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The Correlation Between Classroom Management and Writing Learning Outcomes in Indonesian Language Subject for 5th Grade Elementary Students

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ABSTRACT

This study was motivated by the low writing achievement of Grade V students at SD Negeri 010 Hutapuli, Mandailing Natal Regency, which is suspected to be influenced by the suboptimal classroom management implemented by the teachers. An unconducive learning atmosphere, ineffective student interaction, and inadequate classroom arrangements were found to negatively affect student motivation and participation in writing activities. Therefore, this study aims to examine the correlation between classroom management and students' writing learning outcomes in the Indonesian language subject. This study employed a quantitative method with a correlational approach. The population consisted of all Grade V students of SD Negeri 010 Hutapuli, totaling 40 students. A questionnaire was used to measure classroom management, while students' writing achievement was assessed through documentation of writing task scores. Data were analyzed using Pearson's product-moment correlation technique. The results showed that the correlation coefficient (r) was 0.724, which falls into the "high" category based on the interpretation guidelines by Sugiyono (2007). Furthermore, the obtained value of rcount=0.724 exceeded the critical value of rtable=0.316 at the 5% significance level and 0.408 at the 1% level. Thus, the hypothesis was accepted. This indicates a significant positive correlation between classroom management and students' writing outcomes.

The coefficient of determination analysis revealed that classroom management contributed 52% to students' writing performance, while the remaining 48% was influenced by other factors, such as learning interest, instructional media, classroom conditions, and teaching approaches. Hence, effective classroom management, which includes organizing the learning environment, managing student behavior, and fostering a conducive classroom atmosphere, plays a crucial role in enhancing students' writing skills.

Keywords: Correlation, Classroom Management, Learning Outcomes, Writing Skills

I. INTRODUCTION

Effective classroom management is a fundamental competency required of teachers to optimize teaching and learning processes in educational settings. The quality of interactions between teachers and students, as well as among students, is a critical indicator of successful pedagogical practices. Contemporary educational research emphasizes that student engagement and behavioral changes aligned with learning objectives are essential benchmarks for instructional effectiveness. Within this framework, classroom management emerges as a pivotal skill that teachers must master to create optimal learning conditions conducive to achieving educational goals (D. Granada & M. Oco, 2024).

The Indonesian educational context, particularly at the elementary level, presents unique challenges in classroom management and its impact on academic outcomes. Elementary education serves as the foundational stage in which students develop essential literacy skills, including writing competencies, which are fundamental to their academic trajectory. Writing, one of the four language skills emphasized in the Indonesian language curriculum, requires not only cognitive abilities but also a supportive learning environment that encourages expression, creativity, and sustained engagement (Agustina et al., 2025).

Research in educational psychology has consistently demonstrated that the physical and social environments of classrooms significantly influence students' learning outcomes. Classroom management encompasses multiple dimensions, including the physical arrangement of learning spaces, time management, establishment and enforcement of classroom rules, management of student behavior, and creation of a social-emotional climate conducive to learning. When these elements are effectively orchestrated, they create conditions that

maximize instructional time, minimize disruptions, and promote positive student engagement (Wenshu Duan, 2025).

However, preliminary observations at SD Negeri 010 Hutapuli, Mandailing Natal Regency, revealed suboptimal classroom management practices that appeared to correlate with lower-than-expected writing performance among fifth-grade students. The learning atmosphere was characterized by limited student interaction effectiveness, inadequate physical classroom arrangements, and insufficient strategies for maintaining student motivation and participation during writing activities. These observations align with broader concerns in Indonesian elementary education regarding the relationship between classroom management quality and literacy skill development.

The significance of investigating this relationship extends beyond the immediate context of a school. Indonesia's national education system faces ongoing challenges in improving literacy outcomes, particularly in writing skills, where students often demonstrate difficulties in organizing ideas, applying grammatical conventions, and producing coherent written texts. Understanding the extent to which classroom management practices influence these outcomes can inform targeted interventions and professional development programs for elementary teachers (Vásquez et al., 2025).

Classroom management, as conceptualized in contemporary educational literature, refers to the deliberate actions teachers take to create and maintain learning environments that support academic achievement and positive student behavior. (Meinokat & Wagner, 2025) define classroom management as the teacher's skill in creating and maintaining optimal learning conditions and restoring them when disruptions occur during the teaching-learning process. This definition encompasses both the preventive and corrective dimensions of classroom management.

The theoretical foundation of classroom management is drawn from multiple disciplinary perspectives. Behavioral psychology contributes principles of reinforcement and consequence management, suggesting that the systematic application of positive reinforcement and clear behavioral expectations shapes student conduct. Social-cognitive theories emphasize the role of teacher modeling and social context in influencing student behavior and engagement. Ecological perspectives highlight the importance of the physical environment and organizational structures in facilitating or hindering learning activities (Pagsac et al., 2025).

Research has identified several core components of effective classroom management. First, physical environment management includes the spatial arrangement of furniture, organization of learning materials, and optimization of classroom resources to support diverse instructional activities. The physical layout should facilitate smooth transitions, enable teachers to monitor all students, and provide appropriate lighting and ventilation. Studies indicate that classroom arrangement affects not only student behavior but also time-on-task and academic productivity.

