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LEADERSHIP STRATEGIES OF SCHOOL HEADS IN MANAGING SCHOOL MAINTENANCE: A QUANTITATIVE STUDY

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ABSTRACT

This study determined the leadership strategies of school heads and the effectiveness of managing school maintenance in public elementary schools in the Third Legislative District of Bataan, during School Year 2026–2027. It employed a quantitative descriptive-correlational design with a predictive component and used total enumeration of 56 school heads. Data were gathered through a researcher-developed questionnaire that underwent expert validation and pilot testing. Weighted mean, standard deviation, Pearson correlation, and multiple regression were used. Leadership strategies were consistently practiced (M = 3.63, SD = 0.34), with strategic planning receiving the highest dimension mean (M = 3.69). Maintenance management was highly effective (M = 3.53, SD = 0.42), with facility condition and safety highest (M = 3.67) and equipment functionality lowest (M = 3.46). Leadership strategies had a very strong positive relationship with maintenance effectiveness ($r = .839$, $p < .001$). The regression model explained 85.7% of variance ($R^2 = .857$, $F = 69.16$, $p < .001$). Decision-making and problem-solving and monitoring and supervision were significant positive predictors. A leadership intervention program focused on evidence-based decisions, systematic monitoring, timely corrective action, equipment management, and stakeholder accountability are proposed.

Keywords: *school leadership*, *school maintenance*, *strategic planning*, *monitoring and supervision*, *decision-making*, *resource management*

INTRODUCTION

Educational leadership extends beyond instruction to the management of facilities, resources, safety, and the physical conditions that support teaching and learning. School heads are responsible for ensuring that classrooms, buildings, equipment, sanitation facilities, and emergency systems remain safe, functional, and accessible. Republic Act No. 9155 and the Philippine Professional Standards for School Heads reinforce responsibility for school operations, resources, and strategic improvement.

Effective facility management requires planning, responsible resource allocation, stakeholder participation, regular monitoring, and timely problem-solving. Koko and Elenwo (2022) found that monitoring, supervision, and facility audits support teaching and learning. Acera and Tan (2023) likewise linked school-head competencies and leadership practices with organizational performance. Strategic, resource-dependence, and transformational perspectives explain why administrators must prioritize needs, mobilize partnerships, and establish shared responsibility under financial constraints (Bass & Avolio, 1994; Ireland & Hitt, 2005; Pfeffer & Salancik, 1978).

Local evidence remains limited regarding which leadership practices most strongly predict maintenance effectiveness. This gap matters because limited MOOE, delayed repairs, equipment failures, and uneven stakeholder support can affect safety and continuity of school operations. The study therefore examined five leadership dimensions and five maintenance-effectiveness dimensions to provide a basis for a focused intervention program.

Research Questions

This study explored the school heads' leadership strategies in managing school maintenance in the third legislative district of Bataan for the school year 2026-2027.

Specifically, the study sought to answer the following questions:

1. How may the leadership strategies of the school head be described in terms of:
    - 1.1 Strategic Planning
    - 1.2 Resource Management
    - 1.3 Participative Leadership
    - 1.4 Monitoring and Supervision.
    - 1.5 Decision- Making and Problem-Solving?
2. How may the level of effectiveness of managing school maintenance be described in terms of:
    - 2.1 Adequacy of Facilities
    - 2.2 Equipment Functionality
    - 2.3 Facility Condition and Safety
    - 2.4 MOOE Utilization Efficiency; and
    - 2.5 Sustainability of Maintenance Programs?
3. Is there a significant relationship between the leadership strategies and level of effectiveness of managing school maintenance?

4. Which among the factors best predicts the effectiveness of managing school maintenance?
5. Based on the results, what Leadership Intervention Program may be developed?

METHODOLOGY

The study used a quantitative descriptive-correlational design with a predictive component. Descriptive statistics measured leadership strategies and maintenance effectiveness, Pearson correlation tested their association, and multiple regression estimated the unique contribution of each leadership dimension. No variable was manipulated.

The locale comprised public elementary schools in the Third Legislative District of Bataan during School Year 2026-2027. Total enumeration was used. Based on the population table in the source study, 56 school heads represented the entire listed population across four municipality groupings.

