

www.ijemst.net

# The Existence of Teacher Leadership and School Climate Impact on Teacher **Performance**

Aman Simaremare 🗓



Universitas Negeri Medan, Indonesia

Arif Rahman 🗓



Universitas Negeri Medan, Indonesia

Muhammad Meftah 🗓



Universitas Negeri Medan, Indonesia

Baharuddin 🗓



Universitas Negeri Medan, Indonesia

Dina Ampera 🗓



Universitas Negeri Medan, Indonesia

#### To cite this article:

Simaremare, A., Rahman, A., Meftah, M., Baharuddin, & Ampera, D. (2023). The existence of teacher leadership and school climate impact on teacher performance. International Journal of Education in Mathematics, Science, and Technology (IJEMST), 11(6), 1518-1536. https://doi.org/10.46328/ijemst.3819

The International Journal of Education in Mathematics, Science, and Technology (IJEMST) is a peerreviewed scholarly online journal. This article may be used for research, teaching, and private study purposes. Authors alone are responsible for the contents of their articles. The journal owns the copyright of the articles. The publisher shall not be liable for any loss, actions, claims, proceedings, demand, or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of the research material. All authors are requested to disclose any actual or potential conflict of interest including any financial, personal or other relationships with other people or organizations regarding the submitted work.



This work is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License.



2023, Vol. 11, No. 6, 1518-1536

https://doi.org/10.46328/ijemst.3819

# The Existence of Teacher Leadership and School Climate Impact on Teacher Performance

Aman Simaremare, Arif Rahman, Muhammad Meftah, Baharuddin, Dina Ampera

#### **Article Info**

#### Article History

Received:

05 February 2023

Accepted:

22 September 2023

#### Keywords

Teacher leadership School climate

Teacher performance

# Abstract

This research aims to determine the influence of teacher leadership and school climate on the performance of high school (SMP) teachers. This type of research uses a quantitative approach through path analysis. The sample consisted of 80 Medan 35 State Junior High School (SMP) teachers. Data collection was carried out using a questionnaire. The research results show: (1) Teacher leadership directly affects the learning climate in schools; the better the teacher leads the class, the better the learning climate created in the school environment. (2) Teacher leadership directly affects teacher performance; the better the teacher's leadership, the more the teacher's performance will also increase. (3) School climate has a direct positive effect on teacher performance, meaning that the better the school climate, the higher the teacher performance. (4) Teacher leadership indirectly affects teacher performance through the school climate because the teacher leads the class better and can work well together, internally and externally. A good school climate will be created. The school atmosphere will feel comfortable and peaceful when the members can work together, which ultimately results in a good performance for the teacher.

#### Introduction

Human resources are educators in school education institutions responsible for building and shaping student personalities, namely principals, teachers, and education staff. Teachers occupy a vital position in achieving educational goals. The teacher's task is more challenging than one might imagine, but on the contrary, the task and role of the teacher as an educator are very complex. The teacher as the class director when learning takes place provides a synergistic effect in building teacher performance so that they have an attitude of loyalty to their duties and responsibilities in realizing the achievement of the school's vision, mission, and goals in the short-term, and achieving educational goals as stated in Article 3 of Law no. 20 of the 2003 National Education System, namely being a human being of faith and fear of God Almighty, having a noble character, being healthy, knowledgeable, capable, creative, independent, and being a democratic and responsible citizen. To realize the educational goals, the teacher's active role is needed as the central element in the success of education.

The achievements of the quality of education in Indonesia have recently received attention from the world of education because the results have not been encouraging. According to the 2019 PISA (Program for International Student Assessment) survey results, Indonesia belongs to the low category, ranked 74th out of 79 countries or 6th from the bottom. The government has made efforts to improve the quality of education in Indonesia, including through the teacher professional education and training program, professional teacher education in positions and pre-services, training, upgrading, seminars, and functional training, as well as providing professional allowances for teachers. Professionals with the hope that the educational practices carried out are of high quality and, in the end, the expected quality of education can be realized. However, these efforts have yet to be maximized to achieve the expected results.

In connection with these conditions, exploring other factors that can realize educational practices in quality schools, especially in school human resources, especially in the element of teachers as professional educators as the main actors in student learning process activities, is necessary. These professional educators master competencies in carrying out their teaching duties and receive recognition from the government through educator certificates (Janawi, 2012). The role of the professional teacher is crucial in the success of students in mastering several sciences as well as in the formation of character as human beings with dignity and dignity as well as several skills needed by students in their daily life so that teachers who have strong performance in their duties and responsibilities professionally so that expectations of students who have character and master the knowledge and skills of living in society can be realized.

Performance is the willingness of a person or employee to remain loyal as a member of the organization and contribute in totality to the success of achieving specific goals (Colquitt et al., 2009; Walker in Ambarita et al., 2013; Meyer et al. in Sutrisno, 2015). An employee with a strong performance on his duties and work will have a greater chance of success than an employee with a low performance. High task performance is characterized by loyalty, as shown by compliance with existing regulations, respect for fellow employees and superiors, loyalty to the institution, and high discipline in carrying out tasks (Hoy & Miskel, 1987).

Organizational performance is divided into three models, namely (1) Affective commitment, (2) Continuance commitment, and (3) Normative commitment (Allen & Meyer, 1993; Newstrom, 2001; Colquitt et al., 2009). Affective commitment relates to individual feelings of love for the organization, manifested in the form of a willingness to stay in the organization and the desire to foster social relations with members. Continuance commitment relates to an individual's feelings to remain in the organization without any desire to leave the organization even though there are many offers from outsiders. Normative commitment relates to feelings that require individuals to stay in the organization carrying out their duties because it is considered an obligation and responsibility towards the organization based on consideration of employee norms, values, and beliefs.

