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Causal Model of Learning Supervision on Teacher Performance: Madrasah Head, Organizational Culture, and Self-Discipline

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ABSTRACT

Purpose of the study: This study analyzes the direct and indirect effects of instructional supervision by the head of madrasah, organizational culture, and self-discipline on the performance of Madrasah Aliyah teachers in Gayo Lues Regency.

Methodology: Using a quantitative approach with a causal model and involving 84 teachers selected through the Krejcie–Morgan sampling technique, this research employs path analysis to examine the structural relationships among the variables.

Main Findings: The findings indicate that organizational culture has the strongest influence on teachers' self-discipline (ρ = 0.436), while instructional supervision exerts a smaller but positive effect (ρ = 0.132). Teacher performance is significantly affected by instructional supervision (ρ = 0.597), organizational culture (ρ = 0.408), and self-discipline (ρ = 0.324). Although instructional supervision and organizational culture also influence teacher performance indirectly through self-discipline, these mediating effects are relatively small—0.044 and 0.132 respectively. The model fit analysis confirms that the proposed causal structure aligns well with the empirical data. This study contributes to educational management literature by offering a comprehensive model integrating supervision, culture, and self-discipline, and by establishing self-discipline as a partial mediator between organizational culture and teacher performance.

Novelty/Originality of this study: The findings highlight the importance of strengthening supervisory practices, cultivating a positive organizational culture, and enhancing teacher discipline to improve professional performance in madrasahs. Overall, the study provides empirical evidence that can support the development of strategic policies to enhance teacher quality and accountability in Islamic educational institutions.

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1. INTRODUCTION

Quality education is the foundation of a strong national civilization. In today's globalized era, educational quality becomes a key indicator of a nation's capacity to prepare competent and competitive human resources. Beyond transmitting knowledge, education shapes character, values, and critical thinking abilities essential for societal resilience [1]. The UNESCO Report emphasizes that quality education is indispensable for sustainable national development. In Indonesia, efforts to enhance educational quality continue, yet many madrasas especially in remote areas still struggle with fundamental systemic barriers.

A crucial determinant of educational quality is the teacher, who functions not only as an instructor but also as a mentor and moral exemplar. According to Law No. 14 of 2005, teachers must possess pedagogical, personality, social, and professional competencies. However, empirical findings reveal persistent gaps. Evidence shows a 34% decline in the performance of certified teachers, indicating that certification alone has not led to meaningful improvements in teaching quality. Teacher performance, in practice, is shaped by multiple interacting factors, notably instructional supervision, organizational culture, and teacher self-discipline [2]-[6].

Instructional supervision plays a strategic role in ensuring that teaching aligns with curriculum goals, supports professional growth, and strengthens teachers' motivation. However, supervision in many madrasas remains predominantly administrative, lacking depth in pedagogical guidance. Similarly, organizational culture significantly influences teacher performance. Madrasas with strong shared values, teamwork, and appreciation mechanisms tend to foster higher commitment and job satisfaction [7]-[11]. Yet many institutions still experience weak coordination, low participation, and ineffective reward systems. Teacher self-discipline also serves as a critical internal factor reflecting professionalism and emotional intelligence. Although teacher attendance rates reportedly reach 95%, problems such as tardiness, insufficient preparation, and minimal instructional effort persist. Discipline, as part of emotional intelligence, is essential for achieving workplace success [12]-[17].

Previous studies support the importance of integrating external and internal factors for improved teacher outcomes. Research by Glickman and Schein indicates that effective supervision and strong organizational culture enhance motivation, discipline, and teacher performance [18], [19]. A preliminary survey in Gayo Lues Regency further reveals that 65% of Madrasah Aliyah teachers exhibit moderate to low performance, suggesting systemic weaknesses in leadership, supervisory practices, institutional culture, and individual discipline. Problems of weak collaboration, inconsistent implementation of supervision, and low teacher initiative reflect ongoing challenges in madrasah management.

From an organizational behavior perspective, performance results from the interaction between internal factors such as discipline and work attitudes and external factors such as leadership, supervision, and organizational culture [20]-[22]. Thus, strengthening teacher performance requires an integrated and holistic approach in which madrasah heads act not only as administrators but also as instructional leaders capable of cultivating positive culture and sustaining teacher discipline.

