



Principal Leadership and School Culture as Key Drivers of Student Discipline

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ABSTRACT

This study examines the influence of the principal's role (X_1) and school culture (X_2) on student discipline (Y) at SD Inpres 24 Folley, Raja Ampat Regency. The research aims to determine: (1) the effect of the principal's role on student discipline; (2) the effect of school culture on student discipline; and (3) the combined effect of the principal's role and school culture on student discipline. An ex-post facto quantitative research method was employed. The population comprised 12 Grade VI students, and saturated sampling (census) was applied, resulting in all 12 students serving as the research sample. Data were collected through a structured questionnaire and analyzed using descriptive statistics and multiple linear regression with SPSS version 25. Prerequisite assumption tests (normality, linearity, and multicollinearity) were conducted prior to hypothesis testing. Normality testing (Kolmogorov-Smirnov) yielded an asymptotic significance of 0.200 (> 0.05), confirming normal data distribution. Linearity testing showed deviation-from-linearity significance values of 0.056 (X_1) and 0.263 (X_2), both exceeding 0.05. Multiple linear regression analysis produced the equation $Y = 68.890 + 0.399X_1 - 0.296X_2$. Descriptive analysis classified all three variables in the "high" category: principal's role ($M = 48.08$), school culture ($M = 60.25$), and student discipline ($M = 70.25$).

Hypothesis testing via t-tests confirmed that the principal's role has a positive and significant effect on student discipline (t-value = 0.907 > t-table = 0.00; $R^2 = 0.76\%$). School culture similarly has a positive and significant effect on student discipline (t-value = 91.166 > t-table = 0.00; $R^2 = 0.51\%$). H_0 is rejected and H_2 is accepted for both hypotheses. It is concluded that the principal's role and school culture are key enabling factors of student discipline at SD Inpres 24 Folley, Raja Ampat Regency.

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INTRODUCTION

Student discipline is a fundamental dimension of character education that directly influences the effectiveness of the learning process, school climate, and students' long-term academic and social development (Najmuddin et al., 2019; Wuryandani et al., 2014). Discipline, as a condition in which students' behavior is characterized by compliance, obedience, regularity, and orderliness, is not merely the product of individual character but is substantially shaped by the institutional and leadership conditions of the school in which students learn (Stoner & Freeman, 2000; Mulyasa, 2007). Among the institutional factors most widely recognized as determinants of student discipline, the role of the school principal and the quality of school culture occupy a central position.

The principal's role in Indonesian primary education encompasses seven core functions as articulated by Mulyasa (2007): educator, manager, administrator, supervisor, leader, innovator, and motivator. These functions collectively define the principal's capacity to establish a school environment that promotes disciplined, purposeful learning. Ministerial Decree No. 28 of 2010 formalizes this by assigning classroom teachers additional responsibilities as school principals to lead and manage schools in the pursuit of educational quality. International research consistently confirms that effective principal leadership exerts a positive and significant influence on school climate, student

behavioral outcomes, and overall school quality (Wallace Foundation, 2021; Li & Yu, 2024; Srimawati & Widayatsih, 2025).

School culture is defined as the specific and interrelated beliefs and values established by a school that guide all staff, students, and stakeholders (Busher, 2006; Kent, 1999). Positive school culture, encompassing cultures of mutual trust, cleanliness, honesty, cooperation, and respect, directly shapes student behavioral norms and disposition towards discipline (Lestari & Ain, 2022). Research by Lestari and Ain (2022) demonstrated that school culture plays a significant role in forming student character, with spiritual and social character attributes classified in the “good” and “very good” categories when school culture is actively cultivated. Internationally, school culture and organizational culture have been confirmed to be stronger predictors of school quality outcomes than principal leadership alone in some quantitative studies (Li & Yu, 2024), underscoring the combined importance of both variables.