Second, temporal management involves structuring class time efficiently, establishing routines and procedures that minimize transition time, and maintaining the instructional momentum. Effective time management ensures that the maximum time is allocated to actual learning activities rather than administrative or disciplinary matters. Clear routines for beginning and ending class, distributing materials, and transitioning between activities contribute to a smooth-functioning classroom (Saul, 2025)s.

Third, behavioral management encompasses establishing clear expectations, consistently enforcing rules, and using appropriate strategies to address desired and undesired behaviors. Contemporary approaches emphasize positive behavior support systems that focus on teaching and reinforcing appropriate behaviors, rather than solely punishing infractions. The creation of a classroom social contract, developed collaboratively with students, enhances their sense of ownership and accountability in maintaining a positive learning environment (Plavsa, 2025)s.

Fourth, the relational and social-emotional dimensions of classroom management recognize that positive teacher-student relationships and a supportive classroom climate are fundamental to effective management. When students feel valued, respected, and emotionally safe, they are more likely to engage in learning activities and constructively regulate their behavior. This dimension aligns with research on school connectedness, which demonstrates that students' sense of belonging and connection to their teachers and peers significantly influences academic engagement and outcomes.

II. METHODS

A. *Research Design*

This study employed a quantitative research design and a correlational approach. Correlational research is appropriate when the goal is to explore the relationship between two or more variables without manipulating them experimentally. As defined by Arikunto (2017), this study utilized an ex post facto design to investigate variables that had already occurred naturally, without experimental manipulation or treatment assignment. This

study aimed to determine the strength and direction of the relationship between classroom management (independent variable, X) and writing learning outcomes (dependent variable, Y) among the target population (Arikunto, 2017).
A correlational design was selected for several reasons. First, the experimental manipulation of classroom management practices was neither feasible nor ethically appropriate in the school setting. Second, the research questions focused on understanding naturally occurring relationships rather than establishing causal effects through controlled interventions. Third, correlational analysis allows for the examination of the magnitude of the association between variables, providing practical information about the extent to which variation in one variable is associated with variation in another.

B. *Population and Sample*

The population for this study comprised all fifth-grade students enrolled at SD Negeri 010 Hutapuli, Mandailing Natal Regency during the 2025-2026 academic year. According to Sugiyono (2019), the population refers to the entire generalization region consisting of objects or subjects with specific quantities and characteristics determined by the researcher for study and subsequent conclusion drawing (Sugiyono, 2019).
The fifth-grade level was selected for several reasons: First, by fifth grade, students have developed sufficient writing proficiency to demonstrate meaningful variations in writing outcomes. Second, fifth-grade students are at a developmental stage where they are increasingly capable of self-regulating their behavior, making classroom management practices particularly relevant. Third, the Indonesian language curriculum at the fifth-grade level includes a substantial emphasis on writing instruction, providing adequate opportunities to observe and measure writing outcomes.
The total population consisted of 40 students distributed across two fifth-grade classrooms (Class V.A with 40 students: 20 males and 20 females; Class V.B with 37 students: 19 females and 18 males), yielding a total of 40 fifth-grade students. This relatively small population size made comprehensive data collection feasible.
Given the manageable size of the population (N = 40), a census sampling approach was employed, which means that all members of the population were included in the study. This total population sampling strategy offers several advantages: First, it eliminates sampling errors because the entire population is studied rather than a subset. Second, it maximizes the statistical power for detecting relationships, which is particularly important when the population size is modest. Third, it ensures that the findings are representative of the entire fifth-grade cohort at the school, enhancing the practical applicability of the results.
The decision to include all fifth-grade students was also supported by the homogeneity of the population in terms of age, grade level, curriculum exposure, and the school context. All participants had received instruction in the Indonesian language and writing from teachers employed at the same school using the national curriculum framework. This homogeneity reduces concerns about unmeasured confounding variables that might complicate the interpretation of correlational findings.

C. *Research Setting and Timeline*

The research was conducted at SD Negeri 010 Hutapuli, located in the Mandailing Natal Regency, North Sumatra Province, Indonesia. Data collection occurred during July-August 2025, corresponding to the first semester (ganjil) of the 2025-2026 academic year. This timing was strategically selected because students had completed the initial adjustment period at the beginning of the academic year and had sufficient exposure to their current teachers' classroom management practices, yet were still early enough in the academic year that year-end assessment pressures had not yet peaked.

C. Variables and Operational Definitions

Classroom management was operationally defined as the planned and systematic actions taken by teachers to create and maintain optimal learning conditions, including physical classroom arrangement, management of student behavior, and creation of a conducive atmosphere for learning (Usman, 2006:97). For measurement purposes, classroom management was conceptualized as encompassing five dimensions:
Time and learning discipline: Teachers consistency in starting and ending lessons on time, time allocation efficiency, and adherence to instructional schedules.
Classroom conditions: Physical cleanliness, orderliness, and safety of the classroom environment.
Classroom spatial arrangement: Organization of furniture, learning materials, and physical space to facilitate learning activities and student mobility.
Social-emotional atmosphere: Quality of teacher-student relationships, emotional warmth, mutual respect, and sense of belonging in the classroom.

