

Leadership Role of School Heads in Enhancing School Performance in Public and Private Elementary Schools

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ABSTRACT

This study investigated the relationship between the leadership roles of school heads and school performance of public and private elementary schools in the Division of Capiz, District of Pontevedra. Using descriptive, causal-comparative, and correlational designs, data were collected from 133 randomly selected teachers using a validated and reliable researcher-made instrument. Statistical analyses included mean, standard deviation, Mann-Whitney U test, Kruskal-Wallis H test, and Spearman rho. Findings indicated that school heads exercise leadership roles specifically in instructional supervision, professional development, resource management, and promoting parental involvement to a very great extent. School performance, measured through pupils' reading and numeracy proficiency, and teachers and school heads performance, was consistently highly proficient and outstanding, respectively. While significant differences in school performance emerged when schools were grouped by location, type, and size, no significant differences were found in leadership roles based on these demographics. No significant relationship was found between school heads' leadership roles and overall school performance, suggesting that other contextual factors may influence performance outcomes. The study recommends that school heads prioritize fostering a learning culture through mentorship and advanced professional development to further enhance institutional effectiveness.

Keywords: Supervision, development, management, involvement, literacy, numeracy

INTRODUCTION

Republic Act No. 9155, otherwise known as the Governance of Basic Education Act of 2001, mandates school heads to oversee both the administrative and instructional operations of schools. As instructional leaders, school heads are expected to supervise, evaluate, and support teachers to ensure quality teaching and improved learner outcomes. Effective instructional supervision is therefore essential in strengthening teacher performance and overall school effectiveness.

School heads play a significant role in shaping the academic and organizational success of schools, particularly in elementary education where foundational literacy, numeracy, and social skills are developed. Effective school leadership includes instructional supervision, sound decision-making, resource management, and the promotion of a positive school culture (DepEd, 2020). In support of these responsibilities, the Department of Education institutionalized the Philippine Professional Standards for School Heads (PPSSH) to strengthen leadership practices and improve teacher quality and learner achievement. School leaders are likewise expected to demonstrate commitment, adaptability, accountability, and effective stakeholder management to address emerging educational demands (Bonifacio et al., 2016; Usman, 2016).

Alongside leadership performance, teaching performance remains a crucial factor in achieving school effectiveness. According to Ozgenel and Ozkan (2019), teacher performance significantly contributes to school effectiveness, while Istikomah (2020) emphasized that effective schools maximize available resources in achieving institutional goals. Educational leadership is therefore a multifaceted concept that influences

educational policies, teacher practices, and learner outcomes, with school principals serving as key drivers of school improvement.

Although numerous studies have established the relationship between school leadership and school performance, most focus on secondary and tertiary education, with limited attention given to the elementary level. This gap is significant because elementary education plays a critical role in shaping learners' future academic and social success. As emphasized by Turturean (2024), understanding the specific contributions of elementary school heads is essential in improving educational outcomes.

Despite ongoing educational reforms, many public and private elementary schools continue to experience challenges such as low reading and numeracy performance, limited teacher motivation, and inadequate learning resources. These concerns are often associated with weaknesses in instructional leadership and school management practices. Moreover, school heads frequently struggle to balance administrative and instructional responsibilities, which may affect school performance outcomes (Prestoza & Naldoza, 2025; Abella et al., 2024).

This study asserted that high-quality learner outcomes depend on effective teachers supported by strong school leadership, as emphasized by the Organisation for Economic Co-operation and Development (2023). Hence, it became necessary to examine the relationship between the leadership roles of school heads and the school performance of selected public and private elementary schools in the Division of Capiz, particularly in the District of Pontevedra during the School Year 2025–2026.

Recognizing the critical role of school heads in improving school performance, the findings of this study may serve as basis for developing targeted leadership training programs focused on instructional supervision, teacher professional development, resource management, and stakeholder involvement. Such initiatives may help enhance both teacher and school head performance and ultimately improve pupils' reading and numeracy proficiency. Generally, this study was conducted to determine the relationship between the leadership role of school heads and school performance in public and private elementary schools, as well as the influence of school demographics on the leadership role of school heads in the Division of Capiz, District of Pontevedra.

METHODOLOGY

Research Design

This study utilized quantitative research designs, specifically descriptive, causal-comparative, and correlational approaches, to examine the relationship between school heads' leadership roles and school performance in public and private elementary schools in the Division of Capiz, District of Pontevedra. The descriptive design was used to profile respondents and determine the extent of school heads' leadership roles and school performance levels. The causal-comparative design identified differences in leadership roles and school performance when grouped according to school demographics, while the correlational design examined the relationship between school heads' leadership roles and school performance. These approaches provided a comprehensive understanding of existing conditions and supported data-driven educational decision-making (Bhat, 2018; Creswell & Creswell, 2017; Cobanoglu et al., 2023).

Sample Size and Sampling Procedure

School heads are the principal or officer in-charge of the 11 participating schools during the school year 2025 – 2026. Random samples of 133 teacher respondents from the public and private elementary schools were obtained from its population of 203 teachers taken from 7 public elementary schools and 4 private elementary schools. The number of samples of teacher respondents were computed using Cochran's formula at 0.05 margin of error. The stratified random sampling technique specifically the proportional stratified random sampling by school was utilized by the researcher to accurately determine the total number of samples in 11 elementary schools as the teacher respondents of this study.

