# The Influence of Leadership Style, Supervision, and Work Motivation of the Madrasah Principals on Teacher Performance in Private Madrasah Aliyah in Wanasaba Subdistrict, East Lombok Regency

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**Abstract:** This study aims to identify the influence of leadership style. supervision, and work motivation of the madrasah principals on teacher performance in Private Madrasah Aliyah (MA) in Wanasaba Subdistrict, East Lombok Regency. The research adopts a quantitative approach, with data collection conducted through questionnaires. Data analysis techniques include simple linear regression and multiple linear regression, calculated using SPSS 16.0. The results of the simple linear regression analysis are as follows: 1) There is a significant influence of the madrasah principal's leadership style on teacher performance, indicated by a sig. value of 0.000 < 0.05 and a t-value of 11.857 >1.994 (t-value > t-table), with the influence of variable X1 on Y amounting to 65.8%. 2) There is a significant influence of the madrasah principal's supervision on teacher performance, indicated by a sig. value of 0.000 < 0.05 and a t-value of 13.285 > 1.994 (t-value > t-table), with the influence of variable X2 on Y amounting to 70.7%. 3) There is a significant influence of the madrasah principal's work motivation on teacher performance, indicated by a sig. value of 0.000 < 0.05and a t-value of 11.097 > 1.994 (t-value > t-table), with the influence of variable X3 on Y amounting to 62.8%. 4) The results of the multiple linear regression analysis indicate that there is a significant combined influence of leadership style, supervision, and work motivation of the madrasah principals on teacher performance, with a sig. value of 0.000 < 0.05 and an F-value of 84.561 > 2.732(F-value > F-table), and the combined influence of X1, X2, and X3 on Y amounting to 78.1%.

**Keywords:** Character building, cultural preservation, education, local wisdom, Perang Topat, ritual, spiritual connection, transcendental communication.

### **INTRODUCTION**

Leadership in an educational organization, such as a madrasah, plays a crucial role in determining the direction and success of the institution. Leadership style, which is the way a leader directs, motivates, and supervises their subordinates, has a significant impact on teacher performance (Pacios, 2023). An effective leadership style can create a conducive work environment, enhance teacher motivation, and ultimately have a positive impact on their performance (Tavares & Almeida, 2023). Various leadership styles can be applied by a madrasah principal, ranging transformational leadership, which emphasizes change and development, to authoritarian leadership, which is more focused on control and direction (Louis & Murphy, 2023). Each style has different implications for teacher motivation and performance (Berkovich & Hassan, 2023).

Supervision is also a critical component in the educational context. Supervision refers to the efforts made by a leader to ensure that the teaching process runs according to the plans and objectives that have been set (Choi et al., 2018). In the context of madrasah, supervision often involves classroom observations, performance of teachers, evaluations and providing constructive feedback (Nguyen et al., 2023). Effective supervision functions not only as a monitoring tool but also as a means for the professional development of teachers (Y. Wang, 2023). With proper supervision, teachers can improve the quality of their teaching, which in turn will impact their overall performance (Hossny et al., 2023). Work motivation is another influences factor that greatly performance (Nasri, 2023). Work motivation can be defined as the internal and external drives that push individuals to achieve certain goals (Nasri, 2019). In madrasah, teacher work motivation can be influenced by various factors, including the rewards given by the principal, working conditions, and opportunities for professional development (Nasri, 2017). High motivation will drive teachers to work harder and with greater dedication, which will ultimately improve their performance (Nasri, 2016).

This study is of high urgency as it combines three important aspects of educational management—leadership style, supervision, and work motivation—to analyze their influence on teacher performance. In the educational context of Wanasaba, East Lombok, this study becomes particularly relevant given the strategic role of madrasah principals in improving the quality of education. Madrasah principals are not only responsible for administrative management but also for motivating and supervising teachers so they can teach effectively and efficiently. The problem context faced by madrasahs in Wanasaba includes the challenge of improving teacher performance amid various limitations. These limitations may include a lack of facilities, high workloads, and socio-economic conditions that affect teacher motivation and performance. Amid these challenges, the role of the madrasah principal becomes increasingly important as a leader who can direct and motivate teachers to remain committed to their tasks.

