

## THE INFLUENCE OF NEUROLEADERSHIP AND SCHOOL CULTURE ON TEACHER PERFORMANCE AT MAN 2 MODEL MEDAN

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### Abstract

This study aims to understand and analyze the influence of neuroleadership and school culture on teacher performance at MAN 2 Model Medan, both partially and simultaneously. The study is based on the fact that teacher performance is generally categorized as good, but there are still some aspects that need to be optimized, and the implementation of neuroleadership and school culture is not yet fully optimal. This research uses a quantitative approach with an associative research type. The population in this study consists of 136 teachers teaching at MAN 2 Model Medan, while the research data were analyzed based on 102 respondents. Data was collected through questionnaires using a Likert scale. Data analysis was carried out using multiple linear regression analysis, classical assumption tests, t-test, F-test, and the coefficient of determination test ( $R^2$ ). The results of the study show that: (1) neuroleadership has a positive and significant effect on teacher performance. (2) School culture also has a positive and significant effect on teacher performance. Furthermore, the simultaneous test results indicate that neuroleadership and school culture together have a positive and significant effect on teacher performance, with an F-value of 120.716 and a significance level of  $0.000 < 0.05$ . The R Square value of 0.709 shows that neuroleadership and school culture can explain 70.9% of the variation in teacher performance, while the remaining 29.1% is influenced by other factors outside the study.

**Keywords:** Neuroleadership, School Culture, Teacher Performance

### INTRODUCTION

Human resources are a crucial element in determining the success of an organization, including within the education sector. According to Dessler (2020), human resource management is the process of acquiring, training, evaluating, and compensating employees, as well as managing employment relations, to effectively achieve organizational goals. In the context of education, teachers—as part of the human resource pool—play a strategic role in creating a high-quality and sustainable learning process. Within the educational landscape, such development is essential for enhancing teacher professionalism, particularly regarding pedagogical and social competencies as well as the ability to adapt to technological advancements. Consequently, the success of an educational institution is largely determined by the quality of its human resources. Education is a key factor in enhancing the quality of human resources. It is a fundamental necessity for individuals and is regarded as a strategic tool for improving the standard of living. Through education, people can acquire new knowledge and hone their skills, enabling them to contribute effectively to society. Education is also a systematic process for shaping the quality of human resources capable of meeting the demands of a changing era. Within the educational process, teachers play a crucial role as the spearhead of teaching and learning activities (Sari & Nugroho, 2022).

MAN 2 Model Medan is a State Islamic Senior High School (\*Madrasah Aliyah Negeri\*) under the auspices of the Ministry of Religious Affairs of the Republic of Indonesia, serving as a model school with high educational quality standards. As a leading educational institution, MAN 2 Model Medan strives to produce graduates who are academically competent and possess strong character. In this context, teacher performance is a key factor determining the success of the learning process. According to Darling-Hammond et al. (2021), teacher performance is significantly linked to the quality of instruction and student learning outcomes. Therefore, enhancing teacher performance is a top priority for a model school like MAN 2 Model Medan. As a leading madrasa, MAN 2 Model

Medan is required to maintain effective human resource management, adaptive leadership, and a strong school culture. These three aspects are crucial factors in supporting the enhancement of teacher performance and the overall quality of education. Teacher performance refers to the degree of success a teacher achieves in carrying out their duties and responsibilities as an educator to meet educational goals in accordance with established standards. In reality, however, teacher performance is not always optimal. It can be defined as a teacher's ability to execute teaching duties at school and fulfill responsibilities toward students with the aim of enhancing student academic achievement. According to Supardi (2021), teacher performance is the ability to carry out instructional tasks and take responsibility for students under one's guidance by fostering their academic success. In an educational context, performance is demonstrated through the ability to plan lessons, conduct the teaching-learning process, and evaluate student learning outcomes. Therefore, improving teacher performance is a matter of great importance for schools to address.

