RESEARCH BARRIERS OF PUBLIC SCHOOL TEACHERS OF THE DIVISION OF ILGAN CITY

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Abstract

Teachers involved and engaged in research and utilize research evidence as the basis for instructional and pedagogical choices are leading to having desirable effects on both the teaching and learning process. The Division of Iligan City has already initiated endeavors to strengthen the research culture of the teachers. However, the number of teachers conducting teacher research is still minimal despite efforts exerted by the Division Office. Thus, this study was carried out to determine the factors and reasons why teachers are having difficulty in doing research. This study employed a descriptive research design. It used both quantitative and qualitative research methods. The study utilized a researcher-made questionnaire, and the researcher validated the questionnaire. Five (5) experts in the field of educational research were asked to validate the questionnaire. The tool's internal reliability statistics obtained Cronbach's Alpha Coefficient of 0.942. The survey was made available in Google Forms for easy analysis

and low-cost dissemination. The researchers were able to gather responses, 149 respondents. The researchers also strictly observed the ethics of research. Then the researchers analyzed the numerical data using SPSS V 20. The researchers examined the textual responses of the respondents using thematic analysis. Quantitative results revealed that teachers consider insufficiency of time to do research, no funding, too many responsibilities at school, the tedious and rigorous process in the proposal, no mentor in conducting research, and poor knowledge in analyzing qualitative and quantitative data as primary barriers to research. Teachers research activity is also hindered by no knowledge on how to make a publishable paper, very large class size in the classroom, no access to research journals, no or poor internet in the school and poor support from the management. Thematic analysis of the qualitative data also revealed the critical needs of the teachers in conducting research, which was grouped according to themes. These themes include the need for training and mentoring in research, the necessity of research funds, the need for access to research resources, the need of time, and the need for administrative support in research projects. The researchers suggested training programs using the study as the baseline data.

Keywords

1. Introduction

Teacher research plays a vital role in the teaching-learning process. It serves as the backbone of the teaching approaches, strategies, technique, instruction materials, and assessment that we currently use now. Teachers involved and engaged in research and utilize research evidence as the basis for instructional and pedagogical choices are leading to having desirable effects on both the teaching and learning process. Teacher research is an ideal way for teaching professionals to explore and develop their understandings of their practices Borg (2010). As explained by Cain (2015), teachers transform theoretical knowledge to practical knowledge through developing their conceptual understanding of it. They then transmute theoretical knowledge into contextualized and personal knowledge using cases from their previous experiences. They also transformed specific knowledge into a broader knowledge base by creatively diffusing it into areas beyond those in the original research.

The Division of Iligan City has already initiated endeavors to strengthen the research culture of the teachers. The division has issued Division Memorandum 187, s. 2016 to provide

guidelines on the conduct and submission of basic research, action research, innovation, and intervention to streamline the research and development of the teacher in the division.

However, the number of teachers conducting teacher research is still minimal despite efforts exerted by the Division Office. Thus, this study was carried out to determine the factors and reasons why teachers are having difficulty in doing research.

1.1 Research Engagement and its Importance to the Education Sector

It is compulsory to have a research policy in the nation with an excellent level of validity, consistently ensuring the provision of quality research education and meeting other research standards, therefore building a research-oriented community Kurt (2015). There has been numerous research policy and issuances in the Department of Education (DepEd). DepEd Orders were issued to strengthen the research practices of the department.

Educational Researches play a vital role in the administration, management, and implementation of the school system. Educational research, as defined by Bas (2017) is the adaptation of the process, collecting, organizing the data systematically and objectively, analyzing the data and reporting the results and implications for others in the field of education. Many scholars have used several names and terms to the research that educators conduct in classrooms or schools Roulston et al. (2005), to name a few of those are action research, collaborative inquiries, practitioner research, self-studies, case studies, critical investigation and teacher research. Numerous intellectuals have promoted the conduct of "practitioner" or "teacher research" as an avenue of aiding professional development for both pre-service teachers and in-service teachers. The research practices in the department among teachers could provide a stimulating environment encouraging modification and reform in the K-12 program of the DepEd, and hearing the clamor for teachers' continuous personal and vocational knowledge.

