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Exploring Self-Leadership as a Predictor of Student Engagement in Religious Internship Programs

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ABSTRACT. This study investigates the influence of self-leadership on student engagement among students at Madrasah Aliyah Ma'arif NU in Kota Blitar, a context where fostering independent learning is crucial for academic and personal development. Employing a quantitative approach with Spearman's Rank Correlation, the research involved 126 students selected through proportional random sampling. Data were collected using a validated questionnaire and analyzed with IBM SPSS 24.0. Prerequisite tests indicated that the data, while not normally distributed, met the linearity assumption. The results demonstrated a moderate positive correlation between self-leadership and student engagement ($R = 0.436$), with self-leadership accounting for 19% of the variance in engagement ($R^2 = 0.190$). The regression model was significant ($p < 0.05$), with the equation $Y = 28.652 + 0.262X$ indicating a positive relationship between self-leadership and engagement. These findings underscore the significant role of self-leadership in promoting active participation, motivation, and commitment among students. While self-leadership is a key contributor, other factors also substantially influence engagement. The practical implications suggest that educators and policymakers at Islamic schools should prioritize developing students' self-leadership through strategies like reflective practices, granting autonomy, and providing targeted training. Future research should examine additional influencing variables and employ longitudinal designs to achieve a more comprehensive understanding.

Keywords: *Lifelong Learning Skills, Quality Education, Reduced Inequalities, Student Well-being, Youth Empowerment*

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INTRODUCTION

In addressing the global issues of the 21st century, education systems globally are compelled to cultivate graduates who are not only academically competent but also exhibit robust leadership, flexibility, and self-regulation skills (Bilderback & Thompson, 2025; Schleicher, 2018; Walker, 2018). Indonesia's score at the bottom in reading and mathematics in the 2022 PISA survey reflects ongoing low levels of student engagement and intrinsic drive to learn (OECD, 2023). This global and national environment underscores the necessity of cultivating student leadership as a pivotal element in improving engagement and learning outcomes (Rivera & Garden, 2021). Such engagement, reflected in the dedication of time and energy to effective learning, is crucial for creating a dynamic, high-quality learning environment (Alrajeh & Shindel, 2020; Kulophas et al., 2015).

The concept of leadership begins with the ability to lead oneself. Self-leadership is defined as the process of influencing oneself through cognitive and behavioral strategies to achieve set goals

(Neck & Houghton, 2006). It enhances self-efficacy, self-management, and constructive thinking patterns, helping students develop independence and strong intrinsic motivation (Langdon Warren, 2021). This is particularly relevant in the post-pandemic era of flexible, technology-driven learning (Bleich et al., 2020). Meanwhile, in the unique context of Madrasah Aliyah, which integrates academic achievement with Islamic values, fostering student engagement—cognitively, affectively, and spiritually—is essential for reducing academic burnout and strengthening a sense of belonging (Bachtiyar et al., 2025; Saifudin & Rohimah, 2025)

One effective strategy for improving human resource quality is through internship programs (*Praktik Kerja Lapangan* or Field Work Practice), which offer students the opportunity to apply knowledge in real-world settings, cultivating leadership, collaboration, and creativity. This research takes place at Madrasah Aliyah Ma'arif NU in Blitar City, a unique and relevant setting. The school implements a distinctive religious internship program for its 12th-grade students, who are deployed in groups to rural communities to apply their religious knowledge and interact with residents. The program aims to deepen religious understanding and foster leadership skills. However, preliminary observations indicate significant variation in students' participation and initiative during the program, which is suspected to be related to their individual self-leadership capacity.

Despite the established importance of both concepts, a significant research gap remains. Much of the literature on self-leadership focuses on corporate or higher education contexts (Cheung et al., 2018; Langdon Warren, 2021), with limited studies addressing the secondary school level, particularly in the unique environment of Madrasah Aliyah. Furthermore, while internships are recognized for their benefits, the role of self-leadership in shaping students' active engagement during these experiential programs has not been thoroughly investigated empirically (Muslim et al., 2022). Finally, previous research has predominantly focused on external factors (e.g., teacher support, pedagogy) affecting engagement (Krauss & Hamid, 2015), underinvestigating the contribution of intrapersonal factors, such as self-leadership, in an experiential learning context.

Based on this background and the identified research gaps, this study specifically aims to analyze the influence of self-leadership on student engagement within the religious internship program at Madrasah Aliyah Ma'arif NU Blitar City. This research is expected to contribute: (1) Theoretically, by enriching the literature in educational psychology and leadership studies with empirical evidence on the relationship between self-leadership and engagement in the under-researched context of Islamic education and experiential learning; (2) Practically, by providing recommendations for school administrators and teachers to design more effective internship programs and training to cultivate student self-leadership; and (3) To policy, by offering insights for educational policymakers to formulate regulations that support the development of students' intrapersonal competencies as part of a holistic strategy for improving education quality.

METHOD

Research Design and Approach

The research employed a descriptive-explanatory design alongside a quantitative methodology. The objective was to meticulously examine the correlation between self-leadership and student involvement among Madrasah Aliyah Maarif NU students in Blitar. This approach is practical for finding phenomena and investigating potential causal links among variables within an educational framework (Sugiyono, 2016).