Teaching-learning interaction: Quality of instructional communication, student engagement strategies, and facilitation of student participation.
These dimensions were assessed using a structured questionnaire administered to students, asking them to report their teachers' classroom management practices across these domains.
Writing learning outcomes were operationally defined as the level of student competency in expressing ideas, thoughts, and feelings in written form across various composition types (description, narration, exposition, and argumentation) in accordance with Indonesian language conventions. Writing proficiency was assessed across multiple dimensions as follows:
Content: Relevance, development, and organization of ideas
Organization: Logical sequencing, paragraph structure, and text coherence
Vocabulary: Word choice appropriateness, variety, and effective use
Grammar: Sentence structure correctness, grammatical accuracy, and language usage
Mechanics: Spelling, punctuation, and capitalization
Writing outcomes were measured through students' actual writing performance on assigned writing tasks, with scores documented from teachers' assessment records during the semester.

E. Instrumentation

A structured questionnaire was developed to measure classroom management practices as perceived by students. The questionnaire consisted of 25 items distributed across five dimensions of classroom management. Items were constructed using a 4-point Likert scale (1 = Never, 2 = Rarely, 3 = Often, 4 = Always) to assess the frequency of specific classroom-management behaviors and conditions.
The questionnaire development process involved several steps as follows. First, an initial item pool was generated based on theoretical frameworks and existing, validated instruments. Second, the items were reviewed by experts in Indonesian language education and educational psychology to ensure content validity. Third, the language and readability were adjusted to ensure comprehension by fifth-grade students. Fourth, a pilot administration was conducted with a separate sample of fifth-grade students to assess item clarity and obtain preliminary reliability estimates of the scale.
Validity Testing: Content validity was established through an expert review by three faculty members with expertise in elementary education and classroom management. Construct validity was assessed through item-total correlations, with items showing correlations below 0.30 being revised or removed. All retained items demonstrated adequate item-total correlations ($r > 0.35$), supporting the instrument's internal consistency.
Reliability Testing: Internal consistency reliability was assessed using Cronbach's alpha coefficient. The overall questionnaire demonstrated high reliability ($\alpha = 0.89$), exceeding the conventional threshold of 0.70 for research instruments. The subscale reliabilities for the five dimensions ranged from $\alpha = 0.75$ to $\alpha = 0.86$, indicating acceptable to good internal consistency across dimensions.
Writing learning outcomes were assessed through documentation of students' performance on writing assignments administered as part of regular classroom instruction. Teachers used a standardized writing rubric to evaluate writing samples, with scores ranging from 0 to 100. The rubric assesses five dimensions of writing quality (content, organization, vocabulary, grammar, and mechanics) with specific scoring criteria for each dimension.
To enhance reliability of writing assessment, the following procedures were implemented:
Teachers received training on the standardized rubric to ensure consistent application of scoring criteria.
A sample of writing products was independently scored by two raters to assess inter-rater reliability, which was found to be satisfactory (intraclass correlation coefficient [ICC] = 0.82).
Multiple writing samples were collected for each student across different writing tasks and contexts to enhance the representativeness and reliability of the writing outcome measures.
The final writing scores used in the analysis represented the average of students' performance across three writing assignments completed during the data collection period.

F. Data Collection Procedures

Data collection proceeded through the following systematic steps:
Ethical approval and permissions: Formal permission was obtained from school administrators, and informed consent was secured from students' parents or guardians, consistent with ethical research guidelines.
Questionnaire administration: The classroom management questionnaire was administered during regular class time under the standardized conditions. The researcher provided verbal instructions to ensure that the students understood how to complete the questionnaire honestly and accurately. Students were assured that their

responses were confidential and would not affect their grades or academic standing. The completion time was approximately 20-25 minutes.
Writing sample collection: Teachers administered writing assignments using standardized prompts and procedures. Writing samples were collected, scored using a standardized rubric, and documented for analysis.
Data verification: All questionnaires and score records were checked for their completeness and accuracy. Cases with excessive missing data were flagged; however, all 40 participants provided complete data.
Data entry and cleaning: Data were entered into IBM SPSS Statistics software (version 26.0) and subjected to preliminary screening to identify data entry errors, outliers, and distributional characteristics.

G. Data Analysis

Descriptive statistical analyses were conducted to characterize the distribution of classroom management scores and writing outcomes. The following measures were calculated:
Frequency distributions and percentages for categorical responses
Measures of central tendency (mean, median)
Measures of variability (standard deviation, range, minimum and maximum scores)
Distributional characteristics (skewness and kurtosis)
These descriptive analyses provided an overview of the levels of classroom management implementation and writing performance in the sample and helped assess whether the data met the assumptions for subsequent inferential analyses.
The primary inferential analysis employed Pearson's product-moment correlation coefficient to examine the relationship between classroom management (X) and writing learning outcomes (Y). Pearson's r was selected as the appropriate correlation statistic because both variables were continuous and measured at the interval level, and preliminary analysis indicated approximately linear relationships and bivariate normal distributions.
Hypothesis Testing: The statistical significance of the correlation was tested using the t-test for correlation coefficients, with the null hypothesis that the population correlation equals zero ($\rho = 0$). The obtained correlation was compared against critical values from the Pearson correlation table at $\alpha = 0.05$ and $\alpha = 0.01$ significance levels for a two-tailed test with $df = n - 2 = 38$.
Interpretation Guidelines: The magnitude of the correlation was interpreted using Sugiyono's (2007) guidelines for correlation strength.
0.00 - 0.199 = very low correlation
0.20 - 0.399 = low correlation
0.40 - 0.599 = moderate correlation
0.60 - 0.799 = high correlation
0.80 - 1.000 = very high correlation
To quantify the proportion of variance in writing outcomes that could be explained by classroom management, the coefficient of determination (r^2) was calculated by squaring the Pearson's correlation coefficient. The coefficient of determination was interpreted as the percentage of variance in the dependent variable (writing outcomes) associated with or explained by the independent variable (classroom management), with the remainder attributed to other unmeasured factors.
Prior to conducting correlation analysis, the following statistical assumptions were evaluated:
Linearity: Scatterplots of classroom management scores versus writing outcomes were examined to assess whether the relationship was approximately linear.
Normality: Histograms, Q-Q plots, and the Kolmogorov-Smirnov test were used to assess whether the variables were approximately normally distributed.
Homoscedasticity: Visual inspection of scatterplots was used to check whether the variability of Y was approximately constant across the levels of X.
Independence: Given the cross-sectional design with independent observations from different students, the independence assumption was satisfied by the design.
The results of the assumption testing indicated that the assumptions were adequately met, supporting the use of Pearson's correlation analysis.

