



The Effect of Principal Leadership and Organisational Culture on Teacher Performance through Work Discipline as an Intervening Variable (A Case Study of Senior High Schools in Berastagi District)

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ARTICLE INFO

Keywords: Principal Leadership, Organisational Culture, Teacher Performance, Work Discipline, Path Analysis

Received : 1, December

Revised : 13, December

Accepted: 13, January

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ABSTRACT

This study analyses the influence of principal leadership and organisational culture on teacher performance, with work discipline as an intervening variable, in high schools across the Berastagi District. A quantitative approach with an ex post facto design was employed, utilising path analysis to examine the structural relationships between variables. The research involved a sample of 122 teachers selected from a population of 175 through simple random sampling. Data were collected using Likert scale questionnaires that were rigorously tested for validity and reliability. The findings reveal that principal leadership has a significant positive effect on both work discipline and teacher performance. While organisational culture significantly affects work discipline, it had a non-significant negative direct effect on teacher performance. Crucially, the analysis demonstrates that work discipline significantly mediates the influence of principal leadership and organisational culture on teacher performance. This indicates that discipline serves as the primary "bridge" connecting leadership and organisational values to optimal professional outcomes. The study concludes that the combination of inspirational leadership and a robust organisational culture depends largely on reinforcing discipline to foster a professional educational setting.

INTRODUCTION

Education serves as the primary foundation for shaping the character, intelligence, and skills of the nation's next generation. Because teachers interact directly with students, they play a critical role as the spearhead of the educational process. Quality education cannot be achieved without professional, competent teachers (Habibah et al., 2024). However, preliminary observations in Senior High Schools (SMA) in the Berastagi District indicate that teacher performance remains suboptimal. This is evidenced by inadequate preparation, underutilization of diverse learning media, and insufficiently structured learning evaluations. Furthermore, phenomenological issues such as teachers arriving late or leaving class early imply disciplinary problems that directly affect the quality of learning.

Previous research indicates that teacher performance is influenced by various factors, including principal leadership and organisational culture. According to Selfiati (2021), principal leadership positively influences teacher performance by 47.3%, while organisational culture contributes 22.5%. Similar results were reported by Cahyana (2018), who found that organisational culture influenced performance by 48.3%, and by Fitria (2018), who reported an influence of 12.9%. While these factors play a positive role, their direct influence is often considered weak in certain contexts, necessitating the inclusion of work discipline as an intervening variable. This is supported by empirical data showing that work discipline has a strong influence on performance, as evidenced by Kaliri (2008) at 82.9% and Misrania (2021) at 91.9%.

The contribution of this research to knowledge enrichment lies in its explicit inclusion of work discipline as an intervening variable to bridge and strengthen the relationship between principal leadership and organisational culture toward teacher performance, a model that has not been extensively studied. Practically, this study provides strategic insights for the Karo District Education Office in formulating quality improvement programs, specifically by reinforcing work discipline and professional integrity within the local context of Berastagi.

Based on this background, the present study aims to analyze and examine: (1) the direct effects of principal leadership and organizational culture on teacher performance; (2) the effects of principal leadership and organizational culture on work discipline; (3) the effect of work discipline on teacher performance; and (4) the role of work discipline in mediating the effects of principal leadership and organizational culture on teacher performance in senior high schools (SMA) across Berastagi Subdistrict.

LITARATURE REVIEW

This study is constructed upon a theoretical framework that links leadership behaviour and organisational values to professional outcomes through the mechanism of discipline. At a macro level, the conceptual foundation of this research draws on Contingency Theory, developed by Fiedler, which emphasises that leadership effectiveness is not universal but highly depends on the fit between leadership style and the organisational environment. This approach posits that different situations require different leadership behaviours,

as each organisation possesses unique characteristics that necessitate a specific managerial style. In the school context, the principal, as a strategic leader, must be adaptive in interpreting environmental dynamics and teacher characteristics to motivate teachers to achieve educational goals effectively (Northouse, 2022; Yukl & Gardner, 2023). Such flexibility is a key element of contextual decision-making that accounts for field conditions, thereby fostering harmonious relationships between superiors and subordinates.