Population and Sample

The research population consisted of all 135 students enrolled at Madrasah Aliyah Maarif NU Kota Blitar. The sample size was determined using the Slovin formula with a 5% margin of error (e = 0.05), yielding a minimum required sample size of 102 respondents. This margin of error was selected to provide a conservative estimate and enhance the sample's representativeness, given the

small, finite population. Proportional random sampling was employed to ensure that each subgroup within the population was represented in proportion to its actual proportion. A total of 126 questionnaires were completed and used for analysis.

Table 1: Demographic Characteristics of Respondents

Component	Category	Frequency	Percentage (%)
Gender	Male	51	40.48%
	Female	75	59.52%
Age	15 years old	0	0.00%
	16 years old	0	0.00%
	17 years old	27	21.43%
	18 years old	80	63.49%
	19 years old	15	11.90%
	20 years old or above	4	3.17%
Major	Religion	39	30.95%
	Social Sciences (IPS)	51	40.48%
	Natural Sciences (IPA)	36	28.57%
Total Respondents		126	100%

Data Collection

Data were collected using two online questionnaires distributed via Google Forms. Prior to distribution, ethical approval was obtained from the school administration, and informed consent was secured from all participating students to ensure confidentiality and voluntary participation. The instruments were adapted from previous studies to measure self-leadership (Neck et al., 2019) and student engagement (Prokesova et al., 2019) using a five-point Likert scale (1=Strongly Disagree to Agree 5=Strongly). Self-Leadership was measured through 15 items across four dimensions: mental imagery, self-talk, belief, and assumption. Student Engagement was measured through 12 items across three domains: vigor, dedication, and absorption.

Table 2: Indicators and Statements of Self-Leadership and Student Engagement

Variable	Indicator	Definition	Statement Items
Self-Leadership	Mental Imagery (Mental image)	Symbols, mental setting, self, or others' experiences that make a performance feel as if it has already occurred. (Houghton and Neck, 2002)	I am always confident when doing my work. I am always satisfied with my work. I use my imagination to visualize myself performing well on important tasks.
	Self-talk, or self-verbalizations	Talking to ourselves is a tool for influencing ourselves to increase the personal effectiveness of employees and managers.	Sometimes I talk to myself when facing complex tasks. Sometimes I tell myself to get through challenging work situations. In difficult situations, I talk to myself to help find a solution. I always evaluate my work results. I always ask my colleagues about the results of my work.
	Belief	How beliefs influence mindset. If negative beliefs arise from negative thoughts, they can be changed through self-talk.	I always believe in the efforts I make. I always have confidence in my work outcomes. I try to evaluate the accuracy of my beliefs in solving problems.
	Assumption	A person can identify and face their dysfunctional beliefs and replace them with more rational beliefs.	I always think positively about my environment. I believe I get support from my team at work. I have beliefs and assumptions about how to handle work-related problems.

Student Engagement	Vigor (Spirit)	Employee engagement is marked by high physical and mental strength when completing tasks.	I actively seek constructive solutions when I face challenges. I feel motivated to express my concerns and contribute to improving the work environment. I always complete my tasks thoroughly. I always accept work without complaining.
	Dedication	Employee engagement is characterized by enthusiasm at work.	I always enjoy my work. I am always enthusiastic about working. I always work sincerely and wholeheartedly. I always work to the best of my abilities.
	Absorption	Employee behavior that shows full and serious attention to their work.	I feel that my job is an important part of my life. I feel a strong bond with my job. I always feel a sense of belonging to the institution. I always feel uncomfortable hearing negative news about the institution I work for.

Validity and Reliability

Construct validity was established through factor analysis, confirming that all item loadings exceeded 0.5. Reliability was assessed using Cronbach's Alpha, with each construct achieving an alpha coefficient above 0.70, indicating strong internal consistency. The detailed results are presented in Table 2.

Table 2: Validity and Reliability Results

Variable	Number of Items	Cronbach's Alpha	Conclusion
Self-Leadership	15	0.89	Reliable
Student Engagement	12	0.86	Reliable

Data Analysis

The data analysis was performed in three phases. Initially, descriptive statistics were employed to encapsulate the demographic data and variable scores. Secondly, the assumptions of inferential analysis were evaluated. A Kolmogorov-Smirnov test indicated that the data were not normally distributed ($p < 0.05$). As a result, the proposed route analysis was deemed unsuitable, and Spearman's Rank Correlation was selected as the nonparametric alternative to assess the monotonic relationship between the two variables (Schober et al., 2018). A linearity test was performed before the correlation analysis to verify a consistent relationship pattern. All analyses were conducted utilizing IBM SPSS Statistics version 24.0.