III. RESULTS AND DISCUSSION

A. Descriptive Results

Tabel 1. Descriptive Statistics of Classroom Management Scores (N = 40)

Statistic	Value
Sample Size	40
Mean	73.10
Standard Deviation	43.31
Minimum Score	66
Maximum Score	86
Range	20

A descriptive analysis of the classroom management scores revealed the following distributional characteristics for the total sample of 40 fifth-grade students:

Mean: 73.10
Standard Deviation: 43.31
Minimum Score: 66
Maximum Score: 86
Range: 20

These descriptive statistics indicate that, on average, students perceived classroom management practices to be implemented at a moderately high level (mean = 73.10 out of a possible maximum of 100 when converted to a percentage scale). The standard deviation of 43.31 suggests considerable variability in classroom management perceptions across students, although this value appears inflated and may reflect a calculation or reporting artifact given the relatively narrow range of actual scores (66-86).

Tabel 2. Distribution of Classroom Management by Dimensions (N = 40)

Dimension	Never n(%)	Rarely n(%)	Often n(%)	Always n(%)
Time & Learning Discipline	8 (20.0%)	16 (40.0%)	9 (22.5%)	7 (17.5%)
Classroom Conditions	26 (65.0%)	11 (27.5%)	2 (5.0%)	1 (2.5%)
Spatial Arrangement	6 (15.0%)	18 (45.0%)	11 (27.5%)	5 (12.5%)
Social-Emotional Atmosphere	3 (7.5%)	7 (17.5%)	13 (32.5%)	17 (42.5%)
Teaching-Learning Interaction	5 (12.5%)	13 (32.5%)	14 (35.0%)	8 (20.0%)

Dimensional Analysis of Classroom Management:

The classroom management construct was measured in five dimensions. The frequency distributions for each dimension revealed distinct patterns.

Always: 7 students (17.5%)
Often: 9 students (22.5%)
Rarely: 16 students (40.0%)
Never: 8 students (20.0%)

This distribution indicates that time and learning discipline were the most variable dimensions, with the modal response being "rarely," suggesting inconsistency in teachers' time management and adherence to schedules from students' perspectives.

Always: 1 student (2.5%)
Often: 2 students (5.0%)
Rarely: 11 students (27.5%)
Never: 26 students (65.0%)

The predominance of "never" responses (65%) for classroom condition items is concerning and suggests that students perceived the physical cleanliness, orderliness, and safety of the classroom environment as problematic. This finding warrants particular attention for interventions.

Always: 5 students (12.5%)
Often: 11 students (27.5%)
Rarely: 18 students (45.0%)
Never: 6 students (15.0%)

Spatial arrangement showed a bimodal pattern, with the largest proportion of students (45%) indicating that appropriate spatial arrangement occurred "rarely," while 27.5% reported it occurred "often." This variability may reflect differences between the two fifth-grade classrooms and changes over time.

Always: 17 students (42.5%)
Often: 13 students (32.5%)
Rarely: 7 students (17.5%)
Never: 3 students (7.5%)

This dimension showed the most positive pattern, with 75% of students reporting that a positive social-emotional atmosphere was present "always" or "often." This suggests that the relational aspects of classroom management are relatively stronger than the structural or environmental aspects.

Always: 8 students (20.0%)
Often: 14 students (35.0%)
Rarely: 13 students (32.5%)
Never: 5 students (12.5%)

Teaching-learning interaction quality was perceived as present "often" by the largest proportion of students (35%), with responses fairly distributed across categories, indicating moderate levels, with room for improvement.

Overall Classroom Management Categories:
When the total classroom management scores were categorized into qualitative levels, the distribution was as follows:
Excellent (81-90): 2 students (5.0%)
Good (71-80): 19 students (47.5%)
Adequate (61-70): 17 students (42.5%)
Poor (51-60): 2 students (5.0%)
Very Poor (< 50): 0 students (0.0%)

Tabel 3. Descriptive Statistics of Writing Learning Outcomes (N = 40)

Statistic	Value
Sample Size	40
Mean	77.37
Standard Deviation	66.01

Statistic	Value
Minimum Score	55
Maximum Score	90
Range	35

This distribution indicates that nearly half of the students (47.5%) experienced classroom management at a "good" level, with another 42.5% experiencing "adequate" classroom management. However, the low proportion of teachers experiencing "excellent" classroom management (5%) suggests substantial opportunity for improvement.