Principal Leadership

Leadership is defined as the process of consciously influencing individuals or groups to achieve a shared vision (Northouse, 2022). Yukl and Gardner assert that leadership involves facilitating collective efforts so that organisational members understand and agree on the steps required to accomplish common goals (Yukl & Gardner, 2023). As a central figure, the principal performs the EMASLIM functions Educator, Manager, Administrator, Supervisor, Leader, Innovator, and Motivator) (Mahfud, 2020). As an educator, the principal is responsible for enhancing teachers' instructional quality through continuous guidance (Alamsyah & Effendi, 2022). In the managerial role, the principal designs strategies, coordinates resources, and exercises control over educational outcomes through innovative decision-making (Alamsyah & Effendi, 2022). As an administrator, the principal ensures orderly documentation of instructional programs, student affairs, and facilities as the institutional foundation (Alamsyah & Effendi, 2022).

The supervisory function positions the principal as an evaluator of teacher performance in the learning process on a regular basis in order to provide staff development recommendations (Lisna & Munastiwi, 2020). As a leader, the principal must possess a strong personality and a deep understanding of the school's vision to create a productive work environment (Alamsyah & Effendi, 2022). The role of innovator demands creativity in managing the work environment to foster renewal, while the motivator function requires strategies to strengthen teachers' work motivation through both financial and non-financial approaches (Alamsyah & Effendi, 2022; Damayani, Arafat, & Eddy, 2020). The effectiveness of these functions is measured by indicators such as integrity, collaborative decision-making, and communication competence in conveying ideas (Hardianti, 2020).

Organizational Culture

This variable is understood through Edgar Schein's model, which divides culture into three levels: artifacts (visible level), espoused values (guiding behavioral principles), and basic assumptions (deeply embedded fundamental beliefs) (Schein, 1985). Organizational culture functions as a social control system that internalizes work norms into the daily behavior of all school members. A strong culture creates a collective identity and unique characteristics that distinguish one school from another (Schein, 1985). Its primary functions include binding members through a sense of togetherness, providing guidelines for professional ethics, and encouraging teacher productivity and student achievement (Schein, 1985).

The characteristics of organisational culture include innovation and risk-taking, attention to detail, and a results-oriented focus, in which management focuses on both methods and outcomes (Robbins in Claudia, 2022). This culture is also marked by team orientation, competitive aggressiveness, and organisational stability (Robbins in Claudia, 2022). In this study, organisational culture is manifested through organisational values, agreed-upon work norms, effective internal communication, and collective commitment to the school's vision and mission.

Work Discipline

The relationship between managerial factors and professional performance is mediated by work discipline, which is rooted in Reinforcement Theory proposed by B.F. Skinner. This theory posits that individual behaviour, including discipline, can be shaped through positive reinforcement (rewards) and negative reinforcement (punishment) (Skinner, 1953). Discipline is a mental attitude reflecting adherence to written and unwritten rules, grounded in awareness of their benefits for the organisation (Machmud, 1987; Semito, 1992).

Operationally, discipline is divided into three categories: preventive discipline to prevent violations; corrective discipline to address deviations that occur; and progressive discipline, in the form of graduated sanctions for repeated violations, which provide individuals with opportunities for corrective action (Afandi in Trianto, 2023). Work discipline serves as a key "bridge" that transforms the influence of leadership and organisational culture into tangible work outcomes (Hasibuan, 2017). Indicators of discipline include timely completion of official duties, honesty at work, compliance with working hours, and appropriate dress and courteous behaviour toward colleagues and superiors.

Teacher Performance

Teacher performance refers to the quality and quantity of work achieved in carrying out professional duties in accordance with established standards within a specific period (Kane, 2006; Supardi, 2014; Wahyudi, 2012). These performance standards encompass the ability to design learning activities, manage high-quality teaching and learning processes, and conduct objective evaluations of learning outcomes (Didi, 2018; Octavia, 2018; UU No. 20 tahun 2005). Teacher performance is influenced by individual factors (abilities, background), psychological factors (perceptions, motivation), and organizational factors (resources, leadership) (Budiasa, 2021).

Principal leadership serves as the primary stimulus that motivates teachers to perform their responsibilities optimally, supported by a harmonious work culture (Schein, 2010; Sulfemi, 2020). Performance indicators in this study include mastery of educational foundations, mastery of instructional materials, management of teaching-learning programs, use of instructional tools, and understanding of school administration (Kompri, 2014). Practically, performance is reflected in teachers' classroom readiness, use of varied instructional strategies, utilization of information technology, and the ability to regularly assess and provide feedback on students' work (Phytanza, 2020).

Interrelationships Among Variables and Hypotheses

The interaction between leadership and organisational culture creates a climate that fosters discipline. Adaptive leadership provides motivation and clear direction, which affects teacher compliance (Fiedler, 1967; Northouse, 2022). Conversely, organisational culture directs teacher behaviour toward professional standards through social control (Schein, 1985). Work discipline then functions as a mediator, strengthening the influence of these organisational factors on productivity (Skinner, 1953).

