



Paradoxical effects of principals' leadership strategies on islamic character development in multicultural school settings

Fatmaya Anisa Rahmania^{1,*}, Ifada Novikasari²

¹ Islamic Education Management, Postgraduate Program, UIN Prof. KH. Saifuddin Zuhri Purwokerto, Purwokerto, Central Java 53126, Indonesia;

² UIN Prof. KH. Saifuddin Zuhri Purwokerto, Purwokerto, Central Java 53124, Indonesia.

*Correspondence: fatmaya.rahmania@gmail.com

Received Date: June 19, 2025

Revised Date: August 21, 2025

Accepted Date: August 31, 2025

ABSTRACT

Background: The leadership of school principals plays a crucial role in shaping students' character in multicultural environments such as State Vocational School 1 Purwokerto. However, there has been no specific study that examines the influence of leadership strategies on the development of students' Islamic character within the context of cultural and religious diversity. This study addresses that academic gap by integrating three aspects: leadership strategies, Islamic character, and the multicultural context. **Methods:** This is an associative quantitative study employing a field research approach. A sample of 80 students was selected from a population of 403 students in grades X and XI using simple random sampling. Data were collected through interviews, observations, and Likert scale-based questionnaires, and were then analyzed using validity, reliability, normality, linearity, and simple linear regression tests. **Findings:** The findings indicate that the instrument was valid ($r\text{-count} > 0.2199$) and reliable (Cronbach's Alpha: $X = 0.742$; $Y = 0.729$). The data were normally distributed ($\text{sig.} = 0.168$) and exhibited a significant linear relationship ($\text{sig.} = 0.001$). Simple linear regression analysis revealed that leadership strategies had a substantial influence on Islamic character ($\text{sig.} = 0.003$), but the effect was negative (regression coefficient $b = -0.244$) with a low contribution ($R^2 = 0.105$). This suggests that an increase in leadership strategies may potentially decrease Islamic character, possibly due to a lack of collaborative approaches or the dominance of external factors (89.5%). **Conclusion:** The conclusion highlights the significance of transformative-relational leadership, which entails embodying Islamic values and conducting contextual evaluations in multicultural settings. **Novelty/Originality of this article:** The novelty of this study lies in the integration of the three aspects and the revelation of a paradoxical negative relationship that has not been explored in previous research.

KEYWORDS: islamic character; multicultural education; school leadership.

1. Introduction

The leadership of the school principal plays a crucial role in shaping students' character, especially in multicultural schools that encompass diverse cultural, ethnic, and social backgrounds. An effective principal must be able to create an inclusive, safe, and supportive school environment in which every member of the school community feels valued and heard. This is essential to promote collaboration, active participation in the learning process, and the development of values such as tolerance and respect for diversity (Baruno et al., 2025; Ifnaldi et al., 2025).

Cite This Article:

Rahmania, F. A., & Novikasari, I. (2025). Paradoxical effects of principals' leadership strategies on islamic character development in multicultural school settings. *Islamic perspective on Communication and Psychology*, 2(2), 68-85. <https://doi.org/10.61511/ipercop.v2i2.2025.1982>

Copyright: © 2025 by the authors. This article is distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).



The leadership of the school principal is a key factor in creating a conducive educational environment, particularly in multicultural schools such as State Vocational School 1 Purwokerto. However, there has been no specific study that measures the extent to which the principal's leadership strategies influence the development of students' Islamic character within the context of cultural, religious, and social diversity. Field observations reveal that multicultural schools often face challenges in balancing Islamic values with respect for diversity. On the other hand, there is still no measurable leadership model to ensure the harmonious integration of Islamic values with multicultural practices.

The role of the school principal in multicultural education is highly significant and encompasses various strategic aspects to create an inclusive and harmonious educational environment. As a leader, the principal must adopt an inclusive and participatory leadership style to foster a sense of belonging among teachers, students, and staff. This open and communicative leadership approach helps create a conducive school climate, minimize conflicts, and promote intercultural understanding. Moreover, the principal also serves as the driving force in developing curricula and policies that reflect the values of diversity and tolerance. The curriculum should not only teach cultural diversity but also equip students with social skills to interact positively with individuals from various backgrounds (Mahmud, 2023).

In enhancing teacher professionalism, the school principal holds the responsibility of guiding and training educators to effectively manage diversity within the classroom, while also fostering a strong commitment to multicultural values. Beyond that, the principal must serve as a role model through daily attitudes and actions that reflect those values, such as discipline, cleanliness, and proactive problem-solving, since such behavior contributes to the development of a positive school culture. Equally important, the principal must also facilitate the active involvement of the school community and broader society to create synergy in supporting multicultural education. In this way, values of tolerance and empathy can be comprehensively instilled in the character development of students (Handayani et al., 2024; Inton et al., 2024).

The leadership of the school principal plays a vital role in shaping students' character, particularly within a multicultural school environment. Inclusive and collaborative leadership not only fosters a comfortable learning atmosphere but also supports students in developing attitudes of tolerance, empathy, and respect for diversity values that are essential in a pluralistic society. An effective principal can cultivate a school culture that is welcoming and appreciative of differences, thereby minimizing the risk of discrimination and conflict among students. Through consistently implemented multicultural education, supported by strong and visionary leadership, students can be nurtured into individuals of character, equipped to face the various challenges of life in a socially and culturally diverse society (Inton et al., 2024; Mahmud, 2023).

Previous studies have predominantly focused on transformational or managerial leadership in general school settings, yet they have paid little attention to the spiritual-Islamic dimension within multicultural environments. In fact, State Vocational School 1 Purwokerto, as a school that strongly upholds multicultural values, requires a unique leadership approach to shape students' religious character without neglecting diversity. This study presents a novelty by filling an academic gap through the integration of three main aspects: school principal leadership strategies, the formation of Islamic character, and the multicultural school context. This approach serves as a pioneer in exploring how Islamic values can be effectively internalized within a heterogeneous environment through adaptive leadership. Thus, the study offers a new integrative perspective in understanding the role of leadership in shaping Islamic character amid cultural and religious diversity in schools.

To ensure that the discussion in this study remains focused and does not become overly broad, the researcher limits the scope to the influence of the school principal's leadership strategies on students' Islamic character at State Vocational School 1 Purwokerto. The research problems addressed in this study include, (1) how the school principal's leadership strategy at State Vocational School 1 Purwokerto contributes to shaping

students' Islamic character; (2) what the condition of students' Islamic character is in the multicultural environment of State Vocational School 1 Purwokerto; and (3) whether there is a significant influence between the school principal's leadership strategy and the Islamic character of students in a multicultural school setting. In line with these research problems, this study aims to: (1) examine the school principal's leadership strategy in shaping students' Islamic character at State Vocational School 1 Purwokerto; (2) analyze the condition of students' Islamic character in the multicultural school environment of State Vocational School 1 Purwokerto; and (3) empirically test the influence of the school principal's leadership strategy on students' Islamic character in a multicultural school setting.

