Teachers as Researchers: An Emphasis on the Readiness and Attitude towards Action Research

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Abstracts: This study explored the readiness and attitude of teachers in conducting action research. Specifically, the study aimed to determine the profile of the teachers, the level of the participants' research readiness, the extent of the participant's attitude toward action research, and the factors that hinder the participants in conducting action research. The study employed a descriptive-correlational research design. Frequency counts, percentages, weighted mean, one-way ANOVA, and Pearson product-moment correlation were used in the study. Results revealed that the participants had a relatively high level of education and experience in teaching, but their research involvement was limited. The participants were motivated to conduct action research, but their research literacy and analysis skills needed improvement. In addition, the study highlighted the need for support from various stakeholders to equip teachers with the necessary knowledge and skills to conduct action research effectively. The hindering factors to conducting action research were overburdened work schedules, lack of fundamental skills, and inadequate training and experience. Several factors, including research outlook, research interest, research benefit, research motivation, research literacy, research support, and research analysis and interpretation, were found to have a strong positive correlation with research readiness. It is recommended that teachers may be provided more training, support, and resources for them to increase their research involvement and strengthen their readiness and positive attitude toward action research.

Keywords: Action Research, Attitude, Hindering Factors, Research Readiness, Teacher-Researchers.

1. INTRODUCTION

Action research has become an integral part of the context of education. Action research is essential in the field of education because it encourages reflective teaching and learning, expands teachers' pedagogical range of skills, makes educators improve their instruction and learning of students, reinforces the connection between practice and student achievement, fosters an openness to new ideas and learning new things by creating suitable techniques in the teaching-learning contexts, and gives teachers ownership of the knowledge they are developing (Hensen, 1996 & Hine, 2013 as cited in Lufungolo et al., 2021).

Aside from the contribution of action research in the educative process, action research can also be used as a tool for teacher-researchers in their promotion. In the DepEd ranking guidelines, which is stipulated in DepEd Order no. 66 series of 2007, research and development projects are included, and it has corresponding points given to action research conducted in school, district, or division levels respectively (DepEd Memo no. 18 series of 2018). Moreover, teachers cannot depart from research undertaking, for it is also included in the Results-Based Performance Management System (RPMS) in the Philippines incorporated by the Philippine Professional Standards for Teachers (PPST), which emphasizes the importance of research and innovation. Under this system, teachers are encouraged to participate in research endeavors to enhance their teaching methods actively.

However, even with the abovementioned positive results and a strong link of action research in education, teachers worldwide are having difficulty conducting any research undertaking, particularly action research. According to Wangdi and Tharchen (2021), teachers were partially demotivated in conducting their research, for they experienced a variety of difficulties, such as their large teaching loads, a lack of time, a lack of research knowledge, a lack of incentives and recognition, a lack of platforms and expertise, and a lack of trustworthy resources, such as books. The study of Nagibova (2019) also revealed that teachers lack action research

knowledge and the necessary skills to conduct research. He also stated that teachers did not receive enough support and resources. Moreover, Bhattarai (2018) added that teachers did not habitually carry out action research.

The Department of Education in the Philippines has policies, programs, and guidelines on research projects to assist instructors in promoting the highest possible quality of education through research. DepEd Order 16, s. 2017 was created to assist teachers with their research projects. The Research Management Guidelines (RMG) were formed in 2017 to continue to promote and strengthen the research culture in basic education and to provide guidance in managing research efforts at all levels, including national, regional, school divisions, and school levels.

Furthermore, suppose a teacher-researcher cannot complete his research due to insufficient funds. In that case, he may apply for the Basic Education Research Fund (BERF), which provides research funding to eligible proponents from national, regional, and school division offices to public elementary and secondary schools across the country. DepEd also has a research effort called Research O'clock. It was established by the Department of Education's Planning Service – Policy Research and Development Division (PS-PRD). This initiative intends to promote research findings and evidence in basic education decision-making, program design, execution, and plan formation and adjustment (DepEd Memorandum no. 047 of 2021)

Despite the existence of the programs and activities, many Filipino instructors still face problems and difficulties when it comes to undertaking research. According to Bullo and Manlapaz' (2021) research, most teachers faced challenges in conducting research, such as a lack of time, anxiety about writing and conducting the study and viewing research as an additional burden on their part. Furthermore, the researcher observed in the context of DepEd Butuan City Division, specifically in West Butuan District I, that during the 2-Day Seminar Workshop on Research Training and Proposal Presentation last December 9-10, 2021, only 32 teachers attended the seminar and only 7 made it to the final defense of the action research. With all the Department of Education's programs, initiatives, and projects, it has been observed that only a few teachers involve themselves in research endeavors and studies. Many teachers have problems, challenges, and concerns about conducting action research.

The researchers strongly believe there is a need to uncover the reasons behind the presented facts and observations. There is a need to conduct a study on the readiness and attitude of the teacher-researchers toward action research. The researcher is interested in finding out the profile of the teachers, their research readiness, the extent of their attitude towards action research, and the factors that hinder them from conducting it. The study findings would help teachers, principals, school heads, district supervisors, and other administrators improve teachers' performance in action research. It would assist them in addressing action research problems and enhancing teacher professional development not only in West Butuan District I but also within and across the Division of Butuan City.