RESULT AND DISCUSSION

Result

Before conducting the Spearman's rank correlation analysis, the researcher conducted prerequisite tests to ensure the method was appropriate for the data. The normality tests revealed that the data were not normally distributed; therefore, Spearman's nonparametric correlation was an appropriate choice. Additionally, linearity tests were conducted to verify the presence of a monotonic relationship between variables, a key assumption for valid Spearman's correlation results. By performing these tests, the researcher ensured that the correlation analysis was both valid and reliable for interpreting the strength and direction of associations without relying on the assumptions required for parametric methods.

Table 3: Descriptive analysis of the case

Cases	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
X	126	100.0%	0	0.0%	126	100.0%
Y	126	100.0%	0	0.0%	126	100.0%

The descriptive analysis of the case processing summary reveals that all 126 replies for both the independent variable (X) and the dependent variable (Y) were legitimate, with no data omissions. This indicates that all cases were effectively gathered and incorporated into the study, guaranteeing comprehensive data coverage. The absence of missing values enhances the reliability of subsequent statistical tests, as the dataset remains complete and free of potential bias or distortion from incomplete entries. This extensive data completeness enhances the reliability of subsequent analysis and bolsters trust in the interpretation of the results.

Normality Test

The normality test determines whether the dataset used in the research is usually distributed. The Kolmogorov-Smirnov test was applied and processed using IBM SPSS version 24.0. A p-value greater than 0.05 indicates a normal distribution, while a value less than 0.05 indicates a deviation from normality (Siregar, 2019). The results of the normality test are summarized in Table 1 below:

Table 4: Normality Test Results

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
X	.109	126	.001	.815	126	.000
Y	.111	126	.001	.980	126	.062

a. Lilliefors Significance Correction

The outcomes of the normality assessment using both the Kolmogorov-Smirnov and Shapiro-Wilk methodologies exhibit contrasting patterns for variables X and Y. For variable X, the significance values in both tests are below the 0.05 threshold (Kolmogorov-Smirnov = 0.001; Shapiro-Wilk = 0.000), indicating a significant deviation from normality in the data distribution. Conversely, variable Y shows ambiguous results: the Kolmogorov-Smirnov test indicates non-normality (Sig. = 0.001), whereas the Shapiro-Wilk test yields a p-value of 0.062, exceeding 0.05, suggesting that variable Y follows a normal distribution. Given the sample size of 126, the Shapiro-Wilk test is preferred due to its superior sensitivity for small to medium samples. Consequently, it can be inferred that variable X is not normally distributed, while variable Y can be regarded as normally distributed according to the more reliable Shapiro-Wilk test. This result has significant ramifications for subsequent statistical analyses, especially in determining the suitability of parametric versus nonparametric methods.

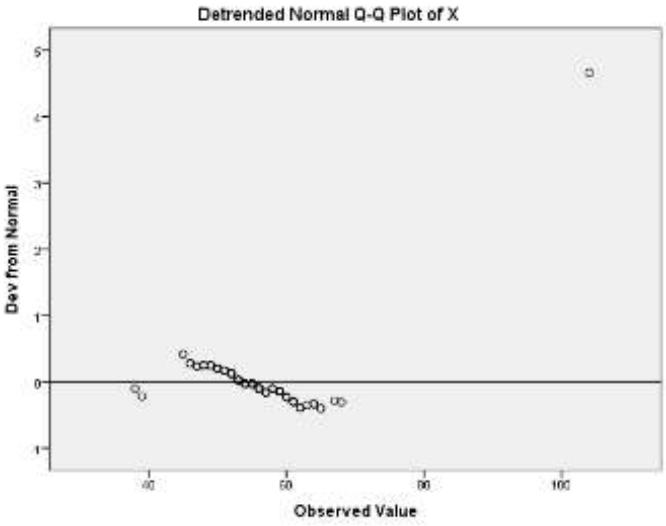

Figure 1: The detrended Q-Q plot of variable X

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The detrended Q-Q plot of variable X visually illustrates the deviation of the data points from a normal distribution by showing how far the data points deviate from the expected normal values. In this plot, most data points cluster below the horizontal reference line, with one extreme value deviating substantially above it. This suggests a right-skewed distribution and highlights a strong outlier, contributing to the dataset's overall non-normality. The pattern indicates that the residuals are not randomly scattered around the zero line—a key assumption for normality—thereby reinforcing the results of the Kolmogorov-Smirnov and Shapiro-Wilk tests, which both showed significant deviations from normality (Ghasemi & Zahediasl, 2012; Razali & Wah, 2011) Thus, these findings confirm that variable X does not meet the assumption of normal distribution, necessitating the use of non-parametric statistical methods.