To achieve the school goals, teachers must have strong performance in carrying out their duties because this aspect can affect their performance in carrying out tasks. Teachers with high professional performance affect their professional competence in carrying out tasks. The results of the theoretical investigation show that there are many influencing factors, including organizational factors, non-organizational factors, and individual employee

characteristics (Porter, 1982), organizational mechanism factors (including leadership, organizational culture, and organizational structure); group mechanism (includes: leadership style and behavior, leadership power and influence, team process and characteristics); and individual characteristics (including personality and cultural values, and abilities) (Colquitt et al., 2009). The results of previous research indicate that organizational performance is influenced by school organizational climate factors (Dharianta & Basuki, 2013; Choiriyah et al., 2017; Saragih & Suhendro, 2020), job characteristics (Mulyani & Soliha, 2014), work motivation (Choiriyah et al., 2017), leadership (Rohim, 2018; Sidupa, 2018; Novitasari et al., 2017), teamwork (Faizah, 2015), trust and organizational culture (Damanaik et al., 2018). Even though much research has been conducted on teacher leadership and school organizational climate, these two variables are considered urgent to study today because they are psychological conditions that directly come into contact with the elements of individual feelings in carrying out their duties.

Teacher leadership is a social process that influences the behavior of individual students and groups in achieving common goals (Hoy & Miskel, 1987). Teacher leadership can significantly contribute to a classroom lesson's success or failure. In the leadership process, the teacher can influence the behavior of its members (students) by using different methods or approaches. Teacher leadership is an aspirational, spirit, and creative moral force that can influence students to change attitudes to conform to the leader's desire to achieve common goals. Teacher leadership is used to describe various management techniques that promote a strong sense of unity and teamwork so that collectively, they can overcome weaknesses among team members in carrying out a job (Aziz et al., 2017). Teacher leadership always encourages all students to provide ideas or ideas democratically to achieve a common goal of improving quality in educational units.

Teacher leadership is a management style that involves all participants by designing a constructive process to work with stakeholders and maintain relationships in achieving the same goals, with the involvement of students in designing goals to be achieved together. This statement is supported by research results showing that teacher leadership significantly affects student learning performance in class (Rohim, 2018; Sidupa, 2018; Novitasari et al., 2017). Another factor that affects organizational performance is the school climate. Organizational climate is a relatively enduring quality of the school environment manifested in teachers' collective perceptions of organizational behavior (Hoy & Miskel, 1987). School climate is an existing characteristic (the enduring characteristics) that describes the psychological characteristics (psychological character) of a particular school, which distinguishes a school from other schools, influences the behavior of teachers and students, and is a psychological feeling (psychological feel) that owned by teachers and students in certain schools (Sergiovanni & Starratt, 1993).

The school climate cannot be seen but can be felt psychologically. Whether the climate is pleasant (conducive) or not depends on how each school member perceives it. A conducive organizational climate will create a comfortable and enjoyable feeling for organizational personnel so that organizational members will be more enthusiastic in carrying out their duties and responsibilities and answer as much as possible to create strong performance for the organization (Marli, 2015; Yusoff, 2016).

The achievement of quality education in schools is inseparable from the leadership of a teacher in creating a conducive school climate, controlling the success of learning in schools, managing classes in a better direction, and building good collaboration and communication as a teacher to all school stakeholders. In line with that, Hadiyanto (2016) stated that teacher leadership can affect the school climate. Based on the description above, an attempt was made to research the effect of teacher leadership and school climate on teacher performance at SMP Negeri 35 Medan. The research aims to find out: 1) To determine the influence of teacher leadership on the performance of teachers of the Middle School (SMP) Negeri 35 Medan. 2) To find out the effect of school climate on the performance of teachers of Middle School (SMP) Negeri 35 Medan. 3) To find out the effect of school climate on the performance of teachers of Middle School (SMP) Negeri 35 Medan.

Performance (work achievement) is a work result achieved by a person carrying out the tasks assigned based on skills, experience, sincerity, and time (Hasibuan, 2003). According to Rusman (2013), performance is a form of a person's behavior in an organization with an achievement orientation. Furthermore, Mathis et al. (2006) wrote that performance is what is done and not done. Teacher performance is what influences how much they contribute to the organization, which includes (1) output quantity, (2) output quality, (3) output period, (4) attendance at work, and (5) cooperative attitude (Mathis et al., 2006).

Meanwhile, according to Cushway (2002), performance assesses how someone has worked compared to predetermined targets. Performance is an activity carried out by each individual to achieve the planned goals. In this regard, there are several definitions of performance. Smith (in Mulyasa 2005) states that performance is ".....output drive from human process or otherwise". Performance is the result or output of a process, and performance or performance can be interpreted as work performance, work execution, work achievement, work results, or work performance.

Performance is a universal concept which is the operational effectiveness of an organization, parts of the organization, and its employees based on predetermined standards and criteria. Because humans run organizations, actual performance is human behavior in carrying out its role to meet predetermined behavior standards to produce the desired actions and results (Mulyasa, 2005). Performance is about what is done, how to do it, and the results achieved from the work (Wibowo, 2017). Supardi (2014) and Wahyudi (2012) state that performance results from work that someone in an organization has achieved to achieve goals based on standardization or size and time according to the type of work and by established norms and ethics.

Teacher performance is a condition that shows the ability of a teacher to carry out his duties at school and illustrates the existence of an action displayed by the teacher while carrying out learning activities. The teacher's performance primarily determines the quality of learning because the teacher's performance is the teacher's performance in carrying out his duties at school as an educator. Every action or work must have an influence both within oneself and from outside the individual. The existence of teachers in carrying out their duties and obligations cannot be separated from the factors that influence them.