Educational research and evidence necessarily and positively affect the teaching practice of the teacher. When teachers involve with and in research and make pedagogical choices guided by sound research evidence and research results, this will have a desirable effect on both the teaching and learning process Hargreaves (1996). The research findings of Cain (2015) explained that teachers transform theoretical knowledge to practical knowledge through developing their conceptual understanding of it. They then transmute theoretical knowledge into contextualized and personal knowledge using cases from their previous experiences. They also transformed specific knowledge into broadly knowledge base by creatively diffusing it into areas beyond those in the original research. Sustaining strong evidenced-based teaching practices

allows us to navigate between Orthodox tradition and assumptions that we have in hand and newer 'progressive' approaches on the other. Teacher research plays an essential role in the aspect of continuous professional development (CPD) of the teachers Firth (2016). Teaching and learning practice of the teachers in the Department of Education could be improved if research evidence and investigation findings guide their choice of teaching strategies, instructional materials, and assessment methods.

Research engagement is an essential avenue for teachers to develop their professional competence. Gao & Chow (2011). Also, according to Watkins (2006), research engagement mainly helped practitioners to 1) obtain an outsider outlook toward the practice of learning; 2) learn what other people are doing in their professional practice; 3) see the practical relevance of research to a classroom setting, and 4) develop social networking such as providing possibilities for contacting other educators. Through reading and doing teacher research, educators become more critical, reflective, and analytical about their practice in classrooms Atay (2008). Reading and doing research can develop and improve teachers' metacognitive knowledge of teaching through the provision of different interpretations and understanding of instruction and learning Biesta (2007). Through reading the research, doing research and using research, teachers could improve their professional practice by apply research findings in their daily run-through.

Research also allows the teachers to test the effectiveness of their interventions which they believe could enhance the learning outcomes Lankshear & Knobel (2004). According to Schohat & Vigoda (2010) engagement strongly correlates to the performance of an individual, the group, and the organization in areas such as productivity, retention, loyalty and customer service. This literature further tells us that research allows the teachers to examine teaching strategies personally and tailor-fit them to the needs and capabilities of their students.

There is a wide variety of research that they may conduct, ranging from brief and self-contained 'action research' within a classroom, reviewing a body of literature and piloting an experimental study with his or her students to see if what teaching strategies are effective Firth (2016). Developing an understanding as to how faculty members estimate their performance on research-related tasks will be of keen interest to planners, senior managers working in the education sector Hemmings & Russell (2010). In the Department of Education, teachers and administrators are compelled by some issuances to research in their classroom and schools respectively. The usual form of research done by DepEd stakeholders is action research and continuous-improvement research.

According to Thomas (2004) the more informed utilization of and involvement of teachers in research, the more that the teacher can enhance the educational quality. Worrall (2004) also investigated the reasons why the teacher engages in research. The most cited reason was 'to create a greater understanding of specific issues and concerns in teaching and learning.

Thus, the current study aimed to improve the research engagement of the teachers in the Department of Education. Increasing research engagement of the public school teachers could lead to improvements in the teaching practice, better choices in teaching strategies, instructional materials, assessment methods, and professional practice. High research engagement level will then result in improved learning outcomes and the achievement of the organizational mandate (DepEd, 2017a) of the Department of Education which is to provide quality education for establishing and maintaining an adequate, complete, and integrated system of basic education relevant to the national development goals.

1.2 Barriers and Challenges to Teacher Research Engagement

In the education sector, teachers as graduates and professional education and some even have graduate degree well capable of conducting researches. However, practical barriers may be a trial in their research journey. According to Firth (2016), some hindrances are present in the education system that makes researching not be in a smooth-sailing activity.

Firth (2016) also highlighted time as one of the obstacles that hinder teachers from conducting research. Lucas and Turner (2007a) likewise found out that high teaching loads influence the research productivity of a faculty. Worrall (2004) also identified the lack of time as one of the three reasons why teachers cannot sustain research engagement. Ibrahim et al., (2016) also accounted that lack of time is one of the several barriers to research participation. These factors are also present in the context of DepEd. As stated in the DepEd Order 16 s2009, teachers are expected to serve 8 hours per day. Six (6) hours will be spent in actual classroom teaching and shall cover the full load teaching of a teacher as specified in the class program. Two (2) hours will be dedicated to teaching-related activities such as making lesson plans and computing grades. Teachers in the Department of Education have many deadlines to beat. Deadlines for submission of grades, item analysis reports, reading inventory report, and even school activity reports are always there, dominating their time to do research.