A researcher-developed questionnaire measured five leadership dimensions and five maintenance-effectiveness dimensions through a four-point Likert scale. Experts in educational research, DepEd planning, and school administration reviewed the instrument for clarity, relevance, alignment, and content coverage. It was pilot-tested outside the target population, refined, and assessed for internal consistency using Cronbach's alpha.

After institutional endorsement and division authorization, informed consent was obtained and questionnaires were administered, retrieved, checked, encoded, and analyzed. Weighted mean and standard deviation described the variables; Pearson r tested their relationship; and multiple regression identified predictors at the .05 significance level.

The study was limited to public elementary school heads and maintenance-related leadership. It excluded private schools, teachers, nonteaching staff, and regional comparisons. Findings relied on self-reports and the correlational design does not establish causation.

RESULTS

Part I. Technology Integration

Part I describes the leadership strategies of the school head in terms of strategic planning; resource management; participative leadership; monitoring and supervision; and decision- making and problem-solving.

Table 1. Leadership Strategies

Indicators	Mean	SD	DI
1. The school head develops a comprehensive maintenance plan for the school.	3.69	0.47	Strongly Agree

2. School maintenance priorities are identified based on actual needs.	3.74	0.44	Strongly Agree
3. Maintenance activities are integrated into the School Improvement Plan (SIP).	3.72	0.45	Strongly Agree
4. Maintenance goals are clearly communicated to stakeholders.	3.60	0.56	Strongly Agree
5. The school head regularly reviews and updates maintenance plans.	3.69	0.47	Strongly Agree
Strategic Planning	**3.69**	**0.36**	Strongly Agree
1. MOOE funds are properly allocated for maintenance activities.	3.62	0.49	Strongly Agree
2. Available resources are maximized to address maintenance needs.	3.60	0.49	Strongly Agree
3. Maintenance supplies and materials are adequately managed.	3.62	0.49	Strongly Agree
4. The school head effectively mobilizes stakeholder support for maintenance projects.	3.62	0.49	Strongly Agree
5. Resources are utilized in accordance with DepEd guidelines.	3.59	0.65	Strongly Agree
Resource Management	**3.61**	**0.38**	Strongly Agree
1. MOOE funds are properly allocated for maintenance activities.	3.59	0.53	Strongly Agree
2. Available resources are maximized to address maintenance needs.	3.60	0.49	Strongly Agree
3. Maintenance supplies and materials are adequately managed.	3.64	0.48	Strongly Agree
4. The school head effectively mobilizes stakeholder support for maintenance projects.	3.66	0.51	Strongly Agree
5. Resources are utilized in accordance with DepEd guidelines.	3.69	0.50	Strongly Agree
Participative Leadership	**3.63**	**0.42**	Strongly Agree
1. Teachers are involved in planning maintenance activities.	3.53	0.54	Strongly Agree
2. Parents are encouraged to participate in school maintenance initiatives.	3.64	0.48	Strongly Agree
3. Stakeholders are consulted before major maintenance decisions are made.	3.64	0.52	Strongly Agree
4. The school head promotes teamwork in maintaining school facilities.	3.72	0.45	Strongly Agree
5. Community members are encouraged to support maintenance programs.	3.59	0.53	Strongly Agree
Monitoring and Supervision	**3.62**	**0.41**	Strongly Agree
1. The school head regularly inspects school facilities and equipment.	3.60	0.49	Strongly Agree
2. Maintenance activities are monitored closely.	3.57	0.53	Strongly Agree
3. Maintenance concerns are addressed promptly.	3.64	0.48	Strongly Agree
4. Maintenance accomplishments are documented and evaluated.	3.48	0.54	Strongly Agree
5. Feedback is used to improve maintenance practices.	3.64	0.48	Strongly Agree

Decision-Making and Problem-Solving	**3.59**	**0.42**	Strongly Agree
Overall	**3.63**	**0.34**	Strongly Agree

Legend: 3.25-4.00 Strongly Agree; 2.50-3.24 Agree; 1.75-2.49 Disagree; 1.00-1.74 Strongly Disagree

The school head's leadership strategies in the maintenance of school facilities were rated Strongly Agree, with an overall mean of 3.63 and a standard deviation of 0.34. This indicates that the identified leadership practices are consistently implemented and are perceived positively by the respondents.