This study holds significant urgency for the advancement of knowledge in the Islamic Education Management/*Manajemen Pendidikan Islam* (MPI) program, particularly in enriching the discourse on Islamic educational leadership theory. Through an adaptive approach to multicultural realities, this research encourages the expansion of leadership concepts beyond conventional managerial aspects to include the dimensions of character formation and Islamic values within the context of diversity. Thus, the findings of this study may serve as an important reference in formulating a relevant and applicable model of Islamic leadership in today's era of social and cultural pluralism.

The hypothesis is a proposition or statement that indicates the existence of a relationship between two or more variables, formulated based on relevant theories and previous research findings (Mulyani, 2021; Siroj et al., 2024). Based on the research problems previously stated, the hypotheses in this study are formulated as follows: the independent variable in this study is the school principal's leadership strategy (X), while the dependent variable (Y) is the Islamic character of students. The influence of the principal's leadership strategy (X) on the students' Islamic character (Y) is tested through two hypotheses, namely, (1) the null hypothesis (H_0), which states that there is no significant influence of the school principal's leadership strategy on the Islamic character of students in a multicultural school; and (2) the alternative hypothesis (H_a), which states that there is a significant influence of the school principal's leadership strategy on the Islamic character of students in a multicultural school.

2. Methods

The school principal, as an educational leader, holds a strategic role in creating a school climate that supports the formation of students' character. In a multicultural school environment, this role becomes even more crucial due to the diversity of students' backgrounds. An appropriate leadership strategy, such as leading by example, effective communication, and the cultivation of Islamic values, can encourage the development of students' Islamic character, including religious attitudes, Islamic ethics, and noble behavior in daily life. Based on these considerations, the conceptual framework related to the title of this study can be illustrated as follows Figure 1.

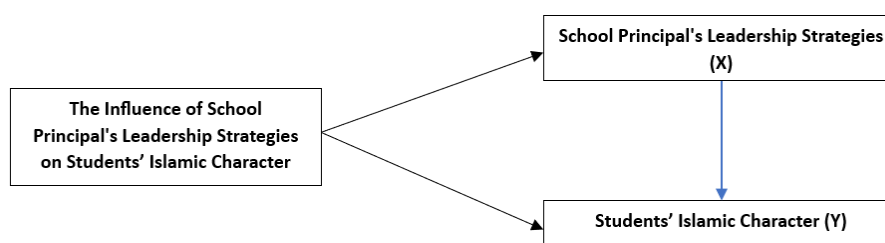


Fig. 1. Conceptual framework

This study adopts a quantitative paradigm rooted in Auguste Comte's positivism, with a focus on empirical data, objective measurement, and statistical analysis (Mayadah, 2022; Mubarak, 2023). The type of research used in this study is associative quantitative research

with a field research method, in which data is collected directly from the field through observation, interviews, and questionnaires (Ahmad & Laha, 2020; Marwa & Abbas, 2023). The associative approach aims to examine the relationship between variables objectively and measurably through hypothesis testing and regression analysis (Yusra & Asnur, 2022).



Fig. 2. Research flow

The research flow, as illustrated in Figure 2, consists of ten main stages; problem identification & preliminary observation, literature review & development of theoretical framework, formulation of research questions and objectives, instrument development, data collection, instrument validity and reliability testing, assumption testing, quantitative data analysis, conclusion drawing, and completion. Each stage is systematically designed to ensure the validity of findings and the measurability of the relationship between the school principal's leadership strategy and students' Islamic character within the context of multicultural education.

$$n = \frac{N}{1 + Ne^2}$$

$$n = \frac{403}{1 + 403(0.1)^2}$$

$$n = \frac{403}{1 + 4.03}$$

$$n = \frac{403}{5.03}$$

$$n = 80 \quad (\text{Eq. 1})$$

The population in this study consists of all 403 students from grades X and XI at State Vocational School 1 Purwokerto, covering students from various departments. Due to the relatively large size of the population, it was not feasible for the researcher to examine the entire population directly. Therefore, a representative sample was selected using the simple random sampling technique, which is a sampling method where each member of a homogeneous population or one with relatively similar characteristics has an equal chance of being selected as a respondent (Garaika & Darmanah, 2019). To determine the sample size from a known population, the researcher used the Slovin formula with a margin of error of 10%. Based on the results of the calculation, the sample size used in this study is 80 students. The questionnaire instrument distributed to the respondents is as follows Table 1.

Table 1. Questionnaires in this study

No	Statement	SA	A	N	D	SD
Questionnaire on school principal's leadership strategy (variable X)						
1	The principal demonstrates exemplary Islamic behavior.					
2	The principal encourages regular religious activities at school.					
3	The principal is fair in making decisions.					
4	The principal listens to students' and teachers' aspirations.					
5	The principal is friendly and open toward students.					
6	The principal actively communicates with teachers and students.					
7	The principal directs teachers to instill Islamic values.					
8	The principal motivates students to improve their character.					
9	The principal sets an example in performing religious practices at school.					
10	The principal gives recognition for students' achievements and good behavior.					
11	The principal rarely demonstrates good Islamic behavior.					
12	Religious activities at school lack support from the principal.					
13	The principal often acts unfairly in making decisions.					
14	The principal is not open to students' aspirations.					
15	The principal often appears unfriendly and distant toward students.					
16	Communication between the principal and students is ineffective.					
17	The principal pays little attention to the importance of Islamic values.					
18	The principal rarely motivates students to improve their character.					
19	The principal does not exemplify religious practices at school.					
20	The principal never gives recognition for good student behavior.					
Questionnaire on students' islamic character (variable Y)						
21	I perform prayers on time, especially during school.					
22	I always speak the truth in all situations.					
23	I treat my friends with politeness and respect.					
24	I am willing to help friends who are in difficulty.					
25	I follow school rules as part of my responsibility.					
26	I habitually recite prayers before and after studying.					
27	I show tolerance toward friends from different backgrounds.					
28	I respect teachers as a form of adab in Islam.					
29	I keep the school environment clean.					
30	I take the Prophet Muhammad (PBUH) as a role model in behavior.					
31	I often delay or skip prayers, especially at school.					
32	I sometimes lie to avoid problems.					
33	I often act rudely or disrespectfully toward friends.					
34	I don't care if a friend is in trouble.					
35	I don't feel it is necessary to strictly follow school rules.					
36	I rarely pray before or after studying.					
37	I feel uncomfortable socializing with friends from different backgrounds.					
38	I don't always respect teachers in every situation.					
39	I often litter at school.					
40	I don't really care about emulating the character of Prophet Muhammad (PBUH).					

