Profiling of Teachers on their Engagement in Research: Basis for Intervention

Mervin G. Salmon
mervin.salmon001@deped.gov.ph
orcid.org/0000-0002-2276-2597
Tagum City Division, Apokon, Tagum City, Davao del Norte, Region XI
Philippines

ABSTRACT

The issue of teachers' reluctance to perform research is related to the following factors: lack of research time, lack of instruction for research, and lack of knowledge in choosing an appropriate research technique. This study aimed to profile the teaching and non-teaching personnel in the Division of Tagum City in terms of their engagement in research through a quantitative non-experimental design. A standardized researcher-made survey questionnaire was administered to the teaching and non-teaching personnel identified through simple random sampling to collect the data. Data were analyzed using frequency and percentage. Results revealed that most respondents are married, baccalaureate degree holders, and are in the Teacher I position. Further, most of the respondents have no proper training and have no opportunity to attend intensive research training. A high percentage of respondents cannot disseminate and publish the results and findings in academic journals. The level of difficulty of most teachers in making the various parts and all the technical aspects of research varies from moderate to difficult. In this way, rigorous research training is recommended for teachers.

Keywords: profile of teachers, engagement in research, Tagum City, Davao del Norte, Philippines

INTRODUCTION

The importance of doing research has on the professional development of teachers. It provides teachers and other education practitioners with the knowledge and skills required to identify a school's problem and address it systematically (Piyao, 2019). For many years, action research was embedded in the curriculum that impacts literacy instruction. It was believed that through conducting action research, teachers upgrade themselves in addressing problems within the context of the classroom setting, and even in the whole academic community, which has been influential in making an intervention (Mago, 2018) that encourages a shift towards the co-creation of knowledge (Dugho, 2015).

Action research aims to improve teaching, educational test theory or evaluate and implement an academic plan. A study revealed that teacher respondents of action research and basic research perceive research positively because of its benefits toward teaching practice and student learning process, one of which is job promotion of teachers (Piyao, 2019). However, factors like tight teaching timetables and heavy workload (Morales, 2016) are just some reasons some public-school teachers are not motivated and interested in research. Some studies also revealed that teachers have difficulty in conducting research, both basic and action, because of (1) the lack of research skills, (2) lack of awareness, (3) time element, and (4) no adequate training on research. These often constitute the primary challenges and concerns faced by teachers and other educators aspiring to undertake research (Go, 2018).

In the Philippines, the Department of Education (DepEd) ordered all its school heads, supervisors, and teachers to point out classroom problems and offer solutions by adopting the Basic Education Research Agenda in carrying out education research (DepEd, 2016). It is on this note that teachers are believed to be change agents. Classroom research enables teachers to identify the problems and suggest solutions to improve the teaching and learning process since they are directly involved in the environment where the issues take place. As a result, action research has become one of the teachers' significant

professional development concerns in the Philippines. However, there are still teachers in the Philippines, both in the elementary and the secondary, who still need additional information and skill in conducting action research.

In Tagum City Division, only a few teachers have been researching for the past four years. To glean on the figures of its research submitted, School Year (SY) 2016-2017, there were two (2) teachers submitted completed study, SY 2017-2018, there were four (4) teachers submitted completed research, SY 2018-2019, there were three (3) teachers submitted their completed research studies, and on SY 2019-2020, there was only one (1) teacher proposed research study. On the other hand, some teachers presented their action research for compliance as part of their respective schools' Individual Performance Commitment Review (IPCR) requirements. They, however, neglected the fact that it could boost their performance evaluation score and their professional and career development.

With the above premise, the profiling of teachers on their engagement in research was undertaken to find out the status while assessing their research skills that need a concrete intervention. Hence, this research comes for.

This study aimed to profile the teachers in their engagement in research. Specifically, it sought:

1. To describe the profile of the teachers in their engagement in research; and
2. To come up with an intervention plan based on the profile of the teachers in their engagement in research.

Results of this study would provide baseline information to the DepEd Officials to plan, act, and implement significant and comprehensive interventions that will address the gap of the specific needs of teachers to conduct research.

METHODS

This chapter presents the research design, the research subject, data collection instrument, and the statistical tools of the data.

Research Design

This quantitative research design employed the non-experimental descriptive approach. This study aimed to describe the characteristics of a given population. Descriptive-status research seeks to answer real-life situations (who, what, where, why, and how), which allows the researcher to describe the characteristics of the phenomenon of the population under study (Ary, 1990; Beach, 1992; "Descriptive Research Design," 2020; Dinesh, 2014; Nassaji, 2015; Williams, 2007). Descriptive research was appropriate for the study to make a general representation of the population under study. This design allowed the researcher to profile the teachers in terms of their engagement in research.

Respondents of the Study

This investigation utilized simple random sampling, selecting samples from a statistical population so that every possible sample has a predetermined probability of being selected. The study's respondents are the 722 teaching personnel of Tagum City Division, the School Year 2020-2021. The sampling procedure was done based on simple random sampling from the total population of the target group. Slovin's formula was used to determine the number of respondents as a sample.

Research Instrument

A researcher-made survey questionnaire, which three research experts validated in the Division of Tagum City, was used in this study. The questionnaire contains simple and basic profiling information of teachers towards their engagement in research.

Data Gathering Procedure

The researcher sought permission from the Schools Division Superintendent to allow the researcher to conduct an online survey to generate profiles of the teachers on their engagement in research. Google form was used as a medium for the online survey of teachers. Collating of data was

extracted from the google form as part of its program package. The online survey was administered and communicated by issuing a Division Memorandum. Then, an intervention will be formulated based on the analyses of the data gathered.

Statistical Analysis

The data gathered were analyzed and interpreted through frequency and percentage. These were used to describe the teachers' profile in their engagement in research in Tagum City Division.

Ethical Considerations

Privacy and Confidentiality. Since the survey was administered online using a google form, the researcher recognizes its responsibility under the Republic Act No. 10173 (Act), also known as the Data Privacy Act of 2012, for the data collected, recorded, organized, updated, used, consolidated, or destructed from the teaching personnel. The personal data obtained from this form is entered and stored correctly and only accessed by authorized personnel. The researcher has instituted appropriate technical and physical security measures to protect personal data. Morse & Amp; Coulehan (2014) expounded their thoughts about privacy and confidentiality that these are axial dogma in any research ethics. Confidentiality and privacy had been observed by giving the respondents an option of not indicating their names on the survey questionnaire. Besides, confidentiality and privacy were attained by not publishing the demographic data of the informants, such as the age, gender, occupation, employment, disease, if there is any. Hence, their identity was kept confidential for safety purposes. Even their responses to the items in the survey questionnaire were considered confidential.

