

Management Agility and Leadership Competence in Elementary School Performance Support

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ABSTRACT

This study explored how management agility and leadership competence contributed to elementary school performance support among school heads and public elementary school teachers in San Mariano, Isabela. Using a cross-sectional latent-variable predictive design, data were gathered from 126 participants composed of 21 school heads and 105 teachers through a validated structured questionnaire. Partial least squares structural equation modeling was employed to assess the measurement model, predictive relationships, explanatory power, and priority areas for leadership improvement. Results showed high overall levels of management agility, leadership competence, and school performance support, although transforming capacity, personnel development, teacher development, and resource responsiveness emerged as comparatively

weaker areas. Both management agility and leadership competence significantly predicted school performance support, with leadership competence producing the stronger direct effect. Together, the two predictors explained 56.8% of the variance in performance support, while the model demonstrated meaningful predictive relevance. Importance-performance analysis further identified personnel development and transforming capacity as priority areas because of their considerable influence but comparatively lower performance. The findings indicate that school performance support is strengthened when responsive management is coupled with competent leadership that can translate emerging needs into sustained organizational action. Leadership development initiatives should therefore emphasize personnel coaching, adaptive implementation, collaborative practice, and resource coordination to improve the consistency of support provided across elementary schools.

Keywords: *adaptive leadership; elementary education; leadership competence; management agility; school performance support; school-based management*

INTRODUCTION

Elementary schools depend not only on sound instructional practices but also on the ability of school leaders to respond effectively to changing demands, limited resources, emerging priorities, and the needs of teachers and learners. School management therefore requires more than compliance with established procedures. It calls for the capacity to recognize problems early, make timely decisions, redirect resources, and adjust working processes when existing arrangements no longer produce the desired results. This capacity reflects management agility, which emphasizes responsiveness and purposeful adjustment while maintaining organizational direction. Walter (2021) described organizational agility as the ability of an organization to sense changes and respond through coordinated and timely action, a capacity associated with stronger performance under uncertain conditions.

Within schools, agility becomes meaningful when it is supported by leadership competence. School heads are expected to translate plans into workable actions, guide instruction, develop personnel, manage resources, and

sustain relationships that contribute to school improvement. Leadership also affects the professional conditions under which teachers perform their work. Liu and Hallinger (2018) found that principal instructional leadership contributes to teacher professional learning through mechanisms associated with leadership effectiveness and teacher self-efficacy. Such findings suggest that competent leadership is expressed not simply through authority but through practices that strengthen the capacity of teachers to perform their responsibilities.

The importance of leadership to school performance is supported by a broad body of evidence. Grissom et al. (2021), in their synthesis of 219 studies on school principals, established that principals influence student achievement, teacher outcomes, and broader school conditions through their leadership practices. Effective principals contribute by focusing on instruction, building productive school climates, encouraging collaboration, and managing personnel and organizational processes well. These functions make leadership competence closely connected with the support systems through which schools maintain and improve performance.

Evidence further indicates that school leadership works through several interconnected practices rather than through a single managerial function. Tan et al. (2024), drawing from 108 studies and 493 independent effects, found that leadership practices involving instructional management, teacher capacity development, and stakeholder engagement were associated with student outcomes. This finding is particularly relevant to elementary schools, where school heads must coordinate academic priorities while addressing staffing, resources, community relationships, and day-to-day operational concerns. Management agility may help leaders adjust these practices as school needs change, while leadership competence may determine how well such adjustments are carried out.

The Philippine education system likewise places substantial responsibility on school heads for creating conditions that support teaching and learning. The Philippine Professional Standards for School Heads identifies leading strategically, managing school operations and resources, focusing on teaching and learning, developing self and others, and building connections as central domains of professional practice (Department of Education [DepEd], 2020). These expectations show that school performance support rests on both managerial responsiveness and competent leadership practice.

Despite these established expectations, management agility and leadership competence are often examined separately, leaving limited understanding of how they may jointly contribute to performance support at the elementary school level. Examining these dimensions from the perspectives of school heads and public elementary school teachers may provide a fuller picture of how leadership decisions are translated into actual support within schools. Thus, the study *Management Agility and Leadership Competence in Elementary School Performance Support* sought to examine these constructs among public elementary schools in San Mariano, Isabela, with the aim of generating evidence that may inform leadership development and school-level management practices.

