK and MA. The significance value is 0.310 (greater than 0.05), suggesting that the two samples do not differ significantly in terms of their average scores.

Table 5. Results of similarity in average survival skill values

Tukey HSD[a]			
Student Survival Skills	**N**	**Subset for alpha = 0.05**	
		1	**2**
MA	33	55.4848	
SMA	33	60.1212	60.1212
SMK	33		57.7273
Sig.	99	.310	.264

The Tukey HSD results presented in Table 5 above are used to assess the similarity of the average survival skill values among students. The interpretation of the values in Subset 1 indicates that the survival skill scores of MA and SMA students are not significantly different, meaning that both groups exhibit similar average survival skill levels. Likewise, in Subset 2, which compares the survival skill scores of high school and vocational school students, no significant difference was found, leading to the conclusion that both groups have equivalent average survival skill scores.

2. Discussion

As-Syifa Al-Khoeriyyah *Pesantren* is one of 41,220 *pesantren* in Indonesia as of August 2024. This study reveals significant differences in self-

regulated learning (SRL) skills and survival skills among students from senior high school (SMA), madrasah aliyah (MA), and vocational high school (SMK) at As-Syifa Al-Khoeriyyah. The senior high school level, established earlier in 2010, demonstrates superior SRL skills compared to the students of MA (2022) and SMK (2023), as SRL programs have been implemented for a longer and more developed period. These findings align with Zimmerman's (2002) perspective that SRL development is influenced by a consistent learning environment and sustainable implementation strategies. Waheed et al., (2024) similarly argue that the success of SRL is highly dependent on the duration and consistency of the program.

Additionally, differences in educational focus at each level also impact the results. SMA students are more oriented toward academic preparation and independent learning strategies for college entrance exams, SMK emphasizes practical skills aligned with the workforce, and MA focuses on the development of spiritual values. This divergent focus underscores the relevance of context-based SRL models, as proposed by Kesuma et al., (2021), emphasizing the importance of adapting SRL development strategies to meet the specific needs of students. The practical implications of this study highlight the importance of segmented educational approaches to optimally support SRL development, ensuring that each student progresses to their educational characteristics and goals.

As-Syifa Al-Khoeriyyah *Pesantren* provides an insightful example of how SRL and survival skills are integrated into students' daily lives. These skills are shaped through daily activities at the school, such as spiritual practices like obligatory and voluntary prayers, Qur'an memorization, Islamic studies, guidance in *aqidah*, worship, and character development, all of which naturally foster students' SRL skills. Furthermore, social activities, such as taking responsibility for domestic tasks, community collaboration, conflict management, integration of Islamic knowledge and technology, and foreign language proficiency, further enhance students' survival skills. Zimmerman's (2002) SRL model is reflected in this *pesantren*, where students actively regulate their thoughts, emotions, and behaviors to achieve learning goals. This model

illustrates that the *pesantren* environment supports independence and individual resilience in achieving a holistic educational goal.

The importance of SRL and survival skills for students has given rise to various literature supporting the role of SRL in improving learning flexibility and effectiveness across contexts. Teich et al., (2024) highlight that students with mature SRL skills can adapt quickly to changes in their learning environment, a capability evident in students at As-Syifa Al-Khoeriyyah. Anwar & Muti'ah, (2022) also stress that SRL development requires ongoing programs and supporting facilities, which have been consistently applied at this *pesantren*. However, the adequacy of educational infrastructure at many *pesantren* in Indonesia can hinder the implementation of SRL programs, as not all have sufficient resources. Consequently, SRL skills may vary between *p*arents.

Dabbagh & Kitsantas, (2004) identify six key processes underlying self-regulated learning: goal setting, self-monitoring, self-evaluation, task strategies, help-seeking, and time management. These processes form the foundation of a broader self-learning model, elaborated in Zimmerman's (2002) SRL framework. This model supports a responsive learning environment divided into three phases: the forethought phase (e.g., goal setting and planning), the performance phase (e.g., self-observation during execution), and the self-reflection phase (e.g., evaluating outcomes and processes). In the context of the *pesantren*, this SRL model can be extended to cater to more personalized learning approaches by incorporating student profiles, which can reveal their preferences in choosing learning resources and strategies.

Fruhmann et al., (2010) introduced three important slogans for self-directed learning: "plan", "learn", and "reflect", which inspire the implementation of the SRL model in the *pesantren*. These three slogans represent critical stages in the self-learning process, including revising or determining student profiles, selecting learning resources, working with those resources, and reflecting on learning strategies and achievements. The implementation of this model in the *pesantren* demonstrates that traditional value-based learning and technological innovation can coexist to create an adaptive education system that meets contemporary demands (Mariyono, 2024; Permana, 2024; Haidar et al., 2023). The integration of local values and SRL in this approach not only

addresses the challenges of global education but also contributes significantly to shaping students who are more independent, resilient, and prepared for the future (Zaini et al., 2023; Wicaksono et al., 2024).