Strategic planning received the highest overall mean of 3.69 with a standard deviation of 0.36, interpreted as Strongly Agree. This shows that the school head demonstrates effective planning practices in managing school maintenance activities.

The highest-rated indicator was the identification of maintenance priorities based on actual needs, with a mean of 3.74. This suggests that maintenance decisions are guided by the existing conditions and priority needs of the school. The integration of maintenance activities into the School Improvement Plan also received a high mean of 3.72, indicating that maintenance concerns are incorporated into the school's broader development priorities.

Resource management obtained an overall mean of 3.61 and a standard deviation of 0.38, interpreted as Strongly Agree. This indicates that the school head effectively manages available financial, material, and stakeholder resources to support school maintenance.

The indicators on the proper allocation of MOOE funds, management of maintenance supplies, and mobilization of stakeholder support each received a mean of 3.62. These results suggest that the school head makes efforts to provide financial and material support for maintenance activities while also engaging stakeholders in addressing school needs.

The lowest-rated indicator was the utilization of resources in accordance with DepEd guidelines, with a mean of 3.59 and a standard deviation of 0.65. Although the result was still favorable, the higher standard deviation indicates greater variation in the respondents' perceptions.

Participative leadership obtained a mean of 3.63 and a standard deviation of 0.42, interpreted as Strongly Agree. This indicates that the school head promotes shared responsibility and stakeholder involvement in school maintenance programs.

The highest-rated indicator was the promotion of teamwork in maintaining school facilities, with a mean of 3.72. This demonstrates that the school head encourages collaboration among teachers, parents, community members, and other stakeholders. Parents' participation and stakeholder consultation before major maintenance decisions were also rated positively, both obtaining a mean of 3.64.

The lowest-rated indicator was the involvement of teachers in planning maintenance activities, with a mean of 3.53. Although still interpreted as Strongly Agree,

this result suggests that teacher participation in the planning stage may be further increased.

Monitoring and supervision received an overall mean of 3.62 with a standard deviation of 0.41, interpreted as Strongly Agree. This indicates that the school head regularly observes, tracks, and follows up on school maintenance activities.

The highest-rated indicators were addressing maintenance concerns promptly and using feedback to improve maintenance practices, both with a mean of 3.64. These findings suggest that the school head is responsive to maintenance problems and is open to using stakeholder feedback in improving school operations.

The school head's regular inspection of facilities and equipment obtained a mean of 3.60, while the close monitoring of maintenance activities received a mean of 3.57. The lowest-rated indicator was the documentation and evaluation of maintenance accomplishments, with a mean of 3.48. This indicates that record-keeping and formal evaluation may be the weakest aspect of monitoring and supervision.

Decision-making and problem-solving obtained an overall mean of 3.59 and a standard deviation of 0.42, interpreted as Strongly Agree. This indicates that the school head is generally perceived to make appropriate decisions and respond effectively to maintenance-related concerns.

The result suggests that maintenance problems are addressed in a timely manner and that the school head uses available information and feedback in determining appropriate interventions. However, because this dimension obtained the lowest overall mean among the five areas, decision-making and problem-solving may still be enhanced through more systematic consultation, documentation of decisions, analysis of possible solutions, and follow-up evaluation.

The findings imply that the school head has established a generally systematic and collaborative approach to facility maintenance, as reflected in the consistently high ratings across all leadership dimensions. The findings further indicate that maintenance is treated as part of school planning rather than as a purely reactive activity, particularly because priorities are identified according to actual needs and incorporated into the School Improvement Plan. Nevertheless, the comparatively lower ratings for documenting and evaluating maintenance accomplishments, involving teachers in planning, and decision-making and problem-solving suggest that implementation is stronger than the formal systems used to record, assess, and collectively refine it. Thus, the school may further strengthen its leadership practice by using documented inspection results, maintenance records, stakeholder consultations, and post-activity evaluations as evidence for subsequent decisions and resource allocation.