2. METHODS

The study employed a descriptive-correlational research design as it involved identifying the participants' research readiness level, the extent of their attitude toward action research, and the factors hindering the participants from conducting it. The study was conducted in West Butuan District I, one of the fifteen DepEd Butuan City Division districts. The study participants were West Butuan District I. West Butuan District I has 234 teachers, and the total computed sample size using Conchran's formula was 148 participants. Simple random sampling was used, where the sample size was determined by applying the formula of Cochran. In the random selection process, the researchers used an online randomizer. The number displayed on the online randomizer was used to select the participants who participated in the study. The study used a validated researcher-made questionnaire for each variable as the basis for acquiring the necessary data; it was tried out and gained the Cronbach Alpha value of 0.974, indicating that the questionnaire is valid and reliable. After collecting the data needed, the researcher tabulated and analyzed the gathered data with the help of statistical tools. The statistical tools used in the study are frequency, percentages, weighted mean, one-way ANOVA, and Pearson-Product Moment Correlation.

3. RESULTS

Table 1 below presents the mean distribution of the participants' research readiness level in terms of motivation. As shown, the statement, "I believe that action research is a tool to improve teaching and learning," got the highest mean score of 4.33, which has the verbal description of agree and is interpreted as the participants' level of readiness is high. On the other hand, the statement, "I believe that conducting action research is not an additional burden to my workload," got the lowest mean score of 3.53, which has the verbal description of agree and is interpreted as the participants' level of readiness is high. All ten indicators received a mean score above 3.5, indicating a high level of the participants' research readiness in terms of motivation. The overall weighted mean score of 4.08 further supports this interpretation.

Table 1. Mean distribution of the level of the participants' research readiness in terms of motivation

Research Motivation	Mean	Description
I am positively motivated to develop action research.	3.87	Agree
I believe that action research is a valuable way to develop my knowledge as a teacher.	4.16	Agree
I believe that conducting action research is not an additional burden to my workload.	3.53	Agree
I believe that action research is a valuable way to receive incentives through speakerships in seminar workshops.	3.81	Agree
I believe action research can be an avenue to receive rewards & recognition that can be used for ranking.	4.24	Agree
I believe action research can be an edge for promotion.	4.22	Agree
I believe that action research can contribute to the body of knowledge.	4.32	Agree
I believe that action research is a tool to improve teaching and learning.	4.33	Agree
I believe that the results and findings of my action research may address educational gaps and improve education delivery.	4.13	Agree
I believe that the results and findings of my action research can help people in various groups, i.e., parents and guardians, administrators, and other stakeholders.	4.21	Agree
Mean	**4.08**	**Agree**

Legend: 4.50 – 5.00 – Strongly agree; 3.50 – 4.49 – Agree; 2.50 – 3.49 – Neutral; 1.50 – 2.49 – Disagree; 1.00 – 1.49 – Strongly disagree

The table suggests that the participants are driven by a positive motivation to conduct action research, primarily driven by the desire to enhance their teaching practice and contribute to the education field. This indicates that the participants' primary motivation for engaging in action research is to improve the teaching-learning process, ultimately leading to the delivery of quality education to the learners.

In view of the data above, Lufungolo et al. (2021) mentioned that action research is one of the research methodologies that teachers can utilize to investigate a particular issue or problem within the school, specifically in the classroom setting, for it directly involves the teachers' participation in solving the various issues they experience during their teaching-learning processes.

Moreover, Tindowen et al. (2019) found that action research can help teachers improve teaching and learning processes, increase pedagogical knowledge, and positively influence students' learning. More so, in the study of Abrenica and Cascolan (2022), they found that action research, according to the participants, positively impacted the teaching-learning process. Lastly, through action research, teachers can focus on studying their teaching practices and consequently become more effective teachers (Prudente & Aguja, 2018).

Table 2 describes the mean distribution of the participants' research readiness level in terms of literacy. As depicted, the highest mean score of 3.66 was for the statement, "I can easily identify issues and problems to be investigated," which has the verbal description of agree and is interpreted as the level of participants' readiness is high. The high readiness level suggests that participants will likely actively engage in action research. Their willingness to identify and investigate issues implies a proactive approach to improving their teaching practices.

Table 2. Mean distribution of the level of the participants' research readiness in terms of literacy

Research Literacy	Mean	Description
I can easily identify issues and problems to be investigated.	3.66	Agree
I can easily search for relevant literature and studies.	3.56	Agree
I can easily develop the processes or methodologies to be undertaken.	3.51	Agree
I can easily identify the appropriate statistical tool to be used.	3.39	Neutral
I can easily identify the research design of my study.	3.40	Neutral
I can easily analyze quantitative and qualitative data.	3.43	Neutral
I can easily organize and write the findings and recommendations of my study.	3.40	Neutral
I can easily identify appropriate tools for data presentation.	3.37	Neutral
9. I can easily make a survey instrument appropriate for my study.	3.31	Neutral
10. I know how to use search engines/software/apps in: a. Searching for related literature.	3.44	Neutral
b. Presenting data in the form of a pie chart, bar graph, histogram, etc.	3.43	Neutral
c. Citing references (i.e., APA citation)	3.41	Neutral
Mean	**3.44**	**Neutral**