Motivation is a condition that drives employees to achieve organizational goals (work goals). An employee can

achieve maximum performance if he has a high achievement motive. Achievement motives that need to be possessed by employees must be grown from within themselves, apart from the environment. Prawirosentono (2018) suggests the following factors influence teacher performance: (1) Effectiveness and efficiency. The effectiveness of a measure is indicated by the fact that the person's goals can be achieved according to the planned needs. Efficient relates to the amount spent to achieve goals; (2) Authority and responsibility (Authority and Responsibility), Authority (authority) is the nature of communication or order in an It is a formal organizational activity that is owned (accepted) by an organization participant to members of other organizations to carry out an activity by its contribution (donation of energy). The order states what can and cannot be done in the organization concerned. In this case, for example, the teacher gives assignments to students. Meanwhile, responsibility is an integral part of or as a result of the authority's leadership; (3) Discipline, in general discipline, is obedience to applicable laws and regulations.

#### **Literature Review**

#### **Teacher Leadership**

Leadership means the ability and readiness to invite, guide, move, direct, and, if necessary, force people or groups so that they accept that influence and then do something that can help achieve a specific goal that has been set. A teacher's reliability largely determines a school's success in achieving educational goals as a leader in learning activities. A teacher is a person who has high expectations for students regarding their duties and functions in determining the learning objectives they lead. As a leader, the teacher must be able to influence the activities of his students to achieve school goals.

Leadership is a crucial aspect of an organization because the success of an organization is primarily determined by the quality of a leader in carrying out his duties. Good leadership is leadership that is liked by subordinates and can positively influence subordinates' views of the work they do. Pusbangtendik (2014) writes that teacher leadership in the learning process is essential to apply in class because it can significantly improve student achievement. Apart from that, it can also build a citizen learning community and even be able to make the class a learning class (learning class).

Freeman et al. (1995) state that leadership is the process of directing and influencing the task-related activities of group members. Leadership is the process of directing and influencing members in various activities that must be carried out. Thus, the essence of leadership in the classroom is the ability to influence and move students to achieve learning goals in class. Here, the elements that must be fulfilled in educational leadership are (1) followers, (2) goals, and (3) influencing activities.

Things that must be considered regarding the component of teacher leadership in the classroom are (1) the process of a series of teacher actions in the learning system in the classroom; (2) influence and setting an example; (3) giving orders persuasively and humanely but still upholding discipline in the applicable rules; (4) students comply with orders by their respective authorities and responsibilities; (5) use authority and power within the justified limits; and (6) mobilizing or directing all students to complete assignments to achieve the goal of increasing

cooperative relations between one student and another, fostering and mobilizing existing resources in schools and classes, and providing motivation to groups and individuals in the implementation of learning so that it can run according to which are desired.

According to Wei et al. (2009), four skills are necessary, namely:

- 1. Working with adult learners: Teachers must be able to see and arrange groupings of students based on the ability of students' intelligence levels from students who have low, medium, and high abilities. Each group must have students with these abilities.
- 2. Communication: Communication skills in a learning process are essential, resulting in the material being studied by students. It will be easier and faster in the process of understanding the material.
- 3. Collaboration team: The teacher's ability to collaborate in student learning groups must be based on sufficient knowledge and ability or skills so that undesirable things do not occur.
- 4. Knowledge of content and pedagogy Some problems in terms of teacher leadership in the classroom are the lack of knowledge and abilities or skills of teachers in using learning resources, supporting media, and learning strategies; this is because teachers still use conventional learning strategies, which only require students to learn to understand the material without group cooperation in its implementation.

#### **School Climate**

A school institution is an organization that organizes teaching and learning processes to achieve educational goals. Hoy and Miskel's (1987) statement that school climate is a broad term that refers to teachers' perceptions of the school work environment, formal organizations, informal organizations, the participants' personalities, and the organizational leadership that influences them. The school climate, as perceived by all school personnel, describes the quality of life in the school environment that is felt and experienced by members, whether it is a pleasant or conducive climate for them to work. In line with that statement, Supardi (2014) argues that school climate is an atmosphere that exists in a school, which describes the condition of school members, whether they are cheerful and intimate or there is concern for one another.

The concept of school climate or organizational climate as a place for teachers to carry out their teaching duties is also called work climate. The work climate arises due to the interaction process between members of the organization, which then produces the organization's characteristics (Haris & Amalia, 2018). The working climate in an organization can be formed as desired. It can be developed by the organization itself (Erawati and Wahyono, 2019) through leadership carried out by leaders, good communication from superiors to members and members to members, and informal relationships in carrying out work. The school's organizational climate can be seen through the dimensions of the organizational climate itself. According to Hoy and Miskel (1987), the dimensions of organizational climate consist of (1) open climate and (2) closed climate.

Pidarta (2011) states that there must be opportunities and abilities for professional staff: (1) cooperation in providing information, (2) cooperation in groups giving and receiving input, (3) making teachers become members of the community of school institutions, (4) making every effort people get the opportunity to experience as a

leader to show their abilities, (5) create a communication network to facilitate the dissemination of information to members, (6) involve members in decision-making activities for the common interest, (7) build a sense of kinship with members through activities fun, (8) first give people or groups a chance to solve their problems, if they cannot solve them together, (9) give directions to new employees how to do tasks or solve problems, and (10) create action which shows that the school institution is shared property. The link between these factors and the school climate can be seen in the following figure:

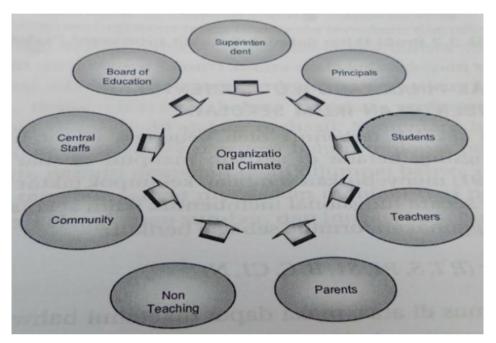


Figure 1. Organizational Climate Functional Model (Chand, 1991)

