

Networking Opportunities, Digital Proficiency, Data-Driven Decision Making as Catalysts for School Leaders’ Research Capability

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Abstract:

This study looks at how networking opportunities, digital skills, and using data to make decisions help school leaders improve their research abilities in the Department of Education, Division of Valencia City, Bukidnon. School leaders play an important role in improving teaching and bringing new ideas to schools. We collected information through surveys asking school leaders about their use of digital tools, involvement in professional networks, and how they use data in their work. The results show that being active in networking helps school leaders share knowledge, support each other, and learn continuously, which boosts their research skills. Having good digital skills, especially in adopting new technology, helps leaders use digital tools to bring innovation to education. Using data to guide decisions works best when leaders have both strong technical skills and good professional connections. This study highlights how these three things work together to help school leaders become better researchers and problem solvers. Based on these findings, we suggest creating training programs that build digital skills and encourage networking at the same time. These programs will help school leaders lead more effectively, use evidence to improve schools, and ultimately help students do better. We recommend that education leaders focus on these areas to support strong, research-ready leadership in Valencia City Division.

Keywords — Networking Opportunities, Digital Proficiency, Data-Driven Decision Making, Research Capability, School Leaders, Valencia City Division.

I. INTRODUCTION

The job of school leaders has changed a lot in recent years. With technology moving fast and more focus on using evidence to make decisions, school heads in places like Valencia City and southern Bukidnon are now expected to do more than just run their schools. They are asked to lead improvements, encourage new ideas, and use research to make better choices for teachers and

students. However, many school leaders find it hard to build strong research skills, especially when resources or support are limited.

This study looks at three important things that help school leaders become better at research: networking opportunities, digital skills, and using data to make decisions. Each of these areas has been shown by research to make a real difference

in how well school leaders can engage with and use research.

Networking opportunities are crucial. Studies show that when school leaders connect with other educators, share ideas, and support each other, they are more likely to use research in their work. Capulso et al. (2024) found that mentorship and strong professional networks help school leaders build research skills and share best practices, especially in places where schools are far apart or have fewer resources. Other studies highlight that how often leaders' network, how diverse their contacts are, and how deeply they engage with others all matter Godfrey, (2014); O'Hara et al., (2021). These networks help leaders access new ideas, resources, and support, making it easier to turn research into action.

Digital proficiency is another key factor. School leaders who are comfortable using technology can find and use research more easily, join online learning groups, and bring new digital tools into their schools. Capulso et al. (2024) and Villa & Pizarro (2025) show that digital skills—including technical know-how, digital literacy, and openness to new technologies—help leaders adapt to changes and improve their schools. In places where technology access isn't equal, building digital skills is even more important. Technical skills let leaders use digital platforms for communication and research, digital literacy helps them judge the quality of online information, and a high rate of adopting new technology keeps their schools up to date.

Using data to make decisions is also vital. When school leaders regularly collect and analyse data, they can spot problems early, make better choices, and improve student learning. Fernandes (2023) and Ming et al. (2024) found that schools using data well are better at closing achievement gaps and making sure resources are used wisely. The frequency of data use, how well data is integrated from different sources, and involving

stakeholders in the process all make data-driven decision-making more effective and transparent.

These studies support the idea that strong networks, good digital skills, and smart use of data all help school leaders become better at using research to guide their schools. By focusing on these areas, school leaders in Valencia City and Bukidnon can become more effective, even when facing tough challenges. This study aims to show how strengthening these three areas can help build stronger, research-ready school leaders who can make a real difference for students and teachers, even in difficult situations student learning. Research supports this, showing that schools that use data well are better at closing achievement gaps and making sure resources are used wisely.

1.1 Statement of the Problem

This study will determine the research capability of school leaders by looking into their Networking Opportunities, Digital Proficiency, and Data-Driven Decision Making. Specifically, it sought answers to the following questions:

1. What is the assessment of school leaders on the use of Networking Opportunities in terms of:
 - a. Frequency of networking,
 - b. Network diversity,
 - c. Network engagement?
2. What extent of digital proficiency do school leaders have in the following dimensions:
 - a. Technical skills,
 - b. Digital literacy,
 - c. Adoption rate?
3. What is the school leaders' attitude on the use of data-driven decision-making in terms of:
 - a. Data use frequency,
 - b. Data integration,
 - c. Stakeholder engagement?
4. What is the level of school leaders' research capability?

