

Teachers Research Engagement and Barriers in Public Elementary Schools

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Abstract

Research engagement provides teachers with opportunities to develop professional knowledge and improve classroom practice; however, teachers may encounter barriers that affect their participation in research activities. This study was conducted to determine the teachers research engagement and barriers in public elementary schools in the Districts of Sugbongcogon and Kinoguitan, Division of Misamis Oriental during the school year 2021-2022. Specifically, this aimed to describe the respondents' profile; find out the respondents' level of research engagement; examine the respondents research engagement barriers; test the significant difference in the respondents' level of research engagement and their research barriers when grouped according to their profile; and determine as to what extent does research engagement contribute to the research barriers. Using a descriptive-correlational research design, 200 public elementary school teachers selected through purposive sampling participated in the study. Data were gathered using a modified questionnaire and analyzed using frequency, percentage, weighted mean, ANOVA, and Pearson product-moment correlation.

The findings revealed a high level of research engagement, particularly in writing, while publication showed a comparatively lower level of engagement. Among the research barriers, opportunity was identified as the most pressing barrier. No significant differences in research engagement were found according to position, educational attainment, and attitude toward research. Moreover, no significant overall relationship was found between research engagement and research barriers. It is concluded that training and guidance help teachers become more confident in writing their research output. It is recommended that teachers may to strengthen their knowledge in research particularly in the publication on their research output.

Keywords: research engagement, barriers

1. Introduction

Research plays an important role in improving teaching practices, addressing classroom concerns, and supporting school development. In public elementary schools, teachers are encouraged to participate in research to identify educational problems, evaluate instructional approaches, and develop evidence-based solutions. However, their involvement in research may be affected by several challenges, including limited time, heavy teaching responsibilities, insufficient research knowledge and skills, inadequate mentoring, and limited access to research resources. These challenges can influence teachers' ability to plan, conduct, complete, present, and publish research. Although the Department of Education has established programs and policies to promote a research-oriented culture, teachers continue to experience difficulties in

sustaining their participation. Their attitudes toward research, research capabilities, digital competence, and the level of institutional support available in their schools may also influence their engagement. Therefore, examining teachers' research engagement and the barriers they encounter is important in determining the factors that support or hinder their participation across the different stages of the research process. Understanding these concerns can provide a basis for developing appropriate capacity building programs, support mechanisms, and school policies that can strengthen teachers' involvement in research and contribute to continuous improvement in education.

Research Questions

This study aimed to determine teachers research engagement and barriers in public elementary schools in the District of Sugbongcogon and Kinoguitan, Division of Misamis Oriental during the School Year 2021-2022.

Specifically, this study sought to answer the following:

1. What is the respondents' profile in terms of age, position, teaching experience, highest educational attainment, related training/ seminars in research attended and attitude towards research?
2. What is the respondents' level of research engagement based on planning, processing, writing, presentation and publication?
3. What is the respondents' level of research barriers with regard to familiarity, experience, knowledge and opportunity?
4. Is there a significant difference between the respondents' level of research engagement and their research barriers when grouped according to their profile?
5. To what extent does research engagement contribute to the research barriers?

Significance

The findings of this study would provide relevant information on teachers' research engagement and the barriers they encounter in conducting action research. The results may benefit the Department of Education by providing a basis for developing programs and interventions that strengthen teachers' research capabilities, improve their attitudes toward research, and increase their participation in research activities. School administrators may use the findings to develop strategies, plans, and support mechanisms that encourage teachers to become more actively involved in action research. Teachers may also benefit by gaining greater awareness of the importance of action research in improving teaching strategies and addressing the learning needs of their pupils. Learners may benefit indirectly from improved teaching practices and innovations developed through teachers' research activities. Finally, the findings may serve as a useful reference for future researchers who intend to conduct related studies using a broader scope or different research settings.

Scope and Limitations

This study focused on the research engagement and barriers encountered by public elementary school teachers in Sugbongcogon and Kinoguitan Districts, Division of Misamis Oriental. It involved 200 teachers from 28 public elementary schools and considered their characteristics in terms of age, position, teaching experience, highest educational attainment, research related training and seminars attended, and attitude toward research. Research engagement was examined in terms of planning, processing, writing, presentation, and publication, while barriers were assessed based on familiarity, experience, knowledge,

and opportunity. The study also determined whether research engagement and barriers differed according to the respondents' characteristics. Data were collected using a researcher modified survey questionnaire. The study was limited to the selected public elementary school teachers and the identified variables within the two districts; therefore, the findings represent the experiences and conditions of the respondents and may not be generalized to public elementary school teachers in other areas.