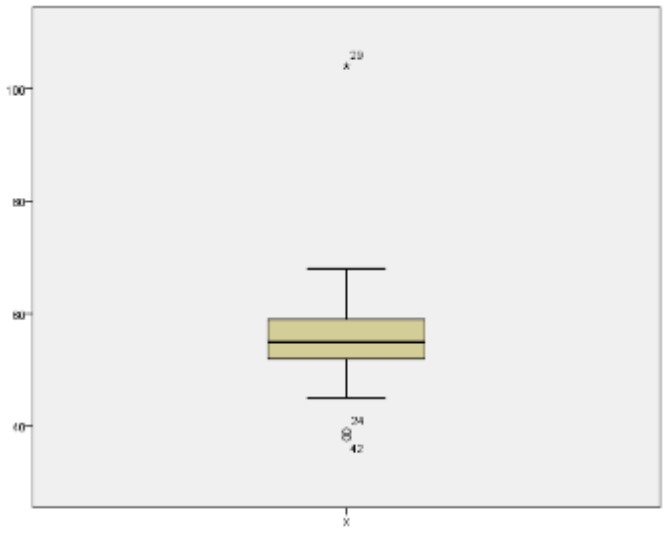

Figure 2: The boxplot of variable X

The boxplot of variable X shows the distribution, central tendency, and outliers of the data in an easy-to-see way. The box indicates the interquartile range (IQR), which demonstrates that the middle 50% of the data is between 50 and 60. The horizontal line in the box shows the median, which is slightly below the center. This means that the data is slightly skewed. The whiskers go from the quartiles to the lowest and highest values that are 1.5 times the IQR away from the quartiles. The map, on the other hand, clearly shows three outliers: two lower outliers (cases 8 and 24) and one extreme upper outlier (case 29), which is well beyond the upper whisker. This significant upper outlier indicates that the values are very different from the usual, which could compromise the normality and homogeneity of the data. Overall, this boxplot supports previous findings (e.g., the detrended Q-Q plot) indicating that variable X is not normally distributed and contains significant outliers, reinforcing the need for careful handling or consideration of nonparametric tests in subsequent analyses.

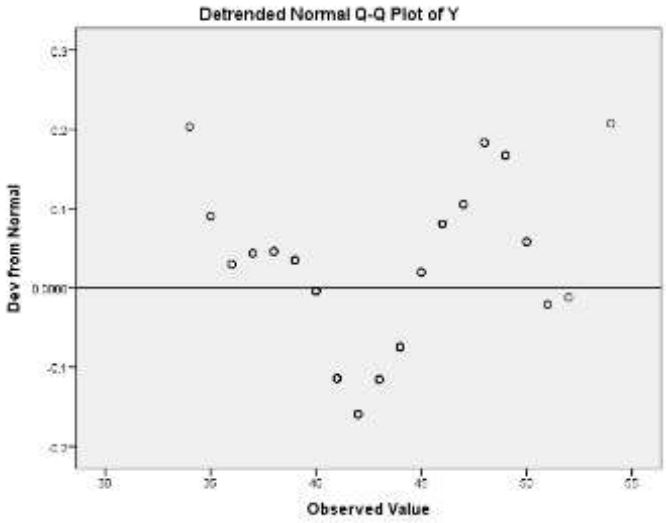

Figure 3: The detrended Q-Q plot of variable Y

The Q-Q plot of variable Y shows that the data points are closely aligned with the diagonal reference line, suggesting that the distribution is approximately normal. This alignment indicates minimal deviation from the expected normal distribution, particularly in the central range of the data, supporting the assumption of normality. Although minor deviations are visible at the extremes, such variations are common and generally acceptable in real-world data. Consequently, the visual evidence from the plot confirms that the dataset is normally distributed, making it appropriate for further parametric statistical testing, such as regression or t-tests (Karadağ & Demirtaş, 2018).

The boxplot below shows the distribution of the variable "Y". The bold line in the boxplot shows the median, which is about 43. This means that half of the observations are below this number and half are above it. The interquartile range (IQR) is the range from roughly 40 (Q1) to 46 (Q3). It includes the middle 50% of the data and shows a moderate spread around the median. The whiskers go from about 34 to 54, which is 1.5 times the IQR from the quartiles. This means that there are no severe outliers. The median being closer to the lower quartile shows that the data distribution is slightly skewed to the right. The lack of points beyond the whiskers indicates no noteworthy outliers. This boxplot shows that variable Y has a relatively symmetric distribution with modest variability. This means it can be used for a variety of statistical studies, including nonparametric methods such as Spearman's rank correlation, especially when normality tests indicate the distribution is not normal.

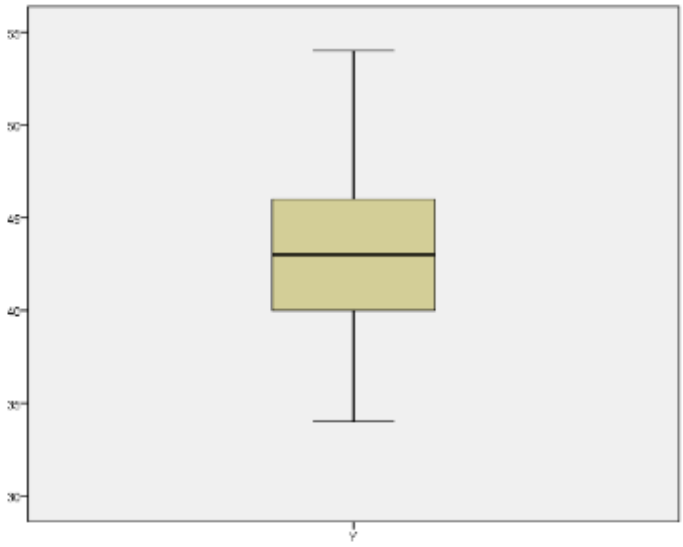

Figure 4: The boxplot of variable Y

Linearity Test

The linearity test checks whether the independent and dependent variables are linearly related and whether regression and correlation analyses are needed. The criteria for determining linearity involve calculating the F statistic and comparing it to the F table value at the 5% significance level. If the calculated F is less than or equal to the F table, then the variable has a linear effect. The results of the linearity test on the self-leadership and student engagement variables are as follows:

Table 5: Linearity Test

			X	Y
Spearman's rho	X	Correlation Coefficient	1.000	.517**
		Sig. (2-tailed)	.	.000
		N	126	126
	Y	Correlation Coefficient	.517**	1.000
		Sig. (2-tailed)	.000	.
		N	126	126

**. Correlation is significant at the 0.01 level (2-tailed).

There is a moderate positive correlation between variables X and Y, as indicated by a Spearman's rank correlation coefficient of 0.517. The coefficient falls between 0.26 and 0.50, typically indicating a moderate relationship. This means that as the value of X goes up, the value of Y likewise tends to go up moderately. The correlation coefficient can be anywhere from -1 to +1. Values closer to ±1 indicate stronger associations, while 0 indicates no association. The significance value (p-value) for this association is 0.000, which is less than the usual threshold of 0.05. This means the correlation between X and Y is statistically significant, and the likelihood that this observed relationship occurred by chance is very low. The two-tailed test further strengthens the conclusion, showing that the direction of the relationship is reliable.

In the context of this study, the moderate, statistically significant positive correlation indicates a strong relationship between the two variables. This conclusion corroborates the research hypothesis that an increase in one variable is associated with an increase in the other, providing empirical evidence for the examined relationship. These results are significant for comprehending

the interactions among these factors and may guide subsequent investigation or practical applications derived from this correlation.

Discussion

This study reveals a moderate positive correlation (Spearman's rank coefficient = 0.517) between self-leadership and student engagement during religious internship activities. This indicates that students who exhibit higher self-leadership tend to report greater engagement; however, it is crucial to emphasize that this cross-sectional design demonstrates an association, not causation. To interpret the practical meaning of this correlation, consider that a tangible difference in self-leadership scores might manifest in observable behaviors. For instance, students with high self-leadership are likely to proactively plan their internship schedules and seek feedback, while those with lower scores may require more direct supervision to stay on task (Darling-Hammond et al., 2020).

The study indicates a modest link between self-leadership and internship engagement, suggesting that while self-leadership is an important predictor, external factors also play a crucial role. Wang et al. (2020) emphasize that mentorship, organizational culture, and available resources are vital in shaping the internship experience. A supportive environment enhances individual growth and overall internship effectiveness. Furthermore, the interplay between self-leadership and these external supports warrants further investigation (Bracht et al., 2024; Stewart et al., 2011; Wallace et al., 2011). Future research could explore how specific organizational practices and mentor behaviours moderate the relationship between self-leadership and internship outcomes. Longitudinal studies could also illuminate the dynamic nature of this relationship, examining how self-leadership skills evolve during the internship and how this evolution impacts engagement and performance. Understanding these nuances will enable schools to create more effective internship programs that foster both individual initiative and a supportive work environment.

Peer support, advice from professors or mentors, and a favourable institutional atmosphere are all examples of external pillars (Bauer et al., 2025; Lorenzetti et al., 2023; Raposa et al., 2021). Peer support may help people feel less alone by creating a collaborative atmosphere, as a sense of belonging is strongly fostered through positive peer interactions (Hamshire et al., 2025; LaMarre et al., 2024; Zhou et al., 2023) Mentorship from instructors or industry professionals can provide students vital guidance, comments, and role models, a function that is central to developmental relationships (Kram & Higgins, 2009). Organisational culture includes encouraging initiative and learning, thereby strengthening or hindering the implementation of self-leadership initiatives.. Research on workplace psychology confirms that the organizational environment is a critical factor in enabling individual progress and initiative (Ryazanova & McNamara, 2016; Widiati et al., 2024). Consequently, this finding underscores the importance of educational institutions and internship sites prioritizing not only individual skills training but also the proactive establishment and maintenance of a comprehensive support network for interns. Social support, teacher encouragement, and institutional culture are crucial in shaping student interactions with learning tasks. Combining self-leadership development with supportive structures enhances both the quantity and quality of student engagement and aligns with holistic education models that emphasise the interconnectedness of personal agency and environmental facilitation (Adhikari, 2024).

Furthermore, this study's findings strengthen the theoretical robustness of Self-Determination Theory (SDT) within the internship framework. The significant, albeit modest, relationships indicate that the psychological processes formulated by SDT are functioning effectively. Self-leadership, through tactics such as setting personal goals and monitoring progress, directly addresses the underlying psychological needs of autonomy and competence. Guo Nyuhuan (2024) demonstrated that when individuals recognize autonomy over their goals and have confidence in their ability to achieve them, their intrinsic motivation increases. Self-leadership acts

as an internal trigger, enabling students to transform their internships from mere obligations into authentic experiences that fulfill their own psychological needs.