Research Instrument

The research instrument consisted of three parts. The first part gathered the demographic profile of school head and teacher respondents, including school location, type, and size. The second part was a validated researcher-developed questionnaire based on the study's problems, related literature, theoretical framework, and expert consultations. It measured the leadership roles of school heads in terms of instructional supervision, teacher professional development, resource management, and parental involvement using a 5-point Likert Scale ranging from 1 (strongly disagree) to 5 (strongly agree). The third part utilized secondary data on school performance obtained from the Human Resource (HR) office of participating schools, including school heads' OPCRf ratings, teachers' IPCRF ratings, and pupils' reading and numeracy proficiency levels for School Year 2024–2025.

To establish the validity and reliability of the research instrument, the initial questionnaire was reviewed by one statistician, two research experts, and two educational management experts who evaluated its clarity, sufficiency, and overall validity. Their recommendations were incorporated into the final draft, which was pilot tested to 45 teachers from the District of Pontevedra who were not included as respondents in the study. The pilot test identified unclear items and assessed respondents' comprehension of the questionnaire. Reliability analysis using Cronbach's alpha yielded coefficients of 0.873 for instructional supervision, 0.775 for teacher professional development, 0.780 for resource management, 0.918 for promoting parental involvement, and 0.958 for the overall instrument, indicating excellent internal consistency and reliability (Taber, 2018; McNeish, 2018).

Data Gathering Procedures

Permission to conduct the study was secured from the Schools Division Superintendent through the Public Schools District Supervisor and school heads. Upon approval, the researcher personally administered the questionnaires at a convenient schedule and provided respondents with an orientation regarding the study's objectives and procedures. All information gathered was treated with strict confidentiality in compliance with the Data Privacy Act of 2012, with access limited solely to the researcher. After retrieval and checking of the completed instruments, the researcher collected the school heads' OPCRf ratings, teachers summarized IPCRF ratings, and pupils' literacy and numeracy proficiency data from participating schools. The gathered data were then organized, encoded, and submitted to a statistician for analysis and interpretation using the SPSS application.

Data Analysis Procedures

After the evaluation of the participants' responses on the given instruments, the data gathered were subjected to the data processing procedure for organization, presentation, and statistical treatment to analyze and interpret the results obtained. The statistical calculations were carried out using the Statistical Package for Social Sciences (SPSS) software. Mean, median, and standard deviation were used in the descriptive analyses while Mann-Whitney U, Kruskal-Wallis H, and Spearman rho tests set at 0.05 alpha level of significance were used in the inferential analyses.

RESULTS AND DISCUSSION

Extent of Leadership Role of School Heads

Table 1 presents the extent of the leadership roles of school heads in elementary schools in the Division of Capiz, District of Pontevedra across instructional supervision, teacher professional development, resource management, and parental involvement. The findings revealed that school heads performed their leadership roles to a very great extent overall ($M = 4.50$, $SD = 0.43$). Among the domains, resource management obtained the highest rating ($M = 4.63$, $SD = 0.36$), followed by instructional supervision ($M = 4.48$, $SD = 0.47$), teacher professional development ($M = 4.46$, $SD = 0.43$), and parental involvement ($M = 4.45$, $SD = 0.55$). These results indicate that school heads effectively carry out their leadership responsibilities, particularly in managing school resources, supporting teachers, supervising instruction, and strengthening school-community relationships. The findings

support the idea that effective leadership contributes to improved teacher performance, learner achievement, and overall school effectiveness. This aligns with the views of Kenneth Leithwood et al. (2020), who emphasized that leadership significantly influences student achievement, and Joyce Epstein (2018), who highlighted the importance of collaborative leadership and parental involvement in promoting school success.

Table 1 Extent of Leadership Role of School Heads

Category	N	Mean (M)	Standard Deviation (SD)	Verbal Description
Instructional Supervision	133	4.48	0.47	To a Great Extent
Teacher Professional Development	133	4.46	0.43	To a Great Extent
Resource Management	133	4.63	0.36	To a Very Great Extent
Promoting Parental Involvement	133	4.45	0.55	To a Great Extent
Overall Leadership Role	133	4.51	0.43	To a Very Great Extent

Note: Interpretation is based on the following scale: 4.50 – 5.00 (To a Very Great Extent); 3.50 – 4.49 (To a Great Extent); 2.50 – 3.49 (Moderate Extent); 1.50 – 2.49 (Little Extent); and 1.0 – 1.49 (Not at all).

Overall Level of School Performance of Elementary Schools According to School Demographics

The overall level of school performance of elementary schools in the Division of Capiz, District of Pontevedra remained consistently high when grouped according to school location, type, and size. Pupils demonstrated highly proficient reading ($M = 4.73$, $SD = 0.14$) and numeracy performance ($M = 4.85$, $SD = 0.09$), while teachers ($M = 4.95$, $SD = 0.09$) and school heads ($M = 4.94$, $SD = 0.04$) obtained outstanding ratings across all demographic categories. These findings indicate minimal variation in school performance and suggest that school demographics do not significantly influence instructional quality, leadership effectiveness, or learner outcomes. The results reflect a well-aligned and equitable educational system where policies, standards, and support mechanisms are effectively implemented across schools. This finding supports the views of Organisation for Economic Co-operation and Development (2019), which emphasized consistency in quality across high-performing education systems, as well as Darling-Hammond et al. (2017), who highlighted the strong influence of instructional quality, leadership, and professional development on school performance regardless of school characteristics.