Several relevant previous studies have discussed the influence of leadership style, supervision, and work motivation on teacher performance. For example, a study by Herlina (2020) showed that transformational leadership style has a significant positive impact on teacher performance. Another study by Andriani and Rahmawati (2019) found that regular and constructive supervision can significantly improve teacher performance. Meanwhile, Setiawan's (2021) research emphasized the importance of work motivation as one of the main factors determining teacher performance. Although these studies have provided valuable insights, there are still gaps that need to be addressed. Most studies focus only on one aspect, such as leadership style or supervision, without considering the interaction between these three factors. Furthermore, research specifically examining the context of madrasahs in Wanasaba, East Lombok, is still very limited. Therefore, this study attempts to fill these gaps by combining the three variables into comprehensive analysis, as well as applying them in a specific local context.

The main contribution of this study is to provide a deeper understanding of how the leadership style, supervision, and work motivation of madrasah principals jointly influence teacher performance. Thus, this study is expected to serve as a reference for policymakers and madrasah principals in designing effective strategies to improve teacher performance in their institutions. Additionally, the results of this research are also expected to provide input for the development of more targeted training and supervision programs for madrasah principals and teachers in Wanasaba, East Lombok.

#### **METHOD**

This study aims to investigate the influence of leadership style, supervision, and work motivation of madrasah principals on teacher performance in private Madrasah Aliyah in Wanasaba Subdistrict, East Lombok Regency. The research methodology adopted for this study is a quantitative approach, which is suitable for measuring the relationships between variables through statistical analysis (Han et al., 2022). This section outlines the research design, population and sample, data collection methods, instruments, and data analysis techniques (Massazza et al., 2022a).

## **Research Design**

The study employs a correlational research design to explore the relationships between the independent variables (leadership supervision, and work motivation) and the dependent variable (teacher performance). This design is appropriate as it allows the researcher to quantify the extent to which the independent variables influence the dependent variable. The study also uses both simple linear regression and multiple linear regression analyses to determine the impact of each independent variable individually and collectively on teacher performance (Tiong & Palmqvist, 2023a).

## Population and Sample

The population of this study includes all teachers working in private Madrasah Aliyah in the Wanasaba Subdistrict, East Lombok Regency. Given the scope and resources available, a sample is drawn from this population to represent the entire group. The sampling technique used in this study is purposive

principals (Tiong & Palmqvist, 2023a).

sampling, focusing on teachers who have been working for at least one year in the same madrasah, as they are likely to have had sufficient exposure to the leadership style, supervision, and motivational strategies employed by their

The total number of private Madrasah Aliyah in Wanasaba Subdistrict is 10, with approximately 150 teachers in total. Based on the Krejcie and Morgan table, a sample size of 108 teachers is deemed sufficient for this population size, ensuring a 95% confidence level and a 5% margin of error. However, to account for potential non-responses or incomplete questionnaires, a total of 120 teachers are selected for the study (H. Wang et al., 2024).

#### **Data Collection Methods**

Data for this study are collected using a structured questionnaire. The questionnaire is divided into four main sections corresponding to the variables being studied:

- 1. Leadership Style: This section assesses the leadership style of the madrasah principals using items adapted from established leadership assessment tools, such as the Multifactor Leadership Ouestionnaire (MLQ). The items measure different dimensions of leadership. including transformational, transactional, and laissezfaire styles (Kotar et al., 2022).
- 2. Supervision: The supervision section includes items designed to evaluate the frequency, quality, and effectiveness of supervisory practices in the madrasah. These items are based on existing supervision evaluation tools that measure aspects such as classroom observation, feedback provision, and professional development support (Massazza et al., 2022b).
- 3. Work Motivation: Work motivation is measured using items adapted from established motivation scales, such as the Work Motivation Inventory (WMI). This section assesses both intrinsic and extrinsic motivators, including recognition, job satisfaction, and opportunities for professional growth (Tiong & Palmqvist, 2023b).
- 4. Teacher Performance: Teacher performance is assessed using a combination of self-reported measures and objective criteria. The items in this section evaluate teaching effectiveness, student engagement, and

overall job performance. Additionally, performance data such as student achievement scores and feedback from students and colleagues may be integrated to provide a comprehensive measure of teacher performance (Zheng et al., 2024).