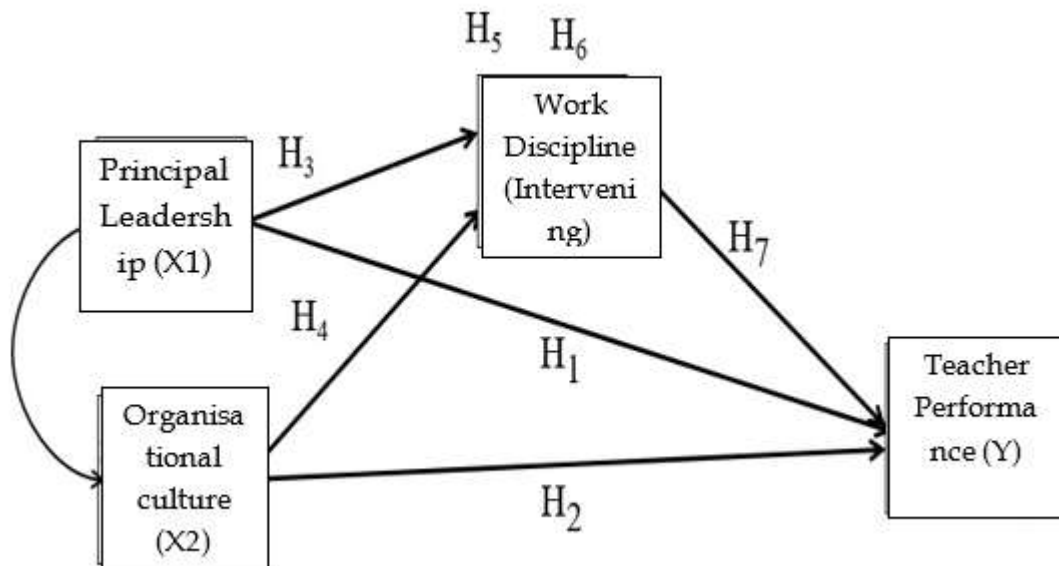


Figure 1. Conceptual Framework

Based on this theoretical synthesis, seven research hypotheses are proposed:

- H1: Principal leadership has a positive effect on teacher performance.
- H2: Organisational culture has a positive effect on teacher performance.
- H3: Principal leadership has a positive effect on work discipline.
- H4: Organisational culture has a positive effect on work discipline.
- H5: Work discipline has a positive effect on teacher performance.
- H6: Work discipline mediates the effect of principal leadership on teacher performance.
- H7: Work discipline mediates the effect of organisational culture on teacher performance.

METHODOLOGY

This study employed a quantitative, ex post facto design to examine phenomena that had already occurred in the field. The primary focus of this study is correlational and causal analysis aimed at explaining the relationships among variables without administering any specific treatment to the research subjects.

Population and Sample

The population in this study comprised all senior high school (SMA) teachers in Berastagi Subdistrict, totalling 175 individuals (Sugiyono in Purnamasari, 2022). The sample size was determined using the Slovin formula, with a 5% margin of error, yielding 122 respondents. The sampling technique employed was simple random sampling, in which respondents were proportionally allocated across the four senior high schools included as study sites (Sugiyono in Purnamasari, 2022).

Data Collection Techniques

Primary data were collected by distributing structured questionnaires using a Likert scale ranging from 1 to 5. The research instrument encompassed four main variables: Principal Leadership (X1), Organisational Culture (X2), Work Discipline (Z), and Teacher Performance (Y).

Prior to use, the instrument was deemed valid through the Pearson Product-moment correlation test (Arikunto, 1998; Ghozali, 2021) and reliable through Cronbach's alpha, with coefficient values exceeding 0.5 (Ghozali, 2011).

Data Analysis Techniques

All data processing procedures were conducted using IBM SPSS Statistics version 30. The stages of data analysis included:

1. Descriptive Analysis: Employed to describe respondent characteristics and the distribution of mean scores for each variable.
2. Classical Assumption Tests: Consisting of the normality test (Kolmogorov-Smirnov), multicollinearity test using the Variance Inflation Factor (VIF) values, heteroscedasticity test using the Glejser test, and autocorrelation test using the Durbin-Watson test.
3. Path Analysis: Utilised to examine the strength of direct and indirect effects of independent variables on the dependent variable through the intervening variable. The structural relationships among variables in this path analysis were mapped as illustrated in Figure 2.
4. Hypothesis Testing: Partial hypothesis testing was conducted using the t-test, while the significance of the mediating role was measured using the Sobel test.