5. Do the following variables, networking opportunities, digital proficiency and data-driven decision making, singly or in combination, correlate to the research capability of school leaders?
6. Which of the independent variables best predict school leaders’ research capability?

The following null hypotheses is formulated for testing at 0.05 percent level of significance.

Ho1: There is no significant relationship between the research capability of school leaders to the networking opportunities, digital proficiency, and data-driven decision making.

Ho2: There is no variable that predict the research capability of school leaders.

II. MATERIALS AND METHODS

A. Research Design

This study used a descriptive-correlational, non-experimental quantitative design to examine the relationships among networking opportunities, digital proficiency, and data-driven decision making in predicting the research capability of public-school leaders. Data were collected from 230 school leaders in the Division of Valencia City and selected districts of Southern Bukidnon using adapted survey questionnaires, administered both online and in print. Descriptive statistics summarized the participants’ skills and experiences, while path analysis was employed to identify and quantify the direct and indirect effects of the key variables on research capability. This approach allowed the study to determine which factors most strongly predict school leaders’ research capability without manipulating any variables.

B. Locale of the Study

The research was conducted in two phases within Bukidnon province. The pilot phase took place in the Division of Bukidnon, chosen for its proximity to the researcher and suitability for testing and refining the research instruments. The main phase focused on public schools in the Division of Valencia City,

including selected schools in the southern districts of Bukidnon. This area was purposefully selected due to its diverse educational settings, ranging from urban centers to remote rural communities, and the unique challenges faced by its school leaders. By targeting all school leaders within these institutions, the study was able to capture a broad range of perspectives, practices, and capabilities related to networking opportunities, digital proficiency, and data-driven decision making. This setting provided a rich context for exploring how these factors influence research capability of school leaders.

C. Research Instruments

Research Capability

Based on the framework proposed by Dum Dumaya, D. B. (2021) and Oracion, E. G., & Dizon, R. C. (2019), here is a comprehensive survey questionnaire designed to evaluate the Research Capability of School Leaders. This questionnaire includes three key variables, each with ten indicators, and utilizes a 5-point Likert scale ranging from "Strongly Agree" to "Strongly Disagree."

Level	Range	Descriptive Rating	Descriptive Interpretation
5	4.51-5.00	Strongly agree	Very Highly Capable
4	3.51-4.50	Agree	Highly Capable
3	2.51-3.50	Moderately Agree	Capable
2	1.51-2.50	Disagree	Slightly Capable
1	1.00-1.50	Strongly Disagree	Not Capable

Networking Opportunities

Part II of the questionnaires based on the framework proposed by Reyes, L. M., Garcia, P. T., & Villanueva, J. R. (2021) and Capulso et al. (2024), here is a comprehensive survey questionnaire designed to evaluate the Networking Opportunities of School Leaders. This questionnaire includes three key variables, each with ten indicators, and utilizes a 5-point Likert scale ranging from "Strongly Agree" to "Strongly Disagree."

Level	Range	Descriptive Rating	Descriptive Interpretation
5	4.51-5.00	Strongly agree	Very Highly Connected
4	3.51-4.50	Agree	Highly Connected
3	2.51-3.50	Moderately Agree	Connected
2	1.51-2.50	Disagree	Slightly Connected
1	1.00-1.21	Strongly Disagree	Not Connected

Part III of the questionnaires based on the framework proposed by Ertmer & Ottenbreit-Leftwich, (2010), here is a comprehensive survey questionnaire designed to evaluate the Digital Proficiency of School Leaders. This questionnaire includes three key variables, each with ten indicators, and utilizes a 5-point Likert scale ranging from "Strongly Agree" to "Strongly Disagree."

Level	Range	Descriptive Rating	Descriptive Interpretation
5	4.51-5.00	Strongly agree	Very Highly Proficient
4	3.51-4.50	Agree	Highly Proficient
3	2.51-3.50	Moderately Agree	Proficient
2	1.21-2.50	Disagree	Slightly Proficient
1	1.00-1.20	Strongly Disagree	Not Proficient

Part IV based on the framework proposed by Gadia (2023), here is a comprehensive survey questionnaire designed to evaluate Data-Driven Decision Making of School Leaders. This questionnaire includes three key variables, each with ten indicators, and utilizes a 5-point Likert scale ranging from "Strongly Agree" to "Strongly Disagree."

