

Attitude and Research Capabilities of Public Elementary School Teachers of Sanchez Mira District: Input for a Training Plan

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Abstract

This study determined the research capability and attitudes toward research of public elementary school teachers in Sanchez Mira District, Cagayan during School Year 2024–2025 as basis for a research capability enhancement program. The study was conceptually anchored on the view that teachers' research capability is shaped by personal profile, professional profile, research exposure, and attitudes toward research. Using a descriptive-correlational research design, the study involved 100 public elementary school teachers from 19 schools selected through simple random sampling proportional to school size. Data were gathered using a validated researcher-made questionnaire and analyzed using descriptive statistics, t-test, one-way ANOVA, and Pearson's r correlation through SPSS. Findings showed that the respondents were generally experienced and academically progressing but had limited research training and low research engagement. Their overall research capability was mostly Fair to Satisfactory, with weaknesses in research concepts and terminologies, research design and methodology, ethics, reporting, limitations, and application of research, while data analysis and interpretation appeared relatively stronger. Teachers showed generally positive attitudes toward research, particularly in interest, perceived usefulness, confidence, and self-efficacy. Research capability differed significantly according to sex, highest educational attainment, and number of research projects conducted, while attitudes toward research were significantly related to data analysis and interpretation and to ethics, reporting, and limitations. The study concludes that positive attitudes alone are insufficient without structured training, mentoring, and actual research experience. It recommends the implementation of PROJECT INSPIRE to strengthen teachers' research competence and promote a sustainable research culture. The study supports SDG 4 on Quality Education, SDG 8 on Decent Work and Economic Growth, SDG 9 on Innovation, and SDG 17 on Partnerships. Its sustainability impact lies in strengthening institutional capacity, teacher professional development, evidence-based instruction, and locally responsive school improvement.

Keywords: Research Capability, Elementary Teachers, Research Competency, Professional Development, Project INSPIRE

1. Introduction

Teachers' research capability is increasingly essential in Philippine basic education as schools pursue evidence-based instruction, professional growth, and improved student outcomes. Within the K-12 reform context, teachers are expected not only to deliver instruction but also to investigate classroom issues, interpret evidence, and apply findings to improve teaching and learning. This study focuses on the research capability and attitudes toward research of public elementary school teachers in Sanchez Mira District, Cagayan, during School Year 2024–2025, with the goal of informing a research capability enhancement program.

The Philippine education system continues to implement reforms through the K-12 program, which emphasizes competency-based learning, evidence-based practices, and national development. In this context, teacher research capability supports systematic inquiry into classroom problems and enables educators to improve instructional practices through data-informed decision-making. Research capability involves understanding research concepts, designing appropriate methodologies, analyzing and interpreting data, observing ethical standards, reporting findings, and applying results to educational problems. These competencies are considered essential in school improvement (Kusanagi, 2004). For public elementary school teachers, research engagement is linked to professional growth, instructional innovation, and improved classroom responsiveness. Teachers who can identify problems, collect and interpret data, and translate findings into practice are better positioned to address learner needs and contribute to school development. In Sanchez Mira District, Cagayan, research capability is especially important because teachers work in local school contexts where evidence-based solutions can support teaching effectiveness despite practical constraints.