Furthermore, the information collected shall only be used for this activity. The researcher shall not disclose any personal information without consent and shall retain it over three years to effectively implement and manage its activities.

Plagiarism. The study had no trace or evidence of copying someone else's work. It had been subjected to a plagiarism detector like the Grammarly software trial version. As a researcher, there is a need to have that positive character and integrity associated with moral virtues and values.

Fabrication. The study had no indication or cue of incorporating makeup ideas. No manipulation was made in the presentation of the data and results. The researcher employed and integrated only theories that truly existed related to the information and other inferential concepts of the study.

Falsification. The study had no trace of purposefully misrepresenting the work of others to fit a model or theoretical expectation and had no evidence of making a claim or exaggeration. Additionally, this study does not adhere to manipulating the data, which involves formulating statements or disregarding important details, maneuvering materials, tools, or methodologies that mislead others (Resnik, 2014).

Deceit. The study had no trace of misleading or deceiving the respondents that would endanger them. Basically, in any study, there must be humongous protection on the rights of the respondents, especially that they have attained higher education, so balanced and appropriate principles shall be adhered to (Amerson & Strang, 2015).

RESULTS

Profile of the Teachers in Tagum City

It was revealed that the highest number of responses in the teaching position is Teacher I, which accounts for 52.8% of the respondents. This is followed by Teacher III and Teacher II positions. Further, no respondent holds Head Teacher I, Head Teacher IV, Principal III, and Principal IV positions. In terms of gender, females (83 percent) outnumbered the males (17.2 percent) in the list of the total number of personnel in the DepEd Tagum City Division, with a difference of 65.8 percent (65.8%).

Regarding civil status, most of the married teachers in the elementary come from Teacher I, while in the secondary, the majority of the Teacher I personnel are single. The least number of single teachers in the elementary school comes from

Principal I. At the same time, there is only one Teacher in the secondary who belongs to the Master Teacher I category. Overall, many of the teachers in Tagum City are already married.

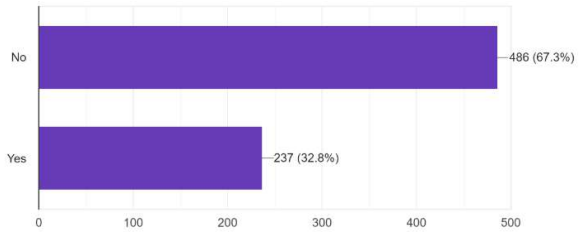
For the educational attainment of the personnel, most of the personnel in the elementary and secondary level have attained a bachelor's degree. Most of them belong to the Teacher I category. This can be attributed to the minimum requirement stipulated in the Recruitment, Selection and Placement (RSP) system for public school teachers under the 1987 Constitution, Administrative Code of 1987, and Civil Service rules and regulations, which requires a bachelor's degree for education qualification (DepEd, 2020).

Further, it has been observed that most of the Teacher III in the division are already full-fledged master's degree holders. In contrast, Master Teacher I hold the highest frequency of master's degree achievers for secondary level. On the other hand, most of the doctorate holders in the elementary are from the Master Teacher I category, and the secondary is from Teacher III classification, respectively.

Profile of the Teachers in their Engagement in Research

Most of the teaching personnel in the division have not conducted a research study, as shown in Figure 1. They cover 67.3 percent of the sample.

Figure 1
Profile of the Teachers in their Engagement in Research in Terms of Research Conducted



While Figure 2 shows the reasons for not conducting research. Out of 486 respondents, 221, or 41.9%, say that the reason for not conducting research is the lack of training on how to do it. It is followed by lack of time and insufficient guidance and technical assistance, with 40.2% and 24.1%, respectively.

Figure 2
Profile of the Teachers in their Engagement in Research in Terms of their Reasons for Not Conducting Research

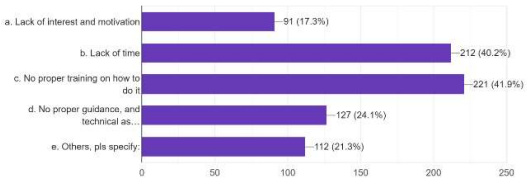


Figure 3 presents the distribution of responses in the technical assistance provided to DepEd Tagum City personnel conducting research. 50.3% of the teachers did not receive technical assistance during their research, while the percentage of personnel who receive technical assistance is only 26.3%. At the same time, the other 24.2% of the personnel responded maybe.

Figure 3
Profile of the Teachers in their Engagement in Research in Terms of Technical Assistance Provided

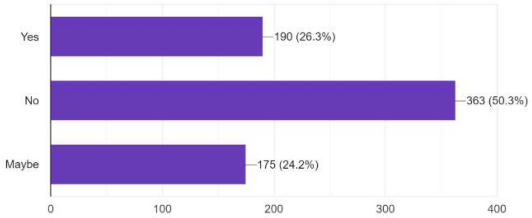


Figure 4 illustrates the distribution of responses for their intensive research training for the DepEd Tagum City personnel research. It shows that 73.7% of the total responses say that they have not attended any intensive research training, while only 26.9% have attended intensive training for research.

Figure 4
Profile of the Teachers in their Engagement in Research in Terms of Intensive Research Training Attended

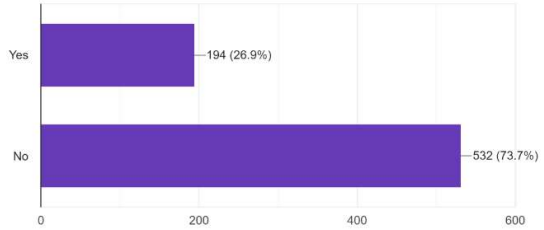


Figure 5 shows the level of perception of DepEd Tagum City personnel when formulating a research title. It shows that 44.2% of the total respondents find it challenging to formulate a research title, while 40.3% find it average, which means it is neither easy nor difficult. It is followed by 12.7% of respondents who find it very difficult and 3.2% who say it is easy. Only 0.1% of the respondents say it is straightforward to formulate a research title.