Despite extensive scholarly attention, clear research gaps remain. First, prior studies largely analyze instructional supervision, organizational culture, or teacher discipline *separately*, resulting in fragmented understanding. There is a lack of research employing an integrated causal model that simultaneously examines how these variables interact to influence teacher performance. Second, empirical studies that position teacher self-discipline as a *mediating variable* remain scarce; most research treats self-discipline merely as an independent factor rather than a behavioral mechanism linking supervisory practices and school culture to performance outcomes. Third, contextual gaps persist, as limited studies focus on Madrasah Aliyah, particularly in rural and remote regions such as Gayo Lues Regency, where educational dynamics differ significantly from urban settings.

This study addresses these gaps by developing a comprehensive and empirically tested causal model that analyzes the effects of instructional supervision and organizational culture on teacher performance, with self-discipline as a mediating variable. Focusing on Madrasah Aliyah teachers in Gayo Lues Regency, the research aims to provide theoretical contributions to educational management literature and practical recommendations for improving the quality of madrasah education through strengthened professionalism, discipline, and organizational leadership.

2. RESEARCH METHOD

This research was conducted across all public and private *Madrasah Aliyah* in Gayo Lues Regency, involving eight institutions: MAN 1 Gayo Lues, MAS Safinatussalamah, MAS Raudhatul Jihat, MAS Ruhul A'zham, MAS Raudhatul Qur'an, MAS Serambi Darussalam, MAS Darul Hijrah, and MAS Taruna Al-Qur'an Bunayya. The study is scheduled for one year, from March 2025 to March 2026. A quantitative approach was employed using a path analysis model, which allows researchers to identify both direct and indirect causal influences among variables, thereby providing a deeper understanding of the structural relationships between the independent and dependent variables [23]. This model is highly suitable for educational research that seeks to measure the effectiveness of organizational, instructional, and personal factors on teacher performance.

The research population consisted of 113 Madrasah Aliyah teachers in Gayo Lues Regency, comprising 48 males and 65 females, with population data obtained from the Regional Office of the Ministry of Religious Affairs. From this population, a sample of 84 teachers was drawn based on the Krejcie and Morgan sample size determination table at a 5% margin of error, ensuring a representative sample for generalization. This study involved four key variables, with three serving as independent variables namely, the madrasah head's

instructional supervision (X_1), organizational culture (X_2), and teacher self-discipline (X_3) and one dependent variable, teacher performance (X_4).

Operationally, instructional supervision (X_1) refers to the systematic guidance provided by the madrasah head to teachers to enhance the quality of teaching and learning. This variable is measured through indicators such as planning and implementing supervision, evaluation of supervision outcomes, mastery of teaching materials, the application of instructional methods, and interpersonal relations with the instructional supervisor. Organizational culture (X_2) is defined as the shared norms, values, and beliefs that influence decision-making and behavior within the madrasah. Its indicators include collective commitment, honesty, responsibility, motivation, acceptance of organizational norms, recognition, and alignment of institutional goals. Meanwhile, self-discipline (X_3) encompasses teachers' ability to manage their behavior, emotions, and responsibilities to achieve professional goals. Indicators include compliance with regulations, awareness and responsibility in task completion, and the ability to work in accordance with established guidelines to maintain harmony within the institution. Teacher performance (X_4) is conceptualized as teachers' professional ability to perform instructional tasks effectively. It includes lesson planning, execution of learning activities, evaluation processes, creativity, professional ethics, and the integration of technology in instruction.

Data collection used a closed-ended questionnaire, selected for its efficiency, simplicity, and ease of quantitative analysis. This format minimizes misinterpretation, saves time, and facilitates the standardized measurement of respondents' perceptions. Each instrument was developed based on variable indicators and presented using four response alternatives aligned with the research objectives. The instructional supervision instrument (X_1) measured planning and implementation processes, as well as classroom climate. The organizational culture instrument (X_2) assessed values, norms, communication, leadership, and behavioral consistency. The self-discipline instrument (X_3) measured time management, self-control, intrinsic motivation, and responsible task completion. The teacher performance instrument (X_4) evaluated teaching preparation, classroom implementation, evaluation skills, creativity, professional ethics, and technology utilization.