This is a summary of teacher performance results at MAN 2 Model Medan for the 2025/2026 academic year. Based on the table above, teacher performance scores range from 88 to 97. The highest number of teachers (31) achieved a score of 94, followed by 29 teachers with a score of 95; 17 teachers each achieved scores of 92 and 93; 16 teachers scored 96; 12 teachers scored 92; and 5 teachers scored 90. Conversely, the lowest number of teachers was found at the score of 88 (1 teacher), while scores of 89 and 97 were each achieved by 4 teachers. Based on the description above, it can be concluded that out of a total of 136 teachers, 5 teachers (3.68%) obtained performance scores in the 88–89 range—comprising 1 teacher with a score of 88 and 4 teachers with a score of 89. Meanwhile, 131 teachers (96.32%) obtained performance scores in the 90–97 range. Based on teacher performance assessment data at MAN 2 Model Medan, the majority of teachers achieved ratings of "good" and "very good." These results demonstrate that, overall, the teachers have successfully carried out their professional duties and responsibilities as educators in accordance with the standards established by the school. This achievement indicates that the quality of teacher performance at MAN 2 Model Medan is good in terms of supporting the implementation of the learning process.

When examining data on graduates admitted to state universities, a notable trend emerges. Despite teacher performance assessments indicating a "good" rating, the number of students admitted to state universities declined from 276 in the 2023/2024 academic year to 262 in the 2024/2025 academic year—a drop of 14 students. An even more significant decline occurred in the 2025–2026 academic year, with only 196 students gaining admission to state universities. This figure represents a decrease of 66 students compared to the previous academic year and a drop of 80 students compared to the 2023–2024 academic year. These conditions indicate that the assessed "good" teacher performance has not yet fully translated into improved educational outcomes. In other words, other factors likely influence the optimization of teacher performance in producing better educational results. One factor that can influence teacher performance is the leadership style adopted by the school principal. Within the evolution of modern management science, the concept of "neuroleadership" has emerged; drawing on Pohan (2026)—who references David Rock (2006)—neuroleadership is defined as a leadership approach that integrates neuroscience principles with leadership theories. Leaders utilize neuroleadership to understand how to manage responses to stress, rewards, threats, and change within employees' brains. By grasping these dynamics, a leader can create a more conducive work environment, boost motivation, and drive optimal individual performance.

Pre-survey results indicate that the implementation of neuroleadership at MAN 2 Model Medan has proceeded reasonably well but is not yet fully optimal. This is evident from the responses to statement number 4, which received the highest number of "Disagree" (KS) ratings—specifically from four respondents. These findings suggest that some teachers do not yet fully experience positive relationships with colleagues or feel comfortable discussing matters with school leadership. According to David Rock (2008), this situation relates to the "relatedness" indicator within the SCARF model—an individual's need to feel accepted and trusted, and to maintain positive social connections in the workplace. The presence of "Disagree" responses indicates that the relatedness aspect has not been fully realized; consequently, some teachers lack a sense of psychological safety when communicating and collaborating with leadership and fellow teachers. Therefore, efforts are needed to strengthen open communication, build trust, and foster a collaborative work environment to optimize the implementation of neuroleadership at the school. In summary, these pre-survey results indicate a need to further improve the implementation of neuroleadership at MAN 2 Model Medan to better support enhanced teacher performance. In addition to neuroleadership factors, school culture also plays a significant role in influencing teacher performance.

According to Deal & Peterson (2016), as cited in Hariki et al. (2026), school culture consists of the patterns of values, beliefs, traditions, symbols, and rituals formed over time through the collaboration of the school community, as well as the shared habits that shape the school's identity and influence how members think, behave,

and act in daily school life. A strong, positive school culture fosters a comfortable and supportive work environment, enabling teachers to perform their duties more effectively. Conversely, a less conducive school culture can lead to diminished morale, a lack of collaboration among teachers, and poor instructional quality. Therefore, school culture is a crucial factor to consider in efforts to enhance teacher performance. Overall, the pre-survey results indicate that the school culture at MAN 2 Model Medan falls into the "good" category, as the majority of teachers responded positively to each indicator. However, some respondents—three for each item—expressed disagreement regarding questions number 3 and 4. Question number 4 addresses indicators related to values and beliefs, as well as norms and rules. This suggests that the school culture has not yet been fully or uniformly internalized among the teaching staff. According to the perspectives of Deal and Peterson (2016) and Hariki et al. (2026), a strong school culture is characterized by a shared understanding and commitment among all school community members regarding the values upheld by the institution. Therefore, these pre-survey results indicate a need to strengthen the school culture at MAN 2 Model Medan so that all teachers share a common perception, exhibit consistent behavior, and maintain a unified commitment to achieving educational goals and enhancing teacher performance.