Legend: 4.50 – 5.00 – Strongly agree; 3.50 – 4.49 – Agree; 2.50 – 3.49 – Neutral; 1.50 – 2.49 – Disagree; 1.00 – 1.49 – Strongly disagree

Notably, out of 10 statements under research literacy, only three statements received a mean score above 3.50. The statements "I can easily identify issues and problems to be investigated," "I can easily search for relevant literature and studies," and "I can easily develop the processes or methodologies to be undertaken" received mean scores above 3.50, indicating agreement among the participants and suggesting a high level of readiness. The participants' high level of readiness in these areas indicates a degree of research autonomy. They possess the necessary skills and confidence to independently engage in problem identification, literature review, and methodology development, essential to successful research endeavors.

Meanwhile, the lowest mean score of 3.31 was for the statement, "I can easily make a survey instrument appropriate for my study," which has the verbal description of neutral and is interpreted as the participants' readiness is moderate. The low score implies that participants still have room for improvement in terms of their skill in crafting survey instruments such as questionnaires.

Finally, the participants' research readiness level in terms of literacy research garnered an overall mean of 3.44, which has a verbal description of neutral and is interpreted as moderate. The results indicate that the participants perceive moderate readiness levels in some aspects of research literacy. This may explain why most of the participants did not conduct any action research. Furthermore, the moderate level of readiness of the participants in terms of research literacy may also contribute to the absence or limited training or seminars attended by the participants of the study.

This relates to the study of Nagibova (2019) that revealed that teachers lack action research knowledge and the necessary skills to conduct research. In addition, a study by Morales et al. (2016) found that participants perceived a moderate level of difficulty in conducting action research and that some areas, such as statistics, data organization, literature searching, and writing reports, were difficult.

Table 3 below presents the mean distribution of the participants' research readiness level in terms of analysis and interpretation.

Table 3. Mean distribution of the level of the participants' research readiness in terms of analysis and interpretation

Research Analysis and Interpretation	Mean	Description
I can design and implement the base measurement approach for the study.	3.25	Neutral
I can interpret and analyze qualitative data.	3.30	Neutral
I can interpret and analyze quantitative data.	3.30	Neutral
I know various ways of data presentation.	3.26	Neutral
I can easily interpret data presented through graphs, charts, etc.	3.39	Neutral
I can design and implement the best sampling strategy for the study.	3.22	Neutral
I can understand research findings and discussions in academic journals.	3.28	Neutral
I can effectively present findings both verbally and in written form.	3.30	Neutral
I can select the appropriate statistical tool for the study.	3.20	Neutral
10. I can easily interpret and understand statistical results.	3.21	Neutral
Mean	**3.27**	**Neutral**

Legend: 4.50 – 5.00 – Strongly agree; 3.50 – 4.49 – Agree; 2.50 – 3.49 – Neutral; 1.50 – 2.49 – Disagree; 1.00 – 1.49 – Strongly disagree

As observed, the statement "I can easily interpret data presented through graphs, charts, etc." received the highest mean score of 3.39, while the statement "I can select the appropriate statistical tool for the study" received the lowest mean score of 3.20. Both statements fall under the verbal description of neutral, indicating moderate agreement among the participants.

The high mean score for the statement related to interpreting data through graphs and charts suggests that the participants have a moderate level of confidence and readiness in understanding and extracting information from visual representations of data. They can likely make sense of data presented in graphical formats and draw meaningful insights from them; hence, there is still room for improvement in this aspect.

On the other hand, the low mean score for the statement regarding selecting the appropriate statistical tool indicates that the participants perceive themselves to have a moderate level of readiness in this area. It suggests that they may need further support, training, or guidance in understanding and choosing the most suitable statistical tools for their research studies. The participants may seek professional help from a statistician in selecting the appropriate tools to be used in their action research.

Based on the data presented, it can be observed that all ten statements received an overall mean score of 3.27 which has a verbal description of neutral and is interpreted as moderate. This suggests that the participants may possess only some basic understanding and skills in performing tasks related to analysis and interpretation in the context of their research; thus, there is still room for improvement and further development.

This relates to the study of Morales et al. (2016), which found that their study participants perceived a moderate level of difficulty in conducting action research and that some areas, such as statistics, data organization, literature searching, and writing reports, require professional development programs. In addition, the study of Oestar and Marzo (2022) had similar findings, which noted that teacher researchers are weak in choosing the tools for data analysis and interpretation, encoding quantitative and qualitative data, and interpreting results from the software.

Table 4 displays the mean distribution of the participants' research readiness level in terms of support. As shown, the statement "Our division promulgates research culture by conducting division-wide seminar workshops for teacher researchers" received the highest mean score of 3.86, indicating a verbal description of agree.