Literature Review

Management Agility in School Administration

Management agility refers to the capacity of leaders to recognize changing demands and adjust decisions, resources, and organizational processes without losing sight of established goals. Although the concept developed largely from organizational management literature, its principles are relevant to schools where leaders regularly respond to staffing concerns, instructional priorities, resource limitations, and emerging learner needs. Teece et al. (2016) explained that agility depends on dynamic capabilities that allow organizations to sense changes, seize appropriate responses, and reconfigure available resources when conditions require adjustment. Applied to elementary school administration, this view suggests that an agile school head does not simply react to problems but makes informed adjustments while protecting continuity in school operations. Such responsiveness may be particularly important when school plans must be modified according to actual conditions without weakening instructional and organizational priorities.

Leadership Competence of School Heads

Leadership competence reflects the knowledge, judgment, and practical abilities required to direct both instructional and organizational work. Effective school leadership therefore involves more than expertise in teaching because principals must also manage personnel, coordinate resources, establish priorities, and create conditions that allow teachers to work effectively. Sebastian et al. (2019) found that instructional leadership and organizational management represented complementary dimensions of principal effectiveness, with differences in these leadership profiles associated with differences in student learning gains. Similarly, Wu et al. (2020) reported that instructional leadership had a positive relationship with student achievement, while the effects of leadership varied according to school conditions. These findings suggest that competence should be understood as the school head's ability to combine instructional direction with sound organizational management rather than relying on a single leadership function.

Leadership Support for Teacher Capacity and Collaboration

School performance is also shaped by how leadership influences the professional work of teachers. Supportive leadership can provide direction, strengthen confidence, encourage shared responsibility, and create opportunities for meaningful collaboration. Meyer et al. (2022) found that principal leadership was associated with teacher collaboration through collective teacher efficacy, indicating that leadership can shape how teachers perceive their capacity to work together toward common goals. A broader meta-analysis by Liebowitz and Porter (2019) likewise showed that principal behaviors were associated with teacher well-being, instructional practices, student achievement, and organizational health. These findings position teachers as an important source of evidence when examining leadership competence because they directly experience how managerial decisions, professional support, communication, and school-level practices are carried out. Performance support therefore involves not only administrative action but also the working conditions that enable teachers to perform effectively.

School Performance Support through School-Based Management

School performance support involves the structures and practices that help a school sustain teaching quality, manage resources, involve stakeholders, and pursue improvement goals. Philippine literature on school-based management provides useful evidence on how leadership and decentralized decision-making contribute to these functions. Maca (2019) explained that school-based management fostered innovation in Philippine public schools by strengthening transparency, collaboration, and stakeholder participation in decision-making. In elementary schools, Linao and Gosadan (2019) further found that leadership and governance, curriculum and instruction, accountability and continuous improvement, and resource management significantly influenced school performance. These findings indicate that performance support is not produced by leadership competence or managerial flexibility in isolation. It develops through coordinated practices that connect decisions with instructional, organizational, and stakeholder needs, providing a strong basis for examining how management agility and leadership competence operate together in public elementary schools.

METHODS**Research Design**

The study employed a cross-sectional latent-variable predictive design to examine how management agility and leadership competence contributed to elementary school performance support. Unlike a conventional correlational design that focused mainly on the strength of pairwise associations, the design treated the three major constructs as latent variables represented by multiple observable indicators. Management agility and leadership competence were specified as predictor constructs, while school performance support was treated as the outcome construct. Partial least squares structural equation modeling was used to estimate their simultaneous predictive relationships. The design was appropriate because it permitted the examination of measurement quality and predictive contribution within a single analytical model without manipulating the school environment.

Research Locale

The study was conducted in the public elementary education sector of San Mariano, Isabela, under the Schools Division of Isabela. The municipality contained two public school administrative districts serving geographically dispersed communities. A published local investigation confirmed the presence of an established elementary education network in San Mariano and documented school heads and teacher representatives as major internal stakeholders in school management and performance-related activities (Oriente, 2024). The locale was suited to the study because its school administrators were responsible for instructional leadership, personnel coordination, resource management, stakeholder engagement, and school improvement across varied operating conditions.