*Note: SA = Strongly Agree, A = Agree, N = Neutral, D = Disagree, SD = Strongly Disagree

3. Results and Discussion

3.1 Instrument validity and reliability testing

According to Gronlund & Linn (1990), validity refers to the accuracy of the interpretations made from the results of measurement or evaluation. The validity of an instrument can be calculated using the product-moment correlation formula, also known as Pearson's correlation (Widodo et al., 2023). A research instrument can function optimally

as a data collection tool if it possesses sufficient quality, ensuring that the resulting data is trustworthy and reliable. An instrument with high reliability indicates that it is consistent and appropriate for measuring the variables under study, as well as effective in capturing accurate data.

Reliability originates from the word reliable, which means trustworthy. Reliability is often interpreted as consistency or stability, accuracy, and dependability. A research instrument is considered to have a high level of reliability if the test results produced by the instrument are consistent or stable concerning the construct being measured (Machali, 2021). The assessment of reliability aims to ensure that the instrument can produce relatively stable and consistent results when used under similar conditions. To examine the level of reliability of the instrument, this study employs the Cronbach's Alpha coefficient formula, which is expressed as follows Equation 2.

$$\alpha = \left(\frac{K}{K-1} \right) \left[1 - \frac{\sum S_i^2}{S_t^2} \right] \quad (\text{Eq. 2})$$

K refers to the mean square between subjects, which indicates the average variation among subjects in the analysis. Meanwhile, $\sum S_i^2$ represents the mean square error, reflecting the average error or within-group variation. Finally, S_t^2 denotes the total variation, which describes the overall variability of the data being analyzed.

The alpha formula is used to determine the reliability level of an instrument, where the resulting reliability value ranges from 0 to 1, but is never exactly 0 or 1. An instrument can be considered reliable if the cronbach's alpha coefficient is greater than 0.60. This value indicates that each item in the instrument has a sufficiently significant level of internal consistency in measuring the intended variable. The basis for evaluating reliability testing based on the cronbach's alpha coefficient can be explained as follows Table 2.

Table 2. Reliability test evaluation criteria based on cronbach's alpha coefficient values

Reliability Coefficient	Interpretation
$\alpha \geq 0.90$	Very reliable
$0.80 \leq \alpha < 0.90$	Reliable
$0.70 \leq \alpha < 0.80$	Fairly Reliable
$0.60 \leq \alpha < 0.70$	Less reliable, but still acceptable
$\alpha < 0.60$	Not Reliable

Thus, the higher the cronbach's alpha value, the greater the reliability of the instrument in measuring a construct. Below are the results of the validity and reliability tests for each instrument variable. As shown in Table 3, to ensure the quality of the research instrument, the researcher conducted validity and reliability tests on the items used to measure Variable X, namely the school principal's leadership strategy.

The validity test was carried out using the pearson product-moment correlation technique between the score of each item and the total score. Based on the results of the analysis, all statement items from question number 1 to 20 had correlation coefficient (r-calculated) values greater than the r-table value of 0.2199, at a degree of freedom (df) of $N-2 = 80-2 = 78$, with a 5% significance level. The correlation coefficients ranged from 0.360 to 0.770, and all significance values were below 0.05. Therefore, it can be concluded that all instrument items have adequate validity and are statistically significant in measuring the construct of the school principal's leadership strategy.

Table 3. Validity test results of each item in variable X instrument

No	Instrument / Questionnaire Item	r calculated	r Table (0.05)	Remarks
1	Question01	0.510	0.2199	Valid
2	Question02	0.503	0.2199	Valid
3	Question03	0.491	0.2199	Valid
4	Question04	0.390	0.2199	Valid
5	Question05	0.360	0.2199	Valid

6	Question06	0.391	0.2199	Valid
7	Question07	0.398	0.2199	Valid
8	Question08	0.381	0.2199	Valid
9	Question09	0.405	0.2199	Valid
10	Question10	0.450	0.2199	Valid
11	Question11	0.630	0.2199	Valid
12	Question12	0.643	0.2199	Valid
13	Question13	0.693	0.2199	Valid
14	Question14	0.681	0.2199	Valid
15	Question15	0.765	0.2199	Valid
16	Question16	0.770	0.2199	Valid
17	Question17	0.745	0.2199	Valid
18	Question18	0.785	0.2199	Valid
19	Question19	0.674	0.2199	Valid
20	Question20	0.699	0.2199	Valid

Subsequently, to assess the internal consistency of the instrument, a reliability analysis was conducted using Cronbach's Alpha coefficient. The data analysis results showed that the Cronbach's Alpha value for the 21 complete statement items with the total score was 0.742. According to the interpretation criteria for alpha values, this figure falls within the range of $0.70 \leq \alpha < 0.80$, which is categorized as 'adequately reliable'. This indicates that the instrument has a good level of internal consistency, making it capable of providing stable and dependable measurement results. The reliability test results for variable X are presented in Table 4 below.

Table 4. Reliability test results of the instrument for variable X

Cronbach's Alpha	N of Items
0.742	21

Then, Table 5 below provides a more detailed explanation of the results of the item-total statistics, which show that all items have a Corrected Item-Total Correlation value above 0.30 the minimum threshold indicating that each item is adequately correlated with the total score. This value signifies that each statement contributes positively to the overall construct of the variable. Furthermore, the Cronbach's Alpha if Item Deleted values do not show a significant increase if any item is removed, indicating that each item is relevant and supports the overall reliability of the instrument.

Table 5. Item-total statistics results

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Question01	117.49	233.367	0.480	0.733
Question02	117.54	234.707	0.396	0.735
Question03	117.53	232.455	0.467	0.732
Question04	117.60	232.825	0.470	0.732
Question05	117.55	233.238	0.474	0.733
Question06	117.78	234.379	0.359	0.735
Question07	117.63	233.199	0.417	0.733
Question08	117.59	235.334	0.381	0.735
Question09	117.63	234.288	0.400	0.734
Question10	117.59	232.980	0.411	0.733
Question11	120.03	227.063	0.443	0.728
Question12	120.44	233.819	0.426	0.734
Question13	120.31	228.218	0.622	0.726
Question14	120.10	226.876	0.607	0.725
Question15	120.25	230.038	0.539	0.729
Question16	120.18	226.526	0.676	0.724
Question17	120.33	230.020	0.582	0.729
Question18	120.33	227.564	0.650	0.725

Question19	120.33	228.653	0.649	0.727
Question20	120.34	227.948	0.615	0.726
Total	60.99	60.696	1.000	0.869

Overall, the results of the validity and reliability tests provide empirical evidence that the instrument used to measure the school principal's leadership strategy meets the criteria for a high-quality research instrument. Therefore, this instrument is deemed appropriate for use in data collection to measure variable X accurately and consistently in this study.