Another challenge that also affects the research engagement of the teachers is their access to reading materials on research. Firth (2016) emphasized that the lack of comprehensive libraries and limited access to research journals deteriorate the participation and engagement of

teachers in research. Bazeley (2003) also reported poor or limited access to resources affects research activity. Teachers in DepEd also had constrained access to research journals since research journals are most of the time expensive to subscribe. Online research journals are also inaccessible due to lack of internet and online journal subscription. Teachers are just limited to textbooks and references in the school library, which are mostly outdated and very limited to basic education. Some teachers have access to research journals as they are using the university account of their graduate schools.

Another challenge to research engagement is money Firth (2016). Ibrahim et al., (2016) also attested that unavailability of research funding is also a barrier to research participation. Although there is already an allocated budget for conducting action research from the classroom level to the national level through the Basic Education Research Fund (BERF), not all the teachers can be granted for this. Researcher requesting for funding still has to go through a rigid assessment to qualify for a subsidy. The study funding per year is also limited, and the screening body needs to select the best set of research to be financed for that year. Another thing is that the research funds take time to be disbursed as it has to go through the bureaucratic auditing system of DepEd.

Additionally, classroom duties Firth (2016), role overload Debowski (2006) and Lucas & Turner (2007b), and were found to be another challenge in research engagement of the teacher's other factors also include. The teachers are also very busy doing another task other than reading and doing research. Aside from teaching, teachers are sometimes taking to coach pupils for a contest such as but not limited to, MTAP, science fair, quiz bee, and journalism. Teachers are also sometimes given administrative and ancillary tasks such as being a member of the Bids and Awards Committee, being the ICT and subject Coordinators.

Moreover, another challenge of the teachers to engage in research is the unlively culture of research in most of the schools in the Department of Education. Firth (2016) stated that low cultural inertia in research weakens the research engagement of the faculty. Ibrahim et al., (2016) also indicated that a lack of proper mentoring reduces research participation. Worrall (2004) also reported that a lack of external pressure to do research is one other reason why teachers cannot sustain their engagement in research. Teachers in DepEd are not so inclined to engage in research because of the little research culture of the institution.

2. Research Questions

This study seeks to answer the following questions:

2.1 What are the demographics of the respondents when they are grouped according to:

      2.1.1 Teaching Position

      2.1.2 Key stage Assignment

2.2 What are the common research barriers experienced by the teachers?

2.3 What are the needs of the teachers to increase their research engagement?

3. Research Methods

This study employed a descriptive research design. It used both quantitative and qualitative research methods. To answer these research questions, the researchers did the procedures: The researchers followed proper entry protocol by submitting a proposal to the ASDS and approved by SDS. The researchers also asked permission for the SDS to conduct the pilot testing and the data gathering among teachers. Second, since the study used a researcher-made questionnaire, the researcher validated the questionnaire. Five (5) experts in the field of educational research were asked to validate the questionnaire. Third, the researchers considered the recommendations of the validation. Fourth, the researchers conducted pilot testing among 25 randomly selected teachers. Fifth, the researchers run an internal reliability testing using Cronbach's Alpha. The result in the reliability test tells that the questionnaire is reliable and acquired consistent responses with a Cronbach's Alpha value of 0.942.

Since the result of the reliability, analysis and validity analysis provided good results; the researchers proceed to the sixth stage which the data gathering. The researchers implored convenience sampling in the gathering. The survey was made available in Google Forms for easy analysis and low-cost dissemination. The researchers were able to gather 149 respondents in the process. The researchers assured the confidentiality of the responses in the questionnaire. The researchers also strictly observed the ethics of research. The researchers also gathered textual responses. Then the researchers analyzed the data using Statistical Package for the Social Science or SPSS V 20. The researchers analyzed the textual responses of the respondents using thematic analysis.

The researchers used statistical tools such as frequency, percentage, and weighted mean. The researchers interpreted and presented results for the conclusion and recommendations. The