Table 4. Mean distribution of the level of the participants' research readiness in terms of support

Research Support	Mean	Description
I am fully equipped with the knowledge and skills to develop action research.	3.17	Neutral
I am allowed to attend seminars, webinars, and seminar workshops on action research.	3.63	Agree
I have received financial support from my family to attend seminars, webinars, and seminar workshops about action research that requires a registration fee.	3.01	Neutral
I have received moral support from my peers and colleagues in conducting action research.	3.47	Neutral
I have received technical assistance from our master teachers and district research	3.22	Neutral

managers in conducting action research.		
Our school head/principal encourages us to conduct action research and rewards teachers who can accomplish action research.	3.59	Agree
Our school has an active committee on research and provides free seminar workshops on action research which everybody can attend.	3.36	Neutral
Our school provides financial support to teachers who conduct action research.	2.88	Neutral
Our district initiates programs, seminar workshops, and activities about research.	3.57	Agree
Our division promulgates research culture by conducting division-wide seminar workshops for teacher researchers.	3.86	Agree
Mean	**3.38**	**Neutral**

Legend: 4.50 – 5.00 – Strongly agree; 3.50 – 4.49 – Agree; 2.50 – 3.49 – Neutral; 1.50 – 2.49 – Disagree; 1.00 – 1.49 – Strongly disagree

The mean score suggests that the participants' level of readiness in this aspect is high. This implies that the participants perceived that their division promotes a research culture by organizing division-wide seminar workshops designed for teacher researchers. This indicates that the participants acknowledge the efforts of the division in creating a supportive environment and providing opportunities for teachers to engage in research activities. In contrast, the lowest mean score is for statement, "Our school provides financial support to teachers who conduct action research," with a mean score of 2.88, which has a verbal description of neutral and is interpreted as the level of the participants' readiness is moderate. This implies that the participants perceive a neutral level of readiness in terms of financial support provided by their school for conducting action research. This suggests that there may be some room for improvement in terms of financial assistance for teachers who engage in research activities.

The overall mean score for the participants' level of research readiness in terms of research support is 3.38, indicating a neutral level. This suggests that there are both supportive structures and initiatives in place, as well as areas for improvement in terms of financial support and resources for conducting research. The neutral mean score implies that the participants perceive a balanced level of support for their research endeavors. While there may be some existing supportive structures or initiatives within the educational context, there is room for enhancement in providing additional financial support and resources to facilitate their research activities further.

This conforms with the study of Ulla et al. (2017) that identified the lack of research expertise and skills, large teaching loads, and the lack of school financial support as obstacles to teachers in conducting research. Moreover, Nagibova (2019) revealed that teachers did not receive enough support and resources. In addition, Sato and Loewen (2019) revealed that teachers lacked physical access to research, such as time and resources, and institutional support.

Research support may be one of the factors to be considered to increase the research involvement of the teachers. In fact, the study of Puspitasari et al. (2021), which aimed to investigate what factors made the teachers choose to continue conducting teacher action research and what pedagogical and professional competencies perceived changed as sustainable impacts of Teacher Action Research (TAR) indicated that sustaining engagement with research requires motivation, self-efficacy beliefs, institutional support, and collaboration with academics or universities. Also, Anwar (2016) in his study stated that field support played a positive role in enhancing participants' knowledge and reported skills in implementing action research.

This collective evidence emphasizes the need for comprehensive support systems, resources, and collaborative efforts to address these obstacles and encourage teachers' active involvement in action research for their professional development and to improve the education system.

Table 5 below illustrates the mean distribution of the extent of participants' attitude towards action research in terms of research outlook. As shown, the highest mean score is 4.17 for the statement "I believe action research can improve the teaching-learning process," which has a verbal description of agree and is interpreted as high, indicating that the participants have a positive attitude towards the potential impact of action research on their teaching practice. The lowest mean score is 3.17 for the statement "I believe action research does not require

teachers to spend much money," which has a verbal description of neutral and is interpreted as moderate, indicating that the participants are somewhat skeptical about the financial aspects of conducting action research.

Table 5. Mean distribution of the extent of participants' attitude towards action research in terms of research outlook

Research Outlook	Mean	Description
I believe action research is helpful for my career.	4.12	Agree
I believe action research can improve the teaching-learning process.	4.17	Agree
I believe action research contributes immensely to solving practical educational problems.	4.15	Agree
I believe doing action research is a part of teaching.	3.93	Agree
I believe action research is not solely the task of a trained professional.	3.92	Agree
I believe action research is not time-consuming.	3.29	Neutral
I believe action research is not a complicated thing to do.	3.24	Neutral
I believe action research does not require teachers to spend much money.	3.17	Neutral
I believe action research is not only for intelligent teachers but also for all teachers who seek answers to their classroom-based problems.	4.01	Agree
I believe action research can be done independently.	3.68	Agree
Mean	**3.77**	**Agree**

Legend: 4.50 – 5.00 – Strongly agree; 3.50 – 4.49 – Agree; 2.50 – 3.49 – Neutral; 1.50 – 2.49 – Disagree; 1.00 – 1.49 – Strongly disagree

The overall mean score for this table is 3.77, indicating that the participants hold a generally positive attitude towards action research in terms of research outlook. Most statements received a mean score above 3.5, reflecting agreement with the statements and a favorable attitude towards action research. However, it is worth noting that out of the ten statements, only three statements received a mean score below 3.5. The statements, "I believe action research is not time-consuming," "I believe action research is not a complicated thing to do," "I believe action research does not require teachers to spend much money" received a mean score below 3.5 which has a verbal description of neutral and is interpreted as the extent of the participants' attitude is moderate. These results suggest that while the participants generally have a positive attitude toward action research, there may be some reservations or uncertainties regarding the time commitment, complexity, and financial requirements associated with conducting action research. This neutral stance could be attributed to factors such as a lack of awareness or understanding of the process, concerns about workload or resources, or previous experiences that have influenced their perceptions.