A key methodological limitation to consider is the potential for social desirability bias. Given the religious school setting, participants might have provided responses they believed were socially acceptable, potentially inflating self-reports of both self-leadership and engagement (Pfeiffer et al., 2018). Furthermore, while the correlation is statistically significant, its practical significance must be carefully evaluated. Educators should assess whether fostering self-leadership results in meaningful qualitative improvements in students' internship experiences beyond what statistical measures indicate.

From a pedagogical perspective, these results suggest that integrating structured self-leadership training into the internship curriculum can be beneficial. To achieve maximum effectiveness, the program should be culturally tailored to align with students' spiritual values, for example, by framing self-reflection within religious teachings, thereby enhancing its relevance and applicability (Rahman, 2022). This will not only help students develop leadership skills but also help them understand and appreciate their cultural context. A holistic approach is expected to produce wiser leaders who are more responsive to community needs.

At the policy level, these findings support integrating self-leadership development into broader educational standards. Allocating resources for teacher training in these methodologies is essential to create learning environments that consistently foster student autonomy (Culduz, 2024). The study's cross-sectional nature remains a primary limitation, preventing causal inferences, and its focus on a single institution limits generalizability. Future research involving diverse populations and longitudinal designs is necessary to strengthen the validity of these findings (Étiévant & Viallon, 2022).

Future studies should employ mixed-methods approaches to gain a deeper understanding. Qualitative inquiries could explore students' lived experiences to identify barriers and facilitators to self-leadership, while advanced statistical models could elucidate how self-leadership interacts with other contextual variables (Heikkinen et al., 2025). For the school's administration, these results provide a foundation for designing comprehensive student support systems that combine self-leadership training with robust mentorship programs and constructive feedback mechanisms.

On a humanistic level, promoting self-leadership extends beyond academic engagement to support emotional well-being and ethical development. Students with strong self-regulation skills are often better equipped to manage stress and build social connectedness, qualities essential for character formation in religious educational contexts (Tenschert et al., 2024). In summary, this research underscores the relevance of self-leadership theory within a specific religious learning environment, highlighting how spiritual values can interact with self-regulatory processes.

Although self-leadership is closely related to student engagement, educational strategies must be integrative. Self-leadership development must be accompanied by efforts to strengthen supportive social and institutional structures to develop students who are not only engaged but also independent and resilient (Al-Riyami et al., 2024). This holistic approach ensures that students are equipped with the skills necessary to face challenges effectively. By fostering individual responsibility and a supportive environment, educational institutions can improve student success and overall well-being.

CONCLUSION

This study successfully confirms a significant positive relationship between self-leadership and student engagement within the context of the religious internship program at Madrasah Aliyah Ma'arif NU in Blitar City. A Spearman's correlation coefficient of 0.517 indicates a moderate-to-strong association, demonstrating that students with higher self-leadership capabilities—

encompassing mental imagery, self-talk, constructive beliefs, and assumptions—tend to exhibit greater vigor, dedication, and absorption in their internship activities. The findings align with and reinforce Self-Determination Theory, highlighting how self-leadership strategies fulfill fundamental psychological needs for autonomy and competence, thereby enhancing intrinsic motivation. In the unique setting of Islamic education, this relationship underscores the role of self-leadership not only as an academic driver but also as a means to integrate spiritual values into experiential learning, fostering holistic student development. However, the moderate strength of the correlation signifies that self-leadership is one of several influential factors. A substantial portion of the variance in engagement remains unexplained, suggesting that other factors, such as peer support, teacher mentorship, and the overall institutional climate, also play critical roles. Therefore, cultivating self-leadership should be part of a comprehensive approach that also strengthens these supportive environmental structures.

BIBLIOGRAPHY

Adhikari, D. P. (2024). Constructing student agency: The nexus between classroom activities and engagement. *International Journal of Education and Practice*, *12*(3), 819–830. https://doi.org/10.18488/61.v12i3.3759

Al-Riyami, R. M., Alkaabi, A., & Abdallah, A. (2024). *Cutting-edge innovations in teaching, leadership, technology, and assessment*. IGI Global. https://doi.org/10.4018/979-8-3693-0880-6

Alrajeh, T. S., & Shindel, B. W. (2020). Student engagement and math teachers support. *Journal on Mathematics Education*, *11*(2), 167–180. https://doi.org/10.22342/jme.11.2.10282.167-180

Bachtiyar, M., Bakar, M. Y. A., & Rusydiyah, E. F. (2025). Innovations in Islamic Religious Education in Bilingual Madrasah Aliyah: A Systematic Literature Review. *Al-Ishlah: Jurnal Pendidikan*, *17*(17), 2115–2124. https://doi.org/10.35445/alishlah.v17i2.5453

Bauer, C. F., Bowe, K. A., Meredith, D. C., & Kustina, J. (2025). Students as Partners in Teaching, Managing, and Developing Peer Learning in STEM Gateway Courses. *Journal of College Science Teaching*, *54*(5), 403–411. https://doi.org/10.1080/0047231X.2025.2472148