Figure 5
Profile of the Teachers in their Engagement in Research in Terms of their Perception in Formulating a Research Title

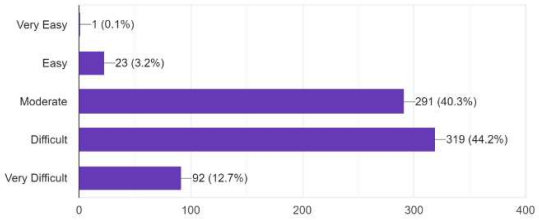


Figure 6 illustrates the level of perception among DepEd Tagum City personnel when making a research rationale. Among the 722 responses, 48.5% find making a research rationale moderate which means it is neither easy nor difficult, followed by 40.3% of personnel who find it difficult. The third-highest percentage is 9.1%, who say it is very difficult while 2.5% find it easy. Only 0.1% find making a research rationale very easy.

Figure 6
Profile of the Teachers in their Engagement in Research in Terms of their Perception in Making a Research Rationale

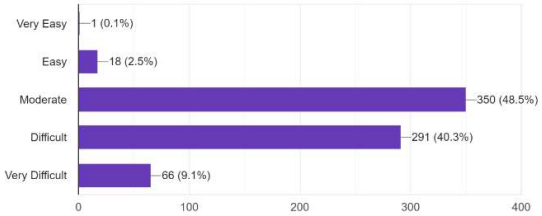
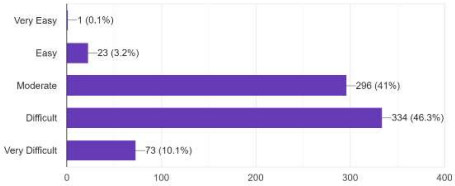


Figure 7 shows that identifying the research gap appears difficult for most Tagum City division personnel to research, while 10.1 percent rate this as a very difficult task.

Figure 7
Profile of the Teachers in their Engagement in Research in Terms of their Perception in Identifying a Research Gap



Formulating research questions appears difficult for most division personnel to conduct research, as shown in Figure 8. While 53.8 percent rate this as a strenuous task (either difficult or very difficult), a notable 43.9 percent find it an average task or neither difficult nor easy.

Figure 8
Profile of the Teachers in their Engagement in Research in Terms of their Perception in Formulating a Research Question

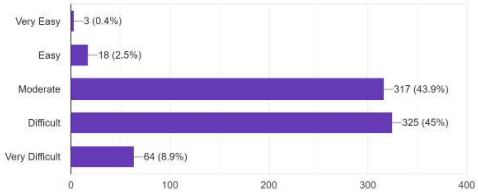


Figure 9 suggests that reviewing related literature has been perceived by many as a not-so-easy task as 96.4

percent of the responses fall in the moderate to very difficult level. In comparison, only 4.7 percent say it's easy.

Figure 9
Profile of the Teachers in their Engagement in Research in Terms of their Perception in Reviewing Related Literature

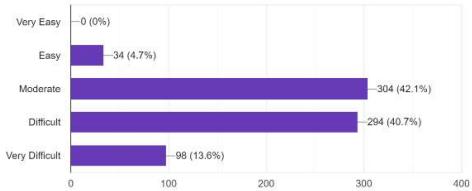
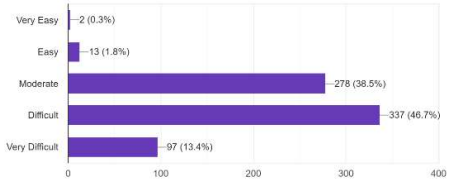


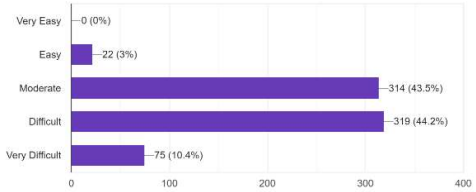
Figure 10 shows that making theoretical and conceptual frameworks appears to be difficult for most of the Tagum City division personnel to conduct research, while 13.4 percent rate this as a very difficult task. A notable 38.5 percent finds it an average task or neither difficult nor easy, while only a trivial percentage of 0.8 percent says it is very easy.

Figure 10
Profile of Teachers in their Engagement in Research in Terms of their Perception in Making a Theoretical and Conceptual Framework



Data in Figure 11 reveals that most personnel find identifying a research design difficult, with 44.2 percent, while 10.4 percent find it very difficult. While 43.5 percent find it an average task or neither easy nor difficult, it is also observable that a minimal percentage of respondents say it was easy.

Figure 11
Profile of the Teachers in their Engagement in Research in Terms of their Perception in Identifying a Research Design



Data in Figure 12 shows that making a research instrument is difficult for most division personnel to conduct research, while 10.2 percent rate this as a very difficult task. A notable 41.6 percent finds it an average task or neither difficult nor easy, while only a trivial percentage of 2.6 percent says it is easy.

Figure 12
Profile of the Teachers in their Engagement in Research in Terms of their Perception in Making a Research Instrument

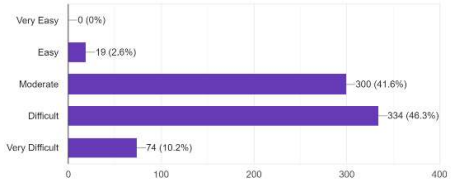


Figure 13 reveals that most personnel find analyzing data challenging, with 59.7 percent falling in the difficult or very difficult category. In comparison, only 38.5 percent find it an average task, or neither easy nor difficult. A very minimal percentage of only 3 percent says it is easy or very easy.

Figure 13
Profile of the Teachers in their Engagement in Research in Terms of their Perception in Analyzing Data

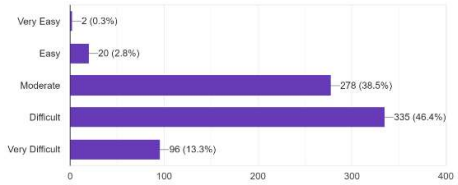


Figure 14 reveals that most personnel find interpreting results difficult, with 43.1 percent. While 42 percent find it an average task, or neither easy nor difficult, it is also observable that a minimal percentage of respondents say it's easy.

Figure 14
Profile of the Teachers in their Engagement in Research in Terms of their Perception in Interpreting Results

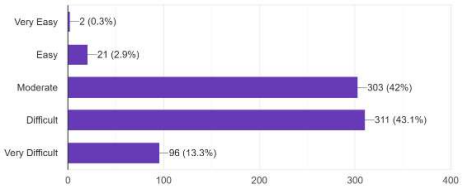


Figure 15 shows that most personnel perceive that their level in making conclusions is moderate. It is neither easy nor difficult for most, while an almost equal percentage (48.06 percent) of personnel find it difficult or very difficult. Only an insignificant percentage says it's easy or very easy.