The questionnaire is distributed to the selected teachers in person and collected after completion. Teachers are assured of the confidentiality of their responses to encourage honest and accurate reporting.

### **Instruments**

The primary instrument used in this study is the structured questionnaire, which has been designed and validated for content and construct validity. The validation process includes:

- 1. Content Validity: The questionnaire is reviewed by a panel of experts in educational management and quantitative research to ensure that it covers all relevant aspects of the variables under study (Pang et al., 2024).
- 2. Construct Validity: A pilot study is conducted with a small sample of teachers (n=30) to test the reliability and validity of the questionnaire items. The results of the pilot study are used to refine the questionnaire before full-scale data collection (Y. Wang et al., 2023).
- Reliability: The internal consistency of the questionnaire items is assessed using Cronbach's alpha. A reliability coefficient of 0.7 or higher is considered acceptable for the scales used in this study (Okada et al., 2023).

#### **Data Analysis Techniques**

The data collected are analyzed using SPSS 16.0 software. The analysis proceeds in several stages:

- 1. Descriptive Statistics: Initially, descriptive statistics are calculated to provide an overview of the data. This includes measures of central tendency (mean, median) and variability (standard deviation) for each variable (Wallwey & Kajfez, 2023).
- 2. Simple Linear Regression Analysis: Simple linear regression is used to assess the influence of each independent variable (leadership style, supervision, and work motivation) on the dependent variable (teacher performance) individually. The significance of the regression coefficients is tested using t-tests, with a significance level set at 0.05.

- 3. Multiple Linear Regression Analysis: Multiple linear regression is then conducted to examine the combined influence of leadership style, supervision, and work motivation on teacher performance. The overall model fit is assessed using the F-test, and the significance of individual predictors is evaluated using t-tests. The coefficient of determination (R²) is reported to indicate the proportion of variance in teacher performance explained by the independent variables collectively (Z. Liu et al., 2025)
- 4. Assumption Testing: Prior to conducting regression analyses, key assumptions are tested, including linearity, independence of errors (Durbin-Watson test). homoscedasticity, and normality of residuals (Kolmogorov-Smirnov test). assumptions are violated, appropriate remedial data measures. such as transformation, are taken (C. M. Liu et al.,
- 5. Hypothesis Testing: Hypotheses related to the influence of leadership style, supervision, and work motivation on teacher performance are tested based on the results of the regression analyses. The decision to accept or reject the hypotheses is based on the significance level of the test statistics (Arizmendi et al., 2024)

### **Ethical Considerations**

Ethical approval for the study is obtained from the relevant authorities before data collection begins. All participants are informed about the purpose of the study, and their consent is obtained prior to participation. Confidentiality and anonymity of the respondents are maintained throughout the research process, and the data are used solely for research purposes (Zhang et al., 2024). By following this detailed methodology, the study aims to provide reliable and valid results that contribute to understanding the influence of leadership style, supervision, and work motivation on teacher performance in private Madrasah Aliyah in Wanasaba Subdistrict, East Lombok Regency.

### RESULT AND DISCUSSION

### **Results**

This section presents the detailed findings of the study, focusing on the effects of the madrasah principal's leadership style, supervision, and work motivation on teacher performance in private Madrasah Aliyah in Wanasaba Subdistrict, East Lombok Regency. The results are based on both simple linear regression and multiple linear regression analyses.

# 1. Influence of Leadership Style on Teacher Performance

The first analysis explored the impact of the madrasah principal's leadership style (X1) on teacher performance (Y) using simple linear regression. The results show a significant positive influence, as indicated by the following statistical values:

- 1.1. Sig. Value: The significance value (p-value) for the leadership style's influence on teacher performance is 0.000, which is less than the conventional threshold of 0.05. This indicates that the effect is statistically significant.
- 1.2. T-Value: The calculated t-value is 11.857, which exceeds the critical t-value from the t-distribution table (t-table) of 1.994 at the 5% significance level. This further confirms the significant influence of leadership style on teacher performance.
- 1.3. Coefficient of Determination (R<sup>2</sup>): The R<sup>2</sup> value, which represents the proportion of variance in teacher performance explained by the leadership style, is 0.658. This means that 65.8% of the variability in teacher performance can be attributed to the madrasah principal's leadership style.