researchers suggested training programs using the study as the baseline data. Lastly, the researchers then proposed for BERF funding to support the training programs for the teachers.
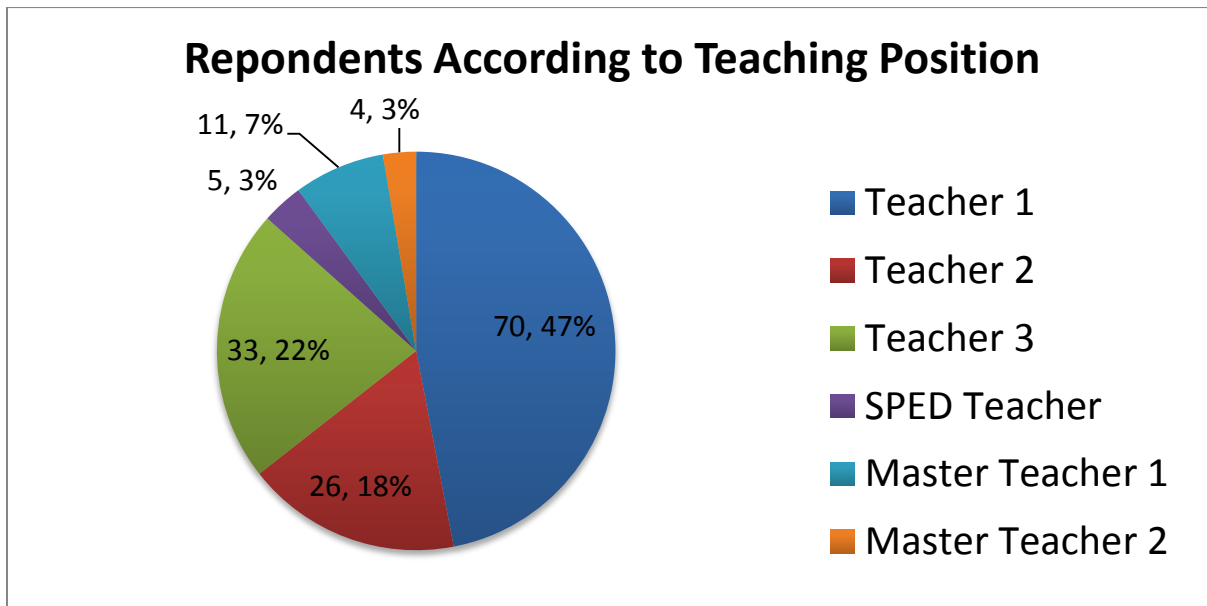
4. Presentation of Findings

Research Question No. 2.1

2.1. What are the demographics of the respondents when they are grouped according to:

  2.1.1. Teaching Position

  2.1.2. Key stage Assignment

Figure 1: *Pie Graph of the respondents grouped according to Teaching Position*

  This figure shows that most of the respondents are Teacher 1 (47%). This might be attributed to the fact that there are more Teacher 1 items in the division. The figures also show that the lowest number of the respondent is Master Teacher 2 (3%). This can be attributed to the minimal items of Master Teachers in the division.
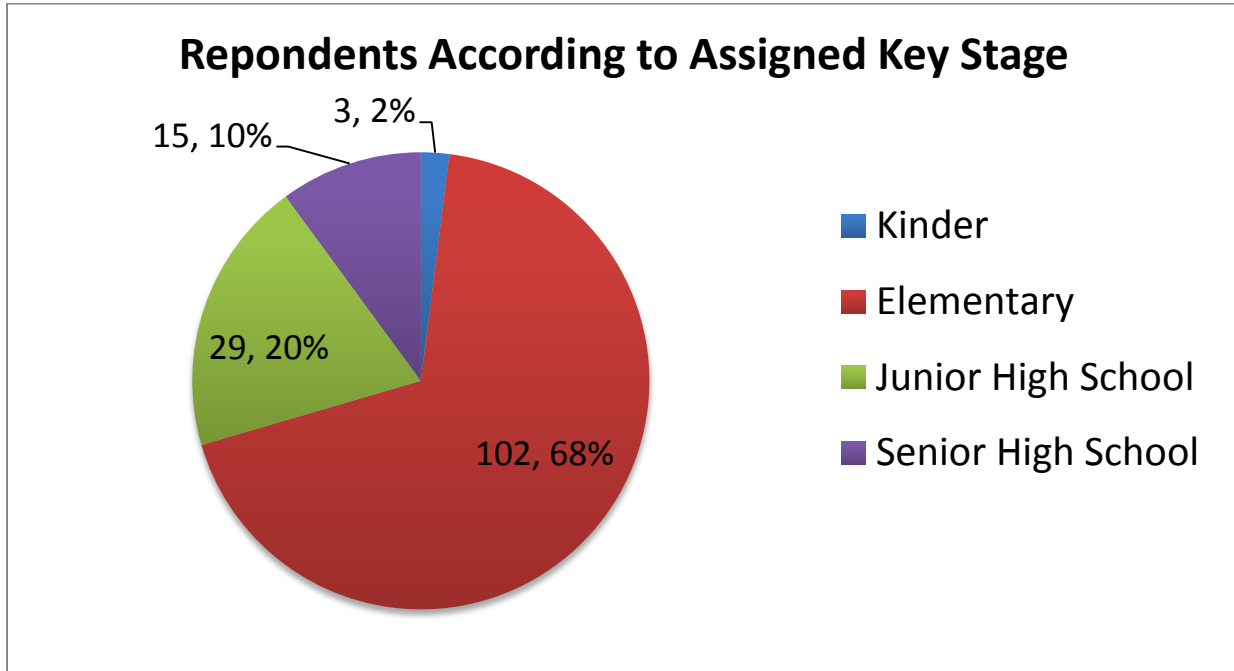
Figure 2: *Pie Graph of the respondents grouped according to Assigned Key Stage*