Bilderback, S., & Thompson, C. B. (2025). Developing global leadership competence: redefining higher education for interconnected economies. *Higher Education, Skills and Work-Based Learning*. https://doi.org/10.1108/HESWBL-10-2024-0301

Bleich, M. R., Smith, S., & McDougle, R. (2020). Public policy in a pandemic: A call for leadership action. *Journal of Continuing Education in Nursing*, *51*(6), 250–252. https://doi.org/10.3928/00220124-20200514-03

Bracht, E. M., Nieberle, K. W., & van Dick, R. (2024). It's Not All About the Self: Exploring the Interplay Between Self-leadership and the Social Work Environment. *Journal of Change Management*, *24*(3), 177–203. https://doi.org/10.1080/14697017.2024.2367454

Cheung, R., Reinhardt, T., Stone, E., & Little, J. W. (2018). Defining teacher leadership: A framework. *Phi Delta Kappan*, *100*(3), 38–44. https://doi.org/10.1177/0031721718808263

Culduz, M. (2024). The impact of educational leadership in improving the learning experience. In *Promoting Crisis Management and Creative Problem-Solving Skills in Educational Leadership*. IGI Global Scientific Publishing. https://doi.org/10.4018/978-1-6684-8332-9.ch008

Darling-Hammond, L., Flook, L., Cook-Harvey, C., Barron, B., & Osher, D. (2020). Implications for educational practice of the science of learning and development. *Applied Developmental Science*, *24*(2), 97–140. https://doi.org/10.1080/10888691.2018.1537791

Ghasemi, A., & Zahediasl, S. (2012). Normality tests for statistical analysis: A guide for non-statisticians. *International Journal of Endocrinology and Metabolism*, *10*(2). https://doi.org/10.5812/ijem.3505

Hamshire, C., Benjamin, M., & Soong Swee Kit, A. (2025). What is the Role of Trust in Peer Support Schemes for Underrepresented Students? *Teaching and Learning Inquiry*, *13*. https://doi.org/10.20343/teachlearninqu.13.8

Heikkinen, S., Saqr, M., Malmberg, J., & Tedre, M. (2025). A longitudinal study of interplay between student engagement and self-regulation. *International Journal of Educational Technology in Higher Education*, *22*(1), 1–28. https://doi.org/10.1186/s41239-025-00523-3

Karadağ, F., & Demirtaş, V. Y. (2018). The effectiveness of the philosophy with children curriculum on critical thinking skills of pre-school children. *Egitim ve Bilim*, *43*(195), 19–40. https://doi.org/10.15390/EB.2018.7268

Kram, K. E., & Higgins, M. A. (2009). A new mindset on mentoring: creating developmental networks at work. *MIT Sloan Management Review*, *15*, 1–4.

Krauss, S. E., & Hamid, J. A. (2015). Exploring the relationship between campus leadership development and undergraduate student motivation to lead among a Malaysian sample. *Journal of Further and Higher Education*, *39*(1), 1–26. https://doi.org/10.1080/0309877X.2013.765943

Kulophas, D., Ruengtrakul, A., & Wongwanich, S. (2015). The Relationships among Authentic Leadership, Teachers' Work Engagement, Academic Optimism and School Size as Moderator: A Conceptual Model. *Procedia - Social and Behavioral Sciences*, *191*, 2554–2558. https://doi.org/10.1016/j.sbspro.2015.04.298

LaMarre, A., Couturier, J., Dimitropoulos, G., Jones, S., Kumar, S., Obeid, N., & Wozney, L. (2024). Peer support for eating disorders in Canada: program user perspectives. *Journal of Eating Disorders*, *12*(1), 133. https://doi.org/10.1186/s40337-024-01068-y

Langdon Warren, L. (2021). The Importance of Teacher Leadership Skills in the Classroom. *Education Journal*, *10*(1), 8–15. https://doi.org/10.11648/j.edu.20211001.12

Lorenzetti, D., Lorenzetti, L., Nowell, L., Jacobsen, M., Clancy, T., Freeman, G., & Oddone Paolucci, E. (2023). Exploring International Graduate Students' Experiences, Challenges, and Peer Relationships. *Journal of International Students*, *14*(2). https://doi.org/10.32674/jis.v14i2.5186

Muslim, M., Hasan, N., & Kholifah, Y. B. (2022). Self-Leadership and Its Influence on the Engagement of Islamic Junior High School Teachers in the Covid-19 Period. *Briliant: Jurnal Riset Dan Konseptual*, *7*(4), 970–980. https://doi.org/10.28926/briliant.v7i4.1186

Neck, C. P., & Houghton, J. D. (2006). Two decades of self-leadership theory and research. *Journal of Managerial Psychology*, *21*(4), 270–295. https://doi.org/10.1108/02683940610663097

Nyuhuan, G. (2024). Beyond rewards and punishments: enhancing children's intrinsic motivation through self-determination theory. *World Journal of Advanced Research and Reviews*, *21*(2), 1576–1583. https://doi.org/10.30574/wjarr.2024.21.2.0457

OECD. (2023). PISA 2022 Results. In *Factsheets: Vol. I*.