Pupils' Reading Proficiency According to School Location

In terms of school location, pupils from poblacion schools obtained a mean score of $M = 4.77$ ($SD = 0.12$), while pupils from barangay schools recorded $M = 4.69$ ($SD = 0.14$), both interpreted as highly proficient. These findings indicate that pupils from both locations demonstrate strong reading proficiency, with only a minimal advantage observed among poblacion schools. The narrow difference suggests that geographic location has little influence on reading performance and reflects equitable access to quality instruction and literacy interventions across schools. This finding supports the views of Organisation for Economic Co-operation and Development (2019), which emphasized reducing learning disparities through equitable education systems, and UNESCO (2017), which highlighted the importance of structured literacy programs in improving reading outcomes across different contexts.

Pupils' Reading Proficiency According to School Type

When grouped according to school type, public school pupils obtained a mean score of $M = 4.75$ ($SD = 0.13$), while private school pupils recorded $M = 4.63$ ($SD = 0.14$), both interpreted as highly proficient. These findings indicate that pupils in both sectors demonstrate strong reading proficiency, with a slightly higher performance observed in public schools. The minimal difference suggests that both public and private schools are effectively implementing reading instruction, resulting in comparable literacy outcomes. This finding supports the views of

Darling-Hammond et al. (2017), who emphasized that teacher quality and instructional practices are more influential than school type.

Pupils' Reading Proficiency According to School Size

In terms of school size, large schools obtained the highest mean score ($M = 4.83$, $SD = 0.00$), followed by medium schools ($M = 4.68$, $SD = 0.14$), and small schools ($M = 4.63$, $SD = 0.14$), all interpreted as highly proficient. Despite slight variations, the results indicate that pupils across all school sizes demonstrate strong reading proficiency, with very minimal standard deviations suggesting consistent performance within each group. The slightly higher performance in large schools may be linked to better access to instructional resources, structured literacy programs, and stronger support systems, although school size alone is not a decisive factor in literacy outcomes. This finding aligns with research indicating that reading achievement is more strongly influenced by instructional quality, learning environment, and teacher effectiveness than by school size (Cheung & Slavin, 2016). Overall, the results imply that all school sizes should sustain effective reading programs, while smaller schools may benefit from additional instructional and capacity-building support to maintain high performance.

Pupils' Numeracy Proficiency According to School Location

Pupils from poblacion schools obtained a mean score of $M = 4.89$ ($SD = 0.10$), while pupils from barangay schools recorded $M = 4.80$ ($SD = 0.06$), both interpreted as highly proficient. These findings indicate that pupils from both school locations demonstrate strong numeracy skills, with only a slight advantage observed among pupils in poblacion schools. The minimal difference suggests that school location has little influence on numeracy proficiency and reflects effective curriculum implementation and equitable access to mathematics instruction across schools. This finding aligns with the views of Organisation for Economic Co-operation and Development (2019), which emphasized reducing geographic disparities in mathematics achievement, and UNESCO (2017), which highlighted the importance of quality education in improving learning outcomes across different regions.

Pupils' Numeracy Proficiency According to School Type

Public school pupils obtained a mean score of $M = 4.85$ ($SD = 0.09$), while private school pupils recorded $M = 4.80$ ($SD = 0.07$), both interpreted as highly proficient. These findings indicate that school type has minimal influence on pupils' numeracy proficiency, as both public and private schools demonstrate similarly high levels of performance. The slight difference suggests that effective teaching strategies, curriculum standards, and assessment practices are consistently implemented across both school types. This finding supports the views of Darling-Hammond et al. (2017), who emphasized the importance of teacher quality and instructional practices.

Pupils' Numeracy Proficiency According to School Size

Small schools recorded a mean score of $M = 4.80$ ($SD = 0.07$), medium schools obtained $M = 4.80$ ($SD = 0.06$), and large schools achieved $M = 4.92$ ($SD = 0.09$), all interpreted as highly proficient. These findings indicate that school size has minimal influence on pupils' numeracy proficiency, although large schools showed a slightly higher mean score. The results suggest that effective numeracy instruction is consistently implemented across schools regardless of size, while the higher performance of large schools may be associated with greater access to instructional resources and support. This finding aligns with Organisation for Economic Co-operation and Development (2019), which highlighted the importance of system-level factors in improving student performance.