Level	Range	Descriptive Rating	Descriptive Interpretation
5	4.51-5.00	Strongly agree	Very Highly Adoptive
4	3.51-4.50	Agree	Highly Adoptive
3	2.51-3.50	Moderately Agree	Adoptive
2	1.51-2.50	Disagree	Slightly Adoptive
1	1.00-1.50	Strongly Disagree	Not Adoptive

D. Statistical Analysis

The data will gather from the questionnaire then calculate and analyze using the statistical methods.

Descriptive statistics were used to determine the levels of networking opportunities, digital proficiency, and data-driven decision making on research capability of school leaders.

Pearson-Product-Moment Correlation (Pearson r) will employ to determine the magnitude of relationship between networking opportunities in terms of; frequency of networking, network diversity, and network engagement, digital proficiency in terms of technical skills, digital literacy, and adoption rate and data-driven decision making in terms of data use frequency, data

integration, and stakeholder engagement, and research capability of school leaders.

Stepwise multiple linear regression will utilize to ascertain which of the variables best predicts research capability of school leaders.

E. Networking Opportunities

Table 1 show the summary of mean scores of networking opportunities, the two highest mean scores were observed in Frequency of Networking (4.45) and Network Engagement (4.40), both of which fall under the qualitative interpretation of "Very High Networking Opportunities." On the other hand, the lowest mean score was recorded for Network Diversity at 4.12, which is still interpreted as "High Networking Opportunities".

TABLE I
Summary of Mean Scores of Networking Opportunities

SUB-VARIABLES	MEAN	QUALITATIVE INTERPRETATION
Frequency of Networking	4.4587	Very High Connected
Network Diversity	4.1257	High Connected
Network Engagement	4.4025	Very High Connected
Overall Mean	4.3289	Very High Connected

Range	Qualitative Interpretation
1.00-1.80	Very Low Connected
1.81-2.60	Low Connected
2.61-3.40	Moderately Connected
3.41-4.20	High Connected
4.21-5.00	Very High Connected

The summary of mean scores for networking opportunities shows that respondents experience very high opportunities across multiple dimensions. Frequency of networking received the highest mean score of 4.45, indicating that respondents frequently engage in networking activities. Network engagement also scored very high at 4.40, reflecting active participation and meaningful interaction within professional networks. Although network diversity scored slightly lower at 4.12, it still represents a high level of opportunity, suggesting respondents maintain connections across varied groups and sectors. The overall mean of 4.32 confirms that respondents generally perceive their networking opportunities as very high. This strong engagement across frequency, diversity, and participation highlights a robust networking

environment that likely supports professional growth, knowledge exchange, and collaboration.

These findings align with existing research emphasizing the vital role of comprehensive networking in professional development. Dela Cruz and Santos (2019) found that Filipino educators who actively participate in diverse and frequent networking report improved teaching strategies and leadership skills. Similarly, Reyes et al. (2021) demonstrated that engagement in professional learning communities and social media networks provides Filipino teachers with timely access to educational innovations and peer support, enhancing instructional effectiveness. The Department of Education (2020) also promotes networking through programs encouraging collaboration across regions and disciplines, recognizing its contribution to educational quality and reform.

Supporting these results, Bautista and Manalo (2022) reported that Filipino educators involved in frequent and diverse networking exhibit greater adaptability and responsiveness to educational reforms due to enhanced access to resources and peer support. Lanuza and Garcia (2023) linked participation in online professional learning communities to improved instructional practices and increased collaboration across regions. The Philippine Teachers’ Network (2024) highlights that sustained networking, both face-to-face and online, significantly contributes to professional development and collective problem-solving among Filipino educators.

In summary, these studies affirm that high-frequency, diverse, and engaged networking environments are essential for Filipino educators to thrive in the dynamic educational landscape.

Table 2 shows the overall mean score for digital proficiency is 4.13, which is interpreted as "High Digital Proficiency".

Among the sub-variables, Adoption Rate stands out with the highest mean score of 4.45, reflecting a "Very High Digital Proficiency." In contrast, Technical Skills has the lowest mean score

of 3.94, although it is still rated as "High Digital Proficiency". Digital Literacy falls in between, with a mean of 4.02, also rated as high, showing solid understanding and application of digital knowledge.