Based on the background outlined above, the following issues can be identified:

1. Teacher performance at MAN 2 Model Medan is not yet fully optimal, despite falling within the "good" category.
2. There are still aspects of teacher performance—such as collaboration and problem-solving skills—that require improvement.
3. The implementation of neuroleadership by school leadership is not yet fully optimal.
4. The school culture does not yet fully support the maximization of teacher performance.
5. There is an indication that neuroleadership and school culture influence teacher performance.

Referring to the background of the problem, research formulation, and objectives, the researcher can state the following hypotheses:

H1: Neuroleadership has a positive and significant effect on teacher performance at MAN 2 Model Medan.

H2: School culture has a positive and significant effect on teacher performance at MAN 2 Model Medan.

H3: Neuroleadership and school culture have a positive and significant effect on teacher performance at MAN 2 Model Medan.

## METHOD

This study employed an associative approach, which aims to identify the relationship or connection between one variable and another (Sugiyono, 2021). The method employed was quantitative. The data used in this study included both primary and secondary data. This study was conducted at MAN 2 Model Medan, located at Jl. Wiliem Iskandar No. 7A, Sidorejo, Medan Tembung District, Medan City, North Sumatra. The research was scheduled to take place from February 2026 to August 2026. The study population consisted of 136 teachers at MAN 2 Model Medan; this group was selected due to its direct relevance to the research variables. A probability sampling technique was employed, with the number of respondents determined via simple random sampling—meaning the sample was selected randomly without regard to specific characteristics. This study uses SPSS version 26 as the analysis tool. The sample size for this study was determined using Slovin's formula, with a margin of error of 5%.

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

Note:

n = sample size

N = population size

e<sup>2</sup> = margin of error

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

$$n = \frac{136}{1 + 136 \times (0,05)^2}$$

$$n = \frac{136}{1 + 0,34}$$

$$n = \frac{136}{1,34}$$

$$n = 102$$

Thus, the sample for this study consists of 102 teachers. This number is considered representative of the population and sufficient for the research analysis.

## RESULTS AND DISCUSSION

### Results

#### Validity and Reliability Test Results

**Table 1.** Results of the Validity Test of Neuroleadership, School Culture, Teacher Performance

| Statement Item | r-count | r-table | Description |
|----------------|---------|---------|-------------|
| N1             | 0,899   | 0,361   | Valid       |
| N2             | 0,898   | 0,361   | Valid       |
| N3             | 0,885   | 0,361   | Valid       |
| N4             | 0,781   | 0,361   | Valid       |
| N5             | 0,655   | 0,361   | Valid       |
| N6             | 0,665   | 0,361   | Valid       |
| N7             | 0,746   | 0,361   | Valid       |
| N8             | 0,743   | 0,361   | Valid       |
| N9             | 0,642   | 0,361   | Valid       |
| N10            | 0,692   | 0,361   | Valid       |
| SC1            | 0,886   | 0,361   | Valid       |
| SC2            | 0,848   | 0,361   | Valid       |
| SC3            | 0,812   | 0,361   | Valid       |
| SC4            | 0,552   | 0,361   | Valid       |
| SC5            | 0,805   | 0,361   | Valid       |
| SC6            | 0,752   | 0,361   | Valid       |
| SC7            | 0,845   | 0,361   | Valid       |
| SC8            | 0,662   | 0,361   | Valid       |
| SC9            | 0,808   | 0,361   | Valid       |
| SC10           | 0,634   | 0,361   | Valid       |
| SC11           | 0,888   | 0,361   | Valid       |
| SC12           | 0,760   | 0,361   | Valid       |
| TP1            | 0,797   | 0,361   | Valid       |
| TP2            | 0,667   | 0,361   | Valid       |
| TP3            | 0,827   | 0,361   | Valid       |
| TP4            | 0,761   | 0,361   | Valid       |
| TP5            | 0,806   | 0,361   | Valid       |
| TP6            | 0,734   | 0,361   | Valid       |

Source: SPSS version 25 (2026)

Referring to Table 1, it is known that the corrected item total correlation value is > 0.361, so all statement items are stated to be valid/legitimate.