The figure tells us that most of the respondents are elementary teachers (68%). This can be attributed to the reality that there are more elementary teachers in the division. The figure also shows that least numbered respondents are the teachers assigned in the Kinder (2%).

Research Question No. 2.2

2.2. What is the common research barriers experienced by the teachers?

Table 1: *Ranking of Research Barriers of the Public-School Teachers*

Research Barriers	Mean	SD	Rank
I don't have time to do research	3.41	1.414	1
I don't have the money or funding to conduct my research	3.20	1.375	2
Our process of proposing research is very tedious and rigorous	3.09	1.230	3
I don't know how to do a statistical analysis of my numerical data	3.05	1.193	4
I have many duties and responsibilities in school	3.01	1.268	5
I don't know how to analyze my qualitative data	2.99	1.219	6
I don't have a mentor in conducting research	2.97	1.353	7
I don't know how to make a publishable paper	2.93	1.311	8
I don't have access to research journals	2.85	1.234	9
I don't have support from the management	2.80	1.305	10
I find research hard to understand	2.77	1.260	11
I am not motivated to do to research	2.74	1.242	12
I don't know how to conceptualize my research	2.74	1.297	13
I don't have any training in doing research	2.70	1.265	14
My reading materials are minimal	2.69	1.202	15

I have a very large class size	2.64	1.295	16
I don't know how to make a research questionnaire	2.62	1.378	17
I don't have internet connection at school	2.61	1.563	18
My co-teachers are not doing research	2.60	1.262	19
I don't know how to use research tools	2.57	1.291	20
I my co-teachers are not doing research too	2.56	1.264	21
I don't know how to make a conceptual/theoretical framework	2.56	1.362	21
I don't know how to identify and construct a research problem	2.55	1.302	23
I don't know how to make research hypotheses	2.46	1.292	24
I don't know how and where to apply for research presentation and publication	2.46	1.249	24
I don't know how to digest literature	2.44	1.254	26
I feel that it is not our responsibility to do it, it is the responsibility of the higher education	2.37	1.372	27
I don't know how to make a research proposal	2.36	1.263	28
I don't know how to access online research journals	2.34	1.223	29
I think that research does not have any practical applications in my profession	2.24	1.184	30
I am not interested in doing research	2.20	1.162	31
I have not been to a graduate school where I could learn research	1.96	1.185	32

Table 1 shows the ranking of research barriers of public school teachers. The table also indicates that the primary barriers of the teachers in conducting research are the limited time to do research, availability of funds, tedious proposing process, no knowledge in statistical analysis, many responsibilities in school, no knowledge in analysis of qualitative data, no research mentor in the school, no knowledge in making publishable paper, no access to research journals, and poor support from the management.

Research Question No. 2.3

2.3 What are the needs of the teachers to increase their research engagement?

Table 2: *Thematic Analysis of the Textual Responses Regarding Research Needs*

Primary Themes	Sub-Themes	Codes
The Need for Training and Mentoring	• Intensive Training in Research • Small Group Training in Research • Training Workshops in Research • Seminar in Research • Mentoring in Research • Technical Assistance in	TM2, TM3, TM4, TM5, TM6 TM7, TM10, TM12, TM13, TM14, TM15, TM16, TM17, TM18, TM19, TM20, TM21, TM22, TM23, TM24, TM25, TM26, TM27, TM28, TM31, TM32, TM33, TM34, TM35, TM36, TM37, TM39, TM41, TM42, TM43, TM44, TM45, TM46, TM47, TM48, TM50,