The result is supported by recent literature emphasizing that effective school-facility management requires strategic planning, responsible resource use, stakeholder participation, systematic monitoring, and accurate documentation. Valenzuela and Buenvinida (2021) found that school heads' competencies in managing operations, resources, facilities, records, finances, and safety were significantly related to school quality and efficiency. Similarly, Nurmayuli (2022) stressed that inventory, recording, and reporting are continuous processes that support planning, accountability, and the

preservation of facility quality. Mendoza and De Jesus (2024) further highlighted strategic, shared, and data-informed leadership as important approaches in the Philippine educational setting. These studies support the present finding that positive maintenance outcomes are reinforced when school leadership combines planning and stakeholder mobilization with consistent monitoring and evidence-based management.

Part II. Administrative Efficiency

Part II describes the level of effectiveness of managing school maintenance in terms of adequacy of facilities; equipment functionality; facility condition and safety; MOOE utilization efficiency; and sustainability of maintenance programs.

Table 2. Administrative Efficiency

Indicators	Mean	SD	DI
1. School facilities adequately support teaching and learning activities.	3.64	0.48	Strongly Agree
2. Classrooms are sufficient to accommodate learners.	3.52	0.57	Strongly Agree
3. Comfort rooms are adequate and functional.	3.69	0.50	Strongly Agree
4. School buildings are properly maintained.	3.62	0.52	Strongly Agree
5. Facilities are accessible and usable by school stakeholders.	3.74	0.44	Strongly Agree
Adequacy of Facilities	**3.64**	**0.40**	**Highly Effective**
1. School furniture is in good condition.	3.57	0.53	Strongly Agree
2. ICT equipment is functional and operational.	3.38	0.77	Strongly Agree
3. Learning equipment is available when needed.	3.43	0.60	Strongly Agree
4. Damaged equipment is repaired promptly.	3.36	0.72	Strongly Agree
5. Equipment effectively supports school operations.	3.55	0.60	Strongly Agree
Equipment Functionality	**3.46**	**0.55**	**Highly Effective**
1. School facilities provide a safe environment for learners and personnel.	3.74	0.44	Strongly Agree
2. School grounds are clean and well-maintained.	3.66	0.48	Strongly Agree
3. Safety hazards are immediately addressed.	3.62	0.49	Strongly Agree
4. Safety measures are consistently implemented throughout the school.	3.66	0.48	Strongly Agree
5. Emergency and safety equipment are properly maintained.	3.66	0.51	Strongly Agree
Facility Condition and Safety	**3.67**	**0.39**	**Highly Effective**
1. MOOE funds are utilized according to DepEd policies and guidelines.	3.66	0.48	Strongly Agree
2. Maintenance expenditures are properly documented.	3.66	0.51	Strongly Agree

3. Maintenance projects are completed within the approved budget.	3.66	0.48	Strongly Agree
4. MOOE funds adequately address school maintenance needs.	3.55	0.54	Strongly Agree
5. School maintenance expenditures demonstrate efficient use of resources.	3.60	0.49	Strongly Agree
MOOE Utilization Efficiency	**3.62**	**0.42**	**Highly Effective**
1. Preventive maintenance practices are regularly implemented in the school.	3.60	0.53	Strongly Agree
2. Maintenance programs are sustained throughout the school year.	3.62	0.49	Strongly Agree
3. Stakeholders continuously support maintenance initiatives.	3.55	0.54	Strongly Agree
4. Maintenance projects result in long-term benefits to the school.	3.66	0.48	Strongly Agree
5. The school has established a culture of maintaining its facilities and equipment.	3.59	0.53	Strongly Agree
Sustainability of Maintenance Programs	**3.60**	**0.42**	**Highly Effective**
Overall	**3.53**	**0.42**	**Highly Effective**

Legend: 3.25-4.00 Strongly Agree | Highly Effective; 2.50-3.24 Agree | Effective; 1.75-2.49 Disagree | Less Effective; 1.00-1.74 Strongly Disagree | Not at All Effective

The management of school maintenance was assessed as Highly Effective, with an overall mean of 3.53 and a standard deviation of 0.42. This indicates that the school maintenance practices are generally implemented successfully and that the facilities, equipment, financial resources, safety measures, and maintenance programs adequately support school operations.