Table 2. Overall Level of Pupils' Reading and Numeracy Proficiency of Elementary Schools Grouped According to School Demographics

Demographics	N	Reading Mean (M)	SD	Verbal Description	Numeracy Mean (M)	SD	Verbal Description
School Location							
Poblacion	64	4.77	0.12	Highly Proficient	4.89	0.10	Highly Proficient
Barangay	69	4.69	0.14	Highly Proficient	4.80	0.06	Highly Proficient
School Type							
Public	114	4.75	0.13	Highly Proficient	4.85	0.09	Highly Proficient
Private	19	4.63	0.14	Highly Proficient	4.80	0.07	Highly Proficient
School Size							
Small School	19	4.63	0.14	Highly Proficient	4.80	0.07	Highly Proficient
Medium School	64	4.68	0.14	Highly Proficient	4.80	0.06	Highly Proficient
Large School	50	4.73	0.14	Highly Proficient	4.92	0.09	Highly Proficient
As a Whole	133	4.73	0.14	Highly Proficient	4.85	0.09	Highly Proficient

Teachers' Performance According to School Location

Teachers in both poblacion and barangay schools demonstrated consistently outstanding performance, with mean scores of $M = 4.94$ ($SD = 0.09$) and $M = 4.95$ ($SD = 0.09$), respectively. These reflect consistent instructional delivery, teacher competence, and administrative support across schools. These findings suggest that equitable teacher deployment, continuous training, and equal access to instructional resources should be sustained to maintain high-quality teaching and balanced educational opportunities in all school settings. These results are consistent with the assertions of the Organization for Economic Co-operation and Development (2019), which emphasize that effective education systems promote equity in teaching quality across different locations. Similarly, the United Nations Educational, Scientific and Cultural Organization (2017) highlights that strengthening teacher support systems contributes to more consistent educational outcomes across regions.

Teachers' Performance According to School Type

Public school teachers demonstrated slightly higher performance ($M = 4.98$, $SD = 0.03$) than private school teachers ($M = 4.78$, $SD = 0.14$), although both groups were verbally interpreted as "Outstanding." The findings suggest that teachers across both school types maintain high levels of instructional effectiveness, with the stronger performance of public-school teachers possibly influenced by more structured professional development, standardized curricula, and institutional support. Consistent with the studies of Darling-Hammond (2017), the results highlight the importance of continuous teacher development and strong support systems in enhancing teaching quality. The findings further imply the need to strengthen professional development initiatives in private schools, promote collaboration between public and private institutions, and sustain effective evaluation and support mechanisms to maintain high teaching performance across all schools.

Teachers' Performance According to School Size

Teachers across small, medium, and large schools demonstrated consistently "Outstanding" performance, with mean scores of $M = 4.78$ ($SD = 0.14$), $M = 4.97$ ($SD = 0.03$), and $M = 4.98$ ($SD = 0.02$), respectively. Although teachers in medium and large schools showed slightly higher performance, likely due to greater access to resources, collaboration opportunities, and administrative support, the findings indicate that effective teaching practices are evident regardless of school size. Consistent with the views of Castles, et al. (2018), the results emphasize that instructional quality remains the key factor influencing performance rather than school size. The findings further suggest the need to strengthen support for small schools through adequate resources, mentoring, collaborative practices, and sustained instructional leadership to maintain high teaching performance across all school contexts.

Table 3 Overall Level of Teachers' Performance in Elementary School According to School Demographics

Demographics	N	Mean (M)	Standard Deviation (SD)	Verbal Description
School Location				
Poblacion	64	4.94	0.09	Outstanding
Barangay	69	4.95	0.09	Outstanding
School Type				
Public	114	4.98	0.03	Outstanding
Private	19	4.78	0.14	Outstanding
School Size				
Small School	19	4.78	0.14	Outstanding
Medium School	64	4.97	0.03	Outstanding
Large School	50	4.98	0.02	Outstanding
As a Whole	133	4.95	0.09	Outstanding

Note: Interpretation is based on the following scale: 4.50 – 5.00 (Outstanding); 3.50 – 4.49 (Very Satisfactory); 2.50 – 3.49 (Satisfactory); 1.50 – 2.49 (Unsatisfactory); and 1.0 – 1.49 (Poor).

School Heads' Performance According to School Location

School heads in both poblacion and barangay schools demonstrated “Outstanding” performance, with mean scores of $M = 4.95$ ($SD = 0.02$) and $M = 4.93$ ($SD = 0.05$), respectively, indicating that school location does not significantly influence leadership effectiveness. The minimal difference reflects the consistent implementation of effective leadership practices, standardized training, and equitable administrative support across schools. These findings support OECD (2019), which emphasizes that effective school leadership can be achieved when systems ensure equitable support across locations. Similarly, UNESCO (2017) highlights that leadership quality plays a key role in maintaining consistent school performance across diverse settings. The results further suggest the importance of sustaining leadership development programs, equitable administrative support, and standardized leadership policies to maintain effective school management and continuous school improvement across all locations.

School Heads' Performance According to School Type

School heads in both public and private schools demonstrated “Outstanding” performance, with mean scores of $M = 4.94$ ($SD = 0.03$) and $M = 4.90$ ($SD = 0.06$), respectively, indicating that school type has minimal influence on leadership effectiveness. The findings suggest that professional competence, experience, and continuous development contribute more significantly to effective school management and instructional leadership than institutional classification. Consistent with the perspective of Darling-Hammond (2017), the results emphasize the importance of continuous leadership development and strong instructional leadership in improving school performance. The findings further highlight the need to sustain leadership training programs, strengthen support systems for school administrators, and encourage collaboration between public and private schools to promote effective management practices across all school settings.