Existing literature shows that teacher profile variables influence research capability. Age, sex, civil status, educational attainment, length of service, plantilla position, research training, and research involvement have been associated with teachers' motivation and ability to conduct research. Some studies indicate that younger teachers tend to show higher research productivity and motivation than older teachers (Caingcoy, 2020; Journal of Psychology and Pedagogy, 2022). Higher educational attainment, particularly graduate studies and specialized training is associated with stronger competence in research design, data analysis, and reporting (Tamban & Maningas, 2020; Padua-Castañeda and Manalang, 2023). Teachers with permanent positions or higher ranks may also have greater access to institutional support for research (Caingcoy, 2020). Research-related seminars, workshops, mentoring, and motivation are repeatedly identified as important contributors to teacher research capability. Participation in research training improves technical skills and strengthens attitudes toward research (LPU Batangas, 2022; Otid-Vallescas and Oxillo-Oted, 2023). Motivation to write research and mentoring support are also strong predictors of research capability (Caingcoy, 2020; Journal of Psychology and Pedagogy, 2022). Active involvement in research planning, writing, presentation, and publication further strengthens competence (Otid-Vallescas and Oxillo-Oted, 2023). Studies also report that teachers generally possess moderate research capability. They may be able to conceptualize research problems, conduct literature reviews, and formulate research questions, but often encounter difficulty in developing conceptual frameworks, selecting statistical tools, and analyzing or presenting data (International Journal of Research in Education and Science [IJRES], 2024; IJRES, 2024; Philippine Archive, 2020). Teachers with higher qualifications and senior positions tend to demonstrate stronger research competence (Manila et al., 2022; Caingcoy, 2020), while participation in seminars and workshops can further improve capability (Manila et al., 2022). However, limited knowledge of research processes, ethical issues, and insufficient institutional support remain barriers (Journal of Psychology and Pedagogy, 2022). Among teacher educators, research capability has also been found to be average, suggesting the need for continuous professional development across levels of the education system (Amanonce et al., 2025). Teachers' attitudes toward research affect their engagement and productivity. Many teachers recognize research as useful for professional development, curriculum improvement, assessment, and student learning. Günyel and Bilgivar (2023) found that teachers view educational research as necessary, while Laguador & Soverano, 2023 reported that elementary teachers show positive attitudes toward research despite experiencing research-related anxiety. Similar findings show that educators may value research while also perceiving it as difficult or burdensome (Azmi et al., 2024). Positive confidence and self-efficacy are linked to greater willingness to integrate research into teaching practice (Ilhan, 2021), while teacher attitudes also affect student motivation and the learning environment, as noted by Tang and Hu (2022). Institutional alignment, resources, and support can reduce anxiety and strengthen perceptions of research usefulness (Azmi et al., 2024; Laguador & Soverano, 2023). The relationship between attitude and research capability is complex. Teachers may recognize research as professionally valuable but still experience anxiety, limited confidence, or difficulty in conducting research (Caingcoy, 2020; Laguador & Soverano, 2023). Positive beliefs and emotional responses toward research are associated with intentions to conduct future research (Abun et al., 2021). Higher self-efficacy and confidence support persistence in research activities (Abun et al., 2021; Padua-Castañeda and Manalang, 2023), while negative attitudes can hinder productivity (Azmi et al., 2024). Institutional support, mentoring, and professional development are therefore critical in improving both attitudes and research capability (Manzoor et al., 2023; Papanastasiou, 2005). Professional development is another major theme in the literature. Effective professional development is content-focused, collaborative, active, sustained, supported by coaching, and grounded in feedback and reflection (Darling-Hammond, Hyler, & Gardner, 2017). Research-based and job-embedded professional development improves instructional practice and teachers' confidence in applying new methods (Duran, Brunvand, Ellsworth, & Şendağ, 2012). Teacher research can also function as professional learning by allowing educators to investigate classroom realities and improve practice through self-directed inquiry (Leaman & DiLucchio, 2023). Collaborative action research, peer support, and specialist guidance contribute to reflective practice and improved student outcomes (Cordingley, 2013; Opfer & Pedder, 2011).

Nationally, the Philippine basic education system promotes evidence-based practice through reforms and DepEd policies that encourage research-informed teaching and school improvement. Research capability supports teachers in responding to changing educational demands and improving classroom facilitation. Locally, Sanchez Mira District, Cagayan, provides the immediate context for examining the research capability of public elementary school teachers. The study addresses the need to understand teachers' personal and professional profiles, research competencies, and attitudes toward research in a rural district setting. The local concern is that many elementary teachers have limited research engagement and may not fully recognize how systematic inquiry can improve instruction and productivity. Globally, educational systems increasingly value teacher-led inquiry, reflective practice, and evidence-based decision-making. The literature suggests that research-capable teachers are better prepared to innovate, address classroom problems, and contribute to educational improvement, making teacher research capability relevant beyond the local district.