Implementing learning in schools requires a physical and non-physical climate to effectively realize learning processes and objectives. A conducive school climate is characterized by (1) a safe, comfortable, and orderly environment, (2) supported by the optimism and expectations of school members, (3) school health, and (4) activities centered on student development (Mulyasa, 2007). Accordingly, all school personnel and related elements under the principal's leadership must create a harmonious, safe, and pleasant environment. Referring to the explanation above, school climate is an atmosphere that describes a pleasant or unpleasant school environment based on individual perceptions of the school organization where the teacher carries out his work assignments. This school climate has a significant effect on work performance. The indicators of work climate in this study are seen from (1) work atmosphere, (2) environmental quality, (3) interaction between members, (4) award and punishment, (5) division of tasks, (6) decision centralization, and (7) opportunity.

# Method

This research is quantitative research with an ex post facto research design. This research was conducted at State Junior High School 35 Medan with a study population of 99 teachers. In comparison, the research sample was 80 teachers based on the Krejci Table with a 95% confidence level. The research sample was determined using each school's proportional random sampling technique. The research variables include teacher leadership (X1) and

school climate (X2). This research is quantitative research with an ex post facto research design. This research was conducted at State Junior High School 35 Medan with a study population of 99 teachers. In comparison, the research sample was 80 teachers based on the Krejci Table with a 95% confidence level. The research sample was determined using each school's proportional random sampling technique. The research variables consist of teacher leadership (X1), school climate (X2), and teacher performance (X3). Research data was collected using a questionnaire instrument distributed to research respondents.

Before the research questionnaire instrument was used, the instrument was first tested to test the validity and reliability of the instrument. The results of the validity test of teacher performance instruments obtained several 25 items declared valid with a reliability coefficient of r11 = 0.7282 (high category); the results of the validity test of the teacher's leadership instrument obtained several 25 items which were declared valid with a reliability coefficient of r11 = 0.7073 (high category). The school climate instrument validity test yielded 25 items with a reliability coefficient of r11 = 0.6961 (high category). Furthermore, the research data were analyzed with descriptive statistics and inferential statistics using SPSS. Before testing the research hypothesis, a requirement analysis test was carried out as a normality test, linearity test, and simple regression, and then carried out by path analysis. Research data was collected using a questionnaire instrument distributed to research respondents.

#### **Results and Discussion**

Description of research data for each research variable, namely teacher leadership, school climate, and teacher performance:

Table. 1. Summary of Research Variable Data Description and Ideal Data

	Teacher Leadership	School Climate	Teacher Performance
Score Minimum	64	57	66
Score Maximum	99	94	98
Mean	81.5	75.5	82
Range	35	37	32
Standard Error	0.777287	0.785948	0.952253
Standard Deviation	6.952267	7.029729	8.517211
Sample Variance	48.33402	49.4170886	72.54288
Sum	6823	6282	6653
Count (n)	80	80	80
Score Min Ideal	25	25	25
Score Max Ideal	100	100	100
Mean Ideal	75	75	75
Standard Deviation Ideal	12.5	12.5	12.5

Based on the data in Table 1, it is known that the highest score is 99, and the lowest score is 64. The standard deviation is 7, the average count (mean) is 81.5, the ideal highest score is 100, the ideal lowest score is 25, the

ideal average score is 75, and the ideal standard deviation is 12.5. This finding shows teacher leadership is above the ideal average (81.5>75). Thus, it is stated that teacher leadership tends to be high. The frequency distribution of teacher leadership scores is shown in the following histogram:

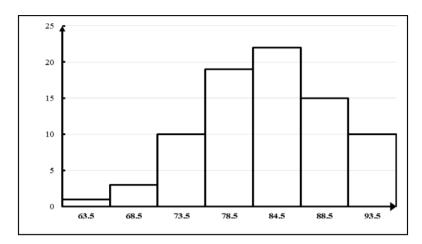


Figure 2. Teacher Leadership Histogram

Next, a trend test for teacher leadership variable data is carried out, as shown in Table 2.

Class Observation Class Interval Class Observation Frequency Relative Frequency category < 56.25 0 1 0.00 Low 2 56.26 - 75.005 6.25 Not enough 3 75.01 - 93.7581.25 65 Enough 4 >93.75 10 12.50 Tall

Table 2. Teacher Leadership Tendency Level

Based on Table 2 above, it is known that the level of teacher leadership tendencies belongs to the sufficient category, namely 81.25, and there are even 12.50%, which states that school teacher leadership is in the high category. The frequency distribution of school climate variable scores can be seen in Table 3:

Table 3. Frequency Distribution of School Climate Scores

Class	Class Interval	Absolute Frequency	Relative Frequency (%)
1	57 - 62	1	1.25
2	63 - 68	5	6.25
3	69 - 74	16	20
4	75 - 80	24	30
5	81 - 86	23	28.75
6	87 - 92	9	11.25
7	93 - 98	2	2.5
Total		80	100

The data in Table 3 shows that the highest score is 94. and the lowest is 57. The standard deviation is 7. The average count (mean) is 79. The ideal highest score is 100. the lowest ideal score is 25. The ideal average score is 75, and the standard deviation is 12.5. Pay attention to the average empirical score is more significant than the ideal average (79 > 75). The school climate in the school environment tends to be conducive (fun). The frequency distribution of work environment scores is shown in the histogram in Figure 3.