TABLE 2
Summary of Mean Scores of Digital Proficiency

SUB-VARIABLES	MEAN	QUALITATIVE INTERPRETATION
Technical Skills	3.9417	High Proficient
Digital Literacy	4.0217	High Proficient
Adoption Rate	4.4504	Highly Proficient
Overall Mean	4.1379	High Proficient

Range	Qualitative Interpretation
1.00-1.80	Very Low Proficient
1.81-2.60	Low Proficient
2.61-3.40	Moderately Proficient
3.41-4.20	High Proficient
4.21-5.00	Highly Proficient

The summary of mean scores shows that respondents demonstrate a high level of competence across key digital skills. Technical skills and digital literacy both scored above 3.90, reflecting strong abilities in operating digital tools, understanding ethical use, and evaluating online information. Adoption rate received the highest mean of 4.45, indicating a very high enthusiasm and proactive engagement in integrating new technologies aligned with educational goals. The overall mean of 4.13 suggests that respondents possess comprehensive digital proficiency, equipping them to effectively use technology, support innovation, and adapt to the evolving demands of digital learning environments.

These findings align with research highlighting the importance of combining technical skills, digital literacy, and active technology adoption for effective educational leadership and teaching (Ertmer & Ottenbreit-Leftwich, 2010; Ng, 2012; Hew & Brush, 2007). Technical competence builds confidence in using digital tools, while digital literacy fosters critical thinking and ethical technology use. Proactive adoption, supported by ongoing professional development, is essential to keep pace with rapid technological changes and ensure alignment with educational goals.

Numerous studies support these insights. Dela Cruz and Santos (2019) found that Filipino educators with strong digital proficiency integrate ICT more effectively, leading to better student engagement. Reyes et al. (2021) emphasize continuous technology adoption and digital literacy as key to adapting to blended and online learning. The Department of Education’s (2020) targeted training programs reflect a national commitment to building digital skills as a foundation for educational quality and innovation.

Recent experiences during the pandemic accelerated technology use, enhancing educators’ digital skills and teaching effectiveness, as shown in a study by Velasco et al. (2024). National policies, such as the 2022–2030 Basic Education Development Plan, highlight EdTech as a critical tool for expanding access and improving learning outcomes. Reports from UNESCO (2025) and the World Bank (2023) further emphasize the importance of aligning technology adoption with educational goals and professional development while addressing challenges like the digital divide.

Together, these studies demonstrate that Filipino educators are increasingly embracing digital tools and innovations, supported by policy and capacity-building efforts. This foundation is vital for sustaining high digital proficiency and effective technology integration in education.

Table 3 showing the summary of mean scores of data-driven decisions making, reveals a very high commitment to using data effectively. The overall mean score of 4.44 indicates a strong emphasis on data utilization across various aspects.

The sub-variables, Stakeholder Engagement stands out with a mean of 4.67, reflecting a proactive approach in involving stakeholders in the decision-making process. Data Use Frequency also demonstrates a high level of commitment, with a mean of 4.43, indicating regular and systematic use of data to inform decisions. Conversely, Data Integration has a mean score of 4.23, suggesting that while it is valued, there may be opportunities for

improvement in integrating data across different sources.

TABLE 3

Summary of Mean Scores of Data-Driven Decision Making

SUB-VARIABLES	MEAN	QUALITATIVE INTERPRETATION
Data Use Frequency	4.4378	Very High Adoptive
Data Integration	4.2317	Very High Adoptive
Stakeholder Engagement	4.6796	Very High Adoptive
Overall Mean	4.4497	Very High Adoptive

Range	Qualitative Interpretation
1.00-1.80	Very Low Adoptive
1.81-2.60	Low Adoptive
2.61-3.40	Moderately Adoptive
3.41-4.20	High Adoptive
4.21-5.00	Very High Adoptive

The summary of mean scores shows that respondents demonstrate a strong competence and commitment to data-driven decision making. Stakeholder engagement stands out with a very high mean score of 4.67, indicating that respondents highly value involving various stakeholders in data processes to improve the quality and credibility of decisions. Data use frequency (4.43) and data integration (4.23) also received high scores, reflecting consistent use of data and the ability to combine different data sources to guide educational decisions. The overall mean score of 4.4497 highlights a culture of evidence-based practice characterized by frequent data use, thorough integration, and inclusive collaboration. This approach supports informed leadership and aims to improve educational outcomes.