These results suggest that the leadership style of the madrasah principals plays a critical role in shaping teacher performance. Principals who exhibit effective leadership styles, such as transformational or transactional leadership, are more likely to positively influence the performance of their teachers.

# 2. Influence of Supervision on Teacher Performance

The second analysis examined the effect of the madrasah principal's supervision (X2) on teacher performance (Y). The findings indicate a significant positive influence, supported by the following statistics:

2.1. Sig. Value: The p-value for the supervision's impact on teacher performance is 0.000, which is well below the 0.05 significance level, indicating a statistically significant effect.

- 2.2. T-Value: The t-value calculated is 13.285, which is significantly higher than the critical t-value of 1.994. This result confirms the strong positive influence of supervision on teacher performance.
- 2.3. Coefficient of Determination (R<sup>2</sup>): The R<sup>2</sup> value for this model is 0.707, indicating that 70.7% of the variation in teacher performance is explained by the supervision practices of the madrasah principals.

These results highlight the importance of effective supervision by madrasah principals. Regular, constructive supervision, which includes classroom observations, feedback, and professional development, significantly contributes to enhancing teacher performance.

# 3. Influence of Work Motivation on Teacher Performance

The third analysis focused on the influence of the madrasah principal's work motivation strategies (X3) on teacher performance (Y). The results demonstrate a significant positive influence, as evidenced by the following data:

- 3.1. Sig. Value: The p-value for work motivation's effect on teacher performance is 0.000, indicating statistical significance at the 0.05 level.
- 3.2. T-Value: The t-value obtained is 11.097, which exceeds the critical t-value of 1.994, confirming the significant impact of work motivation on teacher performance.
- 3.3. Coefficient of Determination (R²): The R² value is 0.628, meaning that 62.8% of the variance in teacher performance is accounted for by the work motivation strategies implemented by the madrasah principals.

These findings underscore the crucial role of motivation in enhancing teacher performance. Principals who effectively motivate their teachers, whether through recognition, opportunities for professional growth, or creating a supportive work environment, can significantly improve overall teacher performance.

## 4. Combined Influence of Leadership Style, Supervision, and Work Motivation on Teacher Performance

The final analysis utilized multiple linear regression to assess the combined influence of leadership style (X1), supervision (X2), and work motivation (X3) on teacher performance (Y). The

results indicate a significant collective influence of these variables, as shown by the following statistics:

- 4.1. Sig. Value: The p-value for the combined effect of the three independent variables on teacher performance is 0.000, indicating a statistically significant impact.
- 4.2. F-Value: The F-value calculated for the regression model is 84.561, which is considerably higher than the critical F-value of 2.732 at the 0.05 significance level. This suggests that the model is a good fit and that the independent variables, when considered together, have a substantial influence on teacher performance.
- 4.3. Coefficient of Determination (R²): The combined R² value for this model is 0.781, indicating that 78.1% of the variance in teacher performance is explained by the combined influence of leadership style, supervision, and work motivation.

These results highlight the synergistic effect of leadership style, supervision, and work motivation on teacher performance. While each factor independently contributes to performance, their combined influence is even more significant, suggesting that madrasah principals who excel in all three areas are likely to see the greatest improvement in teacher performance.

## **Summary of Findings**

The results from both the simple and multiple linear regression analyses demonstrate that the leadership style, supervision, and work motivation of madrasah principals significant positive effects on teacher performance. The findings suggest that to enhance teacher performance, madrasah principals should focus on developing effective leadership styles, providing consistent and constructive supervision, and implementing strategies to motivate their teachers. The combined influence of these factors is substantial, explaining a significant portion of the variance in teacher performance, underscores their importance in the educational management of private Madrasah Aliyah in Wanasaba Subdistrict, East Lombok Regency. Here is a table summarizing the influence of leadership style, supervision, and work motivation of the Madrasah principals on teacher performance in private Madrasah Aliyah in Wanasaba Subdistrict, East Lombok Regency:

**Table 1:** Influence of Madrasah Principals' Leadership, Supervision, and Motivation on Teacher Performance in Wanasaba Subdistrict, East Lombok Regency.