The SRL program implemented in this *pesantren* is relevant for modification and application in the global education context, as all students today need similar skills to support their survival skills, particularly in developing countries facing resource limitations or the need to enhance student independence. However, such programs need to be tailored to the local culture and values of each institution to achieve maximum impact. Gazo et al., (2023) state that autonomy-based programs in *pesantren*'s can help students improve their resilience, which is critical in facing dynamic global challenges. By integrating local values, this SRL model can be adapted to meet the specific needs of various educational environments, both formal and informal (Alvi & Gillies, 2020).

The challenges of globalization in education are marked by the internalization of digital technology in the learning process (Susanto et al., 2022). In the digital era, SRL has become an increasingly essential skill to face the challenges of technology-based learning (Ritz et al., 2023). Anthonysamy et al., (2020) found that SRL helps students leverage technology to schedule their study time, evaluate results, and enhance learning efficiency. As-Syifa Al-Khoeriyyah *Pesantren*, strong in its traditional culture, also integrates technology into its education by promoting Islamic values and global perspectives. This integration equips students with the ability to navigate technology-based education more effectively, preparing them for an increasingly digitalized future (Sahin, 2018).

The findings of this study align with research conducted in similar educational settings globally, such as studies on self-regulated learning in faith-based boarding schools in South Africa (Roux, 2006; Sutarno, 2023) and madrassas in Pakistan (Munir et al., 2021; Zamroni & Supriyanto, 2024). These studies emphasize the importance of integrating cultural and religious values into education to enhance students' autonomy and adaptability. The *pesantren* model, with its blend of academic, religious, and vocational training, offers a unique framework that can address challenges in other

education systems that aim to balance character development with skill acquisition. For instance, the emphasis on resilience and adaptability in *pesantren* may serve as a valuable reference for designing educational interventions in underserved or marginalized communities worldwide. Moreover, the *pesantren's* holistic approach to nurturing self-regulation could inspire global educational policies to incorporate socio-cultural and faith-based dimensions, ensuring that education systems are more inclusive and contextually relevant.

Furthermore, the survival skills taught at the *pesantren* add an important dimension. These survival skills shape students' mental and personality traits through various programs they engage in, such as leadership training, conflict management, and student involvement in organizations, which provide direct experiences that help them build resilience and adaptability. Darwanto et al., (2024) note that *pesantren* students exhibit higher levels of resilience compared to their counterparts in general schools, making them better prepared to face social, economic, and global challenges. The difference in resilience levels between *pesantren* students and general school students is based on the fact that *pesantren* focuses intensely on fostering student independence (Mawardi & Ruhiyah, 2022; Rosdiana et al., 2024).

This difference is increasingly relevant, given that the global market today prioritizes not only technical and academic skills but also moral values and integrity, which are crucial in the workforce. In modern workplaces, especially in competitive and challenging environments, the ability to adapt, manage conflicts, and possess mental resilience and integrity are key factors determining long-term success (King & Rothstein, 2010; Rohmadiyah et al., 2024).

Students from *pesantren*, trained in programs that integrate moral, spiritual, and social aspects, are often better equipped to face such situations (Halimah et al., 2024; Alfayyadl & Fachory MS, 2023). In contrast, general school students, who are mainly focused on academic achievement, tend to be less trained in mental resilience and ethical values, which can ultimately affect their ability to compete and thrive in increasingly complex professional

contexts (Susanto et al., 2023). Therefore, the development of value-based skills in *pesantren* gives students a competitive edge in facing global demands that prioritize not only intelligence but also strong and reliable character.

D. Conclusion

The findings of this study highlight the significant role of Self-Regulated Learning (SRL) skills in enhancing students' independence and preparedness for future challenges. The higher average SRL scores among SMA As-Syifa Jalancagak I students underscore the importance of consistent program development and curriculum integration of SRL skills. These findings demonstrate that the emphasis on academic achievement and college preparation fosters essential self-regulatory abilities, such as time management, responsibility, and moral integrity. For *pesantren* aiming to produce resilient and adaptable graduates, this study underscores the practical value of incorporating SRL-focused strategies into educational programs, tailored to meet the diverse needs of students at different academic levels.

To translate these findings into actionable strategies, *pesantren* across Indonesia could benefit from developing structured frameworks for SRL integration. Practical measures include training educators to design activities that promote goal-setting, self-monitoring, and reflective practices. Additionally, *pesantren* should prioritize providing resources and creating a supportive environment that encourages peer collaboration and personalized learning. By embedding SRL practices into various aspects of the curriculum—whether in academic, vocational, or religious education—*pesantren* can cultivate students' ability to adapt to the demands of higher education, the workforce, and broader societal challenges.

For future implementation, *pesantren* leaders are encouraged to collaborate with educational policymakers and researchers to refine SRL programs that reflect the socio-religious context of *pesantren*. Tailored workshops and professional development for teachers could focus on aligning SRL strategies with Islamic values, fostering a balance between spiritual growth and academic rigor. Furthermore, establishing pilot programs to test SRL interventions in *pesantren* of varying types, including traditional and

modern institutions, can provide a more nuanced understanding of effective practices. These initiatives would not only enhance the quality of education in *pesantren* but also serve as a model for other religious and culturally rooted educational systems globally.

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