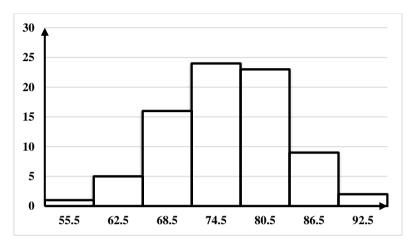


Figure 3. School Climate Histogram

Figure 3 shows four school climate variable tendencies categories in Table 4. Table 4 shows that the tendency level for teacher school climate is sufficient. However, there are still 31.25% who view that the school climate is in the lower category. The frequency distribution of teacher performance variable scores is seen in Table 5.

Table 4. School Climate Trend Level

Class	Class Interval	Absolute Frequency	Relative Frequency (%)	Category
1	< 56.25	0	0.00	Low
2	56.26 – 75.00	25	31.25	Not enough
3	75.01 – 93.75	53	66.25	Enough
4	>93.75	2	2.50	Tall

Table 5. Frequency Distribution of Teacher Performance Scores

Class	Class Interval	Absolute Frequency	Relative Frequency (%)
1	66 - 70	8	10
2	71 - 75	9	11.25
3	76 - 80	11	13.75
4	81 - 85	21	26.25
5	86 - 90	13	16.25
6	91 - 95	23	28.75
7	96 - 100	5	6.25
		80	100

Based on the data in Table 5, it is known that the highest score is 98. The lowest score is 66. the standard deviation is 9. the average count (mean) is 83. and the ideal highest score. The lowest ideal score is 25. The average ideal score is 75. and an ideal standard deviation of 12.5. Thus, the average empirical score is more significant than teachers' performance 75), so it can be stated that teachers' performance towards school organizations tends to be high. The frequency distribution of teacher performance scores is shown in the histogram as shown in Figure 4:

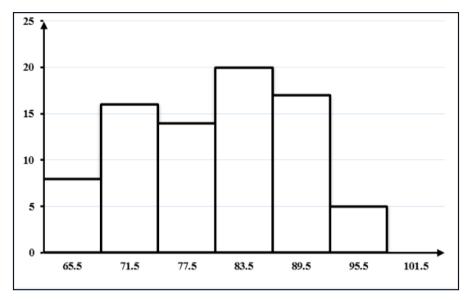


Figure 4. Teacher Performance Histogram

Based on Figure 5, there are four categories of normative performance variable tendencies. as shown in Table 6.

Class	Class Interval	Absolute Frequency	Relative Frequency (%)	Category
1	< 56.25	0	0.00	Low
2	56.26 – 75.00	17	21.25	Not enough
3	75.01 – 93.75	52	65	Enough
4	>93.75	11	13.75	Tall

Table 6. Teacher Performance Trend Levels

Table 6 shows that the level of teacher performance tends to be in the sufficient category. However, 21.25% of teachers still have performance towards school organizations in the less category. The normality test was carried out using the Kolmogorov-Smirnov formula with the test criteria at a significance level of  $\alpha = 0.05$ . If Asymp. Sig. (2 tailed) > 0.05, the distribution is normally distributed. The calculation results are in Table 7.

Testing is conducted with SPSS using the Test for Linearity at a significance level of  $\alpha = 0.05$ . Between variables are said to have a linear relationship if the significance (Linearity) is more than 0.05 if < at the significance level  $\alpha = 0.05$  or if the significance of the Deviation from Linearity > 0.05. The relationship between exogenous and endogenous variables is linear between the variables. It is said that the regression coefficient is significant if < at the significance level  $\alpha = 0.05$ . Then, the regression coefficient is declared significant.

Table 7. Summary of Data Normality Test Calculations using the Kolmogorov-Smirnov Test Formula

		Total Teacher	Total Organizational	Total Teacher
		Leadership (X1)	Climate (X2)	Performance (X3)
N		80	80	80
Normal	Mean	85.2875	78.5250	83.1625
Parameters a.b	Std. Deviation	6.95227	7.02973	8.51721
Most Extreme	Absolute	.071	.063	.071
Differences	Positive	.041	.061	.065
	Negative	071	063	071
Test Statistic		.071	.063	.071
Asymp. Sig. (2-tailed)		.200 <sup>c.d</sup>	.200 <sup>c.d</sup>	.200 <sup>c.d</sup>

Table 8 shows the linearity test results. All significance values are Fh > 0.05 for the regression significance test. All values are significant if Sig. < 0.05 means all exogenous variable relationships with endogenous variables above are linear and meaningful, so the linearity and significance regression assumptions are met.

Table 8. Summary of Linearity and Regression Significance Test Results

No	Variable	Li	nearity '	Test	t Regression Significance Test		
		$F_h$	Sig.	Status	$T_h$	Sig.	Status
1	Teacher Leadership (X1) on Teacher	1.129	0.346	Linear	7.022	0.00	Significance
	Performance (X3)						
2	Teacher Leadership (X1) on school	1.095	0.382	Linear	4.545	0.00	Significance
	climate (X2)						
3	School climate (X2) on teacher	1.165	0.312	Linear	6.385	0.00	Significance
	performance (X3)						

Based on the theoretically formed causal model, a path diagram of the research variables is made, as shown in Figure 6.

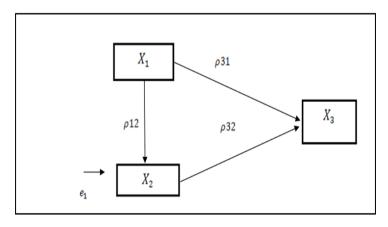


Figure 6. Research Variable Path Diagram

By using the SPSS for Windows version 23, a summary of the results of correlation analysis and path analysis between exogenous variables and endogenous variables is obtained as presented in Table 9:

Model	Unstandar	dized Coefficients	<b>Standardized Coefficients</b>	t	Sig.
	В	Std. Error	Beta	-	
1 (Constant)	39.684	10.306		3.851	.000
Total	.547	.120	.458	4.545	.000

Table 9. Relationships between Structural Equation Models I

The regression output of model I in the table shows that the variable's significance value is smaller than 0.05. These results conclude that the teacher leadership variable significantly affects teacher performance in the regression model I. The value of R Square is 0.209. This result shows that the contribution of the influence of  $X_1$  to  $X_2$  is 20.9%, and the remaining 79.1% is the contribution of other variables not included in this research.