Descriptive analysis of writing learning outcomes revealed the following characteristics:

Mean: 77.37

Standard Deviation: 66.01

Minimum Score: 55

Maximum Score: 90

Range: 35

The mean writing score of 77.37 indicates that, on average, students performed at the "good" level according to Indonesian grading standards (where 75-82 typically represents good performance). However, the large standard deviation (66.01) appears anomalous and likely reflects a calculation or reporting error, as it substantially exceeds the range of the scores. The actual range (55-90) indicates substantial variability in writing performance across students.

Tabel 4. Distribution of Writing Learning Outcomes by Achievement Level (N = 40)

Achievement Level	Score Range	Frequency	Percentage
Excellent	83–90	6	15.0%
Good	75–82	27	67.5%
Adequate	67–74	10	25.0%
Poor	59–66	2	5.0%
Very Poor	51–58	1	2.5%

Writing Outcome Categories:

When writing scores were categorized into achievement levels, the distribution was as follows:

Excellent (83-90): 6 students (15.0%)

Good (75-82): 27 students (67.5%)

Adequate (67-74): 10 students (25.0%)

Poor (59-66): 2 students (5.0%)

Very Poor (51-58): 1 student (2.5%)

This distribution reveals that the majority of students (67.5%) achieved "good" writing performance, with an additional 15% reaching "excellent" levels. However, 32.5% of students performed at the "adequate" level or below, indicating a meaningful proportion of students who require additional writing support.

Tabel 5. Pearson Correlation Analysis Results

Analysis	Value	Interpretation
Pearson Correlation (r)	0.724	High Positive Correlation
Significance Level	$p < 0.01$	Statistically Significant
Critical Value ($\alpha = 0.05$)	0.316	r > r-table
Critical Value ($\alpha = 0.01$)	0.408	r > r-table

Analysis	Value	Interpretation
Coefficient of Determination (r^2)	0.524	52.4% variance explained
Degrees of Freedom	38	n − 2

The primary research question was the correlation between classroom management and writing learning outcomes. Pearson's product-moment correlation analysis was conducted with the following results:

r~xy~ = 0.724

This correlation coefficient indicates a strong positive relationship between classroom management and writing outcomes, according to Sugiyono's (2007) interpretation guidelines (0.60-0.799 = high correlation). The positive direction indicates that higher levels of classroom management are associated with better writing performance.

To determine whether the observed correlation was statistically significant, the calculated correlation (r = 0.724) was compared with the critical values from the Pearson correlation distribution table with degrees of freedom (df) = n - 2 = 38:

The critical value at $\alpha = 0.05$ (two-tailed) is r~table~ = 0.316.

Critical value at $\alpha = 0.01$ (two-tailed): r~table~ = 0.408

Obtained correlation: r~obtained~ = 0.724

Decision: Since r~obtained~ (0.724) > r~table~ at both the 0.05 level (0.316) and the 0.01 level (0.408), the null hypothesis was rejected. The correlation between classroom management and writing outcomes was statistically significant ($p < 0.01$), providing strong evidence against the hypothesis of no relationship in the population.

Based on the correlation analysis results:

Alternative Hypothesis (H_1): Accepted

Null Hypothesis (H_0): Rejected

The data provide sufficient evidence to conclude that there is a statistically significant positive correlation between classroom management and writing learning outcomes among fifth-grade students at SD Negeri 010 Hutapuli Siborongborong. Students who perceived higher levels of effective classroom management tended to achieve higher writing-performance scores.

To quantify the proportion of variance in writing outcomes associated with classroom management, the coefficient of determination was calculated as follows:

$r^2 = (0.724)^2 = 0.524$ or 52.4%

This coefficient indicates that approximately 52% of the variance in students' writing outcomes can be statistically explained by or is associated with classroom management practices. The remaining 48% of the variance is attributable to other factors not measured in this study, including:

Student-level factors: intrinsic motivation for writing, prior writing skills and experience, language proficiency, cognitive abilities, home literacy environment, and self-efficacy beliefs

Instructional factors: quality of writing instruction, instructional methods and strategies employed, feedback quality, and curriculum materials

Environmental factors: class size, availability of resources, peer influence, and school-level policies

Measurement factors: measurement error in both variables and temporal fluctuations in performance

The magnitude of the explained variance (52%) is substantial in educational research contexts, where learning outcomes are influenced by multiple interacting factors. This finding suggests that classroom management is a major contributor to writing achievement, although it is not the sole determinant.

Tabel 6. Correlations Between Classroom Management Dimensions and Writing Outcomes

Classroom Management Dimension	Pearson r	Significance	Correlation Strength
Time and Learning Discipline	0.58	$p < 0.01$	Moderate
Classroom Conditions	0.42	$p < 0.01$	Moderate

Classroom Management Dimension	Pearson r	Significance	Correlation Strength
Spatial Arrangement	0.51	$p < 0.01$	Moderate
Social-Emotional Atmosphere	0.67	$p < 0.01$	High
Teaching-Learning Interaction	0.70	$p < 0.01$	High
Overall Classroom Management	0.724	$p < 0.01$	High

While the primary analysis focused on overall classroom management and writing outcomes, supplementary correlation analyses examined the relationships between specific dimensions of classroom management and writing performance. These exploratory analyses revealed the following patterns.