This relates to the study of Salcedo and Relucio (2019), which found that SHS instructors' confidence in doing action research as a tool for professional development is poor, but despite this, their perception of the contribution of action research was positive because it increases their research knowledge and skills and can help them improve their teaching and social skills with their students. Similarly, Ulla (2018) found that teachers recognized the potential benefits of conducting school and classroom-based research for their teaching practices and professional growth.

Also, Yigit and Bagceci (2017) demonstrated that engagement in action research positively influenced teachers' professional growth across various dimensions. These findings are aligned with Messikh's (2020) suggestion that assuming the role of a teacher-researcher contributes to long-term development within the classroom and supports teachers' professional advancement. Furthermore, Aguilar-de Borja (2018) discovered in her study that nearly all teachers reported positive impacts on student learning and their own teaching practices through their action research projects. These studies collectively underscore the crucial role of action research in enhancing the teaching and learning process, as perceived and evaluated by teachers.

Table 6 exhibits the mean distribution of the extent of participants' attitude towards action research in terms of research interest. As presented, the highest mean score was obtained for the statement "I believe I am interested in research about students' performance and skills" (3.90), which has a verbal description of agree and is interpreted as the extent of the participants' attitude is high, indicating that many of the participants were interested in researching their students' academic performance and skills.

Meanwhile, the lowest mean score was obtained for the statement "I believe I am interested in research about the supervision of school heads and administrators" (3.63), which has a verbal description of agree and is interpreted as the extent of the participants' attitude is high, indicating that the participants were also interested in researching the supervision of school heads and administrators. It is important to note that all ten statements garnered a mean score above 3.5, meaning all indicators have a verbal description of agree and is interpreted as the extent of participants' attitude is high.

Table 6. Mean distribution of the extent of participants' attitude towards action research in terms of research interest

Research Interest	Mean	Description
I believe I am interested in research about students' performance and skills.	3.90	Agree
I believe I am interested in research about literacy.	3.84	Agree
I believe I am interested in research about teachers' performance and skills.	3.77	Agree
I believe I am interested in research about technology.	3.82	Agree
I believe I am interested in research about learning platforms.	3.78	Agree
I believe I am interested in research about mathematics and social sciences.	3.69	Agree
I believe I am interested in research about language.	3.76	Agree
I believe I am interested in research about the DepEd curriculum, programs, and projects.	3.69	Agree
I believe I am interested in research about the schools' internal and external stakeholders.	3.66	Agree
10. I believe I am interested in research about the supervision of school heads and administrators.	3.63	Agree
Mean	**3.75**	**Agree**

Legend: 4.50 – 5.00 – Strongly agree; 3.50 – 4.49 – Agree; 2.50 – 3.49 – Neutral; 1.50 – 2.49 – Disagree; 1.00 – 1.49 – Strongly disagree

The results suggest that the participants had a generally positive attitude towards conducting research and were interested in researching various education-related topics. This means that the participants have varying research interests as the topic of their action research.

Interest is subjective and depends on each individual. Davis (2017) stated that subjectivity is generally conceptualized as how the researcher's perspectives, values, social experiences, and viewpoints influence research.

Table 7 exhibits the mean distribution of the extent of participants' attitude towards action research in terms of research benefit.

Table 7. Mean distribution of the extent of participants' attitude towards action research in terms of research benefit

Research Benefit	Mean	Description
I believe action research can be an edge for promotion.	4.02	Agree
I believe I can receive recognition for conducting action research.	3.95	Agree
I believe I can receive awards in an action research undertaking.	3.88	Agree
I believe I can receive financial support if my action research is widely recognized.	3.55	Agree
I believe action research can help me improve my teaching practice and help me understand my learners deeper.	4.03	Agree
I believe action research can help my colleagues in their teaching practice if my study results are shared through SLAC sessions.	4.11	Agree
I believe action research can help solve issues in schools and communities.	3.97	Agree
I believe my action research can be published in local and international publications.	3.81	Agree
I believe action research can change lives.	3.95	Agree
10. I believe action research can improve policy or practices.	3.97	Agree
Mean	**3.92**	**Agree**

Legend: 4.50 – 5.00 – Strongly agree; 3.50 – 4.49 – Agree; 2.50 – 3.49 – Neutral; 1.50 – 2.49 – Disagree; 1.00 – 1.49 – Strongly disagree

It can be gleaned that the highest mean score is for the statement "I believe action research can help my colleagues in their teaching practice if my study results are shared through SLAC sessions" with a mean score of 4.11, which has a verbal description of agree and is interpreted as the extent of the participants' attitude is high, indicating that the participants agree that action research can benefit their colleagues in improving their teaching practices thru SLAC sessions as a medium of dissemination of results.