RESEARCH RESULTS

Respondent Characteristics and Data Description

This study involved 122 senior high school (SMA) teachers in Berastagi Subdistrict as respondents, selected through a simple random sampling technique from a total population of 175 teachers. Based on demographic data, the majority of respondents were female (60.7%), with the most dominant age range being 36–45 years (40.2%). In terms of professional experience, 37.7% of the teachers had a length of service between 11 and 20 years, indicating that the respondents possessed pedagogical maturity and a deep understanding of the organisational climate in their respective schools. The respondents' educational attainment was also highly homogeneous, with 95.9% holding a Bachelor's

degree (Sarjana/S1), thereby meeting the academic qualification standards for educators in accordance with applicable regulations.

The results of the descriptive analysis indicate that all research variables fall within the “High” category. This finding reflects very positive perceptions among educators regarding the work ecosystem in senior high schools across Berastagi Subdistrict. Detailed data on the distribution of mean scores and other statistical indicators are presented in Table 1.

Table 1. Results of Descriptive Analysis of Variables

Variable	Mean	Std. Deviation	Min	Max	Skewness	Kurtosis
Principal Leadership	179.04	8.448	148	185	-1.417	1.382
Organizational Culture	87.83	3.781	72	90	-2.342	5.531
Work Discipline	83.43	3.844	71	90	-1.152	0.571
Teacher Performance	123.97	8.778	103	130	-1.323	0.361

The negative skewness values across all variables indicate right-skewed distributions, meaning that the majority of respondents provided scores above the mean. This finding represents that principals in the region are perceived to have performed their leadership functions effectively, supported by a strong organisational culture and high levels of teacher discipline, which ultimately culminate in optimal professional performance outcomes.

Classical Assumption Tests

Normality Test

Table 2. Results of the Normality Test

Variable	Kolmogorov–Smirnov	Significance	Description
Principal Leadership	0.309	0.000	Not Normal
Organizational Culture	0.307	0.000	Not Normal
Work Discipline	0.322	0.000	Not Normal
Teacher Performance	0.303	0.000	Not Normal

The Kolmogorov–Smirnov test results in Table 2 indicate that all research variables have a significance value of 0.000, which is less than 0.05. Therefore, it can be concluded that all variable data in this study do not follow a normal distribution.

Nevertheless, the non-normality of the data does not constitute an obstacle to regression analysis, as this study employs a sufficiently large sample size. Based on the Central Limit Theorem (CLT), when the number of observations exceeds 30 ($n > 30$), the distribution of residuals (errors) approaches a normal distribution, allowing the normality assumption to be relaxed. Consequently, parametric statistical analyses in this study can still be performed.

This is consistent with the view of Gujarati (2015), who states that in large samples, violations of the normality assumption of residuals do not have a significant effect on the accuracy of regression model estimation

Multicollinearity Test

Table 3. Multicollinearity Test

Variable	Tolerance	VIF	Description
Principal Leadership	0.297	3.366	No multicollinearity
Organizational Culture	0.387	2.587	No multicollinearity
Work Discipline	0.352	2.843	No multicollinearity

Based on Table 3, the calculation results indicate that all VIF values are below 10. Therefore, it can be concluded that the regression model does not suffer from multicollinearity problems, meaning that there is no strong correlation among the independent variables. Accordingly, the model is appropriate for further analysis.

Heteroscedasticity Test

Table 4. Heteroscedasticity Test

F	F _{0.05;3;118}	p-value	Decision
22.987	2.68	0.000	Reject H ₀

Table 4 shows that the F value (22.987) is greater than F_{0.05;3;118} (2.68), or that the p-value (0.000) is smaller than α (0.05); therefore, the decision is to reject H₀. This indicates that heteroscedasticity is present in the model.

Autocorrelation Test

Table 5. Durbin-Watson Test

Durbin-Watson	dL	dU	Description
0.676	1.6545	1.7552	No positive autocorrelation

Table 5 shows that the Durbin-Watson value (0.676) lies between 0 and dL (1.6545); therefore, the decision is to reject H₀. This indicates that no positive autocorrelation occurs in the model.

Path Analysis

Regression Model 1

1. Individual Effect Test (t-test)

Table 6. Results of Multiple Linear Regression Model I

Variable	Coefficient	t value	Sig.	Description
Principal Leadership	0.267	6.974	0.000	Significant
Organizational Culture	0.268	3.133	0.002	Significant

$$Z=0.267X_1+0.268X_2$$

Based on the table and the multiple regression equation, the variables of principal leadership and organisational culture exhibit positive regression coefficients, indicating a direct relationship with work discipline. This implies that both variables have a positive effect on work discipline.