**Table 2.** Results of the Reliability Test of Neuroleadership, School Culture, Teacher Performance

| Variable            | Cronbach Alpha | Description |
|---------------------|----------------|-------------|
| Neuroleadership     | 0,921          | Reliable    |
| School Culture      | 0,937          | Reliable    |
| Teacher Performance | 0,857          | Reliable    |

Source: SPSS version 25 (2026)

Referring to Table 2, it is known that the Cronbach's alpha value for all variables is > 0.60, so all variables is neuroleadership, school culture and teacher performance items are stated to be reliable.

### Normality Test Results

**Table 3.** Kolmogorov-Smirnov Test Results

|                                  |                | Unstandardized Residual |
|----------------------------------|----------------|-------------------------|
| N                                |                | 102                     |
| Normal Parameters <sup>a,b</sup> | Mean           | .0000000                |
|                                  | Std. Deviation | 1.53174327              |
| Most Extreme Differences         | Absolute       | .049                    |
|                                  | Positive       | .049                    |
|                                  | Negative       | -.025                   |
| Test Statistic                   |                | .049                    |
| Asymp. Sig. (2-tailed)           |                | .200 <sup>c,d</sup>     |

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. This is a lower bound of the true significance.

Source: SPSS version 25 (2026)

Referring to Table 3. above, it is known that the results of the Kolmogorov-Smirnov test have a significance value of  $0.200 > 0.05$  so it can be concluded that the data tested is normally distributed.

### Multicollinearity Test Results (Tolerance and VIF)

**Table 4.** Multicollinearity Test Results

| Model           | Coefficients <sup>a</sup>   |            |                           |  |       | Collinearity Statistics |               |
|-----------------|-----------------------------|------------|---------------------------|--|-------|-------------------------|---------------|
|                 | Unstandardized Coefficients |            | Standardized Coefficients |  | t     | Sig.                    | Tolerance VIF |
|                 | B                           | Std. Error | Beta                      |  |       |                         |               |
| 1 (Constant)    | 3.920                       | 1.080      |                           |  | 3.631 | .000                    |               |
| Neuroleadership | .304                        | .050       | .552                      |  | 6.104 | .000                    | .359 2.783    |
| School Culture  | .158                        | .043       | .333                      |  | 3.680 | .000                    | .359 2.783    |

a. Dependent Variable: Teacher Performance

Source: SPSS version 25 (2026)

Referring to Table 4, it is known that the results of the multicollinearity test for the variables neuroleadership and school culture have a tolerance value  $> 0.10$  and  $VIF < 10$ , so this study is declared free from multicollinearity problems.

### Heteroscedasticity Test Results (Glejser)

**Table 5.** Glejser Heteroscedasticity Test Results

| Table 1. Regression Analysis Results |                 |                             |            |                           |      |      |
|--------------------------------------|-----------------|-----------------------------|------------|---------------------------|------|------|
|                                      |                 | Coefficients <sup>a</sup>   |            |                           |      |      |
|                                      |                 | Unstandardized Coefficients |            | Standardized Coefficients |      |      |
|                                      | Model           | B                           | Std. Error | Beta                      | t    | Sig. |
| 1                                    | (Constant)      | .361                        | .628       |                           | .575 | .567 |
|                                      | Neuroleadership | .020                        | .029       | .144                      | .685 | .495 |
|                                      | School Culture  | .005                        | .025       | .035                      | .208 | .836 |

a. Dependent Variable: Abs res

Source: SPSS version 25 (2026)

Referring to Table 5. above, the results of the Glejser test above, the significance value of the two independent variables is neuroleadership and school culture  $> 0.05$ , so it can be concluded that there is no heteroscedasticity.