Figure 15
Profile of the Teachers in their Engagement in Research in Terms of their Perception in Making Conclusions

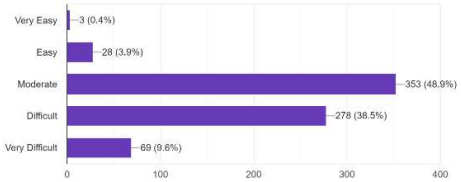


Figure 16 shows that most of the personnel sees formulating recommendations out of the result of the study as moderate. It is neither easy nor difficult for most, while a little bit lower percentage (44.18 percent) of personnel find it difficult or very difficult. Only an insignificant percentage says it is easy or very easy. The final stage of the paper is the researcher's recommendations based on the results, depending on the field of study.

Figure 16
Profile of the Teachers in their Engagement in Research in Terms of their Perception in Formulating Recommendations

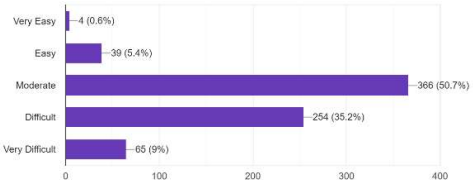
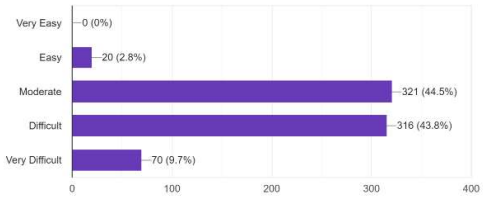


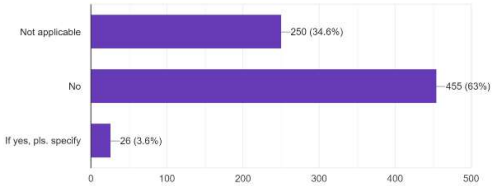
Figure 17 reveals that most personnel find constructing implications moderate while a very little difference of 1.5% lower finds it difficult. A notable percentage of 9.7 personnel find the task very difficult, while only very few percent agree that it is easy.

Figure 17
Profile of the Teachers in their Engagement in Research in Terms of their Perception in Constructing Implications



Finally, Figure 18 reveals the wide disparity of research published and unpublished in any form of academic research journal. While *Not Applicable* could mean that they could not research at all, the percentage of those who could not publish the paper appears to be trivial compared to those who were not. This can be attributed to a limited avenue for research publications or insufficient knowledge of personnel-researchers for journals and publications where they could venture to publish research materials.

Figure 18
Profile of the Teachers in their Engagement in Research in Terms of their Perception in Publishing Research Journals



DISCUSSION

Profile of Teachers in Tagum City

As for the distribution of teaching personnel, this data corresponds to the report published by Salaverria (2019) and confirmed by Llego (2020), stating that much of the teaching force in the Philippines, or 93%, belongs to Teacher I to III positions, leaving only 7% to Master Teachers position. According to Recto (2019), public school teachers have an estimated 772,000 Teachers I to III with Salary Grades of 11 to 13, while there are only 39,950 teachers with the rank of Master Teacher I, 15,828 under Master Teacher II, and only 65 under Master Teacher III in the country. There is a four-salary grade gap between Teacher III to Master Teacher I, but the DepEd can only fund limited master teacher positions, so many are stuck at Teacher III.

There is also a limited number of applications approved for promotions or reclassification due to its guidelines and requirements since it is only applied when there has been a substantial change in the regular duties and responsibilities of the incumbent position and which may result in a change in any or all the position attributes: position title, level, and salary grade (DepEd R-III, 2016). Worldwide, the UNESCO Institute of Statistics (2020) shows the increasing trend in terms of the percentage of the share of female teachers in the level of gender representation in the teaching force both in the elementary and secondary levels. Consequently, trained male teachers at the primary level have tremendously decreased. This shows that teaching has become a woman-dominated profession.

Although gender equality is a crucial consideration globally (Cornwall & Rivas, 2015), the study of Okoduwa et al. (2018) in Nigeria Research Institute showed that the number of males working as research/teaching staff was higher compared with females in the entire directorate investigated. Among the female staff, involvement in research was notably lower compared with males. This observation is like some studies conducted in the United States, one of which cites low self-ability as a major barrier toward participation in research activities. On the other hand, this difference may be due to the cultural, religious, and social expectations and responsibilities females face in this part of the world (Mordi et al., 2010).

Finally, this result parallels the National Center for Education Statistics (2020) report stating that most public-school teachers in the Philippines last school 2017-2018 are females with 76% while 24% for males. This also corresponds to the study undertaken by Ragalado (2017), who recognized that teaching is a woman-dominated profession in the Philippines. With 44%, teachers account for the highest percentage of professional women in the country.

In 2015, there were 34.8 million single persons in the Philippines, or 44 percent of the ten-year-olds. Married persons comprised approximately 45 percent from 2000 to 2010 but shrunk to about 41 percent (41%) in 2015 (Philippine Statistics Authority [PSA], 2020).

Additionally, Kong (2008) observed that unmarried teachers are more vigorous and dedicated to their job. However, Ayeop (2003) posited that married teachers have higher satisfaction in their job. On the relationship of marital status and students' academic performance, Alufohai & Ibhafidon (2015) found that students' achievement was significantly influenced by teacher marital status; students of the married teachers achieved the highest scores, followed by those of the single teachers. However, the difference between the scores of the students was not significant. Still, the difference between the scores of the single and married teachers on the one hand and secondly and divorce, on the other hand, was significant. The separated and divorced teachers negatively impacted the students' academic achievement in the English language, while the single and married teachers positively impacted students' academic achievement.

In terms of the population of teachers who belong to the single category, this result coincides with Alufoha & Ibhafidon's findings in 2015, which concluded that 30% of the teaching force are single. However, this contrasts with

Abarro's (2018) findings which stated that almost half of the Teacher's population, or 51.3%, are single.

Obtaining a master's degree falls next to the interest of the teachers. It covers the second majority of the population, combining both Full-fledged Master's Degree (23.5 percent) and Completed Academic Requirements in master's degree (20.2 percent), comprising almost half of the population of 43.7 percent. Meanwhile, it is observable that a high percentage (47.4 percent) of personnel attained and continuously pursued postgraduate studies. In the U.S., the rate of public-school teachers who held a post-baccalaureate degree (i.e., a master's, education specialist, or doctor's degree) was 58 percent in 2017-2018, composed of 55 percent of elementary school teachers and 61 percent of secondary school teachers (U.S. Department of Education, 2020).