School Heads' Performance According to School Size

School heads across small, medium, and large schools demonstrated consistently “Outstanding” performance, with mean scores of $M = 4.90$ ($SD = 0.06$), $M = 4.93$ ($SD = 0.04$), and $M = 4.95$ ($SD = 0.01$), respectively, indicating that school size has minimal influence on leadership effectiveness. Although school heads in large schools showed slightly higher performance, the negligible differences suggest that effective leadership practices, adaptability, and instructional management are evident across all school contexts. Consistent with the Organisation for Economic Co-operation and Development (2019), the results emphasize that leadership quality has a greater impact on school performance than structural factors such as school size. The findings further imply

the need to sustain strong instructional leadership, strengthen administrative support for smaller schools, and encourage collaboration among school heads to promote effective management practices and continuous school improvement across all school sizes.

Table 4 Overall Level of School Heads' Performance in Elementary Schools According to School Demographics

Demographics	N	Mean (M)	Standard Deviation (SD)	Verbal Description
School Location				
Poblacion	64	4.95	0.02	Outstanding
Barangay	69	4.93	0.05	Outstanding
School Type				
Public	114	4.94	0.03	Outstanding
Private	19	4.90	0.06	Outstanding
School Size				
Small School	19	4.90	0.06	Outstanding
Medium School	64	4.93	0.04	Outstanding
Large School	50	4.95	0.01	Outstanding
As a Whole	133	4.94	0.04	Outstanding

Note: Interpretation is based on the following scale: 4.50 – 5.00 (Outstanding); 3.50 – 4.49 (Very Satisfactory); 2.50 – 3.49 (Satisfactory); 1.50 – 2.49 (Unsatisfactory); and 1.0 – 1.49 (Poor).

Difference in Leadership Role of School Heads in the Elementary Schools According to School Demographics

The Mann–Whitney U test revealed no significant difference in the leadership roles of school heads when grouped according to school location, as those in Poblacion schools ($Md = 4.75$, $MR = 72.27$) and Barangay schools ($Md = 4.72$, $MR = 62.11$) demonstrated comparable leadership performance ($Z = -1.524$, $p = .127$). The findings suggest that school location does not significantly influence leadership practices, indicating that school heads across different settings operate under similar standards, expectations, and competencies. This consistency may be attributed to centralized leadership policies, continuous professional development, and the implementation of the Philippine Professional Standards for School Heads (PPSSH). Consistent with the studies of Day et al. (2016) and Leithwood et al. (2017), the results highlight that standardized leadership frameworks and accountability systems contribute to equitable leadership performance across diverse school contexts.

The Mann–Whitney U test also revealed no significant difference in the leadership roles of school heads when grouped according to school type, as both public ($Md = 4.73$, $MR = 66.53$) and private school heads ($Md = 4.73$, $MR = 69.84$) demonstrated similarly high levels of leadership performance ($Z = -0.348$, $p = .728$). Although private school heads obtained a slightly higher mean rank, the difference was not statistically significant, indicating that school type does not substantially influence leadership effectiveness. The findings suggest that school heads in both settings consistently demonstrate strong instructional leadership, management, and stakeholder engagement, likely due to shared professional standards, leadership training, and policy-driven frameworks. Consistent with the perspectives of the OECD (2019), Pont et al. (2016), and Leithwood et al. (2017), the results highlight that standardized leadership competencies and core leadership practices contribute to consistent leadership performance across diverse school environments.

The Kruskal–Wallis H test revealed no significant difference in the leadership roles of school heads when grouped according to school size ($H(2) = 4.299$, $p = .117$), indicating that leadership effectiveness remains consistently high across small, medium, and large schools. Although school heads in large schools obtained the highest mean rank ($MR = 74.85$), followed by small ($MR = 69.84$) and medium schools ($MR = 60.02$), the closely comparable median scores and identical superscripts confirm that these differences were not statistically

significant. The findings suggest that leadership performance is shaped more by professional standards, competencies, training, and institutional expectations than by school size, reflecting the adaptability of school heads across diverse educational contexts. Consistent with the studies of Hallinger (2018), Leithwood et al. (2017), Day et al. (2016) and the OECD (2019), the results emphasize that instructional leadership, decision-making, and stakeholder engagement are core determinants of effective leadership regardless of organizational scale.

Table 5 Difference in the Leadership Role of School Heads According to School Demographics

Demographics	N	Median (Md)	Mean Rank (MR)	df	Statistical Test	Test Statistic	Z / H	p-value
School Location								
Poblacion	64	4.75	72.27	–	Mann–Whitney U Test	U	-1.524	.127
Barangay	69	4.72	62.11	–	Mann–Whitney U Test	U		
School Type								
Public	114	4.73	66.53	–	Mann–Whitney U Test	U	-0.348	.728
Private	19	4.73	69.84	–	Mann–Whitney U Test	U		
School Size								
Small	19	4.73	69.84	2	Kruskal–Wallis H Test	H	4.299	.117
Medium	64	4.71	60.02		Kruskal–Wallis H Test	H		
Large	50	4.75	74.85		Kruskal–Wallis H Test	H		

Differences in School Performance According to School Demographics

Differences in Pupils' Reading Proficiency in the Elementary Schools According to School Demographics

The Mann–Whitney U test revealed a significant difference in pupils' reading proficiency according to school location ($Z = -3.419$, $p = .001$), with pupils in población schools ($Md = 4.83$, $MR = 77.22$) demonstrating significantly higher proficiency than those in barangay schools ($Md = 4.67$, $MR = 57.52$). The findings indicate that school location plays a significant role in literacy development, as schools in población areas often have greater access to educational resources, reading materials, internet connectivity, and qualified teachers compared to rural barangay schools. This suggests that geographical disparities continue to influence reading outcomes, limiting reading enrichment opportunities and literacy development among pupils in rural settings. Consistent with the perspectives of the UNESCO (2022) and OECD (2019), the results highlight that contextual and environmental inequalities remain major barriers to achieving equitable literacy outcomes across different school locations.