The study is conceptually anchored on the view that teacher research capability is shaped by personal profile, professional profile, research exposure, and attitudes toward research. Research capability is examined through key domains: research concepts and terminologies, research design and methodology, data analysis and interpretation, ethics, reporting and limitations, and application, problem-solving, and creating research. The framework also recognizes that teacher attitudes—interest and engagement, perceived value and usefulness, and confidence and self-efficacy—may influence

research capability. Positive attitudes can encourage teachers to participate in research, persist through challenges, and apply findings to improve practice. However, technical competence still requires formal training, mentoring, and hands-on research experience. This makes professional development and institutional support central to strengthening teachers' research capability.

Although many studies have examined factors affecting student performance and teacher professional development, limited attention has been given to the research capability of public elementary school teachers in rural Philippine districts such as Sanchez Mira, Cagayan. Existing literature also shows that many teachers have only moderate research competence and face challenges in research design, data analysis, ethics, reporting, and application. These gaps justify the need to assess teachers' research capability, determine how their profiles and attitudes relate to their competence, and develop a targeted enhancement program. This study therefore aimed to determine the research capability of public elementary school teachers in Sanchez Mira District for School Year 2024–2025. Specifically, it examined respondents' personal and professional profiles, their capability across major research domains, their attitudes toward research, differences in capability when grouped by profile variables, the relationship between attitudes and capability, and the enhancement program that may strengthen teachers' research skills.

This study aligns most directly with SDG 4 – Quality Education because it focuses on strengthening teachers' research capability to support evidence-based instruction, professional development, and improved student learning. By helping teachers investigate classroom issues and apply findings to practice, the study contributes to educational quality and continuous improvement. It also relates to SDG 8 – Decent Work and Economic Growth through its emphasis on teacher professional development, capacity-building, and improved workplace competence. Strengthening research skills supports teachers' professional growth and enhances their ability to contribute productively to school improvement. The study further connects with SDG 9 – Industry, Innovation and Infrastructure because it promotes educational innovation through systematic inquiry, problem-solving, and the application of research findings. Teacher-led research can support instructional innovation and locally responsive solutions. Finally, the study supports SDG 17 – Partnerships for the Goals because the proposed enhancement of research capability depends on collaboration among teachers, school heads, research mentors, supervisors, and DepEd officials. The emphasis on mentoring, institutional support, and professional networks reflects the importance of partnership in sustaining a research culture.

The study contributes to educational sustainability by strengthening teachers' ability to use research for continuous instructional improvement. Research-capable teachers can identify classroom problems, generate evidence, and implement informed solutions that support long-term educational quality. It also contributes to institutional sustainability by emphasizing professional development, mentoring, resource provision, and school-based research culture. These supports can help schools sustain teacher engagement in research beyond one-time training activities. The study has relevance to innovation and digital sustainability because research capability includes data analysis, interpretation, reporting, and the use of evidence to improve practice. These competencies support more systematic and innovative approaches to teaching and school improvement. It further supports socio-economic sustainability by improving teacher competence and professional productivity. When teachers are equipped to conduct and apply research, they can contribute more effectively to learner development, school performance, and community educational outcomes. Finally, the study contributes to policy and governance sustainability by generating local evidence that can inform training plans, professional development priorities, and institutional support systems for public elementary teachers in Sanchez Mira District.

2. Material and methods

2.1 Research Design

The study used a descriptive-correlational research design. The descriptive component profiled the respondents according to age, sex, civil status, highest educational attainment, plantilla position, length of service, research-related seminars or trainings attended, and number of research studies conducted. It also assessed their research capabilities in terms of research concepts and terminologies, research design and methodology, data analysis and interpretation, ethics, reporting and limitations, and application, problem-solving, and creating research. The correlational component examined differences in research capability when respondents were grouped according to profile variables and determined the relationship between teachers' attitudes toward research and their level of research capability.

2.2 Locale of the Study

The study was conducted in Sanchez Mira District, Cagayan. It covered public elementary schools within the district during School Year 2024–2025.

2.3 Respondents of the Study

The respondents were public elementary school teachers from Sanchez Mira District, Cagayan. They assessed their own research capabilities and attitudes toward research using the survey questionnaire prepared for the study.