Variable	T-Value	Sig. Value	$\mathbb{R}^2$	Interpretation
			(Influence on Y)	
Leadership Style (X1)	11.857	0.000	65.8%	Significant influence on teacher
				performance
Supervision (X2)	13.285	0.000	70.7%	Significant influence on teacher
				performance
Work Motivation (X3)	11.097	0.000	62.8%	Significant influence on teacher
				performance
Combined Influence	F-Value:	0.000	78.1%	Significant combined influence
(X1, X2, X3)	84.561			on teacher performance

#### Note:

- 1. T-Value: The calculated value of the t-test for each variable.
- 2. Sig. Value: The p-value indicating the significance of the variable's influence.
- 3. R<sup>2</sup> (Influence on Y): The percentage of variance in teacher performance (Y) explained by each variable (X1, X2, X3).
- 4. F-Value: The calculated value of the F-test for the combined influence of all variables.

This table clearly presents the statistical significance and influence of each factor on teacher performance, illustrating the critical role of leadership style, supervision, and work motivation in enhancing educational outcomes in the studied Madrasah Aliyah.

#### **Discussion**

The findings of this study highlight the significant impact of the Madrasah principals' leadership style, supervision, and work motivation on the performance of teachers in Private Madrasah Aliyah in Wanasaba Subdistrict, East Lombok Regency. These results align with several established theories and previous research, demonstrating the crucial role that effective leadership, thorough supervision, and strong motivational strategies play in enhancing teacher performance and, by extension, the overall quality of education.

# 1. Leadership Style and Teacher Performance

The significant influence of leadership style on teacher performance, as indicated by the t-value of 11.857 and the R² value of 65.8%, supports the theory of transformational leadership. According to Bass and Avolio (1994), transformational leaders inspire and motivate their followers to achieve more than what is typically expected by fostering an environment of trust, innovation, and commitment. In the context of Madrasah principals, those who exhibit transformational leadership qualities likely encourage teachers to improve their teaching

practices, engage more deeply with their students, and contribute to a positive school culture. The high level of influence observed in this study underscores the importance of adopting a leadership style that is not only directive but also supportive and empowering.

### 2. Supervision and Teacher Performance

The results also indicate a strong influence of supervision on teacher performance, with a tvalue of 13.285 and an R<sup>2</sup> value of 70.7%. This finding is consistent with Sergiovanni's concept of clinical supervision, which emphasizes the importance of regular, constructive feedback and professional development opportunities for teachers. Effective supervision helps teachers identify areas for improvement, refine their instructional methods, and stay motivated to achieve their professional goals. The significant impact of supervision observed in this study suggests that Madrasah principals who actively engage in the supervision process can substantially enhance the effectiveness of their teachers (Nasri, 2024b).

# 3. Work Motivation and Teacher Performance

The study further reveals that work motivation significantly influences teacher performance, with a t-value of 11.097 and an R<sup>2</sup> value of 62.8%. This result aligns with Herzberg's Two-Factor Theory, which posits that motivation factors, such as recognition, achievement, and responsibility, play a crucial role in enhancing job performance. In the context

of this study, Madrasah principals who effectively motivate their teachers by recognizing their efforts, providing opportunities for professional growth, and fostering a sense of purpose within the school community, can significantly boost teacher performance. This finding highlights the importance of motivational strategies in educational leadership (Nasri, 2024a).

# 4. Combined Influence of Leadership, Supervision, and Motivation

The combined influence of leadership style, supervision, and work motivation on teacher performance, as indicated by the F-value of 84.561 and an R<sup>2</sup> value of 78.1%, suggests that these factors are interrelated and collectively contribute to improving teacher performance. This result is in line with the Integrated Leadership Model, which suggests that effective school leadership is multidimensional, involving the integration of various leadership behaviors and practices to achieve optimal outcomes (Nasri & Tabibuddin, 2023). The synergy between leadership, supervision, and motivation observed in this study indicates that Madrasah principals who can effectively combine these elements are likely to foster a more productive and positive teaching environment.