Furthermore, as shown in Table 6 below, the instrument used to measure variable Y, namely students' Islamic character, consists of 20 statement items that cover aspects of students' religious attitudes and behaviors within the school context. To test the validity of this instrument, a Pearson Product Moment correlation analysis was conducted between each item score and the total score of variable Y. Before the analysis, several negatively worded items specifically items 21 to 40 were processed using a reverse scoring procedure to ensure that the direction of measurement aligns with the construct of the variable. This step is essential to prevent responses to negatively worded statements from distorting the data structure and resulting in unrepresentative correlation values.

Table 6. Validity test results for each questionnaire item of variable Y

No	Instrument / Questionnaire Item	r calculated	r Table (0.05)	Remarks
1	Question21	0.401	0.2199	Valid
2	Question22	0.342	0.2199	Valid
3	Question23	0.247	0.2199	Valid
4	Question24	0.360	0.2199	Valid
5	Question25	0.319	0.2199	Valid
6	Question26	0.301	0.2199	Valid
7	Question27	0.276	0.2199	Valid
8	Question28	0.300	0.2199	Valid
9	Question29	0.290	0.2199	Valid
10	Question30	0.380	0.2199	Valid
11	Question31	0.580	0.2199	Valid
12	Question32	0.533	0.2199	Valid
13	Question33	0.598	0.2199	Valid
14	Question34	0.530	0.2199	Valid
15	Question35	0.572	0.2199	Valid
16	Question36	0.601	0.2199	Valid
17	Question37	0.624	0.2199	Valid
18	Question38	0.608	0.2199	Valid
19	Question39	0.740	0.2199	Valid
20	Question40	0.680	0.2199	Valid

After the data were corrected, the results of the validity test indicated that all statement items had correlation coefficients greater than the r-table value of 0.2199 ($df = 78$; $\alpha = 0.05$). The correlation values ranged from 0.247 to 0.740, with all significance values below 0.05. Therefore, it can be concluded that all items in the variable Y instrument have statistically significant validity and are capable of accurately representing the construct of students' Islamic character. These findings reinforce that the instrument used has undergone a thorough process of construction and verification and is suitable for use as a measurement tool in data collection for the research.

After the instrument for variable Y underwent a correction process through reverse scoring of the negative items, a reliability analysis was conducted to ensure internal consistency among the items in measuring the construct of students' Islamic character. The reliability test, using the Cronbach's Alpha method, yielded a value of 0.729 across 21 items, indicating that the instrument falls into the category of moderately reliable (Tavakol & Dennick, 2011). This value indicates that although it does not reach a high level of reliability, the instrument has met the minimum acceptable standard within the context of social and educational research. This can be seen in Table 7.

Table 7. Reliability test results for variable Y

Cronbach's Alpha	N of Items
0.729	21

Subsequently, as detailed further, the results of the item-total statistics presented in Table 8 show variations in the contribution of each item to the overall scale. The Corrected Item-Total Correlation values for most items exceed the threshold of 0.30, indicating that these items have a sufficient correlation with the construct being measured. Several items, such as items 33 to 40, in particular, demonstrate strong correlations above 0.50, with item 34 reaching as high as 0.673 and item 40 at 0.651. This indicates that these items are highly representative of the Islamic character construct.

Table 8. Results of item-total statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Question21	172.63	145.528	.366	.722
Question22	172.70	147.580	.188	.727
Question23	172.46	145.872	.394	.723
Question24	172.60	145.635	.272	.724
Question25	172.45	148.276	.164	.728
Question26	172.53	146.759	.282	.725
Question27	172.45	146.149	.374	.723
Question28	172.56	146.882	.262	.725
Question29	172.59	147.435	.209	.727
Question30	172.53	146.050	.347	.723
Question31	173.20	145.757	.195	.726
Question32	173.25	143.962	.322	.721
Question33	173.00	138.000	.566	.708
Question34	173.05	137.567	.673	.706
Question35	172.98	137.746	.636	.707
Question36	173.04	139.885	.509	.712
Question37	173.01	138.772	.604	.709
Question38	172.95	138.453	.633	.708
Question39	173.05	137.365	.720	.705
Question40	172.88	137.073	.651	.705
TOTAL	88.61	37.531	1.000	.818

As previously explained, several items, such as items 33 to 40, specifically demonstrated strong correlations above 0.50. However, some items require critical attention. Item 22, with a correlation coefficient (r) of 0.188, item 25 with $r=0.164$, and item 29 with $r=0.209$, show relatively low correlations with the total score. This may indicate that these items contain ambiguous statements, linguistic mismatches with the students' context, or lack substantive relevance to the intended dimensions of Islamic character. Nevertheless, the results of the 'Cronbach's Alpha if Item Deleted' analysis indicate that removing these items would not significantly increase the overall alpha value. Therefore, from a statistical perspective, these items can still be retained.

The presence of items with low correlation should be taken into consideration in the further development of the instrument. Overall, the instrument for variable Y demonstrates an acceptable level of reliability, with the majority of items showing good internal consistency. This supports the confidence that the instrument is capable of consistently measuring the construct of students' Islamic character. Nonetheless, editorial revisions to several low-correlation items are still recommended for future instrument refinement.

3.2 Prerequisite tests for analysis (normality test and linearity test)

According to Ananda & Fadhli (2018) the normality test aims to determine how data are distributed within a population, specifically whether the data follow a normal

distribution or not. In general, data can be categorized into two types of distribution: normally distributed data and non-normally distributed data. Refer to the Table 9 below.

Table 9. Results of the normality test using the one-sample kolmogorov-smirnov test

		Unstandardized Residual
N		80
Normal Parameters ^{a,b}	Mean	0.0000000
	Std. Deviation	5.71219977
Most Extreme Differences	Absolute	0.090
	Positive	0.077
	Negative	-0.090
Test Statistic		0.090
Asymp. Sig. (2-tailed) ^c		0.168
Monte Carlo Sig. (2-tailed) ^d	Sig.	0.113
	99% Confidence Interval	Lower Bound 0.105
		Upper Bound 0.122

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. Lilliefors' method based on 10000 Monte Carlo samples with starting seed 926214481.