Adequacy of facilities obtained a mean of 3.64 and a standard deviation of 0.40, interpreted as Highly Effective. This shows that school facilities generally support teaching and learning activities and are accessible to school stakeholders.

The highest-rated indicator was “Facilities are accessible and usable by school stakeholders” with a mean of 3.74. This suggests that classrooms, buildings, and other school facilities are generally available and usable for their intended purposes. The adequacy and functionality of comfort rooms also received a high mean of 3.69, indicating that basic sanitation facilities are perceived to be sufficient.

The lowest-rated indicator was “Classrooms are sufficient to accommodate learners” with a mean of 3.52. Although still interpreted as Strongly Agree, this result suggests that classroom capacity may be a concern in some areas.

Equipment functionality received the lowest dimension mean of 3.46, with a standard deviation of 0.55, but was still interpreted as Highly Effective. This indicates that school equipment generally supports school operations, although equipment-related concerns are more evident than concerns involving facilities, safety, or MOOE management.

The highest-rated indicator was “School furniture is in good condition” with a mean of 3.57. This suggests that desks, chairs, tables, and related furniture are generally usable. Equipment that supports school operations also received a favorable mean of 3.55.

The lowest-rated indicator was “Damaged equipment is repaired promptly” with a mean of 3.36, followed by the functionality of ICT equipment, which obtained a mean of 3.38. These results lead to possible delays in repair, limited technical support, inadequate replacement parts, or insufficient funds for equipment maintenance.

Facility condition and safety obtained the highest dimension mean of 3.67, with a standard deviation of 0.39, interpreted as Highly Effective. This indicates that the school provides a generally safe, clean, and well-maintained environment for learners and personnel.

The highest-rated indicator was “School facilities provide a safe environment for learners and personnel” with a mean of 3.74. This suggests that respondents have a strong positive perception of the school’s safety conditions. The cleanliness of school grounds, implementation of safety measures, and maintenance of emergency equipment each received favorable ratings.

The lowest-rated indicator was “Safety hazards are immediately addressed” with a mean of 3.62. Although the rating remained high, it indicates that the school may further improve the speed and documentation of hazard reporting and corrective action.

MOOE utilization efficiency obtained a mean of 3.62 and a standard deviation of 0.42, interpreted as Highly Effective. This shows that school funds are generally used appropriately and efficiently to support maintenance needs.

The indicators on compliance with DepEd policies, documentation of maintenance expenditures, and completion of maintenance projects within the approved budget each obtained a mean of 3.66. These results indicate that financial utilization and project implementation are generally managed responsibly.

The lowest-rated indicator was “MOOE funds adequately address school maintenance needs” with a mean of 3.55. This suggests that, while the funds are generally utilized efficiently, the available budget may not always be sufficient to address all maintenance requirements.

Sustainability of maintenance programs obtained a mean of 3.60 and a standard deviation of 0.42, interpreted as Highly Effective. This indicates that maintenance activities are not viewed as isolated or one-time projects but are generally sustained throughout the school year.

The highest-rated indicator was “Maintenance projects result in long-term benefits to the school” with a mean of 3.66. This suggests that maintenance initiatives are perceived to contribute to the continued usability, safety, and functionality of school facilities.

The lowest-rated indicator was “Stakeholders continuously support maintenance initiatives” with a mean of 3.55. This indicates that stakeholder support is present but may not always be sustained.

The findings indicate that the school's maintenance system is generally effective in sustaining safe, accessible, and usable facilities, but its effectiveness is not uniform across all operational areas. The pattern of responses indicates that respondents expressed the strongest confidence in facility safety and accessibility, while equipment functionality, prompt repair, ICT operability, classroom sufficiency, and the adequacy of MOOE funds received comparatively lower ratings. This pattern implies that routine facility care and safety practices may be more established than the technical, financial, and logistical mechanisms needed for equipment repair and replacement. Therefore, administrative efficiency may be improved through a preventive-maintenance schedule, an updated equipment inventory, a documented repair-response timeline, prioritization of ICT and classroom needs, and a resource-mobilization plan involving school and community stakeholders.