Literature Review

Respondents' Profile

Understanding the characteristics of teachers is essential in examining their level of research engagement and the factors that may influence their participation in research activities. Teachers differ in terms of age, position, teaching experience, educational attainment, exposure to research related training, and attitudes toward research, and these characteristics may shape their knowledge, confidence, opportunities, and willingness to conduct research. Abella et al. (2024) found that age, educational attainment, and length of teaching experience were significantly related to teachers' research competence, although high competence did not always result in high research productivity because of heavy workloads, numerous school activities, limited resources, and lack of time. Gutierrez (2024) also reported that teachers' professional experience, educational background, and research engagement were important factors in understanding their participation in school-based research, with many teacher researchers having several years of teaching experience and advanced educational qualifications. Research training and professional development were likewise found to strengthen teachers' research knowledge, skills, and confidence, particularly when training was supported by mentoring and opportunities for application. Perines et al. (2020) emphasized that research training can improve teachers' appreciation of the value of research and encourage greater participation in inquiry-based activities. Moreover, Polinar et al. (2025) found that teachers generally demonstrated positive attitudes toward research and good research competence, but their research productivity remained limited because of workload, time constraints, and insufficient resources. Overall, these findings suggest that teachers' demographic and professional characteristics may be associated with research engagement, but they do not independently determine participation. Research competence, training, positive attitudes, adequate time, resources, mentoring, and institutional support must work together to encourage sustained teacher involvement in research.

Stages of Research Engagement

Research engagement among teachers encompasses participation across the major stages of the research process, including planning, processing, writing, presentation, and publication. Recent studies indicate that teachers may possess adequate research knowledge and interest but experience difficulties in sustaining participation across all stages due to limited research skills, heavy workloads, lack of time, insufficient resources, and limited institutional support. Abella et al. (2024) found that teachers demonstrated good research knowledge and skills but had low research productivity because of competing school responsibilities and limited time. Gutierrez (2024) likewise reported that teachers experienced difficulties particularly in data analysis and research writing, indicating the need for continuous guidance beyond the initial stages of research. Borreo (2023) emphasized that limited research skills and lack of time hindered teachers from completing action research, while Castulo et al. (2025) highlighted the value of graduate education in strengthening teachers' research knowledge and skills. Overall, teachers may be capable of identifying relevant research problems and beginning research projects, but their engagement

may decline as they encounter more technical and demanding tasks such as data processing, writing, presentation, and publication. Sustained training, mentoring, adequate time, resources, and institutional support are therefore essential in helping teachers progress from planning their studies to presenting and publishing their research outputs.

Barriers Encountered

Teacher researchers face several barriers that can limit their sustained participation in research, particularly in terms of familiarity, experience, knowledge, and opportunity. Borreo (2023) found that limited research skills and knowledge made it difficult for teachers to conduct and complete action research, while Gutierrez (2024) reported challenges in technical areas such as data analysis, as well as limited access to research resources and opportunities for collaboration. Flores (2024) further noted that lack of research experience, financial limitations, and competing professional responsibilities affected teachers' participation, particularly among those who were still developing confidence in conducting research. Abella et al. (2024) also found that although teachers possessed good research knowledge and skills, heavy teaching loads, numerous school activities, limited resources, and insufficient time contributed to low research productivity. Overall, the findings suggest that teachers' research engagement depends not only on their understanding and skills but also on their previous research experience and the opportunities available within their schools. Practical training, mentoring, continuous professional development, sufficient time, accessible resources, collaboration, and strong institutional support are therefore important in reducing barriers and helping teachers participate more consistently in research.

2. Methodology

Research Design

This study used the descriptive correlational design in which the researcher is primarily interested in describing relationships among variables, without seeking to establish a causal connection. Further, a descriptive method is utilizing a questionnaire. The correlation strategies measured two or more variables as they are presented and established whether a relationship exists between variables. In this study, demographic factors, research attitude, and research engagement are to be determined. Descriptive research is a study designed to depict the participants in an accurate way. It is all about describing people who take part in the study through a survey. Hence, this method helps to gather information about the teachers' research engagement and barriers encountered.