Instrument testing was conducted in September 2023 in all eight madrasahs using a respondent size of 25–40 individuals, as recommended in [6], which is considered adequate for validity and reliability analysis. Validity testing utilized the product-moment correlation, where items were considered valid when the calculated *r* value exceeded the critical *r* value at the 5% significance level. Reliability testing employed Cronbach's Alpha, with reliability categories ranging from very low (0.00–0.20) to very high (0.81–1.00). Instruments demonstrating high validity and reliability were subsequently used in the main research.

Data analysis was conducted through several stages. First, a descriptive analysis was performed to calculate the mean, median, mode, and standard deviation for each variable. A trend test was then used to categorize the results as high or low based on the criteria in [24]. Next, prerequisite tests were carried out, including the Lilliefors normality test, Bartlett homogeneity test, and linearity and significance regression tests to ensure that the relationships among variables were statistically linear and meaningful. An independence test among exogenous variables was conducted using simple correlation and the t-test to confirm the absence of multicollinearity. Following this, path analysis was employed to evaluate the structural model and determine both direct and indirect effects of instructional supervision, organizational culture, and self-discipline on teacher performance. Path coefficients were assessed using the F-test for simultaneous effects and the t-test for partial effects, enabling an integrated interpretation of causal relationships within the educational setting.

3. RESULTS AND DISCUSSION

Research Data Description

The data in this study were obtained by distributing questionnaires to the respondents as listed in Appendix 1. The research instrument includes four variables: Learning Supervision (X_1), Organizational Culture (X_2), Self-Discipline (X_3), and Teacher Performance (X_4). Before being used, the research instruments were tested for their validity and reliability. Descriptive analysis was performed using the SPSS program to determine the characteristics of each variable, including the highest score, lowest score, mean, standard deviation, mode, and median. Based on the analysis results, it was found that Learning Supervision had an average value of 156.65, Organizational Culture 123.73, Self-Discipline 110.92, and Teacher Performance 115.25. The data shows that the four research variables are in the fairly good category and can be used as a basis for further analysis.

Learning Supervision (X_1)

The results of data collection and processing show that the variable Learning Supervision (X_1) has a distribution pattern that is close to normal. Out of 84 respondents, the scores ranged from 83 to 146 with an average (mean) of 115.25, a median of 115.50, and a mode of 112, and a standard deviation of 12.36. These values indicate that the data is centered around the mean with a moderate spread. The majority of respondents fell within the 107–122 interval, which accounts for 58.3% of the total sample, indicating that most teachers

rated the implementation of learning supervision in schools as moderate to high. The number of respondents in the extreme category was very small, and the data distribution appeared balanced between low and high scores, indicating no significant skewness. Based on quartile analysis, 25% of respondents scored below 110, 50% below 115.5, and 75% below 121, which reinforces that the data is centered in the middle to upper range of values. Thus, the Learning Supervision variable has a normal and symmetrical data distribution, and the instrument used is proven to be reliable and suitable for analysis using parametric statistical methods such as regression and hypothesis testing.

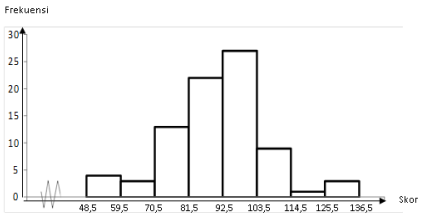

Figure 1. Histogram of the Score Distribution for the Learning Supervision Variable

The analysis results show that the majority of respondents (50 people or 59.5%) fall into the "Moderate" category with a score range of 121-160, while 32 respondents (38%) are in the "High" category. Only 2 respondents (2.3%) are classified as "Low," and none are "Very Low." This data indicates that learning supervision has been implemented well, although not to its full potential. Overall, the condition of learning supervision is considered quite effective, even approaching the high category, which has the potential to positively impact teacher performance improvement.

Organizational Culture (X_2)

Based on the results of data collection and processing, the Organizational Culture variable (X_2) shows a distribution pattern that is close to normal. Out of 84 respondents, scores ranged from 90 to 161 with an average (mean) of 121.4, a median of 121.0, and a mode of 127, as well as a standard deviation of 13.26. Most respondents fell within the 117–134 interval, which accounts for 60.7% of the total sample, indicating that the majority of teachers rate the organizational culture at the school as being in the fairly good to high category. The number of respondents with very low or very high scores is small, so the data distribution appears balanced and does not skew to either side. Based on quartiles, 25% of respondents have scores below 113, 50% below 121, and 75% below 130, which confirms that the data is centered around the median. Thus, the Organizational Culture variable has a normal and stable distribution, and its measurement instrument is considered reliable and valid. This condition indicates that the organizational culture in the school environment has developed well and can be further analyzed using parametric statistical methods such as regression and hypothesis testing.