2. Coefficient of Determination

The influence of principal leadership and organisational culture on work discipline was measured using the multiple coefficient of determination (Adjusted R²). Based on the data processing results presented in the Appendix, the Adjusted R² value reached 64.2%, indicating that 64.2% of the variability in work discipline can be explained by principal leadership and organisational culture. The remaining 35.8% is influenced by other variables not included in this research model.

3. F-test

The next step was to examine whether the simultaneous effects were significant using the F-test. The hypotheses are formulated as follows:

H₀: Principal leadership and organisational culture simultaneously do not affect work discipline.

H₁: Principal leadership and organisational culture simultaneously affect work discipline.

Based on the calculation results provided in the Appendix, the p-value of the F-test is 0.000. Since this p-value is smaller than the significance level $\alpha = 5\%$ ($0.000 < 0.05$), H₀ is rejected, indicating that principal leadership and organisational culture simultaneously have a significant effect on work discipline.

Regression Model 2

1. Individual Effect Test (t-test)

Table 7. Results of Multiple Linear Regression Model II

Variable	Coefficient	t value	Sig.	Description
Principal Leadership	0.328	3.357	0.001	Significant
Organizational Culture	-0.259	-1.355	0.178	Not Significant
Work Discipline	1.47	7.455	0.000	Significant

$$Y=0.328X_1-0.259X_2+1.47X_3$$

Based on the table and the multiple regression equation, it can be observed that the variables of principal leadership and work discipline have positive regression coefficients, indicating a direct relationship with teacher performance. Conversely, organisational culture exhibits a negative regression coefficient, indicating an inverse relationship with teacher performance. These results demonstrate that principal leadership and work discipline contribute positively to teacher performance, while organisational culture exerts a negative effect.

2. Coefficient of Determination

The effects of principal leadership, organisational culture, and work discipline on teacher performance were measured using the multiple coefficient of determination (Adjusted R^2). Based on the data processing results presented in the Appendix, the Adjusted R^2 value of 68.3% indicates that 68.3% of the variability in teacher performance can be explained by these variables. The remaining 31.7% is influenced by other variables not included in this research model.

3. F-test

The subsequent step was to examine whether the simultaneous effects were statistically significant using the F-test. The hypotheses are formulated as follows:

H_0 : Principal leadership, organisational culture, and work discipline simultaneously do not affect teacher performance.

H_1 : Principal leadership, organisational culture, and work discipline simultaneously affect teacher performance.

Based on the calculation results provided in the Appendix, the p-value obtained from the F-test is 0.000. Since this p-value is smaller than the significance level $\alpha = 5\%$ ($0.000 < 0.05$), H_0 is rejected, indicating that principal leadership, organisational culture, and work discipline simultaneously have a significant effect on teacher performance.

Total Effect Analysis

Direct Effect

Figure 2. Path Analysis Model of the Relationships among Variables

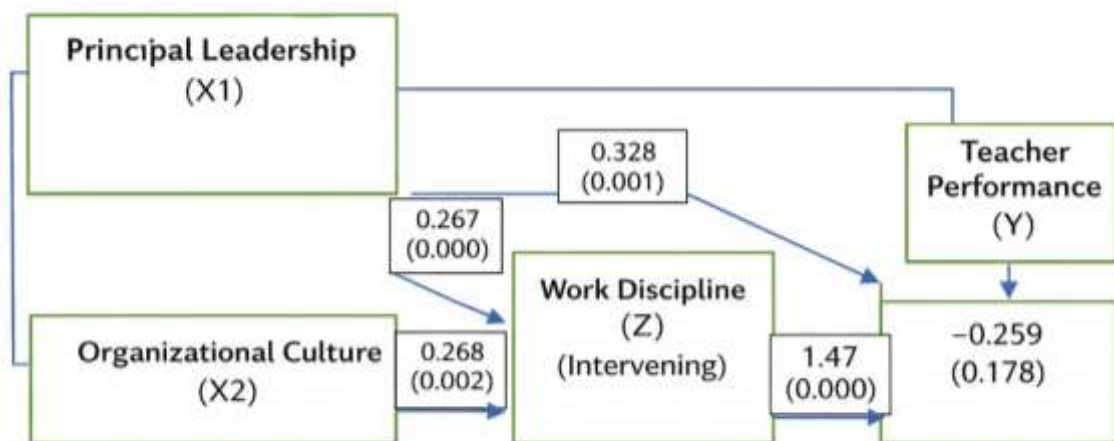


Figure X illustrates the path analysis model depicting the structural relationships among principal leadership (X_1), organisational culture (X_2), work discipline (Z) as an intervening variable, and teacher performance (Y). The model presents standardised path coefficients along with their corresponding significance values (p-values in parentheses).