Based on the results of the One-Sample Kolmogorov-Smirnov test presented in Table 9, the Asymp. Sig. (2-tailed) The value is 0.168, which exceeds the significance threshold of 0.05. This indicates that there is insufficient evidence to reject the null hypothesis (H_0), which states that the residuals are normally distributed. Therefore, it can be concluded that the residuals of the regression model are statistically normally distributed. Furthermore, the K-S statistic value of 0.090, along with the relatively symmetrical distribution of the maximum and minimum residual values, positive 0.077 and negative -0.090, further supports the notion that the residual distribution does not exhibit extreme deviations from normality. This result suggests that the linear regression model used in this study meets the assumption of residual normality, allowing for the regression analysis to be continued and interpreted within the context of statistical inference. Thus, the use of simple linear regression is appropriate for analyzing the relationship between the school principal's leadership strategy and students' Islamic character.

After conducting the normality tests for both variables, variable X and variable Y, the analysis proceeded to the linearity test. The results of the ANOVA analysis, as presented in the ANOVA table, indicate that the school principal's leadership strategy has a significant influence on students' Islamic values. This is evidenced by an F-value of 3.946 and a significance level (p-value) of 0.044 in the between groups (combined) row. Since the significance value is less than 0.05, it can be statistically concluded that there is a significant relationship between the school principal's leadership strategy and students' Islamic character in Table 10.

Table 10. Results of the linearity test between variable X and variable Y

			Sum of Squares	df	Mean Square	F	Sig.
students' Islamic character * principal's leadership strategy	Between Groups	(Combined)	2904.487	73	39.787	3.946	0.044
		Linearity	310.559	1	310.559	30.799	0.001
		Deviation from Linearity	2593.928	72	36.027	3.573	0.055
	Within Groups		60.500	6	10.083		
	Total		2964.987	79			

The results of the linearity test further support these findings, as shown in the data presented above. The significance value for linearity is 0.001, which is less than 0.05, indicating that the relationship between the principal's leadership strategy (X) and students' Islamic values/character (Y) is statistically linear. Meanwhile, the significance

value for deviation from linearity is 0.055, which is greater than 0.05. This suggests that there is no significant deviation from the linear model, thereby confirming that the linear relationship between the two variables is appropriate.

These findings align with the perspective of Setiawan & Yosepha (2020), who assert that the linearity test aims to determine whether the relationship between the independent and dependent variables is statistically linear—an essential prerequisite in correlation or linear regression analysis. According to the decision-making guidelines proposed by Setiawan and Yosepha, a relationship between two variables is considered linear if the probability value in the Deviation from Linearity test exceeds 0.05. In this study, the probability value of 0.055 meets that criterion, indicating that the relationship between the school principal's leadership strategy and students' Islamic values is both linear and significant. Therefore, it can be concluded that the school principal's leadership strategy not only has a significant influence on strengthening students' Islamic values but also follows a linear pattern that can be further analyzed through a regression model. This provides practical implications: systematically improving the quality of school leadership has the potential to consistently enhance students' Islamic character.

3.3 Simple linear regression analysis test

This study aims to examine whether there is a significant influence of the principal's leadership strategy on students' Islamic values. Based on the results of the simple linear regression analysis, several noteworthy findings were obtained, which warrant further examination and are presented in the Table 11 below.

Table 11. ANOVA model significance test results

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	310.559	1	310.559	9.126	0.003 ^b
	Residual	2654.428	78	34.031		
	Total	2964.988	79			

a. Dependent variable: Students' islamic character

b. Predictors: (Constant), Principal's Leadership Strategy

Based on the ANOVA output, the F value is 9.126 with a significance level of $p = 0.003$. Since the significance value is less than 0.05, the regression model is statistically significant. This indicates that the principal's leadership strategy significantly explains the variation in students' Islamic character. Therefore, the decision regarding the null hypothesis (H_0) is:

Since $p < 0.05$, the alternative hypothesis (H_a) is accepted and the null hypothesis (H_0) is rejected. This means that there is a significant relationship between the principal's leadership strategy and students' character. Furthermore, this can be seen in the next table, namely Table 12, which presents the model summary below.

Table 12. Results of the relationship strength test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.324 ^a	0.105	0.093	5.834

a. Predictors: (Constant), principal's leadership strategy

b. Dependent variable: Students' islamic character

From the results of the relationship strength test (model summary), the coefficient of determination (R^2) was found to be 0.105. This indicates that 10.5% of the variation in students' Islamic values can be explained by the principal's leadership strategy, while the remaining 89.5% is influenced by other factors outside the model, such as family environment, peer interactions, teaching methods, and school culture. The correlation coefficient (R) value of 0.324 indicates a weak yet statistically significant relationship. Furthermore, an interesting point for researchers to note is the result of the regression coefficient analysis, from which the following regression Equation 3 was obtained.

$$Y = 103,485 - 0,244X \quad (\text{Eq. 3})$$

Based on the table, the regression equation has been obtained and can be interpreted as follows, 1) The constant value (a) of 103.485 indicates that when the school principal's leadership strategy is at zero, the students' Islamic character is estimated to be 103.485. 2) The regression coefficient (b) of -0.244 means that for every one-unit increase in the school principal's leadership strategy, the students' Islamic character decreases by 0.244 points. In other words, the relationship between the two variables is negative. The results of the t-test in the coefficient Table 13.

Table 13. Regression coefficient analysis results

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	103.485	4.966		20.837	0.000
	Principal's Leadership Strategy	-0.244	0.081	-0.324	-3.021	0.003

a. Dependent variable: Students' islamic character

The t-value is -3.021 with a significance value (Sig.) of 0.003. Since the significance value is less than 0.05, the regression coefficient is statistically significant. This indicates that the school principal's leadership strategy has a significant effect on students' Islamic character, although the direction of the effect is negative. As previously mentioned in the ANOVA results, H_0 is therefore rejected and H_a is accepted, meaning that there is a significant influence of the school principal's leadership strategy on students' Islamic character. The correlation coefficient value (r) of 0.324 indicates a weak relationship between the school principal's leadership strategy and students' Islamic character. However, the direction of the regression coefficient (b), which is negative, shows that the actual relationship is weak and negative. This is further supported by the standardized Beta value of -0.324 in the regression output. According to theory, if r approaches +1, it indicates a strong positive relationship; if r approaches -1, it indicates a strong negative relationship; and if r approaches 0, it indicates a weak or no relationship. In this study, the values of r and the Beta coefficient indicate a weak and negative relationship, which theoretically does not support the assumption that better leadership strategies lead to improved student character.