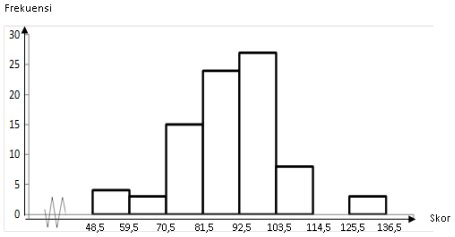

Figure 2. Histogram of Organizational Culture Variable Score Distribution

Most respondents (54 people or 64.3%) rated the organizational culture in their workplace as "Moderate," and 26 respondents (30.9%) rated it as "High." Only 4 respondents (4.76%) were categorized as "Low," and none were "Very Low." This finding indicates that the values, norms, and work systems in educational institutions have been functioning well, although not optimally. Overall, the organizational culture is considered quite good with a positive direction toward the high category, reflecting a stable and supportive work environment that promotes teacher performance improvement.

Self-Discipline (X_3)

Based on the results of data collection and processing, the Self-Discipline variable (X_3) shows a distribution pattern that is close to normal. Out of 84 respondents, scores ranged from 92 to 131 with an average (mean) of 110.75, a median of 110.5, a mode of 104, and a standard deviation of 8.92. Most respondents fell within the 102–116 interval, which accounts for 73.8% of the total sample, indicating that the majority of teachers have moderate to high levels of self-discipline. The number of respondents with very low or very high

scores was small, making the data appear balanced and centered around the middle value. Based on quartiles, 25% of respondents scored below 105, 50% below 110.5, and 75% below 116, which reinforces the perception that self-discipline is focused on the middle to upper categories. Thus, the Self-Discipline variable has a normal and symmetrical distribution, indicating that the instrument used is reliable and the data obtained are suitable for analysis using parametric statistical methods such as regression and hypothesis testing.

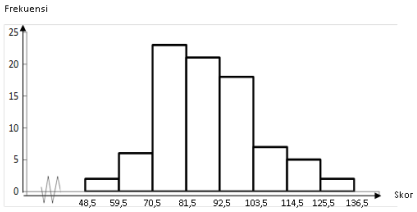

Figure 3. Histogram of Self-Discipline Variable Score Distribution

The majority of respondents (82 people or 97.7%) had a “Moderate” level of self-discipline with a score of 97-128, and only 2 respondents (2.3%) were categorized as “Low.” There were no “Very Low” or “Very High” respondents, which means the teachers' level of discipline was relatively uniform and stable. Overall, the teachers' self-discipline is considered quite good, indicating adequate responsibility and work awareness, although improvement is still needed to achieve a higher level of discipline.

Teacher Performance (X_4)

Based on the results of data collection and processing, the Teacher Performance variable (X_4) shows a distribution pattern resembling a normal curve. Out of 84 respondents, the teacher performance scores ranged from 83 to 146 with an average (mean) of 115.25, a median of 115.50, and a mode of 112, as well as a standard deviation of 12.36. These values indicate that the data is centered around the mean and has a moderate spread. Most respondents scored within the 107-122 interval, which includes 58.3% of the total sample, indicating that the majority of teachers performed at a moderate to high level. Meanwhile, the number of respondents with very low or very high scores was small, suggesting a balanced data distribution that did not skew to either side. Based on the quartile results, 25% of respondents scored below 110, 50% below 115.5, and 75% below 121, further confirming that the data is centered around the middle value. Thus, it can be concluded that the Teacher Performance variable has a normal and even distribution, making it suitable for parametric statistical analysis such as regression tests, correlation, and hypothesis testing.