Pfeiffer, B., Clark, G. F., & Arbesman, M. (2018). Effectiveness of cognitive and occupation-based interventions for children with challenges in sensory processing and integration: A systematic review. *The American Journal of Occupational Therapy*, *72*(1), 7201190020p1-7201190020p9. https://doi.org/10.5014/ajot.2018.028233

Prokesova, L., Vaculik, M., Kasparkova, L., & Prochazka, J. (2019). An integrated model of work engagement: How the satisfaction of basic psychological needs explains the relationship between personality and work engagement. *Psihologija*, *52*(3), 265–284. https://doi.org/10.2298/PSI181204004P

Rahman, K. (2022). Leadership and Multicultural Environment; Kyai's Power and Authority Contest at Pondok Pesantren. *AL-TANZIM: Jurnal Manajemen Pendidikan Islam*, *6*(3), 643–654. https://doi.org/10.33650/al-tanzim.v6i3.3532

Raposa, E. B., Hagler, M., Liu, D., & Rhodes, J. E. (2021). Predictors of close faculty−student relationships and mentorship in higher education: findings from the Gallup−Purdue Index. *Annals of the New York Academy of Sciences*, *1483*(1), 36–49. https://doi.org/10.1111/nyas.14342

Razali, N. M., & Wah, Y. B. (2011). Power comparisons of Shapiro-Wilk , Kolmogorov-Smirnov, Lilliefors and Anderson-Darling tests. *Journal of Statistical Modeling and Analytics*, *2*(1), 21–33.

https://doi.org/doi:10.1515/bile-2015-0008
Rivera, E. S., & Garden, C. L. P. (2021). Gamification for student engagement: a framework. *Journal of Further and Higher Education*, *45*(7), 999–1012. https://doi.org/10.1080/0309877X.2021.1875201
Ryazanova, O., & McNamara, P. (2016). Socialization and Proactive Behavior: Multilevel Exploration of Research Productivity Drivers in U.S. Business Schools. *Academy of Management Learning & Education*, *15*(3), 525–548. https://doi.org/10.5465/amle.2015.0084
Saifudin, M., & Rohimah, S. (2025). *The Integration of Islamic Values in the History of Islamic Civilization into English Language Teaching*. *14*(1), 705–712.
Saifudin, M., & Rohimah, S. (2025). The Integration of Islamic Values in the History of Islamic Civilization into English Language Teaching. *Didaktika: Jurnal Kependidikan*, *14*(1), 705-712. https://doi.org/10.58230/27454312.1763
Schleicher, A. (2018). The Future of Education and Skills: Education 2030. *OECD Education Working Papers*, 23.
Siregar, I. (2019). *Islam Nusantara: Sejarah, Manhaj dan Dakwah Islam Rahmatan Lil 'Alamin di Bumi Nusantara*. Trussmedia Grafika.
Stewart, G. L., Courtright, S. H., & Manz, C. C. (2011). Self-Leadership: A Multilevel Review. *Journal of Management*, *37*(1), 185–222. https://doi.org/10.1177/0149206310383911
Sugiyono, S. (2016). *Metode Penelitian Kuantitatif, Kualitatif dan R & D*. Alfabeta.
Tenschert, J., Furtner, M., & Peters, M. (2024). The effects of self-leadership and mindfulness training on leadership development: a systematic review. *Management Review Quarterly*, 1–52. https://doi.org/10.1007/s11301-024-00448-7
Walker, J. L. (2018). Do Methods Matter in Global Leadership Development? Testing the Global Leadership Development Ecosystem Conceptual Model. *Journal of Management Education*, *42*(2), 239–264. https://doi.org/10.1177/1052562917734891
Wallace, M., O'Reilly, D., Morris, J., & Deem, R. (2011). Public Service Leaders as 'Change Agents' – for Whom? *Public Management Review*, *13*(1), 65–93. https://doi.org/10.1080/14719037.2010.501614
Wang, C., Pan, R., Wan, X., Tan, Y., Xu, L., McIntyre, R. S., Choo, F. N., Tran, B., Ho, R., Sharma, V. K., & Ho, C. (2020). A longitudinal study on the mental health of general population during the COVID-19 epidemic in China. *Brain, Behavior, and Immunity*, *87*, 40–48. https://doi.org/10.1016/j.bbi.2020.04.028
Widiati, R., Soetjipto, B. W., Siscawati, M., & Jayanagara, O. (2024). The Critical Role of Psychological Capital in Empowering Female Managers Amid Digital Innovation. *Aptisi Transactions on Technopreneurship (ATT)*, *6*(3). https://doi.org/10.34306/att.v6i3.500
Zhou, W., Wang, Z., Han, F., & Hong, L. (2023). Chinese digestive surgery interns' learning quality and English reading proficiency during COVID-19 pandemic: Comparison between face-to-face versus WeChat teaching and learning. *Heliyon*, *9*(2), e13434. https://doi.org/10.1016/j.heliyon.2023.e13434