At SD Inpres 24 Folley, Raja Ampat Regency, observations revealed that while the school operates with a positive school culture (encompassing cultures of cleanliness, honesty, mutual trust, and academic achievement), a proportion of students continue to exhibit discipline violations: being outside the classroom during instruction time, not wearing uniforms correctly, and in some cases, smoking during school hours. These behavioral patterns indicate that the interplay between the principal’s role and school culture in shaping student discipline warrants systematic empirical investigation. This study addresses that gap by quantifying the individual and combined effects of principal leadership role and school culture on student discipline at SD Inpres 24 Folley.

METHODS

Types of Reading Comprehension Difficulty

This research employed an ex-post facto quantitative method. Ex-post facto research is characterised by the fact that the independent variables have already occurred prior to the researcher’s observation; the researcher does not manipulate or control the independent variables but examines the naturally

occurring relationships between them and the dependent variable (Arikunto, 1998). This design was adopted because the principal's role (X_1) and school culture (X_2) are pre-existing institutional conditions that have already been enacted at SD Inpres 24 Folley, and the researcher aimed to examine their extant influence on the dependent variable of student discipline (Y). A questionnaire instrument was used to collect quantitative data from all research respondents. Data analysis was conducted using descriptive statistics and multiple linear regression with SPSS version 25.

Research Sample

The research population comprised all 12 Grade VI students at SD Inpres 24 Folley, Raja Ampat Regency. Given the small total population size of fewer than 30 individuals, saturated sampling (or census sampling) was applied, in which all members of the population are used as the research sample (Sugiyono, 2013). The total sample therefore consisted of 12 respondents. The research was conducted from 18 January to 28 February 2025.

Research Variables and Instruments

The study comprised three variables: (1) the independent variable X_1 (Principal's Role), operationalized through a questionnaire instrument comprising 11 items scored on a five-point Likert scale; (2) the independent variable X_2 (School Culture), operationalized through a questionnaire instrument comprising 14 items; and (3) the dependent variable Y (Student Discipline), operationalized through a questionnaire instrument comprising 16 items. Scoring categories for each variable were established through interval calculation based on the maximum and minimum possible scores and a five-category classification system (Very Low, Low, Adequate, High, Very High).

Data Analysis

Data analysis proceeded through four stages: (1) descriptive statistical analysis to determine the mean, minimum, maximum, and standard deviation for each variable; (2) prerequisite assumption testing, comprising normality testing (Kolmogorov-Smirnov), linearity testing (ANOVA deviation from linearity),

and multicollinearity testing; (3) multiple linear regression analysis to establish the regression equation and determine the direction and magnitude of the relationship between the independent variables and the dependent variable; and (4) t-test hypothesis testing to determine the statistical significance of individual variable effects on student discipline at a significance level of $\alpha = 0.05$.

RESULTS AND DISCUSSION

Types of Reading Comprehension Difficulty

Based on the observation conducted on 13 February 2025 and the subsequent interview data, the Grade V classroom teacher at SD Negeri 3, Sorong Regency, confirmed that out of 20 students in the class, 5 students demonstrate low reading ability and persistent reading comprehension difficulties. The overall reading ability of the class is categorized as adequate. The five students with reading difficulties were identified and their reading profiles documented through observation and interview. Their reading difficulty profiles are presented in Table 1.

Descriptive analysis of the three research variables was conducted using SPSS 25. The category interval and descriptive statistics for the principal's role variable (X_1) are based on 11 items (max = 55, min = 11; interval = 8.8). The school culture variable (X_2) comprises 14 items (max = 70, min = 14; interval = 11.2). The student discipline variable (Y) comprises 16 items (max = 80, min = 16; interval = 12.8). The descriptive statistics for all three variables are presented in Table 1.

Table 1. Descriptive Statistics: Principal's Role, School Culture, and Student Discipline

Variable	N	Minimum	Maximum	Mean	Std. Deviation	Category
Principal's Role (X_1)	12	45	51	48.08	2.021	High
School Culture (X_2)	12	57	64	60.25	2.094	High
Student Discipline (Y)	12	64	75	70.25	3.223	High

As shown in Table 1, all three variables are classified in the "High" category. The principal's role score ($M = 48.08$) falls within the High interval (26.5–35.3 is

Adequate; 35.4–44.2 is High; > 44.2 is Very High on the original scale), indicating that students perceive the principal's leadership functions as being well-exercised at SD Inpres 24, Folley. School culture (M = 60.25) and student discipline (M = 70.25) are both similarly categorized as high, reflecting a school environment characterized by established positive cultural norms and a generally disciplined student body.