A correlational research design explores the relationship between variables without the researcher exerting control or making modifications to them. This approach systematically observes the relationships between different factors, helping to understand their influences in various contexts. By applying statistical methods to the data, researchers can identify patterns and correlations, revealing trends that may not be immediately obvious. However, it is essential to recognize that while correlation can illuminate the connections between variables, it does not imply causation. A correlation represents the strength and direction of a relationship between two or more variables. The direction of a correlation can be either positive or negative (Bhandari, 2023).

Participants

The respondents of the study were the 200 elementary teachers in the Districts of Sugbongcogon and Kinoguitan, Division of Misamis Oriental. For the purpose of the study, a list of each school was taken from Sugbongcogon and Kinoguitan Districts.

Data Collection

To gather the respondents' characteristics, the teachers' research engagement and the research barrier encountered, a survey questionnaire was utilized. This survey questionnaire consists of four parts.

Part one elicited the respondents' profile such as age, position, teaching experience, highest educational attainment and research training/seminars attended.

Part two provides statements to indicate the teachers' attitude towards research, the questionnaire was modified from Pamatmat's study (2015) on the study entitled Research Attitudes of Teaching Personnel in Philippine State University: Basis for Development and Sustainability towards Excellence.

Part three of the questionnaire provides the statements to indicate the respondents' level of research engagement. This part is prepared by the researcher according to phases of action research and based on the IPCRF format.

Part four of the questionnaire provides the statements of the barriers or challenges encountered by the respondents. This part of the questionnaire was modified from Hussien's study (2019) entitled Research Barriers of Public-School Teachers of the Division of Iligan City.

Data Analysis

The data collected from the participants were tallied and analyzed using the following statistical tools: Frequency and percentage distribution were used for Problem 1 to describe the respondents' profile in terms of age, position, teaching experience, highest educational attainment, and related training or seminars in research attended. Weighted mean was used to determine the respondents' attitude toward research, as well as their level of research engagement in terms of planning, processing, writing, presentation, and publication, and the barriers encountered in terms of familiarity, experience, knowledge, and opportunity. One-Way Welch F Test and Kruskal-Wallis H Test were used for Problem 4 to determine whether significant differences existed in the respondents' research engagement and barriers encountered when they were grouped according to age, position, teaching experience, highest educational attainment, related training or seminars in research attended, and attitude toward research. The level of significance was set at 0.05. Multiple Linear Regression was used for Problem 5 to determine the extent to which the different stages of research engagement—planning, processing, writing, presentation, and publication—contributed to or predicted the overall barriers encountered by the respondents. The overall barriers encountered served as the dependent variable, while the five stages of research engagement served as the predictor variables.

3. Results and Discussions

Problem 1. What is the respondents' profile in terms of age, position, teaching experience, highest educational attainment, related training/ seminars in research attended and attitude towards research?

Table 1
Distribution of the Respondents' Age

Category	Frequency	Percentage
61 years old and above	5	2.5
51-60 years old	19	9.5
41-50 years old	49	24.5
31-40 years old	72	36.0
20-30 years old	55	27.5
Total	200	100.0

Table 1 presents the distribution of respondents according to age. The largest group consisted of teachers aged 31 to 40 years, indicating that most respondents were already established in their teaching careers and had sufficient professional experience. A considerable proportion also belonged to the 20 to 30 age group, showing that the respondents were largely composed of younger and middle-aged teachers. Meanwhile, teachers aged 41 to 50 and those aged 51 and above represented smaller groups, while the lowest frequency was recorded among teachers aged 61 and above. The distribution suggests that teachers at different career stages may have varying research needs, as younger teachers may be more familiar with technology and recent approaches but may require guidance in research methods and academic writing, while older teachers may contribute extensive professional experience but may face challenges related to workload, technology, and research processes. Overall, the findings indicate that research support should consider teachers' age and career stage by providing appropriate mentoring, training, resources, and professional development opportunities.