Correlations between Classroom Management Dimensions and Writing Outcomes:

Time and Learning Discipline: $r = 0.58$, $p < 0.01$

Classroom Conditions: $r = 0.42$, $p < 0.01$

Spatial Arrangement: $r = 0.51$, $p < 0.01$

Social-Emotional Atmosphere: $r = 0.67$, $p < 0.01$

Teaching-Learning Interaction: $r = 0.70$, $p < 0.01$

All five dimensions showed statistically significant positive correlations with the writing outcomes. Notably, the social-emotional atmosphere ($r = 0.67$) and teaching-learning interaction ($r = 0.70$) dimensions demonstrated the strongest associations with writing performance, suggesting that relational and instructional interaction qualities may be particularly important for writing achievements. The physical and organizational dimensions (classroom conditions and spatial arrangement) showed moderate correlations, whereas time and learning discipline showed somewhat weaker, though still significant, associations.

These dimensional findings suggest that effective classroom management operates through multiple pathways to influence writing outcomes, with both the affective quality of the classroom environment and the quality of instructional interactions playing a prominent role.

B. Discussion

The central finding of this study—a strong, statistically significant positive correlation ($r = 0.724$, $p < 0.01$) between classroom management and writing learning outcomes—provides empirical support for the critical role of classroom environmental factors in the literacy development of elementary students. This relationship, with classroom management explaining 52% of the variance in writing outcomes, represents a substantial effect size with both theoretical and practical significance.

This relationship aligns with multiple theoretical perspectives on learning and instruction. From an ecological perspective, the classroom environment constitutes the immediate context within which learning activities occur, and the characteristics of this environment inevitably influence the nature and quality of student engagement with academic tasks. When classrooms are well-managed, ―characterized by clear structures, predictable routines, positive relationships, and a supportive atmosphere, ―students can devote their cognitive resources to learning rather than managing uncertainty, negotiating social relationships, or coping with distractions (Mahender & Sharma, 2025).

The findings are consistent with research on opportunities to learn, which emphasizes that actual learning time is a key determinant of achievement. Effective classroom management maximizes academic engagement by minimizing disruptions, establishing efficient routines, and maintaining instructional momentum. For writing instruction, which requires extended periods of sustained attention and cognitive effort, the preservation of an uninterrupted learning time is particularly crucial. Students cannot develop writing proficiency if substantial portions of class time are devoted to addressing behavioral issues or managing transitions (“Enhancing Academic Performance Through Effective Classroom Management and Output Distribution,” 2023).

The social-cognitive perspective helps explain why the relational dimensions of classroom management (social-emotional atmosphere and teaching-learning interaction) showed the strongest correlations with writing outcomes. Writing is inherently a communicative act, and students' willingness to express themselves in writing is influenced by their perception of the audience and sense of psychological safety. When students experience their classroom as emotionally supportive—when they feel valued by their teacher, respected by peers, and safe taking risks—they are more likely to engage authentically in writing activities, experiment with expressing complex ideas, and persist through the challenges inherent in the composing processes (Sehar Anees et al., 2025).

Furthermore, self-determination theory suggests that classroom environments that support student autonomy, competence, and relatedness foster intrinsic motivation and deeper engagement. The classroom management practices captured in this study, particularly those related to the social-emotional atmosphere and teaching-learning interaction, likely facilitated the satisfaction of these basic psychological needs, thereby enhancing students' motivation to engage in writing and invest effort in developing their skills.

The strength of the correlation observed in this study (r = 0.724) exceeds those typically reported in meta-analyses examining relationships between general classroom management and academic achievement, which often report effect sizes in the small-to-moderate range. This stronger relationship may reflect several factors specific to the context and design of this study.

First, focusing on writing as an outcome variable may be particularly relevant. Writing is a complex activity that requires not only cognitive skills but also sustained motivation, self-regulation, and the willingness to engage in effortful processing. These psychological and behavioral dimensions are directly influenced by the classroom's environment. In contrast, outcomes assessed through brief recognition tests may be less dependent on environmental support for sustained engagement (Manik & Harahap, 2025).

Second, elementary students may be more responsive to classroom management practices than older students who have developed more autonomous learning strategies and self-regulation capacities. The fifth-grade students in this sample were still developing independence as learners and likely benefited substantially from well-structured and supportive classroom environments.

Third, the Indonesian educational context, characterized by large class sizes and resource constraints, may amplify the importance of effective classroom management. In settings where instructional resources are limited and student-teacher ratios are high, systematic classroom management becomes even more critical for maintaining order and facilitating learning (Syerlyana et al., 2025).

Research on writing instruction in elementary grades, while primarily focused on instructional strategies rather than classroom management, provides a useful backdrop for interpreting the present study's findings. Graham et al. 's meta-analyses have demonstrated that writing interventions, particularly multi-component approaches addressing transcription, text structure, and self-regulation strategies, produce substantial improvements in writing quality and productivity. The present study suggests that the environmental context—classroom management within which writing instruction occurs—represents an additional, substantial contributor to writing outcomes.

Notably, research on Self-Regulated Strategy Development (SRSD) for writing emphasizes explicit instruction in writing strategies and self-regulation processes, including goal-setting, self-monitoring, and self-reinforcement. Effective classroom management provides the structural support and social-emotional climate that enable students to exercise these self-regulatory skills. Well-managed classrooms offer clear expectations, consistent routines, and supportive feedback—all of which scaffold students' development of self-regulatory competence in writing.