2.4 Sample and Sampling Procedure

The study involved 100 public elementary school teachers from 19 schools in Sanchez Mira District. The respondents were selected through simple random sampling proportional to school size to ensure representation across the participating schools.

2.5 Research Instrument

The study used a three-part researcher-made survey questionnaire. The instrument gathered data on the respondents' profiles, research capabilities, and attitudes toward research. It was validated through expert review and pilot testing to ensure reliability and validity within the context of the study.

2.6 Data Gathering Procedure

Data were gathered through the administration of the researcher-made questionnaire to the selected public elementary school teachers. The respondents provided information about their demographic and professional profiles, rated their research capabilities across the identified domains, and indicated their attitudes toward research using the prepared scale.

2.7 Data Analysis Techniques

The collected responses were organized and analyzed using SPSS. Descriptive statistics, including frequencies, percentages, means, and standard deviations, were used to summarize respondents' profiles, research capability levels, and attitudes toward research. Individual scoring was applied to assess research capability, while a four-point attitude scale ranging from Highly Positive to Highly Negative was used to interpret attitudes toward research. Inferential statistics, including t-test, one-way ANOVA, and Pearson's r correlation, were used to test differences and relationships among the study variables.

3. Results and Discussion

3.1 Profile of the Respondents

3.1.1 Personal Characteristics

The respondents were mostly within the 31–40 and 41–50 age groups, each comprising 28% of the sample, with a mean age of 42.81 years. Female teachers made up 80% of the respondents, while male teachers accounted for 20%. Most respondents were married at 80%, followed by single teachers at 16% and widowed teachers at 4%. The age profile suggests that the district has a generally experienced teaching workforce, although this differs from findings that younger teachers often show higher research capability (Caingcoy, 2020). The high proportion of married respondents may indicate personal stability and support systems that can strengthen job engagement, motivation, and professional commitment (Halbesleben, 2006; Skaalvik & Skaalvik, 2011).

3.1.2 Professional Qualifications and Experience

Most respondents had pursued graduate education, with 48% having master's units, 28% being master's degree holders, and 12% having doctorate units. In terms of plantilla position, Teacher 3 was the most common rank at 52%, followed by Teacher 2 at 28%, Teacher 1 at 12%, and Master Teacher at 8%. The respondents had an average of 14.68 years in service, with 56% serving between 6 and 20 years. These findings indicate a professionally experienced and academically progressing teaching workforce. Graduate-level preparation may support deeper pedagogical knowledge and research readiness, while the limited number of Master Teachers suggests room for further professional advancement. Higher qualifications are associated with improved teaching effectiveness and research productivity (Darling-Hammond, 2000; Tamban & Maningas, 2020), while teaching experience can contribute to instructional quality and mentoring capacity (Caingcoy, 2020).

3.1.3 Research Training and Research Engagement

Research-related training was limited among the respondents. Although 52% had attended one research-related training, 24% had not attended any, while only a small proportion had attended two or more. Research engagement was also low, as 64% had not conducted any research, 32% had completed one research project, and only 4% had conducted two. These results show a clear gap between teachers' professional experience and their actual research involvement. Limited training and low research productivity may hinder the development of a research-oriented school culture and weaken teachers' capacity to use evidence for instructional improvement. This finding supports studies showing that continuous research training strengthens instructional effectiveness and scholarly productivity (LPU Batangas, 2022), while low teacher research engagement is often linked to workload, lack of mentoring, insufficient training, and personal challenges (Vergara & Sublay, 2024; Manzoor et al., 2023; Flores, 2024).

3.2 Level of Research Capability

3.2.1 Research Concepts and Terminologies

Most teachers demonstrated limited foundational research literacy. A combined 72% were rated either Fair or Poor in research concepts and terminologies, while only 12% reached the Outstanding or Very Satisfactory levels and 16% were rated Satisfactory. This result suggests that many teachers may struggle to understand research terms, conceptualize research problems, interpret scholarly literature, and communicate research ideas effectively. The finding is consistent with Manila et al. (2022), who reported that elementary teachers often encounter difficulty with research terminology and problem conceptualization, and with Caingcoy (2020), which found that limited training in core research processes contributes to low research capability.