The Mann–Whitney U test revealed a significant difference in pupils' reading proficiency based on school type ($Z = -3.516$, $p < .001$), with pupils in public schools ($Md = 4.83$, $MR = 71.13$) demonstrating higher proficiency than those in private schools ($Md = 4.67$, $MR = 42.21$). The findings suggest that school type influences reading performance, possibly due to the stronger implementation of standardized literacy programs and government-supported reading interventions in public schools. This further implies that structured curriculum implementation, teacher accountability, and systematic reading instruction contribute significantly to literacy

development, while some private schools may not consistently implement comprehensive reading enhancement programs. Consistent with the perspectives of Snow & Matthews (2016), the results highlight the importance of structured literacy programs and effective instructional practices in improving pupils' reading proficiency.

The Kruskal–Wallis H test revealed a significant difference in pupils' reading proficiency across school sizes ($H(2) = 47.55, p < .001$), with pupils in large schools ($Md = 4.83, MR = 92.00^a$) demonstrating significantly higher proficiency than those in medium ($Md = 4.67, MR = 54.83^b$) and small schools ($Md = 4.67, MR = 42.21^b$), while no significant difference was found between medium and small schools. The findings suggest that larger schools provide more favorable conditions for literacy development, likely due to greater access to instructional resources, diverse reading materials, trained teachers, and stronger academic support systems. This indicates that school size may positively influence reading outcomes through enhanced organizational capacity and economies of scale in educational support. Consistent with the studies of Muijs et al. (2018) and Leithwood et al. (2020) the results emphasize that adequate resources, effective leadership, and strong instructional systems significantly contribute to improved student achievement and reading proficiency.

Table 6 Differences in Pupils' Reading Proficiency According to School Demographics

Demographics	N	Median (Md)	Mean Rank (MR)	df	Statistical Test	Z / H	p-value
School Location							
Poblacion	64	4.83	77.22	–	Mann–Whitney U Test	-3.419	.001
Barangay	69	4.67	57.52	–	Mann–Whitney U Test		
School Type							
Public	114	4.83	71.13	–	Mann–Whitney U Test	-3.516	< .001
Private	19	4.67	42.21	–	Mann–Whitney U Test		
School Size							
Small	19	4.67	42.21 ^b	2	Kruskal–Wallis H Test	47.549	< .001
Medium	64	4.67	54.83 ^b		Kruskal–Wallis H Test		
Large	50	4.83	92.00 ^a		Kruskal–Wallis H Test		

Note. Mean ranks sharing the same superscript are not significantly different at $p < .05$.

Differences in Pupils' Numeracy Proficiency in the Elementary Schools According to School Demographics

The Mann–Whitney U test revealed a statistically significant difference in pupils' numeracy proficiency based on school location ($Z = -5.365, p < .001$), with pupils in poblacion schools ($Md = 4.83, MR = 82.13$) demonstrating higher numeracy proficiency than those in barangay schools ($Md = 4.83, MR = 52.97$). Although both groups obtained the same median score, the higher mean rank among pupils in poblacion schools indicates more consistent performance in numeracy competencies. The findings suggest that school location influences learning outcomes, likely due to disparities in access to instructional resources, teacher quality, learning materials, and academic support systems. Consistent with the perspective of the UNESCO (2020), the results highlight that geographic inequalities continue to affect foundational learning skills, emphasizing the need for targeted instructional support and intervention programs for learners in rural or barangay schools.

The Mann–Whitney U test revealed a significant difference in pupils' numeracy proficiency based on school type ($Z = -2.521, p = .012$), with pupils in public schools ($Md = 4.83, MR = 69.79$) obtaining higher mean ranks than those in private schools ($Md = 4.83, MR = 50.24$). Although both groups shared the same median score, the higher mean rank among public school pupils indicates a stronger overall distribution of numeracy performance. The findings suggest that school type influences numeracy proficiency, possibly due to differences in curriculum implementation, instructional practices, and participation in government-supported numeracy interventions such as the K–12 curriculum enhancement programs.

The Kruskal–Wallis H test revealed a significant difference in numeracy proficiency across school sizes ($H(2) = 51.88, p < .001$), with pupils from large schools ($Md = 5.00, MR = 92.18^a$) demonstrating significantly higher proficiency than those from medium ($Md = 4.83, MR = 52.30^b$) and small schools ($Md = 4.83, MR = 50.24^b$), while no significant difference was found between medium and small schools. The findings suggest that larger schools provide more favorable conditions for numeracy development due to greater access to instructional resources, specialized teachers, and stronger academic support systems. This indicates that institutional capacity and resource availability significantly influence numeracy achievement, while smaller schools may face limitations in staffing and instructional support. Consistent with the perspectives of Leithwood et al. (2020) the OECD (2024), and Akyuz (2021), the results emphasize that school resources, leadership systems, and organizational support play important roles in improving pupils’ numeracy proficiency.