Based on the simple linear regression analysis and relevant theories, it can be concluded that the school principal's leadership strategy has a statistically significant influence on students' Islamic character, although the effect is negative and relatively small, accounting for only 10.5%, with the rest influenced by other variables. The weak and negative relationship suggests that the leadership strategy applied in this context may potentially reduce students' Islamic character, especially if the leadership style is overly authoritarian, lacks collaboration, or is not directly rooted in Islamic values. These findings imply the need for a re-evaluation of current leadership strategies, emphasizing the importance of a transformative, spiritual, and participatory approach. Furthermore, principals should actively involve teachers, students, and the community in fostering an ecosystem of Islamic values, as strategies that focus solely on administrative control without moral engagement and role modeling may adversely affect students' character development.

3.4 Principal leadership strategy in shaping students' islamic character

The principal's leadership strategy at State Vocational School 1 Purwokerto, which is implemented through role modeling, open communication, motivation, and the habituation of religious activities such as Dhuha prayer, communal Qur'an recitation, and daily prayers, represents a form of both transformational and spiritual leadership. This strategy reflects

the indicators of idealized influence and inspirational motivation (Amini, 2025; Prabowo, 2024), and also demonstrates that the principal serves not only as an administrative manager but also as a moral and values-based leader.

This is in line with the findings of Naningsih & Hanif (2024). This aligns with the findings of researchers who emphasize that religious communication and teachers' role modeling in conveying Islamic messages from an early age play a significant role in shaping children's religious values. In their study at BA Aisyiyah Gumiwang, the communication of religious values through speech, actions, and simple habits such as greetings, prayers, and polite language served as the foundation for developing Islamic character. This indicates that the internalization of values cannot rely solely on formal rules, but requires empathetic and consistent value-based communication, an aspect also emphasized in the school principal's leadership in this study. Furthermore, the findings of this study reveal that the principal's strategy has not yet fully addressed the affective dimension of students, although habituation activities are one of the most effective approaches to character formation. In this regard, Kusriani & Hanif (2024) demonstrate how the habituation of religious activities such as regular Islamic study sessions, short-term Islamic boarding programs (*pesantren kilat*), and communal work (*gotong royong*) at Marsudi Karya Community Learning Activity Center/*Pusat Kegiatan Belajar Masyarakat* (PKBM) can effectively instill values of religiosity, independence, responsibility, and integrity. This is relevant to the principal's strategy, which also emphasizes regular spiritual activities. However, it needs to be enhanced beyond mere formality into a deeper process of value internalization by actively and reflectively involving both teachers and students.

Further support comes from the study conducted by Ma'arif et al. (2022). Further support comes from a study on multicultural Islamic education at Al-Hikam Islamic boarding school, which revealed that students' character was strongly shaped through the habituation of an Islamic way of life that embraces diversity such as mutual respect, cooperation, honesty, and tolerance. These findings affirm that leadership strategies in multicultural contexts must integrate both spiritual and humanistic approaches. Principals in general schools, such as vocational high schools, can learn from these *pesantren* practices by prioritizing character formation through Islamic, moderate, and collective life experiences. Thus, these three studies provide both conceptual and contextual foundations, indicating that an effective leadership strategy goes beyond the planning of religious programs. It must be realized through value-based communication, consistent habituation, and genuine role modeling, all within the spirit of multiculturalism and holistic Islamic spirituality.

3.5 *The Islamic character of students in a multicultural school environment*

The Islamic character of students at State Vocational School 1 Purwokerto is examined through indicators such as discipline in worship, honesty, tolerance, social concern, and respect toward teachers. The results of the questionnaire indicate that most students demonstrate fairly good Islamic character in aspects of worship and courtesy, but still show weaknesses in honesty, social concern, and cleanliness. In Islam, character is understood as behavior (*akhlak*) that reflects a balance between moral values, reason, and spiritual habituation. The inculcation of these values is carried out continuously through the family, school, and wider community (Alhamuddin et al., 2022).

The holistic approach, which emphasizes honesty, discipline, responsibility, and empathy, plays a significant role in shaping students' character (Hidayat & Janan, 2023). Several test items with low correlation indicate that these values have not been consistently internalized. Islamic education plays a central role in shaping students' personality and behavior through the integration of values from *aqidah*, *fiqh*, and *akhlak*. The article also emphasizes Al-Ghazali's view that character (*akhlak*) is formed through continuous habituation without the need for repeated deliberation (Pamuji & Mulyadi, 2024).

These findings indicate that Islamic character education in multicultural schools faces challenges in shaping students who not only understand but also fully practice Islamic

values. This aligns with the thought of Hermawan (2020) who stated that Islamic character is a manifestation of practicing Islamic values, which must be developed through habituation rather than mere normative memorization. In a multicultural context, tolerance becomes a crucial aspect of students' character. The cultivation of this value reflects the dimensions of character as formulated by Sabhana et al. (2025) namely, the ability to live harmoniously and respectfully within diversity. Therefore, the development of Islamic character in a heterogeneous environment such as State Vocational School 1 Purwokerto must prioritize inclusive values that do not negate or marginalize diversity.

3.6 The influence of leadership strategies on students' islamic character

Simple linear regression analysis shows a significant influence between the principal's leadership strategy and students' Islamic character, with a significance value of 0.003 (<0.05). However, the negative regression coefficient (-0.244) indicates that the measured increase in leadership strategy is negatively correlated with students' Islamic character. This is an interesting finding, suggesting that the strategies implemented may be misaligned or have not fully addressed the students' spiritual aspects on a personal level. Based on transformational leadership theory Thomas (2025), an effective leader should be able to enhance the moral, spiritual, and ethical commitment of their followers. However, in this context, it can be assumed that the approach being implemented may be too administrative or formalistic, thus failing to deeply reach the personal and spiritual dimensions of the students. This is also in line with Al-Ghazali's perspective, which emphasizes that the development of akhlak (character) must be achieved through psychological habituation and direct role modeling (Mukarromah et al., 2022). If leadership strategies are predominantly rule-oriented and do not provide sufficient space for spiritual or personal approaches, the internalization of values will not occur optimally.