The lowest mean score is for the statement "I believe I can receive financial support if my action research is widely recognized" with a mean score of 3.55, which has a verbal description of agree and is interpreted as the participants' attitude is high, indicating that the participants still agree but to a lesser extent that action research can lead to financial support. The overall mean score for all ten statements was 3.92, indicating that the participants agreed that conducting action research can bring various benefits. This means that the participants have a high attitude in conducting action research because of the benefits they can acquire.

This relates to the study of Ulla et al. (2017), which demonstrated that teacher participants had a favorable attitude toward research and its benefits to their teaching practice and students' learning. As a result, job promotion is the driving force behind teacher research.

Moreover, Abrenica & Cascolan (2022) found that teachers believe that action research has a beneficial effect on teaching-learning. It is also useful for the professional development of teachers, particularly in terms of promotion, It positively affects curriculum creation or development, and the teacher-participants face difficulties in conducting action research due to financial limitations, time constraints, and the procedures of the Division Office.

In addition, according to Rochsantiningsih (2022), despite the challenges involved in the conduct of action research, teachers derived numerous benefits from it. Their involvement in action research projects yielded notable enhancements in different aspects of their classrooms, including teaching approaches, student learning, and the overall classroom environment. Moreover, some teachers experienced a shift in their roles, transitioning from being mere "technicians" to becoming active decision-makers in their teaching practices.

Conducting LAC sessions, on the other hand, is a recognized program by the Department of Education. DepEd Order no. 35 series of 2016 issued a policy on Learning Action Cell as K to 12 Basic Education Program School-based Continuing Professional Development which is in line with the implementation RA 10553 or the Enhanced Basic Education Act of 2013. The Department of Education (DepEd) institutionalizes Learning Action Cells (LACs), which aim to foster teachers' knowledge, attitudes, and competencies in terms of curriculum, instruction, and assessment while they are at their workstations. The policy's main goals are to enhance the teaching-learning process, which will result in better student learning; develop successful teachers; make it possible for teachers to support one another in continually improving their content- and pedagogical-related knowledge, practice, skills, and attitudes; and foster a professional collaborative spirit among school administrators, teachers, and the community at large.

Table 8 discusses the mean distribution of the extent of participants' attitude towards action research in terms of research anxiety.

Based on the table, the highest mean score was obtained for the statement "I think action research is challenging," with a mean score of 4.05, which verbally describes agree and is interpreted as the extent of the participants' attitude is high. The lowest mean score was obtained for the statement "I believe action research is just for intelligent teachers," with a mean score of 2.72, which has a verbal description of agree and is interpreted as the extent of the participants' attitude is moderate. Finally, the participants' attitude towards research anxiety is generally neutral, as indicated by the mean score of 3.42, which is interpreted as the extent of the participants attitude in terms of research anxiety is moderate.

The results indicate that the participants perceived action research as a challenging endeavor. This suggests that teachers recognize the complexities and difficulties associated with conducting action research. Moreover, participants generally agreed to a moderate extent that action research is not exclusive to only highly intelligent
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teachers. It implies the participants did not perceive intelligence as the sole determining factor for engaging in action research. Lastly, the participants' attitude towards research anxiety indicates a moderate level of agreement. This suggests that participants held a neutral stance or moderate attitude towards the anxiety experienced in relation to action research. It implies that while there may be some concerns or anxieties, they were not overwhelmingly high or low. Overall, the interpretation of the findings suggests that participants recognized the challenges of action research, held a moderate attitude towards research anxiety, and did not perceive action research as limited to highly intelligent teachers. These insights provide a basis for understanding the participants' attitudes and perceptions towards action research in relation to these specific statements.

However, it is important to note that only four statements on research anxiety got a mean score above 3.5. These statements are "I believe action research is stressful", "I think action research is challenging", "I believe action research demands more time," and "I believe action research is complicated". The fact that only four statements related to research anxiety received a mean score above 3.5 suggests that participants generally experienced elevated levels of anxiety when it comes to action research. The specific areas of stress, challenges, time demands, and complexity within action research appear to be significant factors contributing to this anxiety.

Table 8. Mean distribution of the extent of participants' attitude towards action research in terms of research anxiety

Research Anxiety	Mean	Description
I believe action research is stressful.	3.56	Agree
I do not know about conducting action research.	3.16	Neutral
I think action research is challenging.	4.05	Agree
I believe action research demands more time.	4.01	Agree
I believe action research is complicated.	3.63	Agree
I believe I cannot do action research on my own.	3.26	Neutral
I believe action research is just for intelligent teachers.	2.72	Neutral
I believe conducting action research is expensive.	3.43	Neutral
I believe that I cannot be promoted without conducting action research.	3.09	Neutral
10. I think action research will make me nervous.	3.26	Neutral
Mean	**3.42**	**Neutral**

Legend: 4.50 – 5.00 – Strongly agree; 3.50 – 4.49 – Agree; 2.50 – 3.49 – Neutral; 1.50 – 2.49 – Disagree; 1.00 – 1.49 – Strongly disagree

This conforms to Tarrayo et al. (2021), that suggested that maintaining motivation and commitment to research involvement can be difficult and challenging. Still, with favorable conditions and a supportive research environment, it is possible to sustain one's enthusiasm and engagement in research. On the contrary, the findings of Samosa (2021) indicated a lack of agreement among teachers regarding experiencing anxiety toward action research, suggesting that teachers generally exhibit a low level of anxiety when conducting action research.