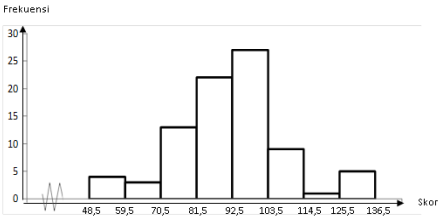

Figure 4. Histogram of Teacher Performance Variable Score Distribution

Based on the analysis results, the majority of respondents (64 people or 76.2%) fell within the 95-125 score interval, categorized as “Sufficient,” indicating that teacher performance was already at an adequate level. A total of 15 people (17.8%) were categorized as “High,” while 5 people (5.9%) fell into the “Insufficient” category, and none were “Low.” This indicates that there were no teachers with very low performance, and most showed fairly good to high performance. Therefore, teacher performance in this study was categorized as good, with a positive trend toward the high category, reflecting a sufficiently conducive work environment and supervision system.

Analysis Requirements Test

The analysis requirements test was conducted to ensure that the research data met the basic assumptions before hypothesis testing was performed. In this study, normality tests, homogeneity tests, and linearity tests were conducted to determine whether the data were normally distributed and the relationships between variables were linear.

Normality Test

The normality test aims to determine whether the data for each research variable comes from a normally distributed population. Testing was conducted using the Kolmogorov-Smirnov (K-S) method thru the SPSS

program. The criterion used was that if the significance value (Asymp. Sig. 2-tailed) is greater than 0.05, then the data is considered normally distributed.

Table 1. Normality test results

Variable	Sig. (2-tailed)	Normality test results
Learning Supervision (X_1)	0,817	Normal
Organizational Culture (X_2)	0,272	Normal
Self-Discipline (X_3)	0,736	Normal
Teacher Performance (X_4)	0,226	Normal

Thus, all research data met the normality assumption, meaning the distribution of data for each variable approached a normal distribution and was suitable for analysis using parametric statistics, such as regression and correlation analysis.

Linearity and Significance Test

Linearity and significance tests were conducted to ensure that the relationship between the independent and dependent variables was linear, allowing for the appropriate use of regression analysis. In this study, the tests were performed using analysis of variance (ANOVA) with the SPSS program, with the criterion that if the significance value of Deviation from Linearity is greater than 0.05, the relationship between the variables is considered linear.

Table 2. Linearity and Significance Test Results

Relationship Between Variables	Sig. Deviation from Linearity	Criteria	Conclusion
Self-Discipline (X_3) on Learning Supervision (X_1)	0.899	> 0.05	Linear
Self-Discipline (X_3) on Organizational Culture (X_2)	0.759	> 0.05	Linear
Teacher Performance (X_4) on Learning Supervision (X_1)	0.165	> 0.05	Linear
Teacher Performance (X_4) on Organizational Culture (X_2)	0.089	> 0.05	Linear
Teacher Performance (X_4) on Self-Discipline (X_3)	0.168	> 0.05	Linear

Based on the results in the table above, all variable pairs have a significance value for Deviation from Linearity greater than 0.05. This indicates that there is no significant deviation from the linear relationship between each research variable. Thus, the relationship between variables in this study is linear, so the linear regression model can be used appropriately to analyze the influence of Learning Supervision, Organizational Culture, and Self-Discipline on Teacher Performance.

Homogeneity Test

Homogeneity testing is conducted to determine whether the data from the population groups have the same variance or not. This testing is important so that differences in results between groups are truly caused by differences in the research variables, not by data non-homogeneity. Homogeneity testing in this study was conducted using the Bartlett's Test (Levene's Test) with the assistance of the SPSS program, and the testing criteria were determined based on the significance value (Sig.). If the Sig. value is > 0.05, the data is considered homogeneous; conversely, if the Sig. is ≤ 0.05, the data is considered non-homogeneous.

Table 3. Homogeneity Calculation Results

Research Variables	dk	α = 0,05	Sig. value	Conclusion
X_4 based on X_1	72	0.05	0.057	Homogen
X_4 based on X_2	57	0.05	0.345	Homogen
X_4 based on X_3	58	0.05	0.412	Homogen
X_3 based on X_1	50	0.05	0.087	Homogen
X_3 based on X_2	57	0.05	0.318	Homogen

Based on the results in the table above, all research variables have a significance value greater than 0.05. This indicates that there is no significant difference in variance between groups, so all data is considered homogeneous.