These findings align with research emphasizing that effective data-driven decision making involves not only regular data use but also integrating diverse data and engaging stakeholders to build trust and shared ownership (Mandinach & Gummer, 2016; Bryson, Crosby, & Bloomberg, 2014). Locally, Dela Cruz and Santos (2019) found that Filipino school leaders who actively involve stakeholders and integrate multiple data sources are more effective in managing programs and improving student performance. Reyes et al. (2021) highlight that frequent data use combined with stakeholder collaboration fosters a culture of shared

responsibility and better decisions in Philippine schools. The Department of Education’s (2020) Data Governance Framework supports these practices by encouraging schools to adopt comprehensive data-driven approaches.

These studies show that successful data-driven decision making depends on quality data, stakeholder collaboration, and ongoing capacity building. This holistic approach helps translate data into meaningful improvements in education.

Table 4 shows the level of research capability of school leaders with overall mean score of 4.20 indicates a high level of capability.

The highest mean score of 4.34 demonstrates a very high positive attitude towards the value of educational research. This positive mindset is crucial for fostering a research-oriented culture within schools. The second highest indicator with a score of 4.32 reflects a proactive approach in blending personal ideas with expert insights when writing research. While, the lowest mean score of 4.05, related to proficiency in interpreting statistical data from research studies. All other indicators highlight a proactive in leveraging research capabilities of school leaders.

I effectively use research to inform policy decisions at the school level.	4.2217	Highly Capable
I actively participate in research-focused professional development.	4.1957	High Capable
I can effectively evaluate the credibility of research sources.	4.1783	High Capable
I can effectively use research to support instructional leadership decisions.	4.1783	High Capable
I can show proficiency in using research to evaluate program effectiveness.	4.1739	High Capable
I effectively communicate research findings to staff and stakeholders	4.1391	High Capable
I can show competence in designing small-scale research projects.	4.1391	High Capable
I demonstrate the ability to interpret and apply research findings in context.	4.1348	High Capable
I frequently access research through professional associations and conferences.	4.1261	High Capable
I demonstrate the ability to synthesize findings from multiple research studies.	4.1217	High Capable
I show proficiency in interpreting statistical data from research studies.	4.0565	High Capable
Overall Mean	4.2035	High Capable

Range	Qualitative Interpretation
1.00-1.80	Very Low Capable
1.81-2.60	Low Capable
2.61-3.40	Moderately Capable
3.41-4.20	High Capable
4.31-5.00	Highly Capable

TABLE 4

Level of Research Capability of School Leaders

INDICATORS	MEAN	QUALITATIVE INTERPRETATION
I demonstrate positive attitudes about the value of educational research.	4.3435	Highly Capable
I consistently blend my ideas with those of experts in the field when writing research.	4.3217	Highly Capable
I practice searching the internet for research information efficiently.	4.2913	Highly Capable
I effectively use research to address specific challenges in the school context.	4.2565	Highly Capable
I demonstrate the ability to foster a research-oriented culture in the schools.	4.2522	Highly Capable
I demonstrate the ability to identify research-based best practices.	4.2478	Highly Capable
I successfully apply research findings to inform my decision-making.	4.2391	Highly Capable
I effectively use research to inform school improvement planning.	4.2304	Highly Capable
I demonstrate the ability to translate research into practical strategies.	4.2217	Highly Capable

The data reveal that school leaders demonstrate a strong overall proficiency and positive attitude toward educational research, with an overall mean score of 4.20, indicating a high level of research capability. Respondents show very high competence in valuing educational research, integrating their ideas with experts’, and efficiently searching for research information online, with mean scores above 4.25. They also exhibit strong skills in applying research to address school challenges, fostering a research-oriented culture, and identifying best practices, underscoring their commitment to evidence-based leadership. While most indicators fall within the "Very High Research Capability" range, some areas-such as participation in research-focused professional development, evaluating research credibility, communicating findings, and designing small-scale research projects-are rated slightly lower but still within the "High Research Capability" category. This suggests room for growth in deeper engagement with research processes and

dissemination. Notably, respondents show confidence in interpreting statistical data, reflecting strength in handling quantitative information.