3.2.2 Research Design and Methodology

In research design and methodology, no teacher reached the Outstanding level. Most respondents were divided between Satisfactory and Fair ratings, each representing 44%, while 8% were rated Poor and only 4% were rated Very Satisfactory. These findings indicate that teachers have moderate to limited competence in formulating research questions, selecting appropriate designs, and applying methodological procedures. This may affect the rigor, validity, and usefulness of their research outputs. Similar findings were reported by Manila et al. (2022), who found that teachers struggle with research design and methodology, and by Caingcoy (2020), which noted difficulties in experimental design, instrument development, and statistical tool selection.

3.2.3 Data Analysis and Interpretation

Teachers showed relatively stronger competence in data analysis and interpretation than in other research domains. No respondent was rated Poor, while 44% were rated Satisfactory, 36% Fair, 16% Very Satisfactory, and 4% Outstanding. This result indicates that teachers possess baseline skills in handling data but still need support in interpreting findings meaningfully and applying results to improve instruction. The finding aligns with IJERE (2025), which found that Filipino teacher educators generally show average competence in data analysis but still need development in interpretation skills. Tamban and Maningas (2020) also emphasized the need for continuous training in statistical methods and interpretation to improve research quality.

3.2.4 Ethics, Reporting, and Limitations

In ethics, reporting, and limitations, no teacher reached the Outstanding level. However, 36% were rated Very Satisfactory and 32% Satisfactory, while 16% were rated Fair and another 16% Poor. These results suggest that many teachers understand basic ethical practices, reporting expectations, and the need to acknowledge limitations, but mastery remains insufficient. Weaknesses in informed consent, confidentiality, citation practices, transparent reporting, and discussion of limitations may affect the credibility of teacher research. This supports Caingcoy (2020), which emphasized teachers' struggles with ethical issues such as informed consent and confidentiality; Manila et al. (2022), which reported difficulty in reporting findings and limitations; and the International Journal of Educational Research and Evaluation (IJERE, 2025), which found that Filipino teacher educators still require further training in ethical research practice.

3.2.5 Application, Problem-Solving, and Creating Research

No teacher achieved an Outstanding rating in applying research, problem-solving, and creating research. Nearly half of the respondents, or 48%, were rated Fair, while 24% were Very Satisfactory, 20% Satisfactory, and 8% Poor. The findings indicate that many teachers still struggle to translate research findings into practical classroom solutions or initiate original research projects. This limits their ability to use research for innovation and instructional problem-solving. The result supports Caingcoy (2020), which found that many teachers have difficulty independently applying research findings and initiating research projects, and Manila et al. (2022), which reported that teachers face challenges in research-driven problem-solving because of limited experience and inadequate training.

3.2.6 Overall Research Capability

Overall, none of the teachers achieved an Outstanding level of research capability. Only 2% were rated Very Satisfactory, 36% Satisfactory, 48% Fair, and 4% Poor, showing that most respondents had only moderate to limited research competence. This overall pattern shows a need for comprehensive capacity-building to help teachers move from basic or moderate research skills toward higher proficiency. Without sustained training, mentoring, and institutional support, teachers may remain limited in conducting rigorous research and applying evidence to school improvement. These findings are consistent with Caingcoy (2020), which found that many teachers require additional training to reach higher research competence, and Manila et al. (2022), which emphasized the importance of continuous professional development and institutional support.

3.3 Teachers' Attitudes Toward Research

3.3.1 Interest and Engagement

Teachers showed a generally positive attitude toward research in terms of interest and engagement, with a category mean of 3.12. They were highly motivated to engage in action research, recognized its value, and expressed willingness to participate when support and resources are available. This positive disposition provides a strong foundation for developing a research culture in schools. However, lower ratings in actively seeking research opportunities suggest that interest does not automatically translate into consistent participation. These findings align with education.research_capabilities (2025), which emphasized motivation and perceived value as drivers of research engagement, and Tamban and Maningas (2020), which highlighted the importance of support and capacity-building in improving research participation.