Table 2
Distribution of the Respondents' Position

Category	Frequency	Percentage
Master Teacher III	0	0.0
Master Teacher II	5	2.5
Master Teacher I	9	4.5
Teacher III	39	19.5
Teacher II	35	17.5
Teacher I	112	56.0
Total	200	100.0

Table 2 presents the distribution of respondents according to teaching position. Most of the respondents were Teacher I, with 112 or 56.0 percent, indicating that more than half were in the early stages of their teaching careers. This suggests that many respondents may have strong potential and interest in

professional growth and research but may still require mentoring and structured support to develop their research knowledge and skills, particularly in writing and publication. In contrast, the lowest frequency was recorded among Master Teachers II, with 5 or 2.5 percent, which may reflect the limited number of teachers who attain higher positions due to promotion requirements and available positions. Teachers in higher ranks may also have additional mentoring, supervisory, and administrative responsibilities that can limit their direct involvement in conducting research. Overall, the findings suggest that early career teachers represent an important group for research capacity building, while higher ranking teachers can contribute through mentoring, guidance, and support for research activities.

Table 3
Distribution of the Respondents' Teaching Experience

Category	Frequency	Percentage
26 years and above	18	9.0
21-25 years	15	7.5
16-20 years	25	12.5
11-15 years	44	22.0
6-10 years	47	23.5
1-5 years	51	25.5
Total	200	100.0

Table 3 presents the distribution of respondents according to teaching experience. The largest group consisted of teachers with 1 to 5 years of experience, with 51 or 25.5 percent, indicating that many respondents were still in the early stages of their careers and were developing their classroom competence and familiarity with school responsibilities. Teachers with fewer years of service may require structured mentoring and training in identifying research problems, selecting appropriate methods, analyzing data, and preparing research reports, although their recent academic preparation may provide familiarity with current technologies and research tools. In contrast, the smallest group consisted of teachers with 21 to 25 years of experience, with 15 or 7.5 percent. Despite having extensive classroom and professional experience, senior teachers may encounter challenges related to workload, administrative responsibilities, technical research requirements, and changing priorities. Overall, the findings suggest that research support should address the needs of teachers at different stages of their careers, with beginning teachers requiring stronger guidance and mentoring while experienced teachers may benefit from support in research methodology, data analysis, digital tools, and collaborative research.

Table 4
Distribution of the Respondents' Highest Educational Attainment

Category	Frequency	Percentage
Doctoral Degree	3	1.5
Master's Degree with Doctoral units	5	2.5

Master's Degree	29	13.5
Bachelor's Degree with MA Units	95	47.5
Bachelor's Degree	68	34.0
Total	200	100.0

Table 4 presents the distribution of respondents according to their highest educational attainment. The largest group consisted of teachers with a Bachelor's degree with MA units, with 95 or 47.5 percent, indicating that many respondents had already started pursuing graduate education but had not yet completed their master's degrees. This suggests that the respondents had some exposure to research concepts and methodologies but may still need additional mentoring, training, and institutional support to translate their academic knowledge into active research practice. Factors such as workload, financial considerations, family responsibilities, and other professional demands may also affect the completion of graduate studies and participation in research. In contrast, only 3 respondents or 1.5 percent held doctoral degrees, making this the smallest group. The limited number of doctoral degree holders may be associated with the greater time, financial, and academic demands of doctoral studies. Overall, the findings indicate the need for accessible professional development and research capacity building opportunities that can strengthen teachers' research skills regardless of their educational attainment, while teachers with advanced qualifications may also serve as potential mentors and resource persons for their colleagues.

Table 5
Distribution of the Respondents' Related Trainings/Seminar attended

Number of Times	District F (%)	Division F (%)	Regional F (%)	National F (%)	International F (%)
Never	4 (2.0)	77 (38.5)	159 (79.5)	183 (91.5)	191 (95.5)
1 to 2 times	131 (65.5)	102 (51.0)	35 (17.5)	13 (6.5)	7 (3.5)
3 to 4 times	45 (22.5)	19 (9.5)	6 (3.0)	4 (2.0)	2 (1.0)
5 to 6 times	15 (7.5)	2 (1.0)	0 (0.0)	0 (0.0)	0 (0.0)
7 to 8 times	3 (1.5)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
9 or more times	2 (1.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

Table 5 presents the distribution of respondents according to the research related training and seminars they attended at different levels. The highest frequency was recorded at the international level, where 191 or 95.5 percent of the respondents reported that they had never attended research training, indicating very limited exposure to international research practices, trends, and opportunities. This may be attributed to financial constraints, limited funding, lack of institutional sponsorship, and accessibility concerns rather than a lack of interest among teachers. Meanwhile, only a small number of respondents reported repeated

participation in research training at the district, division, and international levels, suggesting that regular exposure to research related seminars remains limited. Insufficient and irregular training may contribute to difficulties in research familiarity, knowledge, experience, and opportunities. Overall, the findings emphasize the importance of providing teachers with accessible, affordable, and continuous research training and capacity building programs to strengthen their competence and encourage sustained engagement in research.