Principal leadership (X_1) has a positive and significant direct effect on work discipline (Z) ($\beta = 0.267$; $p = 0.000$) and teacher performance (Y) ($\beta = 0.328$;

$p = 0.001$). Organisational culture (X_2) also shows a positive and significant effect on work discipline (Z) ($\beta = 0.268$; $p = 0.002$); however, its direct effect on teacher performance (Y) is negative and not statistically significant ($\beta = -0.259$; $p = 0.178$).

Work discipline (Z) exerts a strong positive and significant effect on teacher performance (Y) ($\beta = 1.47$; $p = 0.000$), confirming its role as an intervening variable. The magnitude of the indirect effects indicates that work discipline strengthens the influence of principal leadership and organisational culture on teacher performance, thereby functioning as a key mediating mechanism within the model.

Indirect Effects

Table 8. Indirect Effects and Total Effects

Path	Indirect Effect	Total Effect
$X_1 \rightarrow Z \rightarrow Y$	$0.267 \times 1.47 = 0.39$	$0.328 + (0.267 \times 1.47) = 0.72$
$X_2 \rightarrow Z \rightarrow Y$	$0.268 \times 1.47 = 0.39$	$-0.259 + (0.268 \times 1.47) = 0.13$

Table 8 shows that the indirect effect of principal leadership on teacher performance through work discipline is 0.39, while the total effect of principal leadership on teacher performance through work discipline is 0.72. The indirect effect of 0.39 is greater than the direct effect of 0.328.

Similarly, the indirect effect of organisational culture on teacher performance through work discipline is 0.39, whereas the total effect of organisational culture on teacher performance through work discipline is 0.13. The indirect effect of 0.39 is greater than the direct effect of -0.259 .

The indirect effects of principal leadership and organisational culture on teacher performance through work discipline are greater than their respective direct effects. This indicates that work discipline, as an intervening variable, plays a role in mediating the relationship and influence between principal leadership and organisational culture on teacher performance. Thus, work discipline is an important factor that must be possessed by every senior high school teacher across Berastagi Subdistrict.

Sobel Test

1. Effect of Principal Leadership on Teacher Performance through Work Discipline

The Sobel test was conducted to measure the indirect effect of the independent variable (X) on the dependent variable (Y) through the mediating variable (Z). The results of the Sobel test are described as follows.

$$S_{ab} = \sqrt{b^2 S_a^2 + a^2 S_b^2 + S_a^2 S_b^2}$$
$$S_{ab} = \sqrt{1.47^2(0.038^2) + 0.267^2(0.197^2) + (0.038^2)(0.197^2)}$$
$$S_{ab} = 0.077$$
$$t = \frac{ab}{S_{ab}} = \frac{0.267 \times 1.47}{0.077} = 5.09$$

Based on the calculation results, the obtained t value is 5.09, which is greater than $t_{0.025;121}$ (1.97). This indicates that H_0 is rejected. Accordingly, work discipline as a mediating variable plays a role in mediating the effect between principal leadership and teacher performance.

2. Effect of Organisational Culture on Teacher Performance through Work Discipline

$$S_{ab} = \sqrt{b^2 S_a^2 + a^2 S_b^2 + S_a^2 S_b^2}$$
$$S_{ab} = \sqrt{1.47^2(0.085^2) + 0.268^2(0.197^2) + (0.085^2)(0.197^2)}$$
$$S_{ab} = 0.137$$
$$t = \frac{ab}{S_{ab}} = \frac{0.268 \times 1.47}{0.137} = 2.88$$

Based on the calculation results, the obtained t value (2.88) is greater than $t_{0.025;121}$ (1.97); therefore, H_0 is rejected. This indicates that work discipline, as an intervening variable, plays a role in mediating the relationship and influence between organisational culture and teacher performance.

DISCUSSION

The Effect of Principal Leadership on Teacher Performance

The results of the study indicate that principal leadership has a positive and significant effect on teacher performance. This finding suggests that an effective principal leadership style can enhance teachers' motivation, sense of responsibility, and productivity in carrying out their duties.