The findings of this study underscore the critical role of Madrasah principals in shaping the performance of their teachers through their leadership style, supervision practices, and motivational strategies. These results are consistent with various leadership and motivation theories, reinforcing the idea that effective school leadership is a key determinant of educational quality. For policy makers and educational leaders, this study highlights the need to invest in leadership development programs that equip Madrasah principals with the skills and knowledge required to lead effectively, supervise constructively, and motivate their teachers to achieve their full potential.

### **CONCLUSION**

This study demonstrates a significant impact of leadership style, supervision, and work motivation of Madrasah principals on teacher performance in Private Madrasah Aliyah in Wanasaba Subdistrict, East Lombok Regency. The findings reveal the following:

- 1. Leadership Style: The leadership style of Madrasah principals significantly influences teacher performance, with a substantial R<sup>2</sup> value of 65.8%. Transformational leadership, which includes motivating and inspiring teachers, is crucial in improving their performance and fostering a positive educational environment.
- 2. Supervision: Effective supervision by Madrasah principals has a strong impact on teacher performance, as indicated by an R<sup>2</sup> value of 70.7%. Regular, constructive feedback and professional development opportunities are essential for enhancing teaching quality.
- 3. Work Motivation: The motivation provided by Madrasah principals significantly affects teacher performance, with an R<sup>2</sup> value of 62.8%. Motivational factors such as recognition, achievement, and opportunities for growth are vital in driving teacher effectiveness.
- 4. Combined Influence: The combined influence of leadership style, supervision, and work motivation on teacher performance is highly significant, with an R² value of 78.1%. This indicates that these factors are interrelated and collectively contribute to improved teacher performance.

### Recommendations

Based on the findings of this study, the following recommendations are made:

- 1. Enhance Leadership Development:
- 1.1. Training Programs: Implement comprehensive training programs for Madrasah principals focusing on transformational leadership skills. Such programs should include strategies for inspiring and motivating teachers, building trust, and fostering a supportive school culture.
- 1.2. Leadership Mentoring: Establish mentoring programs where experienced leaders guide new principals in effective leadership practices. This can help new leaders develop the necessary skills to positively impact teacher performance.
- 2. Strengthen Supervision Practices:
- 2.1. Regular Supervision: Ensure that supervision is a continuous and regular process, providing teachers with timely and constructive feedback. Incorporate peer evaluations and self-assessments to

- create a comprehensive supervision system.
- 2.2. Professional Development: Provide ongoing professional development opportunities for teachers based on the feedback received during supervision. This can help teachers address areas of improvement and enhance their instructional skills.

### 3. Boost Work Motivation:

- 3.1. Recognition Programs: Develop and implement recognition programs that reward teachers for their achievements and contributions. This could include awards, certificates, or public acknowledgment.
- 3.2. Career Advancement: Create opportunities for career advancement and professional growth within the Madrasah. Support teachers in pursuing further education or specialized training relevant to their roles.
- 4. Integrate Leadership, Supervision, and Motivation:
  - 4.1. Holistic Approach: Adopt a holistic approach that integrates leadership, supervision, and motivation strategies. Ensure that these elements are aligned and mutually reinforcing to create a cohesive and supportive environment for teachers.
  - 4.2. Regular Assessments: Conduct regular assessments of the effectiveness of leadership, supervision, and motivational strategies. Use feedback from teachers to make necessary adjustments and improvements.

By implementing these recommendations, Madrasah principals can significantly enhance teacher performance, leading to improved educational outcomes and a more effective learning environment in Private Madrasah Aliyah.