## Multiple Linear Regression Test Results

**Table 6.** Multiple Linear Regression Test Results

| Model           | Coefficients <sup>a</sup>   |            |                           |  |       | Collinearity Statistics |               |
|-----------------|-----------------------------|------------|---------------------------|--|-------|-------------------------|---------------|
|                 | Unstandardized Coefficients |            | Standardized Coefficients |  | t     | Sig.                    | Tolerance VIF |
|                 | B                           | Std. Error | Beta                      |  |       |                         |               |
| 1 (Constant)    | 3.920                       | 1.080      |                           |  | 3.631 | .000                    |               |
| Neuroleadership | .304                        | .050       | .552                      |  | 6.104 | .000                    | .359 2.783    |
| School Culture  | .158                        | .043       | .333                      |  | 3.680 | .000                    | .359 2.783    |

a. Dependent Variable: Teacher Performance

Source: SPSS version 25 (2026)

Based on the Unstandardized Coefficients (B) values, the following regression equation was obtained:

$$Y = 3.920 + 0.304X_1 + 0.158X_2$$

1. The constant value of 3.920 indicates that if the Neuroleadership and School Culture variables are assumed to be zero, the Teacher Performance value remains at 3.920.
2. The Neuroleadership regression coefficient of 0.304 indicates that every one-unit increase in Neuroleadership results in a 0.304-unit decrease in Teacher Performance, assuming other variables remain constant.
3. The School Culture regression coefficient of 0.158 indicates that every one-unit increase in School Culture results in a 0.158-unit increase in Teacher Performance, assuming other variables remain constant.

## Hypothesis Testing

### Partial Test Results (t-Test)

**Table 7.** Partial Test Results (t-Test)

| Model           | Coefficients <sup>a</sup>   |            |                           |  |       | Collinearity Statistics |               |
|-----------------|-----------------------------|------------|---------------------------|--|-------|-------------------------|---------------|
|                 | Unstandardized Coefficients |            | Standardized Coefficients |  | t     | Sig.                    | Tolerance VIF |
|                 | B                           | Std. Error | Beta                      |  |       |                         |               |
| 1 (Constant)    | 3.920                       | 1.080      |                           |  | 3.631 | .000                    |               |
| Neuroleadership | .304                        | .050       | .552                      |  | 6.104 | .000                    | .359 2.783    |
| School Culture  | .158                        | .043       | .333                      |  | 3.680 | .000                    | .359 2.783    |

a. Dependent Variable: Teacher Performance

Source: SPSS version 25 (2026)

Based on Table 7, it is known that the independent variables influence each other on the dependent variable.

1. The test results indicate that the neuroleadership variable yielded a calculated t-value of 6.104 (exceeding the t-table value of 1.988) with a significance level of 0.000 (below 0.05). Consequently, Hypothesis 1 is accepted. These results confirm that neuroleadership has a positive and significant partial effect on the performance of teachers at MAN 2 Model.
2. The test results indicate that the scholl culture variable yielded a calculated t-value of 3.680 (exceeding the t-table value of 1.988) with a significance level of 0.000 (below 0.05). Consequently, Hypothesis 1 is accepted. This means that school culture is proven to have a positive and significant partial effect on teacher performance at MAN 2 Model Medan.

## Simultaneous Test Results (F-Test)

**Table 8.** Simultaneous Test Results (F-Test)

| ANOVA <sup>a</sup> |            |                |     |             |         |                   |
|--------------------|------------|----------------|-----|-------------|---------|-------------------|
| Model              |            | Sum of Squares | df  | Mean Square | F       | Sig.              |
| 1                  | Regression | 557.903        | 2   | 288.951     | 120.716 | .000 <sup>b</sup> |
|                    | Residual   | 236.970        | 99  | 2.394       |         |                   |
|                    | Total      | 814.873        | 101 |             |         |                   |

a. Dependent Variable: Teacher Performance

b. Predictors: (Constant), Neuroleadership, School Culture

Source: SPSS version 25 (2026)

Referring to Table 8. The ANOVA table shows that the calculated F-value (120.716) exceeds the F-table value (3.089), with a significance probability (Sig.) of 0.000. This probability value, which is well below the 0.05 significance threshold, confirms that Hypothesis 3 is accepted. In conclusion, the variables of Neuroleadership and School Culture, when combined and operating simultaneously, are proven to exert a tangible and significant influence on Teacher Performance.