Similarly, Ibn Miskawayh emphasized the importance of character education as a process of balancing emotion and reason through ethical habituation and exemplary conduct (Hanifah & Bakar, 2024). In this context, the principal needs to evaluate the strategies being used to ensure they more effectively address the students' affective dimension and foster value-based communication in a more personal and transformative manner. Research conducted by (Novikasari & Ulpah, 2022) supports this view, showing that the integration of Islamic context into learning enhances students' understanding of mathematical concepts while also fostering greater interest in learning. Although the study was conducted at the university level, its findings indicate that Islamic values integrated into the learning experience have strong potential to support the development of religious character. Therefore, school leadership strategies should not focus solely on regulation and structure, but also strive to create a learning ecosystem that is contextually and practically infused with Islamic values.

4. Conclusions

Based on the research findings, it can be concluded that the principal's leadership strategy at State Vocational School 1 Purwokerto is generally implemented through an approach that emphasizes role modeling, effective communication, teacher empowerment, and habituation of Islamic programs. This strategy reflects transformational and spiritual leadership styles, as described in the theories of Bass and Al-Ghazali. However, its influence on the development of students' Islamic character has proven to be non-linear and even shows a negative correlation. This means that, although statistically significant, the strategies implemented have not yet been effective in optimally shaping students' Islamic character. Students' character in the multicultural school environment exhibits considerable variation, particularly in aspects such as honesty, tolerance, and social responsibility, which need to be strengthened through a more humanistic and participatory value-based approach.

The regression results show that only 10.5% of the variation in students' Islamic character can be explained by the principal's leadership strategy. This indicates the presence of other more dominant factors, such as the family environment, the role of Islamic education teachers, peer culture, and social media. A limitation of this study lies in its focus on a single school and the dominance of a quantitative approach without in-depth qualitative exploration of the subjective meaning of leadership strategies. Therefore, this study recommends the development of a leadership model based on Islamic values that is more contextual and participatory within multicultural environments. Moving forward, the findings of this research are expected to serve as a foundation for developing principal leadership training programs that emphasize the integration of spiritual role modeling, empathetic communication, and cross-cultural and inter-value collaboration in shaping students' religious character that is adaptive in the era of pluralism.

Acknowledgement

The authors respectfully extends gratitude to the reviewers for their constructive critiques and insightful suggestions, which have significantly enhanced the quality of this manuscript. Additional appreciation is also conveyed to colleagues and mentors for their valuable guidance and support throughout the research process.

Author Contribution

The authors contributed to the study's conception, design, data collection, analysis, and manuscript preparation. Each author participated in drafting, reviewing, and approving the final version of the manuscript for publication.

Funding

This research received no external funding.

Ethical Review Board Statement

Not available.

Informed Consent Statement

Not available.

Data Availability Statement

Not available.

Conflicts of Interest

The authors declare no conflict of interest.

Open Access

©2025. The author(s). This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made. The images or other third-party material in this article are included in the article's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this license, visit: <http://creativecommons.org/licenses/by/4.0/>

References

Ahmad, B., & Laha, M. S. (2020). Penerapan Studi Lapangan Dalam Meningkatkan Kemampuan Analisis Masalah (Studi Kasus Pada Mahasiswa Sosiologi IISIP YAPIS

- Biak) Implementation Of Field Studies To Improve Problem Analysis Ability (Case Study In The Student Sociology IISIP YAPIS Biak). *Jurnal Nalar Pendidikan*, 8(1), 1295–1307. <http://dx.doi.org/10.26858/jnp.v8i1.13644>
- Alhamuddin, A., Surbiantoro, E., & Erlangga, R. D. (2022). Character Education in Islamic Perspective. *Proceedings of the 4th Social and Humanities Research Symposium (SoRes 2021)*, 658(SoRes 2021), 326–331. <https://doi.org/10.2991/assehr.k.220407.066>
- Amini, N. A. (2025). Gaya Kepemimpinan Transformasional Digital Dalam Pengembangan Sumber Daya Manusia. *JEMSI: Jurnal Ekonomi Manajemen Sistem Informasi*, 6(4), 2596–2603. <https://doi.org/10.38035/jemsi.v6i4>
- Ananda, R., & Fadhli, M. (2018). *Statistik Pendidikan (Teori dan Praktik Dalam Pendidikan)* (S. Saleh (ed.); 1st ed.). CV. Widya Puspita.
- Baruno, Y. H. E., Loes, J., & Padama, Y. (2025). The Role Of Principal Leadership In Building An Inclusive School Culture To Support Social Room Education. *Indonesian Journal of Education (INJOE)*, 5(1), 136–147. <https://injoe.org/index.php/INJOE/article/view/199>
- Garaika, & Darmanah. (2019). *Metodologi Penelitian* (1st ed.). CV. Hira Tech.
- Handayani, D., Anshori, M. F. albakhar, Triani, S., & Nurlaili. (2024). The Role Of School Principals In Creating Multicultural Education In The School Employee Environment. *Santhet: Jurnal Sejarah, Pendidikan Dan Humaniora*, 8(2), 2376–2383. <https://doi.org/10.36526/js.v3i2.4681>
- Hanifah, S., & Bakar, M. Y. A. (2024). Konsep Pendidikan Karakter dalam Pemikiran Ibnu Miskawaih : Implementasi pada Pendidikan Modern. *Journal of Education Research*, 5(4), 5989–6000. <https://doi.org/10.37985/jer.v5i4.1831>
- Hermawan, I. (2020). Konsep Nilai Karakter Islami sebagai Pembentuk Peradaban Manusia. *Southeast Asian Journal of Islamic Education Management*, 1(2), 147–154. <https://doi.org/10.21154/sajiem.v1i2.24>
- Ifnaldi, Saartika, D., & Handijaya, Y. (2025). Kepemimpinan dalam pendidikan Multikultural. *TA'LIM: Jurnal Studi Pendidikan Islam*, 8(1), 91–106. <https://doi.org/10.52166/talim.v8i1.8787>
- Inton, R., Suprpto, T., Hariyati, N., Dewi, U., Khamidi, A., & Amalia, K. (2024). Pengaruh Kepemimpinan Transformasional Kepala Sekolah Terhadap Pendidikan Multikultural. *JIGE: Jurnal Ilmiah Global Education*, 5(4), 1940–1953. <https://doi.org/10.55681/jige.v5i4.3334>
- Kusrini, E., & Hanif, M. (2024). Memperkuat Pendidikan Karakter dengan Melibatkan Kegiatan Pembiasaan dalam Program Paket C (Ketaraan SMA) di Lembaga PKBM Marsudi Karya Beji Kecamatan Kedungbanteng. *Global: Jurnal Ilmiah Multidisiplin*, 1(1), 11–19. <https://doi.org/10.37985/wdd9ve37>
- Hidayat, M. W., & Janan, M. (2023). Enhancing moral integrity: Islamic education's role in fostering superior character within Islamic boarding school management. *Managere: Indonesian Journal of Educational Management*, 5(2), 155–164. <https://doi.org/10.52627/managere.v5i2.334>
- Ma'arif, A. S., Ghony, D., & Mistar, J. (2022). Optimization of Multicultural Islamic Education in Building Student Character. *International Journal of Current Science Research and Review*, 05(09), 3705–3710. <https://doi.org/10.47191/ijcsrr/v5-i9-53>
- Machali, I. (2021). *Metode Penelitian Kuantitatif Panduan Praktis Merencanakan, Melaksanakan, dan Analisis dalam Penelitian Kuantitatif* (A. Q. Habib (ed.); 3rd ed.). Universitas Islam Negeri (UIN) Sunan Kalijaga Yogyakarta.
- Mahmud, M. E. (2023). The Strategy of School Principal to Promote Multicultural Education in Islamic High Schools in Samarinda. *Journal of Education*, 23(1), 23–36. <https://doi.org/10.21093/di.v23i1.6329>
- Marwa, M., & Abbas, M. F. F. (2023). Pelatihan Penelitian Lapangan Mahasiswa ABA and STIBA Persada Bunda Pekanbaru. *COMSEP: Jurnal Pengabdian Kepada Masyarakat*, 4(1), 1–8. <https://doi.org/10.54951/comsep.v4i1.331>
- Mayadah, U. (2022). Positivisme Auguste Comte. *Paradigma: Jurnal Kalam Dan Filsafat*, 2(01), 1–12. <https://doi.org/10.15408/paradigma.v2i01.26576>