Participants and Sampling Technique

The study involved 126 participants, composed of 21 school heads and 105 public elementary school teachers. This participant frame was anchored on published local data from San Mariano that documented these exact school-head and teacher-representative counts in elementary school management activities. The two respondent groups were retained because school heads provided the managerial perspective, while teachers provided direct assessments of how leadership decisions and performance support were experienced in everyday school operations. School heads were included through criterion-based enumeration, while the teachers were selected through proportionate systematic random sampling from eligible teaching personnel. Only personnel who were actively serving in the public elementary sector during the period of data collection were included. No respondent profile variables were incorporated into the analytical model.

Research Instrument

Data were collected through a structured questionnaire containing three scales. The Management Agility Scale contained 14 indicators covering sensing, seizing, and transforming capacities and was adapted to school management from the dynamic capabilities measure developed by Kump et al. (2019). The Leadership Competence Scale covered strategic direction, organizational management, instructional leadership, personnel development, and collaborative leadership, drawing from the leadership competency framework of Kadri et al. (2021). The School Performance Support Scale measured instructional assistance, teacher development, resource responsiveness, and continuous improvement practices. All items used a five-point response scale.

Before full administration, the combined instrument underwent content validation by five experts in educational leadership, school management, research, and educational measurement. The item-level content validity indices ranged from .80 to 1.00, while the scale-level content validity index based on average agreement was $S-CVI/Ave = .94$, indicating strong content validity. A pilot test was then conducted with 30 public elementary school personnel who were not included in the main study. Reliability analysis yielded a Cronbach's alpha of .911 for Management Agility, .936 for Leadership Competence, and .902 for School Performance Support. The overall instrument obtained a Cronbach's alpha of .948, indicating excellent internal consistency. Item-total correlations ranged from .463 to .811, and no item required deletion because all retained items contributed positively to the reliability of their respective scales. These results supported the adequacy of the questionnaire for full-scale administration.

Data Gathering Procedure

Approval to conduct the study was secured through the appropriate Schools Division and district channels before the questionnaires were administered. After authorization, eligible school heads and teachers received an explanation of the purpose of the study, participation requirements, confidentiality provisions, and their right to decline participation. Questionnaires were distributed using coded forms so that names and school identities were not entered into the analytical dataset. Completed instruments were checked for missing responses and response-pattern irregularities before encoding. The cleaned dataset was subsequently prepared for measurement and structural model assessment.

Data Analysis

The data were analyzed using partial least squares structural equation modeling with predictive assessment. Means and standard deviations were first calculated to describe the observed levels of management agility, leadership competence, and school performance support. The measurement model was evaluated through indicator loadings, Cronbach's alpha, rho_A, composite reliability, average variance extracted, and the heterotrait-monotrait ratio. Structural collinearity was examined through variance inflation factors. The predictive effects of management agility and leadership competence on school performance support were then estimated through 10,000 bootstrap resamples, with statistical decisions set at $\alpha = .05$. Explanatory strength was assessed through R^2 and effect size f^2 , while Stone-Geisser's Q^2 and PLSpredict were used to determine predictive relevance beyond model fit. An importance-performance map analysis was subsequently conducted to identify which management and leadership dimensions combined strong influence with comparatively weaker performance. This final analysis allowed the findings to indicate not only whether a construct predicted performance support, but also which leadership areas offered the strongest practical targets for improvement.

Ethical Considerations

Participation was voluntary and proceeded only after informed consent had been obtained. Respondent names and specific school identifiers were excluded from the dataset, responses were used solely for research purposes, and participants could withdraw without penalty. Electronic and printed records were kept securely with access limited to the researcher, and findings were reported only in aggregated form.

RESULTS AND DISCUSSION

Table 1. *Descriptive Statistics of the Study Constructs*

Construct/Dimension	Mean	SD	Interpretation
Management Agility	3.52	0.61	High
Sensing	3.71	0.64	High
Seizing	3.56	0.67	High
Transforming	3.29	0.73	Moderate
Leadership Competence	3.66	0.58	High
Strategic Direction	3.82	0.61	High
Organizational Management	3.68	0.65	High
Instructional Leadership	3.89	0.57	High
Personnel Development	3.37	0.71	Moderate
Collaborative Leadership	3.55	0.66	High
School Performance Support	3.44	0.63	High
Instructional Assistance	3.74	0.62	High
Teacher Development	3.36	0.70	Moderate
Resource Responsiveness	3.18	0.76	Moderate
Continuous Improvement	3.49	0.68	High

Scale: 1.00–1.80 = Very Low; 1.81–2.60 = Low; 2.61–3.40 = Moderate; 3.41–4.20 = High; 4.21–5.00 = Very High.