These findings align with research emphasizing that effective school leaders not only value educational research but actively apply it to improve decision-making, policy formulation, and instructional leadership (Leithwood, Harris, & Hopkins, 2020). Mandinach and Gummer (2016) highlight research literacy-including skills in searching, evaluating, and synthesizing research-as essential for informed leadership. The ability to interpret statistical data is critical for translating complex findings into actionable strategies (Datnow & Hubbard, 2016). Relevant studies support these insights. Dela Cruz and Santos (2019) found that Filipino school leaders who integrate research into their practices are more effective in policy and program implementation. Reyes et al. (2021) emphasize that fostering a research-oriented culture enhances collaborative problem-solving and innovation among educators.

Some cautionary perspectives note that possessing research skills alone does not guarantee effective application. Contextual factors like school culture, resources, and leadership support influence how research is used (Spillane & Coldren, 2011). Limited time and access to updated resources can hinder deep engagement with research (Delos Reyes et al., 2023).

The literature affirms the importance of strong research capability for school leaders and its positive link to school improvement. It also highlights the need for continuous capacity building, contextual support, and critical reflection to ensure research effectively informs leadership practice.

F. Correlation of the Variables

TABLE 5

The table shows the Correlation of Networking opportunities, Digital Proficiency, Data-Driven Decision Making and Research Capability of School Leaders

Independent Variables	Pearson Coefficient	(r Probability value) (P-Value)
Networking Opportunities		
Frequency of Networking	.458	<.001**
Network Diversity	.446	<.001**
Network Engagement	.458	<.001**
Digital Proficiency		
Technical Skills	.542	<.001**
Digital Literacy	.557	<.001**
Adoption Rate	.557	<.001**
Data-driven Decision Making		
Data Use Frequency	.439	<.001**
Data Integration	.458	<.001**
Stakeholder Engagement	.416	<.001**

** Correlation is significant at the 0.01 level (2-tailed)

Correlation is significant at 0.01 level (2-tailed Test)

b. listwise N=230

The correlation analysis reveals significant positive relationships among networking opportunities, digital proficiency, data-driven decision making, and the research capability of school leaders, all significant at the 0.01 level. Specifically, aspects of networking-including frequency, diversity, and engagement-show moderate positive correlations with research capability, indicating that school leaders who actively build broad and meaningful professional networks tend to demonstrate stronger research skills. These networks enhance access to knowledge and collaborative opportunities, which support the development of research competence. Digital proficiency components such as technical skills, digital literacy, and technology adoption exhibit even stronger positive correlations with research capability. Leaders with advanced digital skills and a proactive approach to adopting new technologies are better equipped to conduct, interpret, and apply educational research effectively. This underscores the critical role of digital competence in accessing research resources, analyzing data, and making

informed decisions in today’s technology-driven educational environments.

Data-driven decision making-including frequent data use, integration of multiple data sources, and stakeholder engagement-also correlates positively with research capability, though with slightly lower coefficients compared to digital proficiency. School leaders who consistently use and integrate diverse data sources while involving stakeholders in decision-making processes tend to have stronger research capabilities. This highlights the importance of evidence-based leadership that combines data analysis with collaborative interpretation to translate findings into actionable strategies. These findings suggest that networking, digital proficiency, and data-driven decision making are interconnected factors that together enhance school leaders’ research capability. Among these, digital proficiency shows the strongest relationship, emphasizing the essential role of digital skills in modern educational leadership. Strengthening these competencies is therefore crucial for fostering research-informed leadership that improves school outcomes.

These results align with existing literature. Mandinach and Gummer (2016) emphasize digital literacy as foundational for educators to access, evaluate, and apply research effectively. The positive association between networking and research capability supports Bryson, Crosby, and Bloomberg’s (2014) view that collaborative networks foster knowledge exchange and innovation. The link between data-driven decision making and research skills echoes Datnow and Hubbard’s (2016) findings on the role of effective data use in evidence-based school improvement. Local studies further reinforce these insights. Dela Cruz and Santos (2019) found that Filipino school leaders with broad professional networks and strong digital skills are more effective in integrating research into school improvement initiatives. Reyes et al. (2021) highlight that participatory data use involving stakeholders enhances leaders’ research application and decision-making capabilities. However, challenges such as limited access to digital

resources and professional development opportunities remain barriers to maximizing research capability (Department of Education, 2020).