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## **REFRENCES**

- Arizmendi, C., Wang, S., Kaplan, S., & Weinfurt, K. (2024). Evaluating Recall Periods for Patient-Reported Outcome Measures: A Systematic Review of Quantitative Methods. *Value in Health*, 27(4), 518–526. https://doi.org/10.1016/j.jval.2024.01.016
- Berkovich, I., & Hassan, T. (2023). Teachers' intrinsic and extrinsic motivation as mediators of the effect of principals' perceived distributed leadership on organizational learning capability. *International Journal of Educational Management*, 37(6/7), 1552–1570. https://doi.org/10.1108/IJEM-03-2023-0115
- Choi, E. H., Kim, E.-K., & Kim, P. B. (2018). Effects of the Educational Leadership of Nursing Unit Managers on Team Effectiveness: Mediating Effects of Organizational Communication. *Asian Nursing Research*, 12(2), 99–105. https://doi.org/10.1016/j.anr.2018.03.001
- Han, S., Song, D., Xu, L., Ye, Y., Yan, S., Shi, F., Zhang, Y., Liu, X., & Du, H. (2022). Behaviour in public open spaces: A systematic review of studies with quantitative research methods. *Building and Environment*, 223, 109444. https://doi.org/10.1016/j.buildenv.2022.10 9444
- Hossny, E. K., Alotaibi, H. S., Mahmoud, A. M., Elcokany, N. M., Seweid, M. M., Aldhafeeri, N. A., Abdelkader, A. M., & Abd Elhamed, S. M. (2023). Influence of nurses' perception of organizational climate and toxic leadership behaviors on intent to stay: A descriptive comparative study. *International Journal of Nursing Studies Advances*, 5, 100147. https://doi.org/10.1016/j.ijnsa.2023.10014
- Kotar, S., McNeish, R., Murphy-Hagan, C., Renick, V., Lee, C.-F. T., Steele, C., Lusher, A., Moore, C., Minor, E., Schroeder, J., Helm, P., Rickabaugh, K., De Frond, H., Gesulga, K., Lao, W., Munno, K., Thornton Hampton, L. M., Weisberg, S. B., Wong, C. S., ... Rochman, C. M. (2022). Quantitative assessment of visual microscopy as a tool

- for microplastic research: Recommendations for improving methods and reporting. *Chemosphere*, *308*, 136449. https://doi.org/10.1016/j.chemosphere.202 2.136449
- Liu, C. M., Zhang, Y., Hu, Z., & Xie, C. (2024).

  Artificial Immune Detection for Network
  Intrusion Data Based on Quantitative
  Matching Method. *Computers, Materials*& *Continua*, 78(2), 2361–2389.
  https://doi.org/10.32604/cmc.2023.04528
- Liu, Z., Ma, Q., Zhang, T., Zhao, S., Gao, X., Sun, T., & Dai, Y. (2025). Quantitative modeling and uncertainty estimation for small-sample LIBS using Gaussian negative log-likelihood and monte carlo dropout methods. *Optics & Laser Technology*, 181, 111720. https://doi.org/10.1016/j.optlastec.2024.1 11720
- Louis, K. S., & Murphy, J. F. (2023). The contributions of positive organizational studies to educational leadership and school improvement. In *International Encyclopedia of Education (Fourth Edition)* (pp. 511–523). Elsevier. https://doi.org/10.1016/B978-0-12-818630-5.05072-7
- Massazza, A., Teyton, A., Charlson, F., Benmarhnia, T., & Augustinavicius, J. L. (2022a). Quantitative methods for climate change and mental health research: Current trends and future directions. *The Lancet Planetary Health*, *6*(7), e613–e627. https://doi.org/10.1016/S2542-5196(22)00120-6
- Massazza, A., Teyton, A., Charlson, F., Benmarhnia, T., & Augustinavicius, J. L. (2022b). Quantitative methods for climate change and mental health research: Current trends and future directions. *The Lancet Planetary Health*, *6*(7), e613–e627. https://doi.org/10.1016/S2542-5196(22)00120-6
- Nasri, U. (2016). *Menziarahi Filsafat: Sebuah Pengantar Filsafat Umum.* Semesta Ilmu.
- Nasri, U. (2017). Bersahabat Dengan Ilmu: Sebuah Pengantar Filsafat Ilmu. CV. Haramain Lombok.
- Nasri, U. (2019). *Philosophy is Mother of Science: Pengantar Filsafat*. CV. Haramain Lombok