Recent studies support this interpretation. Navarro (2024) reported persistent gaps in Philippine school infrastructure, including classroom congestion, deteriorating buildings, WASH deficiencies, and limited ICT access, indicating that high local ratings do not remove the need for continuous improvement and targeted investment. Anano et.al, (2023) likewise found that budget and fund management, compliance with guidelines, and supplementary funding contribute to more efficient school-building maintenance. Santos et.al, (2025) identified outdated equipment, limited space, inconsistent maintenance, and slow manual reporting as sources of operational inefficiency and recommended a digital reporting system to improve accountability and responsiveness. Together, these studies support the present table's indication that administrative efficiency depends not only on maintaining physical safety, but also on timely repairs, reliable records, adequate financing, and functional technology.

Part III. Relationship Between Variables

Part III presents the degree of relationship between leadership strategies and effectiveness of managing school maintenance.

Table 3. Relationship between Variables

Variables	r	Sig.	Decision on H_0	Interpretation
Leadership Strategies →Effectiveness of Managing School Maintenance	0.839**	<.001	Reject	Significant

at .05 level of Significant

There was a very strong positive and statistically significant relationship between the leadership strategies of the school head and the effectiveness of managing school maintenance, as indicated by r=0.839 and p<.001. Therefore, the null hypothesis was rejected. This finding suggests that improvements in the school head's strategic planning, resource management, participative leadership, monitoring and supervision, and decision-making and problem-solving are associated with increased effectiveness in

managing school facilities, equipment, safety conditions, MOOE utilization, and sustainable maintenance programs. The result further indicates that leadership strategies are an important factor associated with the effective management of school maintenance; however, the correlational result does not by itself establish a causal relationship.

The very strong positive correlation indicates that schools with more consistently practiced leadership strategies also tend to demonstrate more effective maintenance management. The findings imply that leadership provides the coordinating mechanism through which plans, funds, personnel, stakeholder support, inspections, and corrective actions are converted into safe and functional school facilities. The magnitude of the relationship ($r = 0.839$) suggests that leadership and maintenance effectiveness move closely together in the respondents' assessments. However, because the analysis is correlational, the result should not be interpreted as proof that leadership strategies alone cause effective maintenance; budget availability, facility age, technical support, enrollment pressure, and community participation may also influence the outcome.

This finding is consistent with Valenzuela and Buenvinida (2021), who reported significant relationships between school heads' management competencies and public-school quality and efficiency, particularly in operations, resources, facilities, records, finances, and safety. Martinez and Pepito (2024) also emphasized adaptive leadership, collaborative decision-making, strategic resource management, and partnership-building as essential to effective school management in the Philippines.

In addition, Mendoza and De Jesus (2024) underscored the value of strategic, shared, and data-informed leadership in responding to complex school needs. These studies support the present result by showing that leadership practices can align people, information, and resources, thereby strengthening the school's capacity to manage maintenance concerns effectively.

Part IV. Regression Analysis

Part IV presents the extent leadership strategies predict the effectiveness of managing school maintenance.

Table 4. Variables as Predictor of Effectiveness of Managing School Maintenance

Dependent	Predictors	B	SE	t	Sig.	R^2	F	Sig.	Remarks
Effectiveness of Managing School Maintenance	(Constant)	0.07	0.22	0.32	0.749	.857	69.16	<.001	Do not Reject (Not Significant)
	Strategic Planning	0.12	0.08	1.54	0.130				

	Resource Management	0.06	0.07	0.91	0.366	Do not Reject (Not Significant)
	Participative Leadership	0.06	0.08	0.85	0.402	Do not Reject (Not Significant)
	Monitoring and Supervision	0.24	0.09	2.80	0.007	Reject (Significant)
	Decision-Making and Problem-Solving	0.48	0.07	6.65	<.001	Reject (Significant)

at .05 level of Sig.

A multiple linear regression analysis was conducted to determine whether leadership strategies predicted the effectiveness of managing school maintenance. The overall regression model was statistically significant, F=69.16, p<.001, indicating that the set of leadership-strategy variables significantly predicted the effectiveness of managing school maintenance. The model accounted for 85.7% of the variance in effectiveness, R^2 =.857.