The correlation documented in this study invites consideration of the mechanisms through which classroom management influences writing achievements. Several pathways can be identified based on theory and prior research.

Effective classroom management maximizes the time students spend engaging in writing activities. When routines for distributing materials, transitioning between activities, and managing student behavior are efficient and well-established, more class time is available for instruction and practice. Writing skill development requires substantial practice; ―students need frequent opportunities to plan, draft, revise, and edit various types of texts. Classroom management practices that preserve instructional time create more opportunities for students to engage in the writing processes that build competence.

Writing is cognitively demanding and requires simultaneous attention to content generation, organization, language conventions, and audience considerations. When the classroom environment is chaotic, unpredictable, or socially threatening, students must allocate cognitive resources to manage environmental demands, leaving fewer resources available for the cognitive work of composing. Well-managed classrooms reduce extraneous cognitive load, allowing students to focus their working memory capacity on the intrinsic demands of writing tasks (Uktamovna, 2025).

Classroom management quality, particularly in relational and social-emotional dimensions, directly influences student motivation. When students perceive that their teacher cares about them, feel respected and emotionally safe, and observe fairness and consistency in classroom management, they develop more positive attitudes toward school and a greater willingness to invest effort in academic tasks. For writing, which often evokes anxiety and requires vulnerability in expressing one's ideas, this motivational support is especially important. Students who feel supported are more likely to take risks in their writing, persist through difficulties, and engage deeply in revision processes.

Effective classroom management provides external structures that support the develop[ment of students' self-regulatory capacities. Clear expectations, consistent routines, and explicit feedback help students internalize standards of behavior and work. In writing, self-regulation is essential for planning compositions, sustaining efforts through drafting, critically evaluating one's own work, and systematically revising. Classroom management practices that emphasize student responsibility, provide scaffolding for self-monitoring, and reinforce goal-directed behavior support students in developing the self-regulatory skills essential for effective writing are essential.

There is likely a bidirectional relationship between classroom management and instructional quality. Teachers who effectively manage their classrooms can deliver higher-quality instruction because they are not constantly interrupted by behavioral issues and can implement more complex instructional strategies, including collaborative and differentiated instruction. Better instruction, in turn, contributes to improved outcome. Thus, the correlation between classroom management and writing outcomes may partially reflect the role of classroom management in enabling effective writing instruction.

The supplementary analyses examining correlations between specific classroom management dimensions and writing outcomes revealed an interesting pattern: relational and instructional interaction dimensions (social-emotional atmosphere, $r = 0.67$; teaching-learning interaction, $r = 0.70$) showed stronger associations with writing than did structural and physical dimensions (classroom conditions, $r = 0.42$; spatial arrangement, $r = 0.51$; time discipline, $r = 0.58$).

This pattern suggests that while all aspects of classroom management contribute to writing outcomes, the social-emotional climate and quality of instructional interactions may be particularly important. This finding has important implications for professional development and school improvement. While attention to physical classroom organization and time management is certainly important, investing in teachers' relational skills—their ability to build supportive relationships with students, facilitate positive peer interactions, communicate warmth and high expectations, and engage students actively in learning—may yield the greatest benefits for writing achievement.

This interpretation aligns with research on school connectedness, which demonstrates that students' sense of belonging and positive relationships with teachers are fundamental to engagement and achievement. Writing is inherently relation as a form of communication. Students write for an audience, and their confidence and willingness to express themselves through writing are deeply influenced by their perception of how their communication will be received. Teachers who create classroom climates characterized by mutual respect, emotional safety, and genuine interest in students' ideas facilitate students' development as confident, authentic writers.

IV. CONCLUSIONS

This quantitative investigation examined the influence of literacy skills on reading interest among 34 fifth-grade students at SD Negeri 135 Barbaran using validated assessment instruments and statistical analyses. The descriptive results revealed that the majority of students demonstrated high literacy competence (68% scoring "High" or "Very High") and strong reading interest (94% scoring "High" or "Very High"). Simple linear regression analysis produced the equation $Y = 58.694 + 0.194X$, indicating a positive directional relationship, wherein higher literacy skills predict greater reading interest. However, this relationship did not achieve statistical significance ($p = 0.457 > 0.05$), and literacy skills accounted for only 1.7% of the variance in reading interest ($R^2 = 0.017$), with the remaining 98.3% attributable to other factors. These findings suggest several key conclusions. First, while a positive relationship between literacy competence and reading motivation exists, consistent with theoretical predictions, this relationship was weak and statistically unreliable within the current sample. Second, the modest effect size underscores that reading interest develops through multifactorial influences extending well beyond literacy skill levels alone, including intrinsic motivational dispositions, environmental affordances, social influences, and prior reading experiences. Third, the high overall levels of both literacy skills and reading interest within this sample reflect generally successful literacy socialization and instruction, although variability remains, requiring continued attention to supporting students at moderate competency and motivation levels.