	Research • Assign a research coordinator in School • Assign a research mentor in school • A focal person in research within the school • LAC session in Research • In-service training in research • Orientation in Research	TM51, TM52, TM53, TM55, TM59, TM60, TM61, TM62, TM64, TM65, TM66, TM67, TM68, TM70, TM72, TM74, TM75, TM79, TM80, TM81, TM82, TM85, TM86
The Need for Administrative Support	• Support from administrators • Involvement in Research • Motivation to do research • Encouragement to do research • Mandate to do research • Monitoring on research works • Lessening of workloads • Technical assistance from administrators in research • Lessen Paper works • Provide research needs • Help from the administrators • An incentive in doing research • Create a research team	AS1, AS9, AS11, AS16, AS18, AS21, AS26, AS30, AS37, AS40, AS42, AS49, AS54, AS58, AS63, AS64, AS71, AS77, AS79, AS84, AS87, AS88, AS89, AS90, AS91, AS92, AS94
The Need for Research Funds	• Enough funds from administrators • Funding for research • Money to conduct research • Provide financial needs • Give financial incentive	RF1, RF3, RF17, RF35, RF56, RF57, RF71, RF76, RF84
The Need for Research Resources	• Need for internet access • Library for reading • Provide logistics • Provide research resources • Need for online library access • Human resources such as research teams • Provide access to research journals	RS35, RS43, RS57, RS66, RS78, RS83, RS87, RS90, RS92

The Need for Time to do Research	• No time limit in research • Give enough time • More time in doing research • Lesser teaching load and give time for research • Give teachers the time to do action research	T4, T8, T40, T71, T91, T93

The table presents the thematic analysis done by the researcher to the textual responses. The first theme is about The Need for Training and Mentoring. This theme mainly includes the needs for training, seminar, workshops, mentoring, technical assistance, and LAC Sessions in research. It also presents the need for school research coordinators and research teams to mobilize the research efforts of the teachers in their respective schools. The second theme is the Need for Administrative Support. This theme includes the research needs of the teachers such as support, help, involvement, motivation, encouragement, mandate, monitoring, technical assistance, and incentives from the administration in conducting research. It also presents the need for lesser workloads and the creation of a research team in the school. The third theme is the Need for Research Funds. This theme includes the research needs of the teachers such as monetary funds, provision of financial needs in the conduct of the research and cash incentives to teachers for conducting research. The fourth theme is the Need for Research Resources. This theme includes the research needs of the teachers such as Internet connection, access to print and online research journals, library, and human resource needs who would help them in conceptualizing and conducting research. The last theme is the Need for Time. This theme includes the research needs of the teachers which provides for more time for reading literature, doing research, and lesser teaching load for them to allocate ample time for research.

5. Summary of Findings

Quantitative results revealed that teachers consider insufficiency of time to do research, no funding, too many responsibilities at school, the tedious and rigorous process in the proposal, no mentor in conducting research, and inadequate knowledge in analyzing qualitative and quantitative data primary barrier to research. Teachers research activity is also hindered by no knowledge on how to make a publishable paper, immense class size in the classroom, no access

to research journals, no or poor internet in the school and inadequate support from the management.

Thematic analysis of the qualitative data also revealed the critical needs of the teachers in conducting research, which was grouped according to themes. These themes include the need for training and mentoring in research, the necessity of research funds, the need for access to research resources, the need of time, and the need for administrative support in research projects.

Some of these are barriers that can be addressed by the division office, but there are also barriers that are already beyond the control of the division personnel. Most of these barriers are within the power and jurisdiction of the school head. Thus, school head would also play a vital role in increasing the research engagement of the principals.

6. Conclusion

This study aimed at investigating the common research barriers experienced by the teachers and the needs of the teachers to increase their research engagement. This study was limited to study 149 cases which is not that high to establish generalizability. Another limitation of the study is that the research also made use of textual response which might be subjected to personal biases. It has been found out teachers face many challenges in research. It is essential to take actions in removing these bottlenecks in the conduct of research in schools. Teachers' needs should also be addressed to aid them in the conduct of research in their respective stations. Another future research should also be conducted with a regional scope which would also capture the other constructs that may include, research difficulties and research anxieties of the teachers that could also be a barrier in the conduct of teacher research. Interventions in the school and the division level are needed to increase the research turnout and submission.

7. Recommendations

7.1 A school level research coordinator may be designated to mentor teachers at the school level.

7.2 A division-level training write shop may be organized train school appointed research coordinators.

7.3 School Research Centers may be established in each school or district Intensification of administrative support in the conduct of action research in schools

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