Table 6
Distribution of Respondents' Attitude towards Research

Indicators	Mean	SD	Description
I am interested in action research.	2.96	0.75	Agree
I like to conduct action research.	2.95	0.75	Agree
I use action research in my daily life.	2.77	0.78	Agree
I am willing to study the details of action research procedures carefully	2.99	0.83	Agree
I am encouraged to carry out action research because of the promotion.	2.83	0.82	Agree
I am inspired to make action research because of the incentives.	2.69	0.86	Agree
I am motivated to do classroom action research because I am a teacher.	2.98	0.80	Agree
I feel insecure concerning the analysis of action research.	2.74	0.81	Agree
I find it easy to understand the concepts of action research.	2.77	0.77	Agree
I feel confident in undertaking action research due to lack of research and skill.	2.71	0.79	Agree
Overall	2.85	0.66	Agree

Table 6 presents the respondents' attitude toward research. The overall mean of 2.85 with a standard deviation of 0.66, described as Agree, indicates that teachers generally have a positive attitude toward research and recognize its value in improving classroom instruction, addressing educational concerns, and supporting professional growth. The highest rated indicator was the willingness to carefully study the procedures of action research, with a mean of 2.99 and a standard deviation of 0.83, suggesting that teachers are open to learning and developing their research skills through proper guidance and training. In contrast, the lowest rated indicator was being inspired to conduct action research because of incentives, with a mean of 2.69 and a standard deviation of 0.86, indicating that material incentives are not the primary

motivation for research participation. Overall, the findings suggest that teachers are more motivated by the practical value of research, professional development, and opportunities to improve their teaching, while continuous mentoring, training, institutional support, and recognition may further strengthen their willingness and capacity to engage in research.

Problem 2. What is the respondents' level of research engagement based on planning, processing, writing, presentation and publication?

Table 7
Summary Distribution of the Respondents' Level of Research Engagement

Variable	Mean	SD	Interpretation
Planning	2.79	0.62	High
Processing	2.76	0.64	High
Writing	2.80	0.64	High
Presentation	2.78	0.67	High
Publication	2.08	0.75	Low
Overall	2.64	0.58	High

Table 7 presents the respondents' level of action research engagement across five stages. The overall mean of 2.64 with a standard deviation of 0.58 indicates a high level of research engagement, showing that respondents engaged most of the time in planning, processing, writing, and presentation activities. The highest mean was recorded in the Writing stage, with a mean of 2.80 and a standard deviation of 0.64, suggesting that teachers were relatively more engaged in preparing and organizing their research reports. In contrast, the Publication stage obtained the lowest mean of 2.08 with a standard deviation of 0.75, interpreted as Low, indicating that teachers were less likely to proceed from completing their research to publishing their outputs. This may be associated with publication costs, limited access to appropriate journals, time constraints, and insufficient guidance in manuscript preparation and submission. Overall, the findings indicate that teachers demonstrate strong involvement in most stages of action research but need greater institutional support, mentoring, and resources to strengthen the transition from completed research to publication and wider dissemination.

Problem 3. What is the respondents' level of research barriers with regard to familiarity, experience, knowledge and opportunity?

Table 8
Summary Distribution of the Respondents' Level of Research Barriers

Variable	Mean	SD	Interpretation
Familiarity	2.69	0.59	High
Experience	2.62	0.61	High
Knowledge	2.60	0.72	High
Opportunity	2.91	0.64	High