For school leaders and policymakers, these findings underscore the importance of investing in professional networking opportunities, digital skill development, and data literacy training. Building these interconnected competencies will empower leaders to harness research more effectively, fostering evidence-based practices that drive meaningful educational improvements.

G. Regression of the best predictor variables of School Leaders’ Research Capability

TABLE 6

The table show the Predictor variables of School Leaders’

Research Capability				
Model	Unstandardized Coefficients B	Standardized Coefficients Beta	t	Sig.
(Constant)	.913	.411	2.220	.027
Technical Skills	.251	.250	3.334	.001
R = 0.584 R ² = 0.342 F = 12.680 p-value = .000				

The regression analysis clearly identifies technical skills as a significant predictor of school leaders’ research capability. The results show that technical skills have a positive and statistically significant effect (B = 0.251, p = .001) on research capability, meaning that for every one-unit increase in technical skills, the research capability score increases by 0.251 units, holding other factors constant. The moderate effect size (Beta = 0.250) and an R² value of 0.342 indicate that technical skills explain about 34% of the variance in research capability among school leaders. The model as a whole is statistically significant (F = 12.680, p < .001), confirming that technical skills reliably contribute to predicting research capability.

These findings highlight that school leaders with stronger technical skills—such as proficiency in digital tools, data analysis, and research databases—are more capable of conducting, interpreting, and applying educational research. This underscores the importance of developing and strengthening technical skills as a pathway to more effective, evidence-based leadership in schools.

The significance of technical skills is well-supported by research. Mandinach and Gummer (2016) emphasize that digital literacy and technical proficiency are foundational for school leaders to access, interpret, and apply research, fostering evidence-based decision making. Datnow and Hubbard (2016) further argue that technical skills enable leaders to translate research findings into actionable strategies that improve school outcomes. Local studies echo these findings; Dela Cruz and Santos (2019) found that Filipino school leaders' technical competencies significantly contribute to their research engagement, while Reyes et al. (2021) highlight that developing technical skills is essential for fostering a research-oriented culture in schools.

However, it is important to note that while technical skills are critical, they should be developed alongside other supports such as professional development, collaborative practices, and access to resources. As Spillane and Coldren (2011) suggest, technical skills alone do not guarantee effective research application; organizational culture and ongoing training also play vital roles.

In summary, the analysis demonstrates that technical skills are a key driver of research capability among school leaders. Investing in continuous professional development and institutional support for technical skill-building will further strengthen leaders' capacity to engage in and apply educational research for school improvement.

III. CONCLUSIONS AND RECOMMENDATIONS

A. Conclusion

This study concludes that technical skills are a significant and reliable predictor of school leaders'

research capability. School leaders who demonstrate proficiency in digital tools, data analysis, and research-related technologies are notably more effective in conducting, interpreting, and applying educational research. While technical skills account for a substantial portion of research capability, the findings also highlight that these skills must be supported by ongoing professional development, a collaborative school culture, and access to necessary resources. The evidence underscores that technical competence is not only essential for individual leadership effectiveness but also for fostering a culture of evidence-based practice and continuous improvement within schools. The null hypothesis, which states that “there is no variable that predict the research capability of school leaders” was rejected.

B. Recommendations

If you are a school leader, I encourage you to actively seek opportunities to enhance your technical skills, especially in digital literacy, data management, and research methods. Participate in professional development programs, collaborate with peers, and leverage digital platforms to stay current with educational research and technology trends.

For policymakers and educational administrators, consider prioritizing investments in sustained training, digital infrastructure, and access to research resources for school leaders and teachers. Creating an environment that values continuous learning, collaboration, and innovation will empower leaders to make informed, research-based decisions that drive school improvement.

For future researchers, this study provides a solid foundation for further exploration of the relationship between technical skills and research capability in educational leadership. You may wish to investigate additional variables, such as organizational culture or mentoring, that could further strengthen research capability. Expanding the scope to include different educational contexts or longitudinal studies may also yield valuable insights. Your work can help shape

more targeted interventions and policies that support the ongoing professional growth of school leaders.

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