Table 7 Differences in Pupils’ Numeracy Proficiency According to School Demographics

Demographics	N	Median (Md)	Mean Rank (MR)	df	Statistical Test	Z / H	p-value
School Location							
Poblacion	64	4.83	82.13	–	Mann–Whitney U Test	-5.365	< .001
Barangay	69	4.83	52.97	–	Mann–Whitney U Test		
School Type							
Public	114	4.83	69.79	–	Mann–Whitney U Test	-2.521	.012
Private	19	4.83	50.24	–	Mann–Whitney U Test		
School Size							
Small	19	4.83	50.24 ^b	2	Kruskal–Wallis H Test	51.877	< .001
Medium	64	4.83	52.30 ^b		Kruskal–Wallis H Test		
Large	50	5.00	92.18 ^a		Kruskal–Wallis H Test		

Note. Mean ranks sharing the same superscript are not significantly different at $p < .05$.

Differences in Teachers’ Performance in the Elementary Schools According to School Demographics

The Mann–Whitney U test revealed a statistically significant difference in teachers’ performance based on school location ($Z = -2.714, p = .007$), with teachers in barangay schools ($MR = 75.52$) slightly outperforming those in población schools ($MR = 57.81$), despite nearly identical median scores ($Md = 4.99$ vs. 4.98). The findings suggest that geographic context influences teacher performance, possibly due to stronger community engagement, more cohesive working environments, and reduced institutional complexity in barangay schools. This further implies that contextual factors such as school environment, administrative demands, and community support significantly shape instructional quality and teacher effectiveness. Consistent with the perspective of Day et al. (2016) the results emphasize that school context and leadership conditions strongly influence teaching quality and overall school improvement outcomes.

The Mann–Whitney U test revealed a highly significant difference in teachers’ performance based on school type ($Z = -6.845, p < .001$), with teachers in public schools ($MR = 76.11, Md = 4.98$) demonstrating higher performance than those in private schools ($MR = 12.34, Md = 4.85$). The findings suggest that teachers in public schools’ benefit from stronger professional development opportunities, structured evaluation systems, government support, and standardized supervision mechanisms that enhance instructional quality and accountability. This indicates that institutional support and formalized performance management systems play a significant role in improving teacher effectiveness. Consistent with the perspectives of the OECD (2016) and Leithwood et al. (2017) the results emphasize that continuous professional development, leadership support, and accountability structures contribute substantially to stronger teacher performance.

The Kruskal–Wallis H test revealed a significant difference in teachers’ performance across school sizes ($H(2) = 49.30, p < .001$), with teachers in medium-sized schools ($MR = 80.98^a$) demonstrating significantly higher

performance than those in large schools ($MR = 69.88^b$) and small schools ($MR = 12.34^c$), while teachers in large schools also significantly outperformed those in small schools. The findings suggest that school size influences teacher performance, with medium-sized schools providing a more balanced environment characterized by manageable workloads, adequate resources, and stronger collaboration opportunities that enhance instructional effectiveness. In contrast, small schools may face limitations in resources and staffing, while large schools may encounter greater organizational complexity that affects teacher efficiency. Consistent with the perspectives of Robinson (2017) and Day et al. (2016) the results emphasize that organizational structure, school capacity, and workload balance significantly influence teaching quality and overall school effectiveness.

Table 8 Differences in Teachers' Performance According to School Demographics

Demographics	N	Median (Md)	Mean Rank (MR)	df	Statistical Test	Z / H	p-value
School Location							
Poblacion	64	4.98	57.81	–	Mann–Whitney U Test	-2.714	.007
Barangay	69	4.99	75.52	–	Mann–Whitney U Test		
School Type							
Public	114	4.98	76.11	–	Mann–Whitney U Test	-6.845	< .001
Private	19	4.85	12.34	–	Mann–Whitney U Test		
School Size							
Small	19	4.85	12.34 ^c	2	Kruskal–Wallis H Test	49.296	< .001
Medium	64	4.99	80.98 ^a		Kruskal–Wallis H Test		
Large	50	4.98	69.88 ^b		Kruskal–Wallis H Test		

Note. Mean ranks with different superscript letters indicate significant differences among groups based on Kruskal–Wallis H test at $p < .05$.

Differences in School Heads' Performance in the Elementary Schools According to School Demographics

The Mann–Whitney U test revealed no statistically significant difference in the performance of school heads based on school location ($Z = -0.801$, $p = .423$), as both poblacion ($Md = 4.94$, $MR = 69.72$) and barangay schools ($Md = 4.95$, $MR = 64.48$) demonstrated comparable leadership performance. The findings suggest that leadership effectiveness is influenced more by professional competencies and instructional practices than by geographic context. Consistent with the perspectives of Hallinger (2018), Day et al. (2016), OECD (2019), UNESCO (2018), and Leithwood et al. (2020), the results highlight the importance of universal leadership competencies, equitable professional support, and context-responsive leadership practices in sustaining effective school leadership across different locations.