Among the individual predictors, monitoring and supervision was a significant positive predictor of the effectiveness of managing school maintenance, B=0.24, SE=0.09, t=2.80, p=.007. This finding indicates that, holding the other leadership strategies constant, a one-unit increase in monitoring, and supervision was associated with a 0.24-unit increase in the effectiveness of managing school maintenance.

Decision-making and problem-solving were also a significant positive predictor, B=0.48, SE=0.07, t=6.65, p<.001. This variable demonstrated the strongest predictive contribution among the leadership strategies included, suggesting that higher levels of decision-making and problem-solving were associated with higher effectiveness in managing school maintenance.

In contrast, strategic planning, B=0.12, SE=0.08, t=1.54, p=.130; resource management, B=0.06, SE=0.07, t=0.91, p=.366; and participative leadership, B=0.06, SE=0.08, t=0.85, p=.402, were not statistically significant predictors at the .05 level. Therefore, the null hypothesis that leadership strategies do not significantly predict the effectiveness of managing school maintenance was rejected for the overall model. However, at the individual-predictor level, only monitoring and supervision and decision-making and problem-solving made statistically significant unique contributions to the prediction of school-maintenance management effectiveness.

The regression results provide a more specific inference than the correlation analysis: although the leadership strategies collectively explain a substantial proportion of the variation in maintenance effectiveness (R^2 = 0.857), only monitoring and supervision and decision-making and problem-solving have significant unique predictive contributions when all dimensions are considered simultaneously. The results demonstrate that these two strategies are the most action-oriented components of leadership because they involve identifying actual conditions, checking implementation, responding to deficiencies, selecting appropriate interventions, and following up results. Decision-making and problem-solving have the larger coefficient (B = 0.48), indicating that practical and timely responses to maintenance issues are especially important. The nonsignificant unique effects of strategic planning, resource management, and participative leadership do not mean that these dimensions are unimportant; rather, their contributions may overlap with the stronger predictors or operate indirectly through monitoring and informed decisions.

The result agrees with DepEd Region VIII's (2022) emphasis on regular monitoring, validation, inspection, documentation, and corrective recommendations for school infrastructure projects. Nurmayuli (2022) similarly explained that continuous inventory and reporting provide essential information for planning, procurement, accountability, and the maintenance of facility quality. Santos et.al, (2025) further showed that inefficient reporting can delay issue resolution and increase safety risks, supporting the value of responsive monitoring systems. Moreover, Bustaliño et.al, (2026) found that rural Philippine schools rely on collaborative inspections, minor repairs, emergency responses, and adaptive decision-making despite financial, material, labor, geographic, and weather-related constraints. These studies reinforce the present model's indication that leadership becomes most predictive when monitoring information is translated into timely, evidence-based corrective action.

Conclusions

1. Leadership strategies were consistently practiced, with strategic planning highest.
2. Maintenance management was highly effective; safety was strongest and equipment functionality required attention.
3. Leadership strategies had a very strong significant positive relationship with maintenance effectiveness.
4. Monitoring and supervision and decision-making and problem-solving were significant predictors, with decision-making strongest.
5. A focused leadership intervention program is warranted.

Recommendations

1. Institutionalize quarterly facility and equipment inspections with documented risk, responsibility, target date, cost, action, and closure evidence.
2. Establish repair-response standards and a preventive-maintenance calendar, prioritizing life-safety hazards.

3. Link MOOE planning to inspection evidence, inventories, the School Improvement Plan, and lawful stakeholder partnerships.
4. Implement training in root-cause analysis, decision matrices, risk prioritization, asset management, monitoring dashboards, and evaluation.
5. Future studies should use larger multi-site samples, independent audits, and longitudinal designs.

Compliance with Ethical Standards

The researcher secured institutional permissions and informed consent. Participation was voluntary, respondents could withdraw without penalty, and anonymity, confidentiality, data privacy, and well-being were safeguarded. No conflict of interest influenced the study. Plagiarism, fabrication, and biased interpretation were avoided. Results were used for research purposes. Generative artificial intelligence was used only for language organization, editing, and formatting support; the researcher remains responsible for verifying all data, analyses, citations, and conclusions.

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