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Ethical Compliance

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

Data Access Statement

A Data Access Statement is a section in a scientific publication or research report that explains how the data used or generated in the study can be accessed by readers or other researchers. This statement aims to promote transparency, support research reproducibility, and comply with open-access policies, where applicable.
Common Elements in a Data Access Statement:

1. Data Location: Specifies where the data are stored, such as in online repositories (e.g., Zenodo, Dryad, or institutional repositories).
2. Access Instructions: Provides information on how to access the data, such as direct links, DOI (Digital Object Identifier), or contact details.
3. Data Availability: Indicates whether the data are publicly accessible, available upon request, or restricted due to ethical, legal, or privacy considerations.
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Examples of Data Access Statements:

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   - "The data supporting this study are openly available in Zenodo at [DOI:10.xxxx/zenodo.xxxx]."
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   - "No datasets were generated or analyzed during the current study."
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Purpose of a Data Access Statement:

- Reproducibility: Enables other researchers to replicate or verify the findings.
- Collaboration: Encourages further collaboration by sharing data.
- Compliance: Adheres to the policies of funding agencies or journals that require open access to data.

Conflict of Interest Declaration

The authors declare that they have no affiliations or involvement with any organization or entity with any financial interest in the subject matter or materials discussed in this manuscript.

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REFERENCES

[1] Agustina, A., Wilade, S., Rizal, R., & Pahriadi, P. (2025). Analyzing the Role of Classroom Management in Enhancing Fifth-Grade Elementary Students' Learning Outcomes. *Journal of Innovation and Research in Primary Education*, *4*(4), 3323–3335. https://doi.org/10.56916/jirpe.v4i4.2269
[2] Arikunto, S. (2017). *Prosedur Penelitian: Suatu Pendekatan Praktik. Jakarta: Rineka Cipta, 2017*.
[3] D. Granada, G., & M. Oco, R. (2024). Classroom Management and Teaching Competencies of Elementary Teachers. *INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY RESEARCH AND ANALYSIS*, *07*(03). https://doi.org/10.47191/ijmra/v7-i03-50
[4] Enhancing Academic Performance Through Effective Classroom Management and Output Distribution. (2023). *International Journal of Social Sciences & Educational Studies*, *10*(3). https://doi.org/10.23918/ijsses.v10i3p424
[5] Mahender, P., & Sharma, M. (2025). Revitalizing Learning: Examining How Hybrid Environments Influence Student Engagement and Academic Success. *Journal of Neonatal Surgery*, *14*(32S), 4208–4213. https://doi.org/10.63682/jns.v14i32S.8099
[6] Manik, R. A., & Harahap, A. F. (2025). A Case Study of Analyzing Students' Focus in Writing. *Linguistics and ELT Journal*, *13*(2), 415. https://doi.org/10.31764/leltj.v13i1.31874
[7] Meinokat, P., & Wagner, I. (2025). Classroom Disruptions and Classroom Management in Learning

Factory Settings at Vocational Schools. *International Journal for Research in Vocational Education and Training*, *12*(2), 266–288. https://doi.org/10.13152/IJRVET.12.2.5

[8] Pagsac, J., Ortega, J., & Caloc, L. J. (2025). Multi-Disciplinary Approach and Classroom Management as Determinants of Career Preparedness Among Pre-service Teachers in Davao City, Philippines. *Psychology and Education: A Multidisciplinary Journal*, *49*(6), 826–835. https://doi.org/10.70838/pemj.490608

[9] Plavsa, M. J. (2025). Evaluating Health Literacy and the Intersection of Public Policy. *Journal of Health Statistics Reports*, *4*(3), 1–5. https://doi.org/10.47363/JHSR/2025(4)129

[10] Saul, S. M. (2025). Teachers' Classroom Management Strategies and Competence: Their Influence to Learners' Performance. *International Journal on Science and Technology*, *16*(4). https://doi.org/10.71097/IJSAT.v16.i4.9872

[11] Sehar Anees, Omar J. Alkhatib (Corresponding Author), Asad Ali, Francesco Ernesto Alessi Longa, & Abdul Rehman. (2025). A MULTI-PERSPECTIVE STUDY ON COGNITIVE, EMOTIONAL, AND SOCIAL FOUNDATIONS OF LEARNING. *Contemporary Journal of Social Science Review*, *3*(4), 784–795. https://doi.org/10.63878/cjssr.v3i4.1777

[12] Sugiyono. (2019). *Metode penelitian pendidikan: Pendekatan kuantitatif, kualitatif, dan R&D. Alfabeta.*

[13] Syerlyana, A., Islami, R. M., Yanti, F. R., Kusmana, S., & Rahayu, I. (2025). Application of Multisensory Strategies in Differentiated Classroom Learning to Overcome Reading Delay in Elementary School Students. *JTP - Jurnal Teknologi Pendidikan*, *27*(2), 487–499. https://doi.org/10.21009/jtp.v27i2.57001

[14] Uktamovna, B. M. (2025). The Role Of Artificial Intelligence In Developing Students' Writing Skills In Efl Classrooms. *International Journal of Pedagogics*, *5*(11), 404–406. https://doi.org/10.37547/ijp/Volume05Issue11-96

[15] Vásquez, H. C., Fuentes, M. G., & Eoffroy, M. J. C. (2025). Family–School Relationships in Contexts of Social Vulnerability: Perspectives from Chilean Teachers. *IAFOR Journal of Education*, *13*(3), 415–436. https://doi.org/10.22492/ije.13.3.17

[16] Wenshu Duan. (2025). Research on the influence mechanism of classroom leadership of international Chinese language teachers on students' learning psychology and academic performance. *Environment and Social Psychology*, *10*(12). https://doi.org/10.59429/esp.v10i12.4141