- Mubarok, J. (2023). Paradigma Positivisme Dan Pospositivisme Dalam Kebaharuan Penelitian Arsitektur Dan Perkotaan. *Jurnal Ilmiah Arsitektur*, 13(1), 11–21. <https://doi.org/10.32699/jiars.v13i1.3710>
- Mukarromah, Rohman, & Sartika, R. (2022). Pendidikan Karakter Perspektif Al-Ghazali (Analisis terhadap Pemikiran al-Ghazali tentang Pendidikan Karakter Sebagai Solusi Problem Dekadensi Moral dan Signifikansinya dalam Pendidikan di Indonesia). *Tila: Jurnal Pendidikan Islam Anak Usia Dini*, 2(2), 302–323. <https://doi.org/10.56874/tila.v2i2.1073>
- Mulyani, S. R. (2021). *Metodologi Penelitian* (1st ed.). Widina Bhakti Persada Bandung.
- Naningsih, S., & Hanif, M. (2024). Komunikasi Pesan Religius Untuk Penanaman Nilai-Nilai Islam Pada Anak Usia Dini Di BA Aisyiyah Gumiwang. *NUSRA: Jurnal Penelitian Dan Ilmu Pendidikan*, 5(3), 1–23. <https://doi.org/10.55681/nusra.v5i3.3035>
- Novikasari, I., & Ulpah, M. (2022). The Development of Islamic Context Learning Materials to Facilitate the Conceptual Understanding of Mathematics. *JTAM (Jurnal Teori Dan Aplikasi Matematika)*, 6(3), 488. <https://doi.org/10.31764/jtam.v6i3.8364>
- Pamuji, S., & Mulyadi, Y. (2024). Formation Of Students' Character Through Islamic Education. *International Journal of Islamic Thought and Humanities*, 3(1), 26–35. <https://doi.org/10.54298/ijith.v3i1.183>
- Prabowo, A. S. (2024). Penerapan Spiritual Leadership Kepala Sekolah Dalam Pengambilan Keputusan Di SMA Al Hikmah Surabaya. *Educational Journal of Islamic Management (EJIM)*, 4(2), 45–52. <https://doi.org/10.47709/ejim.v4i2.5258>
- Sabhana, M., Taufikurrahman, O., & Rusmana, D. (2025). Revitalisasi Pendidikan Agama Islam dalam Membangun Karakter Siswa, Studi kasus di MTs BAitul Arqom. *Reflection : Islamic Education Journal*, 2(1), 10–21. <https://doi.org/10.61132/reflection.v2i1.364>
- Setiawan, C. K., & Yosepha, S. Y. (2020). The Body Shop Indonesia (Studi Kasus Pada Followers Account Twitter @TheBodyShopIndo). *Jurnal Ilmiah M-Progress*, 10(1), 1–9. <https://doi.org/10.35968/m-pu.v10i1.371>
- Siroj, R. A., Afgani, W., Fatimah, Septaria, D., Zahira, G., & Salsabila. (2024). Metode Penelitian Kuantitatif Pendekatan Ilmiah untuk Analisis Data. *Jurnal Review Pendidikan Dan Pengajaran*, 7(3), 1861–1864. <https://journal.universitaspahlawan.ac.id/index.php/jrpp/article/download/32467/21663/106592>
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, 2, 53–55. <https://doi.org/10.5116/ijme.4dfb.8dfd>
- Thomas, N. D. (2025). *Relationship between the Behaviors of Transformational Leaders and Nurses Intention to Leave the Organization*. Walden University.
- Widodo, S., Ladyani, F., Asrianto, L. O., Rusdi, Khairunnisa, Lestari, S. M. P., Wijayanti, D. R., Devriany, A., Hidayat, A., Dalfian, Nurcahyati, S., Sjahriani, T., Armi, Widya, N., & Rogayah. (2023). Buku Ajar Metode Penelitian. In 1 (Ed.), *Cv Science Techno Direct*.
- Yusra, A., & Asnur, L. (2022). Pengaruh Service Quality Terhadap Repurchase Intention Konsumen di Cafe Kedai Kebun Dharmasraya. *Jurnal Pendidikan Tambusai*, 6(2), 15083–15089. <https://doi.org/10.31004/jptam.v6i2.4790>

Biographies of Authors

Fatmaya Anisa Rahmania, Islamic Education Management Study Program, UIN Prof. KH. Saifuddin Zuhri Purwokerto, Purwokerto, Central Java 53124, Indonesia.

- Email: fatmaya.rahmania@gmail.com
- ORCID: 0009-0009-5300-0745
- Web of Science ResearcherID: N/A
- Scopus Author ID: N/A
- Homepage: N/A

Ifada Novikasari, UIN Prof. KH. Saifuddin Zuhri Purwokerto, Purwokerto, Central Java 53124, Indonesia.

- Email: ifa_da@uinsaizu.ac.id
- ORCID: 0000-0002-3575-7893
- Web of Science ResearcherID: N/A
- Scopus Author ID: 57210969171
- Homepage: <https://sinta.kemdikbud.go.id/authors/profile/6081272&view=overview>