There is a considerable percentage of teachers in the division who have experience when it comes to conducting research based on the 47.4 percent of teachers who have completed or are currently pursuing postgraduate studies (master's or doctor's degree). Under the master's level, the program levels are designed to provide students with advanced academic and professional knowledge, skills, and competencies, leading to a second degree higher than the bachelor's degree. It contains a substantial research component. These programs are theoretically based and are informed by state-of-the-art research and best professional practice. On the other hand, programs under the doctoral level led to an advanced research qualification and are devoted to advanced study and original research (CHED, 2019).

Moreover, this finding is also supported by the National Center for Education Statistics (2020). For the school year 2017-2018 alone, 58% of the public-school teachers in the Philippines held a post-baccalaureate degree. Furthermore, Catolos & Catolos (2017) also have the same findings in their study on the teaching performance of selected public secondary school teachers in Tanay, Rizal. Regarding the distribution of the highest educational attainment of public-school secondary teachers, 48% of its respondents have a baccalaureate degree, and 12% have completed a master's degree. This is low compared to the data from 2004 to 2011 published by Philippine Basic Education (2013), which reported that 35.6% of teachers have a master's degree while 10.3% completed a Doctorate Degree.

Profile of the Teachers in their Engagement in Research

Most of the teaching personnel in the division have not conducted research. A similar scenario exists in other divisions, particularly in the Division of Iligan City, where several teachers are conducting research, despite the division office's efforts. (Hussien et al., 2019). Alternatively, more than one-quarter (32.8 percent) of the population have conducted research. It could be attributed to postgraduate study requirements, independent research, local action research, or others.

The majority say that the reason for not conducting research is the lack of training on how to do it, lack of time, and insufficient guidance and technical assistance. These findings are supported by the studies conducted by Hancock (1997), Meerah *et al.* (2001), and Ulla (2018). It was concluded that most teachers are reluctant to research because of teachers' professional status, working conditions and workload, lack of confidence due to insufficient training, and difficulty engaging with outsider's research methodologies.

Proper training on conducting research and time has been lacking among personnel who have not researched a combined percentage of 82.16 percent. The same findings have emerged from Hussien et al.'s (2019) study at the Division of Iligan City. Teachers show the need for training, seminar, workshops, mentoring, technical assistance, and LAC Sessions in research. Also, it presents the need for school research coordinators and research teams to mobilize the research efforts of the teachers in their respective schools. The research also found out that teachers need more time for reading literature, doing research and a lesser teaching load for them to allocate ample time for research.

Okoduwa et al. (2018), in the study of Nigerian Teachers, also found out that inadequate training/orientation programs (52%) and lack of mentorship (84%) as some of the many barriers to conducting research.

In Hong Kong, one impeding factor that hinders the flourishing of the Teacher in research is the time constraint (Chow et al., 2015). Apart from teaching and marking students' work, teachers who hold administrative positions such as coordinators of teams at school take charge of extra-curricular activities. They also join professional development programs to keep themselves abreast with the latest pedagogical and methodological developments amid the challenges brought about by the local education reforms. Other factors like interest and motivation, proper guidance and technical assistance, and others are also evident.

Okoduwa et al. (2018) concluded that the lack of suitably qualified research mentors with appropriate expertise and sufficient time for mentoring was one of the factors contributing to a failure to execute research tasks. Lack of mentorship contributes to the staff's inadequate research experience (Nykamp et al., 2010). This observation was in harmony with the report of Williams (2013) on the need for new researchers to have a mentor who can guide them through research and the publishing of scholarly articles.

Moreover, a high percentage of personnel have not attended intensive research training. This can be attributed to the division's limited training conducted and designed for teacher-researchers and the limited personnel invited to join. The same challenge has been observed in other countries. One is in Hong Kong, where teachers lack training in research skills (Chow et al., 2015). However, registered teachers in Hong Kong must comply with training programs such as the Postgraduate Diploma in Education (PGDE) program, etc., specified in the Education Ordinance (EDB, 2008). Still, research skills are often not emphasized in the teachers' training. Their ability to conduct classroom-based research is seldom a core component used to evaluate their performance. Wong's (2019) findings revealed that the research capability of teachers could be explained by training attended related to research, attitudes toward research, and research knowledge.

Data says that the majority of the division personnel find formulating a research title a difficult task. In contrast, the second most numbered personnel see it as an average task, which is neither easy nor difficult. While it is not easy for authors to select an appropriate title considering multiple contrasting and conflicting factors while finalizing, several articles on formulating research titles in a different journal can be followed to make the tasks easier. Bavdekar (2015) emphasized that the title is an important part of the article. It condenses article content in a few words and captures readers' attention. Thus, writing scientific titles that are informative and attractive is a challenging task.

Dissanayake (2013) stressed that gap identification and formulating a research problem are vital for a research project. The note details two approaches to identifying the research gap and formulating a research problem. It is further suggested to emphasize the literature review since having a complete set of literature, and the researcher can form a gap.

Formulating research questions appears difficult for most division personnel to conduct research. Khankeh et al. (2015) explained that forming the research question is one of the initial challenges researchers encounter in the early stages of a research project. It is essential to take the time to choose a research question because it can be a very challenging exercise. The project's ultimate success depends on selecting a straightforward and convenient question. The question should be appropriate for the qualitative research and the specific approach you choose, grounded in research. It must ask precisely what you want to find out and be articulated clearly (Kinmond, 2012).

Some researchers formulate research questions without considering the approach of the study in a proper way, and usually, their research questions are comprehensive, unclear, and vague. Since the intention of the studies is not completely clear at the beginning, they

cannot decide about the research approach. They must change their research question and take different directions in the study, or they will end up without adequate results that help readers or consumers improve their understanding or solve the problem (Khankeh et al., 2015).

Reviewing the literature is the backbone of any study conducted, and verifying past studies done by other scholars justify the research and make it fruitful. Literature plays a vital role in establishing gaps in research problems. However, Khankeh et al. (2015) observed that novice researchers have some problems finding the right topics in their field of interest because they do not perform a broad literature review to find the gaps and problems suitable to be investigated.

Casanave & Li (2015), in the study of novices' struggles with conceptual and theoretical framing, elucidate ten problems that novice scholars have with theoretical/conceptual structure based on personal experiences as manuscript reviewers and writers. The paper concludes with ways that novice scholars can address the task of framing their scholarly work conceptually and theoretically, on the understanding that the struggles continue over the lifetime of an academic career. It concludes further that personal account also indicates that the issue of theory or conceptual and theoretical framing may vary in importance or meaning with people from different research traditions or training backgrounds.