3.3.2 Perceived Value and Usefulness

Teachers also perceived action research as useful and valuable, with a category mean of 3.15. They agreed that action research supports professional development, improves teaching practices, enhances student learning, informs instructional strategies, and becomes effective when properly implemented with adequate resources. This result shows that teachers understand the practical benefits of research for classroom improvement and professional growth. However, their recognition that research depends on resources and implementation support indicates the need for institutional investment. The findings are consistent with education.research_capabilities (2025), which emphasized that perceived research value influences sustained engagement, and Tamban and Maningas (2020), which noted that teachers are more likely to adopt research when they see its usefulness in addressing classroom challenges.

3.3.3 Confidence and Self-Efficacy

Teachers reported positive confidence and self-efficacy in conducting action research, with a category mean of 3.00 in the domain results. They felt reasonably confident in designing, implementing, analyzing, and interpreting research, but also acknowledged the need for additional training and support to become fully confident. The findings suggest that teachers are willing to engage in research but still need reinforcement to conduct rigorous studies independently. This confirms the importance of professional development and mentoring in strengthening both competence and confidence. The result aligns with education.research_attitudes (2025), which emphasized self-efficacy as a motivator for sustained research engagement, and education.professional_development (2025), which highlighted the role of targeted training and support in improving research skills and confidence.

3.3.4 Overall Attitude Toward Research

Across the attitude dimensions, teachers showed a generally positive disposition toward research. Interest and Engagement had a mean of 3.12, Perceived Value and Usefulness had a mean of 3.15, Confidence and Self-Efficacy was reported as the highest at 3.92 in the summary, and the overall mean was 3.40. These findings indicate that teachers are motivated, recognize the usefulness of research, and generally feel capable of participating in research activities. However, positive attitudes need to be matched with concrete opportunities, training, resources, and mentoring to produce actual research engagement and productivity. The results support education.research_capabilities (2025), which highlighted the relationship among motivation, perceived usefulness, and confidence, and Tamban and Maningas (2020), which emphasized that positive attitudes and skill development are both necessary for a productive research culture.

3.4 Differences in Research Capability by Profile Variables

3.4.1 Significant and Non-Significant Profile Differences

Research capability differed significantly according to sex, highest educational attainment, and number of research projects conducted. Female teachers had a higher mean research capability score than male teachers. Teachers with doctorate units had the highest mean score, followed by master's graduates, those with master's units, and college graduates. Teachers who had conducted two research projects scored highest, followed by those with one project, while those with no research experience had the lowest score. No significant differences were found according to age, civil status, plantilla position, years in service, or number of trainings attended. These results suggest that advanced education and actual research experience are more influential in developing research capability than demographic factors alone. The higher score among female teachers may indicate stronger research engagement or professional participation. The link between higher education and research capability supports Tamban and Maningas (2020), while the importance of research experience is consistent with Caingcoy (2020). Related literature also indicates that female educators may show higher research engagement (Manzoor, Khan, and Mahmood (2023)), and that age or years of service may have limited direct effect without educational and experiential support (Caingcoy, 2020; LPU Batangas, 2022).

3.5 Relationship Between Attitudes and Research Capability

3.5.1 Association Between Attitude and Research Domains

Teachers' attitudes toward research had significant positive relationships with data analysis and interpretation and with ethics, reporting, and limitations. However, attitudes were not significantly related to research concepts and terminologies, research design and methodology, or application, problem-solving, and creating research. These findings show that positive

attitudes may support performance in more reflective and responsibility-driven areas of research, particularly data interpretation and ethical reporting. However, foundational knowledge, research design, and application appear to depend more on formal instruction, hands-on practice, and structured training than attitude alone. This supports Caingcoy (2020) and Nerona and Narido (2025), who emphasized that positive attitudes help teachers engage with challenging research tasks, while Tamban and Maningas (2020) and Caingcoy (2020) noted that technical research skills require deliberate professional development.