Hypothesis Testing

A hypothesis is a tentative answer to the research problem formulation that still needs to be proven thru data and statistical analysis. In this study, hypothesis testing was conducted with the help of multiple regression analysis to determine the influence of Instructional Supervision, Organizational Culture, Self-Discipline, and

Teacher Performance. The test results for the first and second hypotheses show that Learning Supervision and Organizational Culture were tested for their influence on Self-Discipline. Based on the analysis results, the Organizational Culture variable has a significance value of 0.003 (< 0.05), indicating a significant influence on Self-Discipline. Meanwhile, Learning Supervision has a significance value of 0.341 (> 0.05), which means it is not significant. This means that organizational culture plays an important role in shaping self-discipline, while instructional supervision does not have a significant direct impact. The regression coefficient indicates that for every one-unit increase in Organizational Culture, Self-Discipline will increase by 0.028 units. Overall, these results confirm that strengthening organizational culture is a key factor in improving teachers' self-discipline.

Next, the third, fourth, and fifth hypotheses test the direct influence of Learning Supervision, Organizational Culture, and Self-Discipline on Teacher Performance. Based on the results of multiple regression analysis, these three variables simultaneously have a significant effect on Teacher Performance (Sig. value = 0.000 < 0.05). Partially, Learning Supervision has a positive and significant effect with a regression coefficient of 0.421 and a Sig. value of 0.000. Organizational Culture also has a positive and significant effect with a coefficient of 0.413 and Sig. = 0.000. Self-Discipline shows a significant effect (Sig. = 0.001), although its coefficient value is small (0.007). These results indicate that all three factors make a significant contribution to improving Teacher Performance, with Instructional Supervision and Organizational Culture being the dominant factors.

For the sixth and seventh hypotheses, the indirect or mediating effect of Self-Discipline on the relationship between the other variables was tested. The indirect effect of Learning Supervision on Teacher Performance thru Self-Discipline is 0.044, which is much smaller than the direct effect of 0.597. This means that Self-Discipline does not significantly mediate the relationship, so the sixth hypothesis is rejected. Meanwhile, the indirect influence of Organizational Culture on Teacher Performance thru Self-Discipline is 0.132, which is also smaller than its direct influence (0.408). Thus, the seventh hypothesis is also rejected.

Table 4. The Influence of Exogenous Variables on Endogenous Variables

Variable	Influence	Percentage of Influence
$X_1 \rightarrow X_4$	0.597	59%
$X_2 \rightarrow X_4$	0.408	40%
$X_3 \rightarrow X_4$	0.324	32%
$X_1 \rightarrow X_3$	0.132	13%
$X_2 \rightarrow X_3$	0.436	43%
$X_1 \rightarrow X_3 \rightarrow X_4$	0.044	4%
$X_2 \rightarrow X_3 \rightarrow X_4$	0.132	13%
e_1	0.154	15%
e_2	0.166	16%

Based on the table, the direct influence of Learning Supervision on Teacher Performance is the greatest (59%), followed by Organizational Culture (40%) and Self-Discipline (32%). The influence of Organizational Culture on Self-Discipline is also quite strong (43%), indicating the importance of work culture in shaping teachers' disciplined behavior. Meanwhile, the indirect influence of the two variables thru Self-Discipline is relatively small, suggesting that Self-Discipline does not play a strong mediating role in this relationship.

Model Fit Testing

A goodness-of-fit test is conducted to determine whether the model proposed in the study aligns with the empirical data obtained. The model is considered a good fit if the correlation matrix of the observed results does not significantly differ from the estimated correlation matrix or the expected correlation. In other words, the smaller the difference between the actual data and the model's estimate, the better the model's fit. Based on the analysis and calculations, the calculated chi-square value (χ^2h) was found to be 0. Meanwhile, from the chi-square distribution table for degrees of freedom (df) = 1 and a significance level of 5%, the χ^2t value was found to be 3.84. Since $\chi^2h < \chi^2t$ (0 < 3.84), this result indicates that the proposed model is significant and consistent with the research data. Thus, it can be concluded that the research model describing the causal relationship between the variables of Learning Supervision (X_1), Organizational Culture (X_2), and Self-Discipline (X_3) on Teacher Performance (X_4) has a good level of fit, so the model can be empirically accepted.

The research findings reveal that Self-Discipline (X_3) is significantly influenced by Learning Supervision (X_1) and Organizational Culture (X_2), with a combined effect of 87%. Specifically, Learning Supervision accounts for 13%, Organizational Culture for 43%, and the remaining 15% is influenced by other factors. This indicates that both Learning Supervision and Organizational Culture play a substantial role in shaping Self-Discipline. In turn, Teacher Performance (X_4) is affected by Learning Supervision, Organizational Culture, and Self-Discipline, with a total influence of 84%. The remaining 16% is attributed to other factors. Among these, Learning Supervision has the greatest influence at 59%, followed by Organizational Culture at

40%, and Self-Discipline at 32%. This underscores the significant impact these three factors have on improving Teacher Performance.