These insights highlight the importance of creating conducive environments, supporting, and promoting a research culture within the educational context. By doing so, teachers can continue to explore and enhance their teaching practices, contribute to educational innovation, and ultimately foster positive outcomes for both them and their students.

Table 9 shows the frequency and percentage distribution of the factors that hinder the participants in conducting action research. The table presents nine factors, and the participants were asked to indicate the extent to which each factor hindered them from conducting action research.

Based on the table, the top three factors that hinder participants in conducting action research includes overburdened work schedules, insufficient fundamental skills, and inadequate training and experience. Overburdened work schedules result in little or no time for research which garnered the highest frequency and percentage, with 102 participants (68.92%) reporting it as a hindrance. This suggests that teachers are struggling to balance their teaching responsibilities with conducting research.

Table 9. Frequency and Percentage Distribution of the factors hinder the participants in conducting action research

Factors Hinder Conducting Research	Frequency	Percentage
Overburdened work schedules result in little or no time for research	102	68.92
Insufficient fundamental skills in conducting action research	81	54.73
Inadequate training and experience in conducting action research	81	54.73
Inadequate financial support from relevant authorities for workshops and seminars	56	37.84
Slow internet connection in school	48	32.43
Insufficient reading materials and other references	43	29.05
Inadequate research facilities in the school and district	41	27.70
Unavailability of research experts in the school and district	40	27.03
Unavailability of a conducive environment that encourages research	37	25.00

Insufficient fundamental skills were rated by 81 participants or (54.73%) as one of the hindering factors in conducting action research. This suggests that some teachers may not possess the necessary knowledge or expertise to effectively engage in action research, which could limit their ability or confidence to conduct research projects.

Also, inadequate training and experience were other factors that hindered the participants in conducting action research. Eighty-one (81) or (54.73%) of them reported this as a hindrance. This suggests that teachers may need more training and support to conduct action research effectively.

The findings indicate that teachers face significant obstacles in conducting action research, primarily due to their heavy workloads, lack of fundamental skills, and inadequate training and experience. Addressing these hindrances requires interventions such as workload management strategies, professional development programs, and mentorship opportunities to empower teachers and facilitate their engagement in action research.

Anent this, Declaro-Ruedas and Ruedas (2020) revealed that the teachers have positive attitudes toward the action research process. However, the most influential factors that prevented teachers from doing action research were work overload, insufficient time for conducting research, lack of practical training and experience in doing action research, and lack of research centers and research specialists in their respective schools.

In support of this claim, Wangdi and Tharchen (2022) stated that teachers positively perceived research. However, they were hindered in certain ways by the difficulties they encountered while doing their research, such as the teachers' demanding schedules, a lack of time, a lack of research knowledge, a lack of rewards and recognition, a lack of platforms and expertise, and a lack of trustworthy resources, such as books. However, participants fully knew the research's advantages for students, teachers, institutions, and the country.

Table 10 presents the results of an Analysis of Variance (ANOVA) conducted to determine if there are significant differences in the participants' readiness and attitude toward action research when grouped according to their profile (age, years in service, position/designation, educational attainment, seminars attended, and research outputs).

Table 10. Analysis of Variance on the participants' readiness and attitude towards action research when grouped according to profile

		Sum of Squares	df	Mean Square	F	Sig.
Age	Between Groups	44.243	98	.451	.962	.573
	Within Groups	23.000	49	.469		
	Total	67.243	147			
Years in Service	Between Groups	211.203	98	2.155	1.109	.350
	Within Groups	95.250	49	1.944		
	Total	306.453	147			
Position/Designation	Between Groups	122.869	98	1.254	1.105	.354
	Within Groups	55.583	49	1.134		
	Total	178.453	147			
Educational Attainment	Between Groups	39.894	98	.407	1.253	.192
	Within Groups	15.917	49	.325		
	Total	55.811	147			
Seminars Attended	Between Groups	106.056	98	1.082	.984	.538
	Within Groups	53.917	49	1.100		
	Total	159.973	147			
Research Outputs	Between Groups	31.252	98	.319	3.348	.000*
	Within Groups	4.667	49	.095		
	Total	35.919	147			

The level of significance (or alpha level) used in the analysis is 0.05, which means that a p-value less than or equal to 0.05 indicates a statistically significant difference among the groups. As seen in the table, there were no significant differences in the participants' readiness and attitude towards action research when grouped according to age, years in service, position/designation, educational attainment, and seminars attended, as indicated by the non-significant p-values (greater than 0.05) for these variables. However, there was a significant difference in the participants' readiness and attitude towards action research when grouped according to research outputs, as indicated by the significant p-value (less than 0.05).