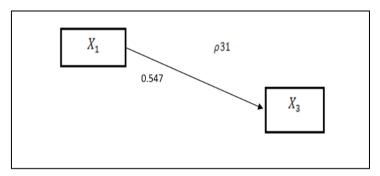


Figure 7. Structure Path Diagram I

The test criteria  $H_a$  is rejected if the significance value is t. count<0.05 or  $H_o$  accept if the significance value is t. count>0.05. The path coefficient between x1 and x3 is obtained based on the analysis results. The path coefficient has a value > namely 4.545 > 1.980. Thus, it is accepted that teacher leadership has a direct positive effect on teacher performance. This result illustrates that the better the teacher's leadership. The teacher's performance will be higher in the 35 Medan City State Junior High School (SMP) organization.

	Model	<b>Unstandardized Coefficients</b>		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	26.270	7.975		3.294	.001
	Total	.654	.093	.622	7.022	.000

Table 10. Structural Equation Model Relations II

The regression output of model II in the table shows that the significance value of the variable is smaller than 0.05. These results conclude that the teacher leadership variable significantly affects school climate in model II regression. The value of R Square is 0.387. This finding shows that the contribution of the influence of  $X_1$  to  $X_2$  is 38.7%, and the remaining 61.3% is the contribution of other variables not included in this research. Meanwhile, the structure diagram II is obtained for the  $e_1$  value obtained as 0.589.

The test criterion is  $H_o$  rejected if the significance value is  $t_{count}$ <0.05 or accepted if the significance value is  $t_{count}$ > 0.05 based on the analysis results as obtained—the path coefficient between  $X_1$  and  $X_3$ . The path coefficient has a value  $t_{count}$ >  $t_{table}$  7.022 > 1.980. Thus, it is accepted that teacher leadership has a positive direct effect on school climate. This finding illustrates that the better the teacher's leadership. The better the school climate, the more comfortable the teacher feels in the school environment.

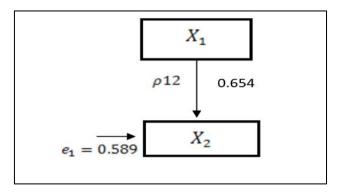


Figure 8. Structure Path Diagram II

Model		<b>Unstandardized Coefficients</b>		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	31.661	8.602		3.680	.000
	Total	.667	.104	.586	6.385	.000

Table 11. Structural Equation Model Relations III

The regression output of model III in the table section shows that the variable's significance value is smaller than 0.05. These results conclude that the school climate variable significantly affects teacher performance in regression model III. The value of R Square is 0.343; this indicates that the contribution of  $X_2$  to  $X_3$  is 34.3%. The remaining 65.7% is a contribution from other variables not included in this study:

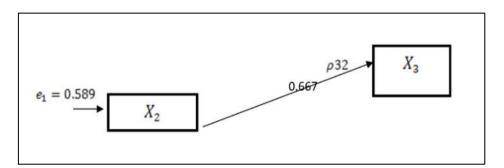


Figure 9. Structure Path Diagram III

The test criterion  $H_o$  is rejected if the significance value is  $t_{count}$ <0.05, or  $H_o$  is accepted if the significance value is  $t_{count}$ >0.05. Based on the analysis results. the path coefficient between  $X_2$  and So has a value > 6.385 > 1.980. Thus, it is rejected and accepted that school climate directly affects teacher performance. The influence of teacher leadership ( $X_1$ ) through school climate ( $X_2$ ) on teacher performance ( $X_3$ ) is shown in the following figure:

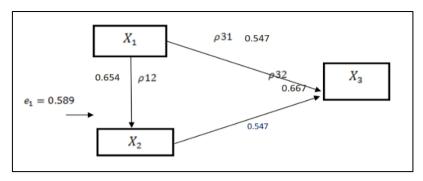


Figure 10. Structure Path Diagram IV

It is known that the direct influence that  $X_1$  has on  $X_3$  is 0.547, while the indirect effect of  $X_1$  through  $X_2$  on  $X_3$  is the multiplication of the beta value of  $X_1$  on  $X_2$  and the beta value of  $X_2$  on  $X_3$ . The total effect of  $X_1$  on  $X_3$  is direct and indirect. Based on the calculation results above, it is known that the direct influence value is 0.547, and the indirect influence value is 0.983. which means that the indirect influence value is greater than the direct influence value. These results indicate that teacher leadership  $(X_2)$  indirectly affects teacher performance  $(X_1)$  through school climate  $(X_2)$ .

Table 12. Structural Equation Model Relationship IV

	Model	Unstandardi	zed Coefficients	Standardized	t	Sig.
				Coefficients		
		В	Std. error	Beta	_	
1	(Constant)	39.684	10.306		3.851	.000
	Total	.547	.120	.458	4.545	.000

Results  $t_{count}$  consulted with  $t_{table}$  for n=80:  $t_{count} > t_{table}$  (4.872>1.984). It is concluded that the path is significant.

Table 13. Structural Equation Model

M	odel	<b>Unstandardized Coefficients</b>		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta	-	
1	(Constant)	26.270	7.975		3.294	.001
	Total	.654	.093	.622	7.022	.000

Results  $t_{count}$  consulted with  $t_{table}$  for n=80:  $t_{could} > t_{table}$  (7.493>1.984). It is concluded that the path is significant.