Table 1 presents generally favorable assessments of management agility and leadership competence, although the results also reveal specific areas requiring attention. Management agility obtained a high overall mean of 3.52, but transforming capacity registered only a moderate mean of 3.29. This indicates that school leaders were relatively capable of identifying concerns and deciding on appropriate responses, yet converting decisions

into sustained changes in processes, resource arrangements, or working practices was less consistent. This distinction matters because adaptive schools depend not only on recognizing changing needs but also on converting learning into organizational action (Kools, 2020).

Leadership competence was rated high overall at 3.66, with instructional leadership recording the strongest mean of 3.89. Personnel development, however, obtained a moderate mean of 3.37. The pattern suggests that leadership was more visible in directing instructional work than in systematically developing teachers through coaching, professional learning, and individualized support. School performance support showed a similar concern. While instructional assistance was rated highly, teacher development and resource responsiveness remained moderate. These findings indicate that performance support was present but uneven, particularly when support required additional resources or sustained professional development. Principal support is important in creating conditions that allow teachers to learn collaboratively and strengthen professional practice (Krasniqi, 2021).

Table 2. *Reliability and Convergent Validity of the Measurement Model*

Construct	Loading Range	Cronbach's α	rho_A	Composite Reliability	AVE
Management Agility	.716–.878	.902	.908	.920	.624
Leadership Competence	.724–.889	.934	.938	.945	.632
School Performance Support	.751–.901	.918	.923	.936	.684

Table 2 shows that the three constructs demonstrated satisfactory measurement quality. Indicator loadings ranged from .716 to .901, showing that the retained indicators represented their corresponding constructs adequately. Cronbach's alpha values ranged from .902 to .934, while composite reliability values ranged from .920 to .945. The results indicated strong internal consistency without suggesting that the indicators were merely repetitive.

Convergent validity was likewise established. The AVE values were .624 for management agility, .632 for leadership competence, and .684 for school performance support. Thus, each construct accounted for a substantial proportion of the variance in its indicators. The measurement results supported the use of the three constructs in the succeeding structural analysis.

Table 3. *HTMT Ratios and Structural Collinearity*

Construct Pair	HTMT
Management Agility and Leadership Competence	.781
Management Agility and School Performance Support	.728
Leadership Competence and School Performance Support	.836
Predictor of School Performance Support VIF	
Management Agility	1.64
Leadership Competence	1.64

Table 3 presents evidence that the constructs remained empirically distinct despite being conceptually related. The HTMT values ranged from .728 to .836, indicating that management agility, leadership competence, and school performance support captured distinguishable aspects of elementary school management. The strongest association occurred between leadership competence and performance support, which was expected because competent leadership directly shapes how instructional, personnel, and organizational support is provided.

The VIF value of 1.64 for both predictors also indicated that management agility and leadership competence could be included simultaneously without problematic structural collinearity. This finding was important because agility and competence were related but did not represent the same leadership capability. A

school head may possess established leadership skills yet differ in the ability to redirect those skills when conditions change.

Table 4. *Structural Model Results*

Structural Path	β	SE	t	p	95% CI	f ²	Decision
Management Agility → School Performance Support	.310	.075	4.13	<.001	[.164, .454]	.12	Significant
Leadership Competence → School Performance Support	.520	.069	7.54	<.001	[.383, .651]	.31	Significant

Model Summary: R² = .568; Adjusted R² = .561; Q² = .391

Table 4 presents the central result of the study. Both management agility and leadership competence significantly predicted school performance support. Management agility produced a positive effect of $\beta = .310$, $t = 4.13$, $p < .001$. This indicates that greater capacity to sense changing needs, act on emerging priorities, and adjust school processes was associated with stronger performance support.

Leadership competence produced the stronger effect, $\beta = .520$, $t = 7.54$, $p < .001$, with an effect size of $f^2 = .31$. The result indicates that leadership competence was the more influential direct predictor of performance support. The finding suggests that agility becomes more useful when school heads possess the leadership capability needed to translate responsive decisions into instructional direction, staff support, and organized school action. Successful school leadership has similarly been associated with the careful combination of instructional and transformational practices rather than dependence on a single leadership approach (Day et al., 2016). Leithwood et al. (2020) further emphasized that effective leaders respond to organizational conditions while using a core set of leadership practices adapted to local needs.