### Determination Test Results

**Table 9.** Determination Test Results

| Model Summary |                   |          |                   |                            |
|---------------|-------------------|----------|-------------------|----------------------------|
| Model         | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1             | .842 <sup>a</sup> | .709     | .703              | 1.547                      |

a. Predictors: (Constant), Neuroleadership, School Culture

Source: SPSS version 25 (2026)

Referring to Table 9, the Model Summary table indicates an R-square value of 0.709. This figure signifies that the variables of Neuroleadership and School Culture collectively contribute 70.9% to the fluctuations in the Job Satisfaction of Education Personnel. Meanwhile, the remaining 29.1% is explained by various other variables or determinants falling outside the scope of this thesis.

### Discussion

#### The Influence of Neuroleadership on the Teacher Performance

Research findings demonstrate that Neuroleadership has a positive and significant impact on teacher performance at MAN 2 Model Medan. This is evidenced by the partial test (t-test) results, which yielded a calculated t-value of 6.104—exceeding the t-table value of 1.988—with a significance level of 0.000 ( $p < 0.05$ ). Furthermore, the regression coefficient of 0.304 indicates that every increase in the application of Neuroleadership is associated with a 0.304-unit increase in teacher performance. The Standardized Beta Coefficient of 0.552 suggests that Neuroleadership makes a substantial contribution to teacher performance. These results indicate that the more effectively school leaders implement Neuroleadership, the better the teachers' performance becomes. The application of Neuroleadership is linked to the principal's ability to understand the psychological states and brain functions of teachers as they perform their duties, manage emotions, make decisions, build social relationships, and create a work environment that fosters a sense of safety and comfort. These findings align with the study by Wulandari et al. (2024), which demonstrated that Neuroleadership can strengthen the impact of emotional intelligence on performance. Additionally, research by Pohan (2026) showed that neuroscience-based leadership practices have a positive and significant influence on performance. Thus, the results of this study are consistent with previous research, despite differences in the research subjects and contexts.

#### The Influence of School Culture on the Teacher Performance

Based on the research findings, school culture has a positive and significant influence on teacher performance at MAN 2 Model Medan. The partial test (t-test) results indicate that the calculated t-value of 3.680 exceeds the t-table value of 1.988, with a significance level of 0.000 ( $< 0.05$ ). A regression coefficient of 0.158 indicates that every increase in school culture is accompanied by a 0.158-unit increase in teacher performance. Meanwhile, the standardized beta coefficient of 0.333 demonstrates that school culture contributes to teacher performance. Based on the descriptive analysis of the school culture variable, the highest mean score was found for statement number 5 (mean = 3.44): "School rules serve as a guide in carrying out daily tasks." This score indicates that school rules constitute a relatively strong aspect of the school culture. Teachers perceive existing rules as guidelines for their daily duties, thereby helping to establish order, discipline, and clarity in the execution of their work. These findings align with the research of Misliawati, Hidayat, and Nurhaliza (2023), which demonstrated that school culture positively influences improvements in teacher performance. The results are also supported by Ananda et al. (2024), who found that school culture and teacher capacity building significantly affect teacher performance within the \*madrasah\* (Islamic school) environment. Thus, the findings of this study are consistent with previous research, despite differences in the characteristics of the research subjects and populations.