Furthermore, an indirect influence through Self-Discipline is observed, where Learning Supervision contributes 4% and Organizational Culture 13%. This suggests that Self-Discipline serves as a stronger mediator in the relationship between Organizational Culture and Teacher Performance, highlighting its crucial role in this dynamic. Overall, these findings emphasize the importance of Learning Supervision, Organizational Culture, and Self-Discipline in enhancing Teacher Performance. While Organizational Culture has the greatest impact on Self-Discipline, Learning Supervision plays the most significant role in improving Teacher Performance.

When comparing these results with prior studies, the findings align with existing research showing the positive impact of Learning Supervision on Teacher Performance. For instance, Singerin found that Academic Supervision positively and significantly influenced teacher performance in public junior high schools, with a significance value of 0.000, which is lower than 0.05 [25]. Similarly, Akpalu study indicated that a strong Organizational Culture positively affected teacher performance in public primary schools in Ghana, enhancing motivation, engagement, and instructional effectiveness [26]. From these findings, a generalization can be made: to improve Teacher Performance, it is essential to focus on enhancing Learning Supervision, strengthening Organizational Culture, and cultivating Self-Discipline among teachers. Improvements in these areas are likely to support one another, creating a conducive environment for professional growth and increased teacher effectiveness.

The implications of this research are far-reaching for educational policy. Schools and educational institutions should focus on strengthening Learning Supervision and cultivating a positive Organizational Culture. This can be achieved through targeted training programs for both school leaders and teachers, along with efforts to promote collaboration and mutual support [27]-[31]. Furthermore, the development of Self-Discipline in teachers should be integrated into professional development programs to foster a more disciplined and committed teaching workforce [32]-[38]. One of the novelties of this study is the identification of Self-Discipline as a significant mediator between Organizational Culture and Teacher Performance. While previous studies have focused primarily on the direct effects of these variables, this research highlights the importance of Self-Discipline as a linking factor, amplifying the effects of Organizational Culture on Teacher Performance.

However, this study has some limitations. Firstly, it only examines three primary variables, leaving out other potential factors that could influence Teacher Performance. Secondly, the sample was limited to specific schools, meaning the findings may not be fully representative of all educational contexts. Lastly, the quantitative research methodology, based on surveys, may not fully capture the complexity of the phenomena being studied. In light of these limitations, several recommendations are proposed. Educational institutions should implement training programs for school leaders and teachers to improve Learning Supervision and enhance Organizational Culture [39]-[42]. Additionally, developing programs aimed at improving Self-Discipline, such as mentoring or reflective practices, would benefit teachers' professional growth. Finally, further research should explore other variables influencing Teacher Performance and adopt diverse research methods to gain a deeper understanding of the factors at play.

4. CONCLUSION

Based on the research findings, it can be concluded that the Head of Madrasah's Learning Supervision, Organizational Culture, and Self-Discipline have a significant influence on improving the performance of Madrasah Aliyah teachers in Gayo Lues Regency. Learning Supervision directly affects teacher Self-Discipline by $\rho = 0.132$, and Organizational Culture affects it by $\rho = 0.436$, indicating that the more effective the head of madrasah's supervision and the stronger the organizational culture, the higher the teachers' discipline in carrying out their duties. In addition, Learning Supervision, Organizational Culture, and Self-Discipline also directly influence Teacher Performance by $\rho = 0.597$, $\rho = 0.408$, and $\rho = 0.324$, respectively. Although there is an indirect influence of Learning Supervision on Teacher Performance thru Self-Discipline by $\rho = 0.044$ and Organizational Culture on Teacher Performance thru Self-Discipline by $\rho = 0.132$, this indirect influence is relatively small compared to the direct influence. Simultaneously, these three variables contribute 44% to Teacher Performance, while the remaining 56% is influenced by other factors outside the scope of this research. These results confirm that the effectiveness of madrasah head's supervision, the strength of organizational culture, and teacher discipline are important factors in improving teacher professionalism and performance in madrasahs.

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