Table 14. Decomposition of Path Coefficients. Indirect Effect of Exogenous Variables and Endogenous Variables

Model	Exogenous Variables to	Causal Influence		Total	Correlation
	Endogenous Variables	Direct	Indirect via X <sub>2</sub>		
I	$X_1$ against $X_3$	0.547	0.983	1.530	0.458
II	$X_1$ against $X_2$	0.654	-	0.654	0.622
III	$X_2$ against $X_3$	0.667	-	0.667	0.586

Table 14 shows the first model where the direct effect of teacher leadership  $(X_1)$  on performance  $(X_3)$  is 0.547. It means that 54.7% of the variation in teacher performance scores  $(X_2)$  can be influenced by teacher leadership  $(X_1)$ , while the remaining 45.3% is determined by other variables outside of teacher leadership  $(X_1)$ . Meanwhile, the direct effect of teacher leadership  $(X_1)$  on school climate  $(X_2)$  is 0.654. The variation in scores of 65.4% can be influenced by teacher leadership  $(X_1)$ , while the remaining 34.6% is determined by other variables from teacher leadership  $(X_1)$  to school climate  $(X_1)$ .

Path Analysis tests four hypotheses based on the theoretical model developed in this study. According to the results obtained from testing the path diagram, which describes the structure of the causal relationship between exogenous and endogenous variables as in Figure 12:

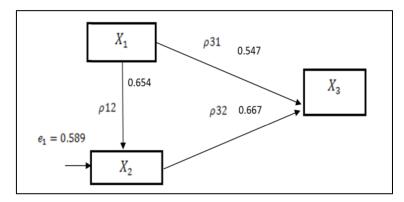


Figure 11. Variable Path Diagram

Based on the analysis results, the first hypothesis is accepted (6.655>1.655. p=0.00), where teacher leadership positively affects teacher performance. Apart from that, teachers must also be able to approach building performance so that they will wholeheartedly carry out the tasks given. This finding is supported by previous researchers such as Rivai and Murni (2009), who explain that teacher leadership, which always involves teams working together, positively affects performance.

School climate supports a conducive learning process to achieve educational goals. School climate describes the community's situation and condition, whether in good or bad condition, happy or friendly, or whether they care about one another or vice versa. Novitasari et al. (2017) and Ampera. (2010) found a strong positive influence of teacher leadership on school climate. It is characterized by teachers being more consistent in carrying out their duties, attention to students, and time and energy spent completing tasks. Work orientation is not only for oneself but also for others. Furthermore, Rohim (2018) found that teacher leadership, involving members in every activity, created a harmonious atmosphere so that good cooperation was built to improve the quality of input, process, and output, automatically creating a conducive school climate.

Saragih and Suhendro (2020) stated that the influence of school climate greatly influences teacher performance both partially and simultaneously. Teacher performance is a personal responsibility bound to the duties and obligations of a teacher with a high sense of loyalty, responsiveness, and innovation towards developments in science and technology. The findings in this study indicate that teacher leadership has a significant indirect

influence on commitment through school climate (0.983>0.547). School climate is an intervening relationship between teacher leadership and teacher performance. It explains that a better school climate through good teacher leadership will produce more robust and better teacher performance.

#### **Conclusion**

- 1. Teacher leadership has a direct positive effect on school climate. In other words, the better the teacher's leadership applied by the principal, the better the climate created in the school's organizational environment.
- 2. Teacher leadership has a direct positive effect on performance. In other words, the better the implementation of teacher leadership where the teacher works, the higher the teacher's performance will increase. Teachers with leaders who can teach well will find it easier to create and shape performance in each teacher.
- 3. School climate has a positive direct effect on teacher performance, meaning that the better the school climate, the higher the teacher performance.
- 4. Teacher leadership has a positive indirect effect on teacher performance through the school climate. Leadership can influence a teacher's work internally and externally and create a good school climate. The school atmosphere will feel comfortable and peaceful when every part of it can work together, resulting in higher teacher performance.

#### Acknowledgments

The author would like to thank the Medan State University Chancellor who funded this research with contract number 0137/UN33.8/KPT/PIT/2023.

### References

- Allen, N. & Meyer, J.P. (1993). Organizational Commitment: Evidence of Career Stage Effects? *Journal of Business Research*, 26, 49-61.
- Ambarita, A. (2013). Principal Leadership. Bandar Lampung: University of Lampung.
- Ampera, D. (2010) Teachers as Potential for Information and Communication Technology in Improving the Quality of Learning in Vocational Schools, *Proceedings of APTEKINDO*. 2010. International Seminar.
- Aziz, R., Wahyuni, E. N., & Wargadinata, W. (2017). The contribution of gratitude and forgiveness in developing mental health in the workplace. *INSAN Journal of Psychology and Mental Health*, 2(1), 33-43.
- Chand, K. (1991). Excellence in American Education through Improving School Climate. United States Department of Education. New York.
- Choiriyah, I., Abadi, T., Sukmana, H., & Karuniawan, M. (2018). Factors Affecting of Life's Happiness.