### **The Simultaneous Influence of Neuroleadership and School Culture on the Teacher Performance**

Research findings indicate that Neuroleadership and School Culture simultaneously exert a positive and significant influence on teacher performance at MAN 2 Model Medan. The simultaneous test (F-test) results show an F-calculated value of 120.716 with a significance level of 0.000 ( $p < 0.05$ ). Consequently, the third hypothesis (H3) is accepted, meaning that Neuroleadership and School Culture collectively have a significant impact on teacher performance. The extent to which these two independent variables explain teacher performance is reflected in an R-Square value of 0.709, or 70.9%. This implies that 70.9% of the variation in teacher performance can be explained by the combined influence of Neuroleadership and School Culture, while the remaining 29.1% is influenced by factors not included in the research model. Regarding teacher performance, these findings align with the descriptive analysis of the teacher performance variable. Statements concerning instructional materials—which still offer room for further refinement—yielded a mean score of 3.39, while the alignment of lesson planning with student needs and the use of teaching methods suited to individual student characteristics yielded a mean score of 3.36. These results demonstrate that teacher performance can be bolstered by leadership that fosters competency development and allows teachers to utilize their professional skills, alongside a school culture that provides guidelines and establishes order in the execution of duties. In other words, Neuroleadership provides support through leadership practices—specifically by ensuring fairness, offering opportunities for competency development, and granting teachers autonomy. Meanwhile, School Culture provides support through the rules, norms, habits, and work environment that guide teacher behavior. When these two aspects operate in tandem, teachers benefit from a more focused work environment and opportunities to enhance their professional capabilities. Such conditions facilitate teachers in preparing instructional materials, tailoring instruction to student needs, and selecting appropriate teaching methods.

### **CONCLUSION**

Based on the research findings regarding the influence of neuroleadership and school culture on teacher performance at MAN 2 Model Medan, the following conclusions can be drawn:

1. **Neuroleadership and Teacher Performance**

The research results indicate that neuroleadership has a positive and significant influence on teacher performance at MAN 2 Model Medan. This demonstrates that improved implementation of neuroleadership leads to enhanced teacher performance. A standardized beta coefficient of 0.552 indicates that neuroleadership makes a substantial contribution to teacher performance.

2. **School Culture and Teacher Performance**

School culture has a positive and significant influence on teacher performance at MAN 2 Model Medan. Partial test results show a calculated t-value of 3.680 (exceeding the critical value of 1.988) with a significance level of 0.000 (below 0.05); thus, H2 is accepted. This implies that a better-implemented school culture results in better teacher performance.

3. **Neuroleadership and School Culture on Teacher Performance**

Simultaneously, neuroleadership and school culture are proven to have a positive and significant influence on teacher performance at MAN 2 Model Medan. Overall, the findings indicate that improvements in teacher performance at MAN 2 Model Medan can be supported by implementing neuroleadership—which provides fairness and professional development opportunities—and by fostering a school culture characterized by clear rules and practices. Together, these factors create a work environment that better supports teachers in carrying out their professional duties, spanning the planning, implementation, and evaluation of instruction.

Based on the research findings and analysis regarding Neuroleadership and School Culture in relation to Teacher Performance at MAN 2 Model Medan, the following recommendations are offered:

1. **For MAN 2 Model Medan regarding Neuroleadership**

The school administration—specifically the principal—is advised to maintain the application of fairness principles when providing teachers with opportunities to develop their competencies. Additionally, an area requiring further strengthening is teacher autonomy in managing work strategies. The principal could grant teachers greater latitude to determine the strategies and approaches used to carry out their duties—tailored to specific learning conditions and needs—while still adhering to the school's objectives and policies. Strengthening this aspect is expected to enhance teachers' sense of responsibility, engagement, and capability in performing their professional duties.

2. **For MAN 2 Model Medan regarding School Culture**

The school is advised to maintain the culture of adhering to established rules that guide the performance of duties. Clear rules provide direction and structure for teachers as they fulfill their responsibilities. Furthermore, the school needs to foster positive habits within the school environment, particularly the practice of sorting waste by type. Such habits can be consistently cultivated by raising awareness, providing supportive facilities, and ensuring supervision and role-modeling by all members of the school community. In this way, the school culture will be evident not only in the rules but also reflected in the daily habits of the school community.

3. For MAN 2 Model Medan regarding Teacher Performance

Teachers are expected to continue maintaining and improving their performance, particularly in the areas of lesson planning, implementation, and evaluation. Research results indicate that the combined application of Neuroleadership and School Culture significantly influences Teacher Performance, with an R-Square value of 0.709 (or 70.9%). Therefore, improvements in leadership quality and school culture should be accompanied by enhancements in teachers' abilities to prepare and develop instructional materials, tailor instruction to students' needs, conduct lessons effectively, and evaluate learning outcomes.

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