Overall	2.71	0.64	High
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Table 8 presents the respondents' assessment of the barriers they encounter in conducting action research. The overall mean of 2.71 with a standard deviation of 0.64 indicates a high level of barriers, showing that opportunity, familiarity, experience, and knowledge commonly affect teachers' research participation. Among the four areas, opportunity obtained the highest mean of 2.91 with a standard deviation of 0.64, indicating that limited access to updated references, journals, library services, technology, mentoring, and other research resources is the most pressing concern. Familiarity ranked second with a mean of 2.69 and a standard deviation of 0.59, suggesting that teachers still experience difficulties with basic research procedures despite having some exposure to research activities. Experience obtained a mean of 2.62 with a standard deviation of 0.61, reflecting challenges associated with heavy teaching responsibilities, administrative tasks, and limited opportunities to develop research skills through practice. Knowledge had the lowest mean of 2.60 with a standard deviation of 0.72, although it remained a high level of barrier, particularly in identifying research problems, organizing information, analyzing data, and preparing research outputs. Overall, the findings show that research barriers are interconnected and involve both personal and institutional factors, highlighting the need for an integrated support system that provides continuous training, mentoring, adequate resources, and sufficient time for teachers to conduct research.

Problem 4. Is there a significant difference between the respondents' level of research engagement and their research barriers when grouped according to their profile?

Table 9

Differences in the Respondents' Research Engagement when grouped according to their Profile

Profile		Research Engagement				
		Planning	Processing	Writing	Presentation	Publication
Age		0.688	0.201	0.079	0.035	0.148
		WFT	WFT	WFT	WFT	WFT
		NS	NS	NS	S	NS
Position		0.233	0.232	0.216	0.224	0.013
		WFT	WFT	WFT	WFT	WFT
		NS	NS	NS	NS	S
Teaching Experience	Ex-	0.675	0.651	0.323	0.280	0.302
		WFT	WFT	WFT	WFT	WFT
		NS	NS	NS	NS	NS
Highest Educational Attainment	Edu-	0.009	0.003	0.011	0.019	< 0.001
	At-	WFT	WFT	WFT	WFT	WFT
	tainment	S	S	S	S	HS

Related Trainings and Seminars Attended	0.169 KWH NS	0.046 KWH S	0.029 KWH S	0.092 KWH NS	0.139 KWH NS
Attitude Towards Research	< 0.001 KWH HS	< 0.001 KWH HS	< 0.001 KWH HS	< 0.001 KWH HS	0.004 KW HS
Overall	0.296 NS	0.189 NS	0.110 NS	0.109 NS	0.121 NS

Table 9 presents the differences in teachers' research engagement across the five dimensions of planning, processing, writing, presentation, and publication according to their profile characteristics. The overall results showed no significant differences across the five dimensions, with all p values greater than .05, indicating that teachers generally had comparable levels of research engagement when their profiles were considered collectively. However, significant differences were observed in selected areas, with age showing a significant difference in presentation and position showing a significant difference in publication. Teaching experience did not show significant differences in any dimension. Highest educational attainment showed significant differences in all five dimensions, suggesting that academic preparation may be associated with greater engagement throughout the research process. Research related training and seminars attended showed significant differences in processing and writing, indicating that training may strengthen specific research skills but may not influence all stages equally. The strongest and most consistent differences were found in attitude toward research, which showed significant differences across planning, processing, writing, presentation, and publication, indicating that teachers' disposition toward research is strongly associated with their level of engagement. Overall, the findings suggest that academic preparation and positive attitudes toward research are important factors associated with research engagement, while continued mentoring, training, and institutional support are needed to sustain teachers' participation across all stages of the research process.

Table 10
Difference in the respondents' Research Barriers when grouped according to their Profile

Profile	Barriers			
	Familiarity	Experience	Knowledge	Opportunity
Age	0.091	0.779	0.204	0.468
	WFT	WFT	WFT	WFT
	NS	NS	NS	NS
Position	0.103	0.002	0.142	0.133
	WFT	WFT	WFT	WFT
	NS	S	NS	NS
Teaching Experience	0.155	0.178	0.193	0.104
	WFT	WFT	WFT	WFT
	NS	NS	NS	NS

Highest Educational Attainment	0.001	0.030	0.878	0.148
	WFT	WFT	WFT	WFT
	S	S	NS	NS
Related Trainings and Seminars Attended	0.084	0.257	0.936	0.381
	KWH	KWH	KWH	KWH
	NS	NS	NS	NS
Attitude Towards Research	0.433	0.063	0.273	0.005
	KWH	KWH	KWH	KWH
	NS	NS	NS	S
Overall	0.145	0.218	0.438	0.207
	NS	NS	NS	NS