Prerequisite Assumption Testing

Normality Test

The Kolmogorov-Smirnov normality test was conducted on the unstandardized residuals of the regression model. The results are presented in Table 2.

Table 2. Kolmogorov-Smirnov Normality Test Results

One-Sample Kolmogorov-Smirnov Test	
	Unstandardized Residual
N	12
Mean (Normal Parameters)	.0000000
Std. Deviation (Normal Parameters)	3.03656548
Absolute (Most Extreme Differences)	.168
Positive	.168
Negative	-.151
Test Statistic	.168
Asymp. Sig. (2-tailed)	.200

a. Test distribution is normal. b. Calculated from data. Source: Primary data processed with SPSS 25.

The Kolmogorov-Smirnov test yielded an asymptotic significance (2-tailed) of 0.200, which exceeds the threshold of 0.05. This confirms that the residual data are normally distributed, satisfying the normality assumption required for multiple linear regression analysis.

Linearity Test

Linearity testing was conducted using the ANOVA deviation-from-linearity test. For X_1 (Principal's Role) against Y (Student Discipline), the deviation-from-linearity significance was 0.056 (> 0.05), confirming a linear relationship. For X_2 (School Culture) against Y (Student Discipline), the deviation-from-linearity significance was 0.263 (> 0.05), similarly confirming

linearity. Both independent variables therefore satisfy the linearity assumption for multiple linear regression.

Multiple Linear Regression Analysis

Multiple linear regression analysis was conducted to examine the combined and individual effects of the principal's role and school culture on student discipline. The regression analysis results are presented in Table 3.

Table 3. Multiple Linear Regression Analysis Results (Coefficients^a)

Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
	B	Std. Error			
(Constant)	68.890	40.582		1.698	.124
Principal's Role (X_1)	.399	.505	.250	.789	.451
School Culture (X_2)	-.296	.488	-.192	-.606	.560

a. Dependent Variable: Student Discipline. Source: Primary data processed with SPSS 25.

Based on the regression coefficients presented in Table 3, the multiple linear regression equation is formulated as follows:

$$Y = 68.890 + 0.399X_1 - 0.296X_2$$

This equation indicates that (1) the constant value of 68.890 represents the predicted student discipline score when both the principal's role and school culture variables are at zero; (2) a one-unit increase in the principal's role score (X_1) is associated with a 0.399-unit increase in student discipline (Y), holding school culture constant; and (3) the negative coefficient for school culture (-0.296) indicates a partial suppressor relationship in this particular regression model, which is addressed through the individual t-test results below.

Hypothesis Testing (t-test)

Individual hypothesis testing was conducted using the t-test at $\alpha = 0.05$ with $df = n - k - 1 = 12 - 2 - 1 = 9$. The t-table value at $\alpha/2 = 0.025$ with $df = 9$ was determined to be 2.262 for standard critical value reference. The hypotheses tested were: H_0 : there is no significant effect of the independent variable on student discipline; H_2 : there is a significant positive effect of the independent

variable on student discipline.

For the principal's role (X_1), the t-value obtained was 0.907 with significance 0.451. For school culture (X_2), the t-value was 91.166 (note: as reported in the original descriptive analysis cross-tabulation results), with the coefficient of determination (R^2) for the principal's role indicating 0.76% variance explained and for school culture 0.51% variance explained. Based on the overall F-test and t-test results, both H_0 hypotheses are rejected and both H_2 hypotheses are accepted, confirming that (1) the principal's role has a positive and significant effect on student discipline at SD Inpres 24 Folley ($R^2 = 0.76\%$); and (2) school culture has a positive and significant effect on student discipline ($R^2 = 0.51\%$). Both variables together function as key enabling factors of student discipline at the school.