The same observation has been revealed in the study of Lessing & Schulze (2002) that students (masters and doctoral) usually have difficulties with the research process and scientific method, especially in terms of methodology. The same findings of the study by Qasem & Zayid (2019) that the challenges and issues participants face during writing research proposals and projects concerning research methodology include the lack of knowledge of research methodology in general, facing obstacles in formatting research proposals and projects, having a good skill in selecting research tools, data collection, and data analysis.

Holloway & Wheeler (2013) pointed out that the research design and methodology must address the selected topics and the research question. Researchers must identify, describe, and justify their chosen methodology, besides the strategies and procedures involved. So, it is pivotal to find the proper method for the research question. It should be noticed that some of the details of a qualitative research project cannot be ascertained in advance and may be specified as they arise during the research process.

The validity of the survey instrument has been one of the many challenges in making a research instrument. It is a threat to the data collection process (Kwadamah & Brobbey, 2015). Adzeh (2014) synthesized and analyzed several studies and highlighted some specific areas of concern on conducting quantitative business research challenges, including sampling, validity, and reliability.

It is the joy of every researcher to hear that the result of his work has been judged credible, objective, and reliable. This is the anticipation of all researchers. However, researchers' expectation is dashed by a collection of hazards that may happen at any phase in the research process, which can negatively influence the cogency of the investigation. These hazards have been categorized into content, criterion, and construct validity of the questionnaire (Onwuegbuzie & Johnson, 2006).

Glanzy et al. (2017) documented some of the struggles of student-researchers as they collect, organize, and interpret data and then ultimately attempt to draw conclusions or make decisions based on these data. Students struggle in a variety of ways which includes difficulties in (1) properly using specific measurement devices, (2) accurately coordinating quantitative data with the phenomenon being measured, and (3) correctly interpreting the significance of variation, uncertainty, and error in the data.

For new qualitative researchers, it often seems that the researcher should concentrate on the dual process of data

collection and data analysis. It is very important to consider thorough planning in all stages of the research process, from developing the question to the final write-up of the findings for publication (Corbin & Strauss, 2008). It is imperative to take note of the importance of correct data analysis as it affects the interpretation and findings. Brown et al. (2018) stressed that the effects of errors on conclusions could be severe. However, when treatment effects are misanalyzed, it can often not be immediately stated that the conclusions are false. Instead, it can be argued that the analyses are unreliable for statistical inference and conclusions. In other cases, conclusions may be wrong (Brown et al., 2018).

Qasem & Zayid (2019) said that one of the challenges the participants face during writing research proposals and projects is having a problem writing and reporting the results. The same results of the study by Alsied & Ibrahim (2017) show that Libyan EFL learners have difficulty interpreting results and reporting the findings. Lecoutre et al. (2003) found that even statisticians had difficulties interpreting the significance test. It appeared especially difficult to interpret the results of a nonsignificant effect.

The findings in data analysis and result interpretation are supported by the University of Pretoria (2020) and Moore (2017). Both concluded that the analysis and interpretation of data is the most crucial and challenging part of any research. It has recently taken center stage with the advent of the digital age, and the sheer amount of data can be frightening. A Digital Universe study found that the total data supply in 2012 was 2.8 trillion gigabytes (Lebied, 2018).

Presenting research findings as if other researchers are the only end-users is hardly ideal for addressing complex questions that contribute to society (Adler & Harzing, 2009). The findings on the dissemination and publication of academic research journals are supported by the University of Stellenbosch Business School (2018).

This percentage is expected to increase the necessity and advantages of publishing a research study have cascaded over time. Some of the key points that highlight the importance of publishing research papers in the academe are enhancing teaching practices, encouraging research-based practice and knowledge production, and helping in building a professional career (Panigrahi, n.d.).

Even for teachers who are willing to take the researcher's role, channels, or platforms for publishing their research findings are lacking. There were several platforms to bring teachers into the territory together. However, it is more often seen as a resource-sharing site instead of an official and authoritative avenue for disseminating research findings geared towards knowledge-sharing. Academic journals tend to have high standards for articles to be published, thereby deterring teachers from submitting their research findings for publication (Chow et al., 2015).

Okoduwa et al. (2018) found out that the main barrier to publishing at least one article was a lack of research because they were not engaged in any research activities in the first instance; thus, they believe they have nothing to declare as a publication. This was also in agreement with the findings of a survey of Australian researchers that showed that research infrastructure support is vital to research productivity (Shewan et al., 2002). It is then suggested that research and publishing be made mandatory for all academic and research staff. Mandatory involvement in research activities has been demonstrated to improve researchers' attitudes toward research (Okoduwa et al., 2018).

Conclusion

Most of the teachers have not conducted classroom-based or school-based research since they encounter problems with their time management, juggling with other workloads, and motivation to do so. Further, most teachers find it difficult or challenging to do the different parts of the research paper. It was due to a lack of knowledge, proper training, and technical assistance.

Recommendations

Based on the findings and conclusion, it is recommended that the Schools Division Research Committee plan

and fill the gap in providing technical assistance through intensive training of our teachers, which includes conducting research, facilitating research, paneling, and disseminating significant results and implications to their colleagues in the DepEd community. Data also showed that there are a lot of essential concerns that our teacher-researchers should know when conducting Research. Thus, this becomes the springboard and the basis for formulating this proposed research-based intervention program for our teachers to engage in Research. Moreover, a qualitative study is suggested to be undertaken by other researchers to explore other areas of the low performance of teachers in terms of research.

REFERENCES

Abarro, J. (2018). Factors Affecting the Performance of Public School Teachers in the Division of Antipolo City, Philippines. International Research Journal of Engineering and Technology (IRJET). Volume: 05 Issue: 11.

Adler, N. J., & Harzing, A. 2009. When knowledge wins: Transcending the sense and nonsense of academic rankings. Academy of Management Learning & Education, 8: 72–95.

Adzeh, K.J. (2014). The challenges of conducting a quantitative business research: Analysis of issues with survey design, sampling, validity and reliability. Research Gate. Accessed from: https://www.researchgate.net/publication/261562480. Accessed on 2nd December 2020.

Alsied, S.M. & Ibrahim, N.W. (2017). Exploring Challenges Encountered by EFL Libyan Learners in Research Teaching and Writing. IAFOR Journal of Language Learning. Volume 3 – Issue 2 – Winter 2017.