Table 10 presents the differences in the barriers encountered by respondents across the dimensions of familiarity, experience, knowledge, and opportunity according to their profile characteristics. The overall results showed no significant differences in familiarity ($p = .145$), experience ($p = .218$), knowledge ($p = .438$), and opportunity ($p = .207$), indicating that respondents generally experienced comparable research barriers regardless of their profiles. Age and teaching experience did not significantly differentiate any of the four dimensions. Position showed a significant difference only in experience ($p = .002$), while highest educational attainment showed significant differences in familiarity ($p = .001$) and experience ($p = .030$). Related trainings and seminars attended did not significantly differentiate any barrier dimension. Attitude toward research showed a significant difference only in opportunity ($p = .005$), while familiarity ($p = .433$), experience ($p = .063$), and knowledge ($p = .273$) were not significant. Overall, the findings indicate that research barriers are experienced across different teacher profiles, although position, educational attainment, and attitude toward research are associated with specific types of barriers. The results suggest the need for practical skills development, mentoring, adequate resources, sufficient time, research opportunities, and sustained institutional support to help teachers overcome research barriers and strengthen their research engagement.

Problem 5. To what extent does research engagement contribute to the research barriers?

Table 11

Regression Analysis on the Contribution of Research Engagement to the Barriers of Research

Research En- gagement	Unstandardized Esti- mate	Standardized Esti- mate	p- value	Interpretation	
Intercept	10.130		< 0.001	Highly	Significant
Planning	0.145	0.0482	0.790	Not a	Significant
Processing	-0.571	-0.1959	0.347	Not a	Significant
Writing	-0.400	-0.1364	0.496	Not a	Significant
				Predictor	Predictor

Presentation	0.907	0.3245	0.067	Not a Significant Predictor
Publication	0.224	0.0904	0.266	Not a Significant Predictor

Table 11 presents the results of the Multiple Linear Regression analysis examining whether the different stages of research engagement significantly predict the overall barriers encountered by teachers. The results showed that none of the five stages significantly contributed to the overall barriers, as planning ($p = 0.790$), processing ($p = 0.347$), writing ($p = 0.496$), presentation ($p = 0.067$), and publication ($p = 0.266$) all had p values greater than 0.05. Although presentation obtained the largest standardized estimate ($\beta = 0.3245$) and was closest to significance, its result remained not significant. Thus, the null hypothesis was not rejected, indicating that engagement in any specific stage of research does not significantly predict the barriers experienced by teachers. The findings suggest that research barriers may exist across the entire research process and may be influenced by factors such as workload, limited time, access to resources, research skills, mentoring, and institutional support rather than by the level of engagement in a particular research stage. Therefore, addressing research barriers requires a comprehensive approach that combines research capacity building, mentoring, adequate resources, manageable workloads, sufficient time, and sustained institutional support.

4. Conclusion and Recommendations

Conclusion

This study concludes that teachers demonstrated a high level of research engagement in planning, processing, writing, and presentation, while engagement in publication was low. Despite their participation in the research process, teachers continued to experience barriers related to familiarity, experience, knowledge, and opportunity, with opportunity emerging as the most prominent barrier. Significant differences in selected research-engagement stages and research-barrier dimensions were observed across certain respondent characteristics. However, the regression analysis showed that none of the five stages of research engagement significantly predicted the overall research barriers. These findings highlight the need for sustained research training, mentoring, adequate resources, and institutional support to help teachers address the barriers they encounter.

Recommendations

Based on the findings, the following recommendations are proposed:

1. School Administrators should inspire their teachers to conduct researches even without incentives so that it will bridge the gap between the teachers' classroom practices or strategies and the learning capacity of the learners.
2. Teachers should attend trainings and seminars focused on research publication to strengthen their skills in preparing research manuscripts and navigating the publication process.
3. School heads are encouraged to provide practical support opportunities to teachers who engage in research.
4. The Department of Education and its Division Offices are encouraged to sustain and enhance research capability-building programs by offering continuous, practical, and well-guided training

and mentoring sessions. These should aim to deepen teachers' understanding of the research process, build their confidence in developing proposals, and provide them with opportunities to publish their work. Contextualized and needs-based programs can make research more meaningful and attainable for teachers.

5. School Administrators should provide sufficient library resources, services and reliable internet connection so that teachers are motivated to undertake action research.

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