Transformational Leadership theory proposed by Bass and Avolio (1994) explains that leaders who are able to inspire and motivate their subordinates will generate higher levels of performance. Principals who provide moral support, individual consideration, and clear direction encourage teachers to work with enthusiasm and dedication.

This study is consistent with the findings of Hasibuan (2017) and Mulyasa (2013), which state that the principal's role in enhancing motivation and providing exemplary conduct has a positive impact on improving teacher performance.

Thus, principal leadership not only determines the direction of school policies but also plays a direct role in shaping teacher performance through effective communication styles, supervision, and reward systems.

The Effect of Organisational Culture on Teachers' Work Discipline

The results of the study indicate that organisational culture has a positive and significant effect on teachers' work discipline. The stronger the organisational culture implemented in the school, the higher the level of teacher discipline. A healthy organisational culture reflects values such as togetherness, responsibility, and compliance with rules.

According to Schein (1985), organisational culture is a system of shared values and beliefs that influences how organisational members think, feel, and act. In the school context, work culture values such as honesty, cooperation, and punctuality serve as behavioural guidelines for teachers in performing their duties.

These findings support the studies of Nawawi (2015) and Luthans (2011), which demonstrate that a strong organisational culture fosters disciplined behaviour among employees because organisational values are internalised as habitual work practices.

Therefore, the development of organisational culture in schools is crucial for fostering teachers' work discipline. Principals must serve as role models in implementing organisational values so that all teachers can emulate these positive behaviours.

The Effect of Principal Leadership on Teachers' Work Discipline

The results of the study indicate that principal leadership has a positive and significant effect on teachers' work discipline. This implies that the more effective the principal's leadership, the higher the level of teacher discipline. Principals who are able to provide clear direction, act as role models, and support teachers can enhance teachers' sense of responsibility and commitment to their work.

This finding is consistent with Fiedler's Contingency Leadership Theory (1967), which posits that a leader's effectiveness largely depends on the extent to which the leadership style matches the characteristics of the work situation. In the school context, principals who are able to adapt their leadership style to the needs and characteristics of teachers are more effective in fostering good work discipline.

This study also supports the findings of Mulyasa (2013) and Hasibuan (2017), which explain that principal leadership plays a substantial role in shaping teachers' work behavior. Principals who enforce discipline through communicative approaches, provide rewards, and serve as role models are likely to create a positive and disciplined work culture.

Thus, teachers' work discipline can develop from leadership that is inspirational rather than merely based on coercive rules. Effective leadership encourages teachers to feel a moral responsibility to be punctual, to complete tasks properly, and to comply with school regulations without external pressure.

The Effect of Organizational Culture on Teacher Performance

The results of the study show that organizational culture has a negative but not significant effect on teacher performance. This indicates that the existing organizational culture in the school has not yet had a direct impact on improving teacher performance.

Nevertheless, this result does not imply that organizational culture is unimportant. Rather, it suggests that positive organizational values need to be more deeply internalized in order to become actual work habits. According to Robbins and Judge (2019), organizational culture requires time to be embedded and to consistently influence the behavior of organizational members.

These findings are consistent with the study by Handoko (2016), which indicates that organizational culture does not always directly affect performance unless mediated by factors such as motivation or work discipline. In this study, organizational culture is most likely to influence teacher performance indirectly through the enhancement of work discipline.

Therefore, strengthening organizational culture in schools should be accompanied by systematic discipline development and exemplary leadership practices, so that cultural values can be implemented consistently by teachers.

The Effect of Work Discipline on Teacher Performance

The research results indicate that work discipline has a positive and significant effect on teacher performance. This implies that the higher the level of teacher discipline, the more optimal the performance achieved. Disciplined teachers tend to arrive on time, prepare instructional materials comprehensively, and carry out their professional duties consistently.

These findings reinforce Reinforcement Theory proposed by Skinner (1953), which explains that individual behavior can be shaped through habituation and positive reinforcement. Consistent work discipline serves as a foundation for the long-term improvement of teacher performance.

This study is in line with the findings of Sinambela (2016) and Luthans (2011), which demonstrate that discipline directly affects employee productivity and job performance.

Thus, improving teacher performance cannot rely solely on leadership or organisational culture; it also requires the consistent enforcement of work discipline. Principals need to implement fair reward and sanction systems so that discipline becomes an ingrained work habit.

The Role of Work Discipline in Mediating the Effect of Principal Leadership on Teacher Performance

Path analysis indicates that work discipline acts as a mediating variable between principal leadership and teacher performance. This means that leadership not only directly affects teacher performance but also indirectly influences it through the enhancement of work discipline.