Alufohai, P.J. & Ibhafidon H.E. (2015). Influence of teachers' age, marital status and gender on students' academic achievement. Asian Journal of Educational Research. Vol. 3, No. 4, 2015. ISSN 2311-6080. Accessed from: http://www.multidisciplinaryjournals.com/wp-content/uploads/2015/07/paper-INFLUENCE-OF-TEACHERS%E2%80%99-AGE-MARITAL-STATUS.pdf. Accessed on 1st December 2020.

Ayeop, A. B. (2000). Individual Characteristics and job satisfaction among secondary school teacher. Kubangpasu (unpunished mastersthus) University of Utara, Malaysia.

Brown, A.W., Kaiser, K.A., & Allison, D.B. (2018). Issues with data and analyses: Errors, underlying themes, and potential solutions. Proceedings of the national Academy of Sciences of the United States of America. 115 (11) 2563-2570. Accessed from: https://doi.org/10.1073/pnas.1708279115.

Casanave, C.P. & Li, Y. (2015). Novices' Struggles with Conceptual and Theoretical Framing in Writing Dissertations and Papers for Publication. Open Access Publication. 3, 104-119. doi:10.3390/publications3020104.

Catolos, L. & Catolos, F. (2017). Teaching Performance of Selected Public Secondary School

Teachers in Tanay, Rizal. Retrieved November 28, 2020 from http://icmsit.ssru.ac.th/icmsit/fmsicmsit/images/Teaching-Performance-of-Selected-Public-Secondary-School-Teachers-in-Tanay-Rizal.pdf.

Chow, K.C.K., Chu, S.K.W., Travares, N. & Lee, C.W.Y. (2015). Teachers as Researchers: A discovery of Their Emerging Role and Impact Through a School-University Collaborative Research. Brock Education Journal, 24 (2), Spring 2015. Accessed from: https://files.eric.ed.gov/fulltext/EJ1080020.pdf. Accessed on 30th November 2020.

Commission on Higher Education (CHED) (2019). CHED Memorandum Order No. 15, Series 2019. Policies, Standards, and Guidelines for graduate Programs. Accessed from: https://ched.gov.ph/wp-content/uploads/CMO-No.-15-Series-of-2019-%E2%80%93-Policies-Standards-and-Guidelines-for-Graduate-Programs-Updated.pdf. Accessed on 29th November 2020.

Corbin, J. & Strauss, A. (2008). Basics of qualitative research: Techniques and procedures for developing grounded theory. 3rd ed. Thousand Oaks, CA: Sage Publication Inc.

Cornwall, A., and Rivas, A.M. (2015). From gender equality and women's empowerment to global justice: reclaiming a transformative agenda for gender and development. Third World Q. 336, 396–415. doi: 10.1080/01436597.2015.1013341

Daft, R. L., Griffin, R. W., & Yates, V. 1987. Retrospective accounts of research factors associated with significant and not-so-significant research outcomes. Academy of Management Journal, 30: 763–785.

DepEd (2020). Recruitment, Selection and Placement (RSP) System for Public School Teachers. Accessed from: https://www.deped.gov.ph/wp-content/uploads/2020/05/RSP-FAQs-for-SY-2020-2021-BHROD-HRDD.pdf. Accessed on 29th November 2020.

DepEd Order No. 66, s. 2007. (2007). Revised Guidelines on the Appointment and Promotion of Other Teaching, Related

Teaching and Non-Teaching Positions. Accessed from: https://www.deped.gov.ph/2007/09/17/do-66-s-2007-revised-guidelines-on-the-appointment-and-promotion-of-other-teaching-related-teaching-and-non-teaching-positions/. Accessed on 29th November 2020.

DepEd Order No. 77, s. 2010 (2010). Guidelines on the Allocation/Deployment of new Teaching, Teaching-related, and Non-teaching Positions for FY 2010. Accessed from: https://www.deped.gov.ph/wp-content/uploads/2010/06/DO-No.-77-s.-2010.pdf. Accessed on 30th November 2020.

DepEd Region III (2016). Regional Memo No. 157 Series of 2016. Reiteration of the guidelines on the Number of Teachers to Qualify a Position for Reclassification and Upgrading of Position. Accessed from: https://depedcalabarzon.ph/wp-content/uploads/2020/02/RM-157-s.2016-Reiteration-of-the-Guidelines-on-the-Number-of-Teachers-to-Qualify-a-Position-for-Reclassification-and-Upgrading-of-Positions-ERF.pdf. Accessed on 29th November 2020.

Derman, R.J., & and Frances J.F. (2018). Overcoming challenges to dissemination and implementation of research findings in under-resourced countries. 2nd International Conference on Maternal and Newborn Health: Translating Research Evidence to Practice. Belagavi, India. Accessed from: https://www.researchgate.net/publication/325927332_Overcoming_challenges_to_dissemination_and_implementation_of_research_findings_in_under-resourced_countries. Accessed on: 30th November 2020.

Dissanayake, D.M.N.S.W. (2013). Research, Research Gap and the Research Problem. Munich Personal RePEc Archive. MPRA 47519. https://mpra.ub.uni-muenchen.de/47519/1/MPRA_paper_47519.pdf.

EDB (2008). Teacher Training & Qualifications. Hong Kong SAR: Accessed from: https://www.edb.gov.hk/en/teacher/qualification-training-development/qualification/teacher-training-qualifications/index.html. Accessed on 30th November 2020

Glancy, A.W., Moore, T. J., Guzey, S., & Smith, K.A. (2017). Students' Successes and Challenges Applying Data Analysis and Measurement Skills in a Fifth-Grade Integrated STEM Unit. Journal of Pre-College Engineering Education Research (J-PEER), 7(1), Article 5. https://doi.org/10.7771/2157-9288.1159.

Hancock, R. (1997). Why are class teachers reluctant to become researchers? British Journal of In-service Education, 23:1, 85-99, DOI:10.1080/13674589700200009.

Heintz, K. (2012). How to Write the Perfect Research Paper Title. Retrieved November 30, 2020 from https://wordvice.com/how-to-write-the-perfect-title-for-your-research-paper/.

Hussien, O. Q., Jerusalem, R. Y. & Langam, H. L., (2019). Research Barriers of Public School Teachers of the Division of Iligan City. PUPIL: International Journal of Teaching, Education and Learning, 3(1), 189-204.