This suggests that participants who have produced research outputs may have a more positive attitude towards action research compared to those who have not.

Ulla et.al (2017) demonstrated that teacher participants had a favorable attitude toward research and its benefits to their teaching practice and students' learning and as a result, job promotion is the driving force behind teacher research.

Producing research outputs can lead to job promotion. This is anchored in DepEd Order no. 66 series of 2007, the Revised Guidelines on the Appointment and Promotion of Other Teaching, Related Teaching and Non-Teaching Positions, wherein, under the outstanding accomplishments, research and development projects are included that has corresponding points given to action research conducted in school, district or division levels respectively.

Table 13 presents the results of a correlation analysis between participants' research readiness and their attitudes toward action research. The variables analyzed include research outlook, research interest, research benefit, research anxiety, research motivation, research literacy, research analysis and interpretation, and research support. The analysis was conducted on a sample of 148 participants.

The findings indicate a strong positive correlation between participants' research readiness and their attitudes toward action research. Specifically, research outlook, interest, benefit, and motivation have a high positive correlation with research readiness. This suggests that motivated individuals with a positive outlook toward research are more likely to be ready to engage in action research. Similarly, research literacy and support positively correlate with research readiness. This implies that individuals with the necessary research skills and access to adequate research support are more likely to be prepared to undertake action research.

Table 13. Correlation Analysis on the participants' research readiness and attitude towards action research

Variables		Research Outlook	Research Interest	Research Benefit	Research Anxiety
Research Motivation	Pearson Correlation	.770**	.679**	.746**	.322**
	Sig. (2-tailed)	.000	.000	.000	.000
	N	148	148	148	148
Research Literacy	Pearson Correlation	.715**	.668**	.571**	.239**
	Sig. (2-tailed)	.000	.000	.000	.003
	N	148	148	148	148
Research Analysis and Interpretation	Pearson Correlation	.681**	.602**	.512**	.141
	Sig. (2-tailed)	.000	.000	.000	.087
	N	148	148	148	148
Research Support	Pearson Correlation	.685**	.639**	.613**	.249**
	Sig. (2-tailed)	.000	.000	.000	.002
	N	148	148	148	148

Furthermore, the results also reveal a positive correlation between research readiness and research analysis and interpretation. This suggests that individuals who are skilled in analyzing and interpreting research findings are more likely to be ready to engage in action research. However, the findings also reveal a weak positive correlation between research anxiety and research readiness. This further entails that individuals who experience some degree of anxiety toward research may still be prepared to undertake action research.

These findings have significant implications for teachers and schools seeking to engage in action research. This indicates that teachers who possess the necessary research skills, have a positive outlook towards research, are motivated, and have access to research support are more likely to be ready to undertake action research. These findings are consistent with previous research showing that individuals with a strong foundation in research skills and knowledge are more likely to engage in research activities (Guo & Sun, 2018). Furthermore, the results of the study by Safa et al. (2018) are also consistent with previous research that has shown that research anxiety can be a barrier to engaging in research activities. However, the weak positive correlation between research anxiety and research readiness suggests that individuals who experience some degree of anxiety toward research may still be prepared to undertake action research.

CONCLUSIONS

Considering the findings of the study, the following conclusions are drawn:

Regarding teachers' profiles, most of them in West Butuan District I belong to the mid-adult age group, who are considered experienced teachers and well-educated individuals. However, their research involvement is minimal.

Concerning teachers' readiness towards action research, they are highly motivated to conduct action research for improving teaching and learning. Still, they have areas for improvement in research literacy, analysis and interpretation of data, and research support. However, they can seek help from experts such as statisticians and the like to assist them in the abovementioned areas of research undertaking.

Moreover, teachers have a positive attitude towards action research as a valuable tool for improving teaching practice and solving practical educational problems. However, they are somewhat concerned about the financial requirements of conducting action research. They have a high attitude toward conducting action research because of the benefits they can acquire. Also, the teachers acknowledge the challenges and demands of conducting action research but do not necessarily feel anxious about it.

Additionally, the teachers face hindering factors that affect their ability to conduct action research. They have insufficient fundamental skills and have inadequate training and experience. They also experienced overburdened work schedules, which resulted in little or no time for any research undertaking.

The teachers' readiness and attitude vary based on age, years in service, position/designation, educational attainment, and seminars attended. However, those who have produced research outputs have a more positive attitude towards action research than those who have not. This suggests that producing research outputs may improve teachers' readiness and attitude toward action research.

Lastly, several factors, including research outlook, research interest, research benefit, research motivation, research literacy, research support, and research analysis and interpretation, were found to have a strong positive correlation with research readiness. This entails that individuals who display positive attitudes and motivation and possess the necessary skills and support are more likely to be prepared to engage in action research. However, it is worth noting that the findings also indicate a weak positive correlation between research anxiety and research readiness. This suggests that even individuals who experience some level of anxiety toward research may still be prepared to undertake action research.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

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