In other words, effective leadership shapes work discipline, and this discipline subsequently serves as a means to improve teacher performance.

These findings support the view of Luthans (2011), who argues that employee work behaviour results from a combination of organisational factors (such as leadership and culture) and individual factors (such as discipline).

This study is also consistent with the findings of Hasibuan (2017), which state that discipline represents a concrete manifestation of compliance with organisational values and rules that ultimately enhances performance.

Therefore, work discipline can be regarded as a “bridge” connecting the influence of leadership to teacher performance. Without work discipline, the impact of leadership cannot function optimally.

The Role of Work Discipline in Mediating the Effect of Organisational Culture on Teacher Performance

Path analysis reveals that work discipline functions as a mediating variable between organisational culture and teacher performance. The results show that organisational culture does not have a significant direct effect on teacher performance but exerts a significant influence through the improvement of work discipline. This finding indicates that organisational cultural values alone are insufficient to enhance teacher performance unless they are internalised in disciplined work behaviour.

The Sobel test results support this finding by demonstrating that the indirect effect of organisational culture on teacher performance through work discipline is substantial. This confirms that work discipline is the primary mechanism linking organisational culture and teacher performance. In other words, organisational culture influences teacher performance when it is implemented in work behaviours reflected in teachers’ levels of discipline in carrying out their professional duties. Therefore, work discipline significantly mediates the effect of organisational culture on teacher performance.

These findings are consistent with the perspective of Luthans (2011), who states that individual work behaviour is the result of the interaction between organisational factors and individual factors. Moreover, this result also supports Hasibuan (2017), who emphasises that work discipline is a tangible form of internalizing organizational values and rules that directly contribute to performance improvement.

CONCLUSIONS AND RECOMMENDATIONS

Based on data analysis and discussion, this study concludes that teacher performance in public senior high schools throughout Berastagi Subdistrict is influenced by the combined effect of principal leadership, organisational culture, and work environment discipline. Effective and inspirational principal leadership has been proven to exert a significant positive impact, both in shaping teacher discipline and in directly enhancing professional work outcomes. However, a distinctive finding reveals that organisational culture does not have a significant direct effect on teacher performance; its influence becomes evident only when it has been internalised into disciplined work behaviour.

The main contribution of this study lies in identifying work discipline as the primary mediating variable, or a “bridge,” that connects leadership policies and

organisational values to teacher productivity. In the absence of strong discipline, effective leadership styles and positive school culture are insufficient to optimally enhance teacher performance.

As a practical recommendation, principals are advised to prioritise the development of discipline management systems based on positive reinforcement, in which leaders act as the primary role models in adhering to organisational norms. For the Karo Regency Education Office (Dinas Pendidikan Kabupaten Karo), the findings of this study may serve as a reference in designing managerial development programs that emphasise the strengthening of work ethic and the integrity of educators. From a theoretical perspective, future research is expected to expand this model by incorporating additional psychological variables, such as work motivation or organisational commitment, in order to obtain a more comprehensive understanding of the determinants of educational quality at the upper secondary level.

ADVANCED RESEARCH

Future research is recommended to extend this study by incorporating additional psychological variables such as work motivation, organisational commitment, job satisfaction, and teacher self-efficacy to develop a more comprehensive model of teacher performance. Expanding the research scope to different regions, school types, and educational levels would also enhance the generalizability of the findings.

Moreover, the use of mixed-methods or qualitative approaches is suggested to gain deeper insights into how leadership and organisational culture are internalised and translated into disciplined work behaviour. Longitudinal and intervention-based studies are further encouraged to examine the sustainability of leadership and discipline management practices and to evaluate their effectiveness in improving teacher performance over time.

ACKNOWLEDGMENT

The author expresses sincere gratitude to the Master's Program in Educational Administration, Universitas Negeri Semarang (UNNES), for the academic support and facilities provided throughout the implementation of this research. Special appreciation is extended to the supervisory team for their guidance, supervision, and highly valuable feedback in refining this manuscript.

The author also wishes to thank the Regional Office of the Education Authority (Kantor Cabang Dinas Pendidikan) Region IV of Karo Regency for granting research permission, as well as all principals and teachers of SMAN 1 Berastagi, SMA Swasta Bersama Berastagi, SMA Masehi GBKP Berastagi, and SMA Swasta Metodist Berastagi. The active participation and openness of the respondents in providing primary data through questionnaire completion greatly contributed to the successful completion of this study and enabled it to contribute to the development of educational management in Berastagi District.

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