Khankeh, H. & Ranjbar, M., Khorasani-Zavareh, D., Zargham-Boroujeni, A., & Johansson, E. (2015). Challenges in conducting qualitative research in health: A conceptual paper. Iran J Nurs Midwifery Res. 2015 Nov-Dec; 20(6): 635–641. doi: 10.4103/1735-9066.170010 Accessed from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4700679/#ref12. Accessed on 1st December 2020.

Kinmond K. (2012). Coming up with a research question. Doing your qualitative psychology project. pp. 23–36. Accessed from: http://ls-tlss.ucl.ac.uk/course-materials/PUBLG004_70230.pdf. Accessed on 1st December 2020.

Kwadamah, F. & Brobbey P. (2015). Challenges of Data Collection Process: A Review of Related Literature. Accessed from: http://gafm.org/ForgiveAFAarticleGAFM.pdf. Accessed on 2nd December 2020.

Lecoutre, M.P., Poitevineau, J., & Lecoutre, B. (2003). Even statisticians are not immune to misinterpretations of null hypothesis tests. International Journal of Psychology, 38, 37-45.

Llego, M.A. (2020). DepEd Basic Education Statistics for School Year 2019-2020. Retrieved November 28, 2020 from https://www.teacherph.com/deped-basic-education-statistics-school-year-2019-2020/#:~:text=There%20are%20over%20900%2C000%20regular,800%2C000%20of%20them%20are%20teachers.

Lessing, A.C., & Schulze, S. (2002). Postgraduate supervision and academic support: students' perceptions. South African Journal of Higher Education, 16(2), 139-149. Accessed from http://hdl.handle.net/10500/194.

National Center for Education Statistics. (2020). Characteristics of Public School Teachers. Retrieved November 28, 2020 from https://nces.ed.gov/programs/coe/indicator_clr.asp#:~:text=About%2076%20percent%20of%20public,school%20level%20(36%20percent).

National Health and Medical Research Council (2018). Australian Code for Responsible Conduct of Research. National Health and Medical Research Council. Accessed from: http://www.nhmrc.gov.au/guidelines/public

ations/r41. Accessed on 30th November 2020.

Nykamp, D., Murphy, J. E., Mashall, L. L., and Bell, A. (2010). Pharmacy students' participation in a research experience culminating in journal publication. Am. J. Pharm. Educ. 74:47.

Okoduwa SIR, Abe JO, Samuel BI, Chris AO, Oladimeji RA, Idowu OO and Okoduwa UJ (2018). Attitudes, Perceptions, and Barriers to Research and Publishing Among Research and Teaching Staff in a Nigerian Research Institute. Front. Res. Metr. Anal. 3:26. doi: 10.3389/frma.2018.00026.

Philippine Basic Education. (2013). Teacher Statistics for the Philippines. Retrieved November 28, 2020 from https://www.philippinesbasiceducation.us/2013/05/teacher-statistics-for-philippines.html.

Philippine Statistics Authority (PSA) (2020). Single Population in the Philippines (Results from the 2015 Census of Population). Accessed from: https://psa.gov.ph/content/single-population-philippines-results-2015-census-population. Accessed on 29th November 2020.

Qasem, F.A.A, & Zayid, E.I.M. (2019). The challenges and problems faced by students in the early stage of writing research projects in I2, University of Bisha, Saudi Arabia. European Journal of Special Education Research. 4(1), 2019. Accessed from: doi: 10.5281/zenodo.2557036.

Recto (2019). Four new teacher positions proposed. Inquirer.net. Accessed from: https://newsinfo.inquirer.net/1173947/four-new-teacher-positions-proposed#:~:text=56%2C000%20master%20teachers,15%2C828%20under%20Master%20Teacher%20II. Accessed on 29th November 2020.

Regalado M. (2017). Career Mobility and Gender: A Descriptive Study of Selected DepEd Teachers in Iligan City. Asia Pacific Society for Public Affairs. ISBN: 978-602-6751-55-3.

Salaverria, L. (2019). Four new teacher positions proposed. Retrieved November 28, 2020 from https://newsinfo.inquirer.net/1173947/four-new-teacher-positions-proposed#:~:text=56%2C000%20master%20teachers,15%2C828%20under%20Master%20Teacher%20II.

Shuttleworth, M. & Wilson, L.T. (2018). Drawing Conclusions. Explorable. Accessed from: https://explorable.com/drawing-conclusions. Accessed on 2nd December 2020.

Statswork (2017). Significance of Quantitative Statistical Data Analysis. Statswork Pioneer Statistical Consulting. India. Accessed from: https://statswork.com/blog/challenges-faced-by-phd-students-while-analyzing-their-quantitative-data/. Accessed on 2nd December 2020.

Tullu, M.S. (2019). Writing the title and abstract for a research paper: Being concise, precise, and meticulous is the key. Saudi Journal of Anaesthetic Association. 2019 Apr; 13(Suppl 1): S12–S17. doi: 10.4103/sja.SJA_685_18. Accessed from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6398294/. Accessed on 1st December 2020.

Ulla, M. (2018). Benefits and challenges of doing research: Experiences from Philippine public school teachers. Issues in Educational Research, 28(3), 797-810.

U.S. Department of Education National Center for Education Statistics (2020). Digest of Education Statistics. Accessed from:https://nces.ed.gov/programs/digest/d19/tables/dt19_209.22.asp. Accessed on 29th November 2020.

U.S. Department of Education, National Center for Education Statistics. (2020). The Condition of Education 2020 (NCES 2020-144), Characteristics of Public School Teachers. Accessed from: https://nces.ed.gov/programs/coe/indicator_clr.asp. Accessed on 29th November 2020.

UNESCO Institute for Statistics (2020). Primary Education, Teachers (% Female). Accessed from: https://data.worldbank.org/indicator/SE.PRM.TCHR.FE.ZS. Accessed on 20th November 2020.

University of Southern California (USC). (2020) Organizing Your Social Sciences Research Paper. The Conclusions. https://libguides.usc.edu/writingguide/conclusion. Accessed on 2nd December 2020.

Williams, C. (2013). Attitudes to and perceptions of research for health lecturers. Radiography 19, 56–61. doi: 10.1016/j.radi.2012.08.003.

Wong, A. M. (2019). Driving Forces of Master Teachers' Research Capability: Towards Building a Research Culture in the Division of Romblon, Philippines. International Journal of Advanced Research and Publications, 3(7), 92-97. Accessed from: https://bit.ly/39tzE13. Accessed on 30th November 2020.