  \*Proceedings of the Annual Conference on Social Sciences and Humanities (ANCOSH 2018) Revitalization of Local Wisdom in Global and Competitive Era, 41-45. SCITEPRESS-Science and Technology Publications. Lda.
- Colquitt, J.a., lePine, J.a., & Wesson, M.J. (2009). Organizational Behavior: Improving Performance and Commitment in the Workplace. McGraw-Hill. New York

- Colquitt, L. & Wesson, O. B. (2009). *Improving Performance and Commitment in the workplace*. New York: McGraw-Hill-Irwin.
- Cushway, B. (2002). Performance in Social Organizations. Jakarta: Rineka Cipta.
- Damanik, D., Lie, D., Butarbutar, M., & Halim, F. (2018). The Influence of Motivation and Work Ethic on Employee Performance at the National Narcotics Agency of Pematangsiantar City. *MAKER Journal*, (4)2. DOI: 10.37403/maker. v4i2.94.
- Dharianta, N. & Basuki, H. (2013). *The Influence of School Organizational Climate on the Commitment of Junior High School Teachers in Ponjong District*. Gunungkidul Regency: Gajah Mada University.
- Faizah, F. (2015). The Influence of Teamwork and Trust on the Commitment of MTs Teachers in South Jakarta. *Journal of Educational Management*, 6(1), 1048-1056.
- Hadiyanto (2016). Theory and Development of Classroom Climate and School Climate. In *Theory and Development of Classroom Climate and School Climate*. Kencana. Jakarta.
- Haris, A., & Amalia, A. (2018). Meanings and Symbols in the Process of Social Interaction (A Review of Communication). *Journal of Dakwah Risale*. Retrieved from ejournal.uin-suska.ac.id
- Hasibuan, M.S.P. (2003). Human Resource Management. Jakarta: Bumi Literacy.
- Hoy, W.K. & Miskel, C.G. (1987). *Theory research and practice: Educational administration*. New York: McGraw-Hil.
- Janawi (2012). Teacher Competency: The Image of a Professional Teacher. Bandung: Alphabeta.
- Wei, R. C., Darling-Hammond, L., Andree, A., Richardson, N., & Orphanos, S. (2009). Professional learning in the learning profession. *A status report on teacher development in the United States and Abroad*. Dallas, TX: National Staff Development Council.
- Marley (2015). The Effect of Organizational Climate on Organizational Performance with Work Motivation as an Intermediate Variable at the Merangin District Education Office. Jambi Province. *Journal of Business Practices*, 4(1).
- Mathis, R. L., Jackson, J. H., Valentine, S. R., & Meglich, P. (2016). *Human resource management*. Cengage Learning.
- Mulyani, S., & Soliha, E. (2014). The Influence of Job Characteristics and Motivation on Organizational Commitment, and its impact on Teacher Performance. *Performance Journal of Personnel, Financial, Operational, Marketing & Information Systems*, 20(2).
- Mulyasa (2007). Becoming a Professional Teacher Creates Creative and Enjoyable Learning. Banduni: Rosdakarya Youth. Bandung: Alphabeta
- Newstrom, J.D.(2001). Behavior in Organizations. Seventh Edition. Jakarta: Erlangga Publishers.
- Novitasari, N., Djasmi, S., & Rini, R. (2017). The Influence of Principal Leadership. Achievement Motivation Climate on Teacher Commitment. *Journal of Educational Quality Management*, 5(1).
- Pidarta, M. (2011). Indonesian Education Management. Jakarta: PT Rineka Cipta
- Prawirosentono (2018). Employee Motivation and Performance. Indomedia Library. Sidoarjo
- Pusbangtendik (2014). School Management and Leadership. Jakarta: Ministry of Education and Culture.
- Rivai & Murni (2009). Educational Management Analyzes Theory and Practice. Jakarta: Rajawali Press.
- Rohim, A. (2018). The Influence of the Work Environment on Job Satisfaction and Employee Performance. *Econis: Journal of Economics and Business*, 20(2).

Rusman (2013). Learner Models Ran: Developing teacher professionalism. Jakarta: Rajawali Press.

Saragih, I.M. & Suhendro, D. (2020). The Influence Of School Organizational Climate. Teacher Work Culture. And Job Satisfaction On Teacher Work Commitment. Journal of Educational Management Accountability, 8(1), 44-52. DOI: https://doi.org/10.21831/jamp.v8i1.29654

Sergiovanni, T. J., & Starratt, R. J. (1993). Supervision a Redefinition. New York: Mcgraw-Hill Inc.

Sidupa, J. N. (2018). Principal Leadership Effectiveness: Case Study at International School X IN BALI. Journal of Education, 19(2). https://doi.org/10.33830/jp.v19i2.168.2018

Freeman, R. E., Gilbert, D., & Stoner, J. A. (1995). Administración.

Supardi (2014). Teacher Performance. Jakarta: PT Raja Grafindo Persada.

Sutrisno, H. E. (2015). Human Resources Management. Jakarta: Kencana.

Erawati, A., & Wahyono, W. (2019). Peran komitmen organisasi dalam memediasi pengaruh disiplin kerja, motivasi kerja, dan self efficacy terhadap kinerja pegawai. Economic Education Analysis Journal, 8(1), 288-301.

Wahyudi, I. (2012). Pursuing Teacher Professionalism Practical Strategies for Creating a Professional Teacher Image. Jakarta: Jakarta Achievement.

Wibowo (2017). Work management. Fifth Edition. Depok: PT. Raja Grafindo Persada

Yusoff, K. (2016). Anthropogenesis: Origins and endings in the Anthropocene. Theory, culture & society, 33(2), 3-28. https://doi.org/10.1177/0263276415581021.

#### **Author Information**

#### Aman Simaremare

https://orcid.org/0000-0002-8624-5169

Universitas Negeri Medan

Medan City, North Sumatra

Indonesia

Contact e-mail: Tuansimare@unimed.ac.id.

#### Arif Rahman



https://orcid.org/0000-0002-8576-7264

Universitas Negeri Medan

Medan City, North Sumatra

Indonesia

## **Muhammad Meftah**



https://orcid.org/0000-0003-2669-463X

Universitas Negeri Medan

Medan City, North Sumatra

Indonesia

# Baharuddin



https://orcid.org/ 0009-0002-2767-756X

Universitas Negeri Medan

Medan City, North Sumatra

Indonesia

#### Dina Ampera



https://orcid.org/0000-0001-8425-0370

Universitas Negeri Medan

Medan City, North Sumatra

Indonesia