3.6 Proposed Research Capability Enhancement Program

3.6.1 PROJECT INSPIRE

The proposed enhancement program, PROJECT INSPIRE or Inquiry-driven Network for Strengthening Pedagogical Research in Education, was designed to improve the research skills of public elementary school teachers in Sanchez Mira, Cagayan. It targets the district's permanent public elementary teachers and includes three phases over 12 months: foundational skills development, specialized skills development, and research project implementation with mentorship and dissemination. The program responds directly to the identified gaps in research capability, low research engagement, and the need for institutional support. Through workshops, lectures, group work, hands-on activities, mentoring, research implementation, and dissemination, it aims to build lasting research competence and a stronger research culture. Its expected outcomes include improved teaching practices, stronger student learning, empowered teachers, locally responsive educational solutions, and evidence that can inform broader educational policy and practice.

4 Conclusion & Recommendations

The study found that public elementary school teachers in Sanchez Mira District, Cagayan were generally experienced and academically progressing, but had limited research training and low research engagement, with many having attended only one research-related training and most having conducted no research. Their overall research capability was mostly Fair to Satisfactory, with weaknesses in research concepts and terminologies, research design and methodology, ethics, reporting, limitations, and application of research, while data analysis and interpretation appeared relatively stronger. Teachers showed generally positive attitudes toward research in terms of interest, perceived usefulness, confidence, and self-efficacy, indicating that they value research for professional development, instructional improvement, and student learning. Research capability differed significantly according to sex, highest educational attainment, and number of research projects conducted, but not according to age, civil status, plantilla position, years in service, or number of trainings attended. Attitudes toward research were significantly related to data analysis and interpretation and to ethics, reporting, and limitations, but not to research concepts, research design, or application, suggesting that positive attitudes must be supported by formal training, mentoring, and actual research experience (Darling-Hammond, 2000; Tamban & Maningas, 2020; Caingcoy, 2020; Manila et al., 2022; LPU Batangas, 2022; Manzoor, Khan, and Mahmood (2023); Nerona and Narido, 2025).

Based on the findings, the study recommends the implementation of PROJECT INSPIRE, or Inquiry-driven Network for Strengthening Pedagogical Research in Education, as a 12-month research capability enhancement program for permanent public elementary school teachers in Sanchez Mira District. The program should address the identified gaps in teachers' research capability, low research engagement, and need for institutional support through three phases: foundational skills development, specialized skills development, and research project implementation with mentorship and dissemination. It should include workshops, lectures, group work, hands-on activities, mentoring, research implementation, and dissemination to strengthen teachers' competence in research concepts, methodology, data analysis, ethics, reporting, and application. The program is expected to improve teaching practices, support student learning, empower teachers, promote locally responsive educational solutions, and contribute evidence that may inform broader educational policy and practice (Tamban and Maningas, 2020; education.research_capabilities, 2025; education.research_attitudes, 2025; education.professional_development, 2025).

The study was limited to 100 public elementary school teachers from 19 schools in Sanchez Mira District, Cagayan during School Year 2024–2025; therefore, its findings apply primarily to the local district context and may not represent all public elementary teachers in other districts or divisions. It used a descriptive-correlational design and a researcher-made survey questionnaire, which means the findings describe profiles, research capability levels, attitudes, differences, and relationships but do not establish causal relationships among the variables. The respondents assessed their own research capabilities and attitudes toward research, so the results were based on self-reported data rather than direct evaluation of completed research outputs or observed research performance.

Compliance with ethical standards

This study on the research capability and attitudes toward research of public elementary school teachers in Sanchez Mira District, Cagayan was conducted in accordance with institutional ethical standards and research protocols. Participation was voluntary, and respondents were informed about the purpose of the study before giving their consent. The confidentiality and privacy of all information provided were observed, and the data gathered were used solely for academic and research purposes. The necessary approval and permission to conduct the study were secured from the concerned authorities. The researcher declares no conflict of interest in the conduct of the study and acknowledges the contributions of the respondents, school personnel, validators, and advisers who supported the completion of the research. Copyright ownership and authorship responsibility remain with the researcher, and all ethical considerations relevant to the study were properly observed.

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