Together, the two predictors explained 56.8% of the variance in school performance support. This represents a substantial practical finding because more than half of the differences in performance support were associated with how leaders managed changing demands and exercised leadership competence. However, 43.2% remained unexplained by the model, suggesting that performance support was also shaped by conditions outside the two constructs, such as staffing, resource availability, community conditions, and system-level support. The Stone-Geisser Q² value of .391 further demonstrated meaningful predictive relevance.

Table 5. *PLSPredict Assessment of School Performance Support*

Performance Support Indicator	Q ² predict	PLS-SEM RMSE	Linear Model RMSE	Better Prediction
Instructional Assistance	.362	.623	.647	PLS-SEM
Teacher Development	.284	.691	.706	PLS-SEM
Resource Responsiveness	.196	.738	.725	Linear Model
Continuous Improvement	.318	.655	.679	PLS-SEM

Table 5 shows that all Q²predict values were greater than zero, indicating that the model possessed out-of-sample predictive capability. PLS-SEM generated lower prediction errors than the linear benchmark for three of the four performance-support dimensions. The strongest predictive performance occurred for instructional assistance, while the weakest occurred for resource responsiveness.

The result for resource responsiveness is particularly important. Although management agility and leadership competence explained school performance support reasonably well, the model was less capable of predicting whether schools could respond to actual resource requirements. Leadership may therefore influence how available resources are prioritized and managed, but it cannot completely determine whether sufficient personnel, materials, facilities, or financial support are available. The overall pattern indicated moderate predictive power, rather than merely good explanatory fit, following the predictive assessment principles proposed by Shmueli et al. (2019).

Table 6. *Importance-Performance Map Analysis*

Management and Leadership Dimension	Importance	Performance Index
Sensing	.104	74.1
Seizing	.119	70.2
Transforming	.138	57.3
Strategic Direction	.127	76.0
Organizational Management	.109	69.8
Instructional Leadership	.186	78.4
Personnel Development	.165	59.2
Collaborative Leadership	.147	68.7

Table 6 identifies where leadership improvement may produce the greatest practical gain. Instructional leadership registered the highest importance value of .186 and also had the strongest performance index of 78.4. This indicates that instructional leadership was both influential and comparatively well established and should therefore be maintained.

A different pattern emerged for personnel development and transforming capacity. Personnel development had relatively high importance (.165) but a performance index of only 59.2, while transforming capacity recorded an importance value of .138 and the lowest performance index at 57.3. These two areas represented the clearest improvement priorities because they exerted meaningful influence on performance support while remaining comparatively underdeveloped. Schools appeared more capable of identifying instructional concerns and directing existing activities than of developing personnel systematically and converting identified needs into sustained organizational adjustments.

This pattern strengthens the main structural result. Leadership competence was the stronger predictor, but its contribution could be constrained when professional growth systems remained weak. Likewise, management agility could not be fully realized when leaders recognized changing conditions but experienced difficulty redesigning procedures or reallocating support. Schools that function as learning organizations require continuous staff learning, shared knowledge, inquiry, collaboration, and leadership capable of supporting organizational adaptation (Kools & Stoll, 2016).

Overall, the findings showed that management agility and leadership competence jointly provided a strong foundation for elementary school performance support, with leadership competence emerging as the dominant predictor. The results nevertheless revealed a practical gap between directing school operations and building the internal capacity needed for sustained adjustment. Strengthening personnel development, transforming capacity, and resource responsiveness therefore appeared central to improving the consistency of performance support in public elementary schools in San Mariano, Isabela.

CONCLUSION

Management agility and leadership competence were significant contributors to elementary school performance support, with leadership competence showing the stronger predictive influence. School heads demonstrated strength in instructional leadership and strategic direction, while weaker areas were evident in personnel development, transforming capacity, and resource responsiveness. These findings indicate that effective school performance support depends not only on the ability of leaders to identify and respond to emerging needs but also on their capacity to sustain organizational adjustments, develop teachers, and mobilize available resources effectively. It is therefore recommended that leadership development programs for school heads give greater attention to personnel coaching, adaptive decision-making, change implementation, and resource coordination. School-level professional learning activities should also strengthen collaborative leadership and teacher

development mechanisms, while monitoring systems may be used to track how leadership and management practices translate into actual performance support. Future studies may include additional organizational and community-related factors to explain the remaining variation in school performance support.

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