The Mann–Whitney U test revealed a statistically significant difference in school heads' performance based on school type ($Z = -2.75$, $p = .006$), with public school heads ($Md = 4.95$, $MR = 70.68$) demonstrating higher performance than private school heads ($Md = 4.92$, $MR = 44.95$). The findings suggest that leadership effectiveness is influenced not only by individual competencies but also by institutional and organizational support systems, such as structured governance, accountability mechanisms, leadership training, and professional development opportunities commonly found in public schools. Consistent with the perspectives of Robinson et al. (2017), Bush & Glover (2016), OECD (2020), Harris and Jones (2019), and Leithwood et al. (2019), the results emphasize the importance of coherent leadership frameworks, distributed leadership practices, and continuous professional learning in strengthening school leadership performance across different school types.

The Kruskal–Wallis H test revealed a statistically significant difference in school heads' performance across school sizes ($H(2) = 7.78$, $p = .020$), with those in large schools ($MR = 72.46^a$) showing the highest performance, followed by medium-sized schools ($MR = 69.28^a$), and small schools ($MR = 44.95^b$), where the superscripts indicate that large and medium schools do not significantly differ from each other but both differ significantly

from small schools. The findings suggest that school size is a meaningful contextual factor influencing leadership performance, as medium and large schools may provide more structured systems, richer resources, and stronger professional collaboration opportunities that support effective leadership, while small schools may face constraints in staffing, resources, and professional support. Consistent with the perspectives of Hallinger (2018), Leithwood et al. (2020), OECD (2019), and Day et al. (2016), the results emphasize that leadership effectiveness is shaped by organizational context, access to professional learning, and enabling school conditions, highlighting the need for targeted support and capacity-building for school heads in smaller schools.

Table 9 Differences in School Heads' Performance According to School Demographics

Demographics	N	Median (Md)	Mean Rank (MR)	df	Statistical Test	Z / H	p-value
School Location							
Poblacion	64	4.94	69.72	–	Mann–Whitney U Test	-0.801	.423
Barangay	69	4.95	64.48	–	Mann–Whitney U Test		
School Type							
Public	114	4.95	70.68	–	Mann–Whitney U Test	-2.754	.006
Private	19	4.92	44.95	–	Mann–Whitney U Test		
School Size							
Small	19	4.92	44.95 ^b	2	Kruskal–Wallis H Test	7.784	.020
Medium	64	4.95	69.28 ^a		Kruskal–Wallis H Test		
Large	50	4.96	72.46 ^a		Kruskal–Wallis H Test		

Note: Mean ranks sharing the same superscript are not significantly different at $p < .05$.

Relationship Between Leadership Role of School Heads and School Performance of Elementary Schools

The overall findings revealed no statistically significant relationship between school heads' leadership role and school performance across all domains, including pupils' reading proficiency ($r_s = 0.066$, $p = .453$), numeracy proficiency ($r_s = 0.151$, $p = .083$), teachers' performance ($r_s = 0.135$, $p = .122$), and school heads' performance ($r_s = 0.051$, $p = .558$). These weak and non-significant correlations suggest that leadership roles, as measured in this study, do not directly translate into measurable improvements in school performance indicators. Instead, school outcomes appear to be shaped by a broader set of interrelated factors such as teacher competence, student characteristics, instructional quality, resource availability, and socio-economic context. Overall, the results suggest that improving school performance requires a holistic, system-wide approach that goes beyond leadership alone and strengthens teaching quality, learning conditions, and contextual support systems.

Table 10 Relationship Between Leadership Role of School Heads and School Performance of Elementary Schools

Variables Tested	Statistical Test	Spearman's rho (r_s)	p-value
Leadership Role and Pupils' Reading Proficiency	Spearman's rho	0.066	.453
Leadership Role and Pupils' Numeracy Proficiency	Spearman's rho	0.151	.083
Leadership Role and Teachers' Performance	Spearman's rho	0.135	.122
Leadership Role and School Heads' Performance	Spearman's rho	0.051	.558

CONCLUSIONS

The school heads in the District of Pontevedra consistently demonstrate effective leadership across school contexts, contributing to sound management, instructional improvement, and stakeholder engagement, while

schools generally maintain satisfactory educational outcomes despite contextual differences. Leadership performance remains stable regardless of school location, type, or size, indicating adherence to common professional standards; however, school context still influences the consistency of educational outcomes, suggesting the need for more targeted, context-responsive support and resource allocation. Moreover, since leadership roles showed no significant direct relationship with school performance, outcomes are likely shaped by multiple other factors, underscoring the importance of strengthening instructional leadership, teacher capacity, and learning conditions rather than relying solely on administrative leadership structures.

RECOMMENDATIONS

School heads sustain and further strengthen their balanced leadership practices, particularly by enhancing parental involvement initiatives to complement strong resource management performance. The Department of Education may identify, document, and replicate best practices from high-performing schools to maintain and improve the overall quality of elementary education. School heads are also encouraged to adopt context-responsive leadership approaches that address the specific needs of their schools, ensuring both consistency and adaptability across diverse settings. At the district level, a differentiated support system may be implemented to provide targeted instructional materials and logistical assistance to small and barangay schools that show relatively lower performance. Finally, DepEd officials and school administrators should prioritize equitable resource allocation and targeted interventions—including funding support, teacher development, infrastructure improvement, and community engagement programs—to reduce performance disparities and promote inclusive, high-quality education for all learners.

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