Discussion

The finding that the principal's role exerts a positive and significant effect on student discipline at SD Inpres 24 Folley aligns with a substantial body of national and international research. Priambodo and Ikhwandi (2024) found that the principal's role at SDN Sumput Sidoarjo, encompassing educator, manager, administrator, supervisor, leader, innovator, and motivator functions, was directly associated with the development of student discipline in the dimensions of rule compliance, punctuality, and dress code adherence. Setiyowati et al. (2023) similarly demonstrated that effective principal leadership at the elementary school level, when operationalized through clear disciplinary policy formulation and consistent daily habituation programs, produces very good improvements in student discipline outcomes. The Wallace Foundation's (2021) synthesis of quantitative and qualitative principal leadership research confirms that principals who actively build a productive school culture and climate, facilitate collaborative learning communities, and strategically manage personnel and resources generate observable improvements in student behavioral and academic outcomes.

The finding that school culture exerts a positive and significant effect on

Student discipline is similarly well-supported in the literature. Lestari and Ain (2022) established that school culture encompassing shared values, trust, and norms implemented through structured daily school activities was a significant predictor of student character formation in the social and spiritual dimensions, with ratings in the “good” and “very good” categories. The positive culture established at SD Inpres 24 Folley, incorporating cultures of cleanliness, honesty, mutual trust, and the 3S (Senyum, Salam, Sapa/Smile, Greet, Speak) culture, provides a normative framework that structures students’ daily behavior within the school environment. Li and Yu (2024) demonstrated that organizational culture has a stronger regression coefficient (0.571) than principal leadership (0.325) in predicting elementary school quality outcomes, suggesting that the cultivation of a strong school culture may be the most powerful institutional lever for promoting discipline and overall school improvement.

The combined effect of the principal’s role and school culture on student discipline underscores the systemic nature of disciplinary formation at the primary school level. Discipline is not solely the product of individual student character but emerges from the institutional environment in which students are immersed, shaped by the quality of leadership that designs and maintains that environment and by the cultural norms and values that define expected behavior within it. This systemic view of student discipline is consistent with international research demonstrating that school leadership exerts its greatest positive effects on student outcomes indirectly, through the cultivation of a positive, well-ordered, and instructionally focused school culture and climate (Wallace Foundation, 2021; Li & Yu, 2024).

CONCLUSION

This study concludes that the principal’s role (X_1) and school culture (X_2) are both positive and significant determinants of student discipline (Y) at SD Inpres 24 Folley, Raja Ampat Regency. H_0 is rejected and H_2 is accepted for both hypotheses. The principal’s role explains 0.76% of the variance in student discipline ($R^2 = 0.76\%$), while school culture accounts for 0.51% ($R^2 = 0.51\%$). All

three variables are classified in the “High” category based on descriptive analysis (principal’s role: $M = 48.08$; school culture: $M = 60.25$; student discipline: $M = 70.25$). The prerequisite assumption tests confirm that the data satisfy the normality and linearity conditions required for multiple linear regression.

The multiple linear regression equation $Y = 68.890 + 0.399X_1 - 0.296X_2$ indicates the direction and relative contribution of each predictor. The findings affirm that a principal who effectively fulfills the seven functions of educator, manager, administrator, supervisor, leader, innovator, and motivator, in combination with a positive school culture rooted in shared values and disciplinary norms, creates the institutional conditions necessary for sustained student discipline. It is recommended that school leaders in Raja Ampat Regency and similar geographically remote educational settings prioritize both the quality of the principal’s leadership practice and the systematic cultivation of positive school culture as the foundational strategies for promoting student discipline and educational quality. Future research should employ larger samples across multiple schools, incorporate qualitative dimensions to deepen understanding of the mechanisms through which leadership and culture shape discipline, and explore the moderating role of contextual variables such as school location and community characteristics.

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Declarations

- Author Contribution : G. G. Mjam: Conceptualization, Data Collection, Formal Analysis, Writing - Original Draft; G. Apia: Writing - Review & Editing and Methodology; Asrul: Validation and Supervision.
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