- Nasri, U. (2023). *Philosophy of Education*. CV. Haramain Lombok.
- Nasri, U. (2024a). Paradigma Filsafat Islam: Revitalisasi Pendidikan Multikultural Telaah Pemikiran TGKH. Muhammad Zainuddin Abdul Madjid Lombok. *Al-Qalam: Jurnal Kajian Islam Dan Pendidikan*, 16(1), 8–21. https://doi.org/10.47435/al-qalam.v16i1.2293
- Nasri, U. (2024b). Rethinking Religious Moderation: Revitalisasi Konsep Manusia Perspektif Filsafat Pendidikan Islam dalam Konteks Multikultural. *Jurnal Ilmiah Profesi Pendidikan*, 9(1), 213–220. https://doi.org/10.29303/jipp.v9i1.1655
- Nasri, U., & Tabibuddin, M. (2023). Paradigma Moderasi Beragama: Revitalisasi Fungsi Pendidikan Islam dalam Konteks Multikultural Perspektif Pemikiran Imam al-Ghazali. *Jurnal Ilmiah Profesi Pendidikan*, 8(4), 1959–1966. https://doi.org/10.29303/jipp.v8i4.1633
- Nguyen, N. P., Hang, N. T. T., Hiep, N., & Flynn, O. (2023). Does transformational leadership influence organisational culture and organisational performance: Empirical evidence from an emerging country. *IIMB Management Review*, 35(4), 382–392. https://doi.org/10.1016/j.iimb.2023.10.00
- Okada, A., Tsuchida, M., Aoyagi, K., Yoshino, A., Rahman, Md. M., & Inoshima, Y. (2023). Research Note: Detection of Campylobacter spp. in chicken meat using culture methods and quantitative PCR with propidium monoazide. *Poultry Science*, *102*(9), 102883. https://doi.org/10.1016/j.psj.2023.102883
- Pacios, A. R. (2023). Strategic Management and Planning. In *Reference Module in Social Sciences* (p. B9780323956895000419). Elsevier. https://doi.org/10.1016/B978-0-323-95689-5.00041-9
- Pang, L., Zhang, M., Li, X., Yang, K., & Zhang, Y. (2024). Research on quantitative risk assessment method of dust explosion based on Bayesian network. *Journal of Loss Prevention in the Process Industries*, 87, 105237. https://doi.org/10.1016/j.jlp.2023.105237
- Tavares, F., & Almeida, L. (2023). Strategic Management for International Business. In Reference Module in Social Sciences (p.

- B978044313701300181X). Elsevier. https://doi.org/10.1016/B978-0-443-13701-3.00181-X
- Tiong, K. Y., & Palmqvist, C.-W. (2023a).

  Quantitative methods for train delay propagation research. *Transportation Research Procedia*, 72, 80–86. https://doi.org/10.1016/j.trpro.2023.11.32
- Tiong, K. Y., & Palmqvist, C.-W. (2023b).

  Quantitative methods for train delay propagation research. *Transportation Research Procedia*, 72, 80–86. https://doi.org/10.1016/j.trpro.2023.11.32
- Wallwey, C., & Kajfez, R. L. (2023). Quantitative research artifacts as qualitative data collection techniques in a mixed methods research study. *Methods in Psychology*, 8, 100115. https://doi.org/10.1016/j.metip.2023.1001
- Wang, H., Zheng, H., Tian, J., He, H., Ji, Z., & He, X. (2024). Research on Quantitative Identification Method for Wire Rope Wire Breakage Damage Signals Based on Multi-Decomposition Information Fusion. *Journal of Safety and Sustainability*, S2949926724000027. https://doi.org/10.1016/j.jsasus.2024.02.0 01
- Wang, Y. (2023). Future research on educational leadership: Theoretical groundings of educational leadership research. In *International Encyclopedia of Education* (Fourth Edition) (pp. 34–43). Elsevier. https://doi.org/10.1016/B978-0-12-818630-5.05067-3
- Wang, Y., Yu, X., Liu, J., Zhao, R., Zhang, L., An, D., & Wei, Y. (2023). Research on quantitative method of fish feeding activity with semi-supervised based on appearance-motion representation. *Biosystems Engineering*, 230, 409–423. https://doi.org/10.1016/j.biosystemseng.2 023.04.011
- Zhang, H., Lai, X., & Zhou, L. (2024). A quantitative internal-short-circuit diagnosis method of lithium-ion batteries for float charging systems. *Journal of Energy Storage*, 96, 112689. https://doi.org/10.1016/j.est.2024.112689
- Zheng, J., Hou, X., Duan, H., & Wang, S. (2024). Where we are and where we will go to

achieve carbon neutrality: A review of quantitative socioeconomic modeling research. *Fundamental Research*, S2667325824000554. https://doi.org/10.1016/j.fmre.2023.12.02