

Research Skills and Competence of Secondary School Teachers in One City Schools Division in the Central Philippines

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Abstract— This study evaluated the research skills and competence of the public secondary school teachers in the Schools Division of Calbayog City, Samar, Philippines. I utilized the descriptive-assessment design employing the use of questionnaires to gather relevant data on the level of research skills and research competence of the respondents. The research-related problems encountered by the respondents were also explored. These data were analyzed and collated using suitable statistical tools and were interpreted and discussed consequently. The findings of the study showed that the public secondary school teachers in the Schools Division of Calbayog City perceived themselves as “competent” in terms of basic research skills and research competence. Furthermore, the study revealed that the inadequacy of training and seminar, lack of technical assistance, and lack of enough time to carry out research in the school were the problems that the public secondary school teachers are encountering. Thus, it is suggested that the teachers must undergo enhancement training in research for them to progress their research skills and competence.

Keywords— Research Competence, Research Skills, Research-related Problems, Secondary School Teachers, City Schools Division.

I. INTRODUCTION

Research fosters creativity, higher order cognitive abilities, and prospects for innovation. Its aim is to discover new knowledge from a series of procedures and methods which can be useful in advancing the many aspects of human endeavors. Thus, it is regarded as one of the fundamental aspects of any learning institution and is mandated to be one of the core functions of teachers. With this premise, it is vital that teachers exhibit research skills and competence in the fulfilment of their educational endeavors since they are on the front line of the educative process. Ostensibly, active research involvement is expected to have better results for teachers' professional development since it appears that research engagement is conceived as a component of the teacher's responsibility (Firth, 2016).

Concomitantly, as it boosts motivation, research-based learning encourages a significant influence on professional knowledge. Additionally, Cepeda, et al. (2006) divulged that learning that is spread out, like a research project, improves the retention of knowledge and ideas. Furthermore, according to Klein (2014), things that are related to one's own behaviors and interests, particularly those that are related to future intentions, like research endeavors, are easier to recall.

Along this line, Firth (2016) posited that if the educational community is genuinely dedicated to fostering teachers who participate in ongoing professional inquiry, these and other potential strategies for fostering teacher research need to be assessed, and challenges need to be addressed. In addition, employing action research skills, especially in learning institutions, is important for they provide the basis for organized inquiry and an avenue to handle educational concerns and issues (Donato, 2003). These are what the teachers in the Schools Division of Calbayog City should possess.

Cognizant, therefore, of the significance of research to development and for in the acquisition of new knowledge, the Philippine government passed Republic Act No. 9155, otherwise known as, The Basic Education Governance Act of 2001 which stipulated among others the vital role of research in the administration and supervision of the basic education system. In conformity with this mandate, the Department of Education (DepEd) has issued DepEd Order 39, s. 2016 also known as the Adoption of the Basic Education Research Agenda (BERA) aims to provide direction to teachers and stakeholders in the conduct of educational research and to utilize these research results to plan policies and programs for the benefit of the agency.

Excellence, integrity, and openness are among the philosophies in the conduct of basic education research (DepEd Order No. 39, 2016). Moreover, the themes which are identified in the research agenda are the following: (1) Teaching and Learning; (2) Child Protection; (3) Human Resource Development; and (4) Governance. Crosscutting themes have also been identified such as: (1) Disaster Risk Reduction and Management (DRRM); (2) Gender and Development (GAD) and (3) Inclusive Education.

In line with this mandate, the DepEd Order No. 42 (2017) adopted the national implementation of Philippine Professional Standards for Teachers (PPST) which have changed the scenario of teacher-quality requirements in the Philippines today. Now, research skills and competence are deemed significant for teachers for it is included in Domain 1 of the new Philippine Professional Standards for Teachers, specifically in Strand 1.2 which is “research-based knowledge and principles of teaching and learning”. The teacher is then expected to demonstrate an understanding of the theories and practices of teaching and learning that are based on research,

apply these theories and practices to enhance professional practice, and conjoin with colleagues to embark on and use research to deepen their understanding of both pedagogy and content.

The DepEd also provides support mechanisms to enhance the research competences of teachers. First, the Basic Education Research Fund (BERF) has been established to cater to the funding of the research internally and externally and to capacitate the teachers and stakeholders in conducting educational research. According to Kendagor, et al. (2012), funding has a great effect on doing and carrying out research. Second, conferences, forums, publications, and other platforms, whether local, regional, or national levels, are organized to disseminate the vital results of the research. The results of the research may lead to the crafting of policies and programs that would help the DepEd and the nation, as a whole. Lastly, to the teacher-researchers, aside from the fact that they will be able to generate new knowledge, doing and indulging in research, will be an avenue for them to use research outputs as a merit for promotion.

Accordingly, the DepEd Order No. 16 s. 2017 has established the Research Management Guidelines (RMG) to provide guidance in handling research inventiveness across levels. The support mechanisms for research, such as finance, collaborations, and capacity building, are further clarified in these guidelines. In this regard, the research competence of the teachers needs to be strengthened to enable them to be part of the research programs of the DepEd. In addition, motivation is a vital driver that boost teachers to engage in research activities and projects (Bay & Clerigo, 2013). According to Chen et al. (2010), the faculty believes that doing high-quality research contributes significantly to their ability to obtain tenure and promotion.

However, it has been generally observed that to date there have been few research papers and studies that have been published in the Schools Division of Calbayog City. In fact, in many instances that the researcher has made encounters with the teachers, the clamor of the latter is that they have difficulty conducting research, for some reason or another. Despite the mandates for the institutionalization of research among schools in the DepEd as embedded in DepEd Order No. 39, s. 2016, research skills and competence of teachers in the Schools Division of Calbayog City is still a potent issue that needs closer attention if the agency is indeed serious about its implementation.

Against these drawbacks, this study was anchored on the premise that secondary school teachers should be equipped with research skills and competence so as to carry out the mandates of the agency for research and development among its stakeholders, primarily, the teachers. The findings of this study would serve as the foundation for developing a research capability-building program for the teachers. Additionally, this would be an avenue to supporting the various research initiatives of the DepEd such as the Basic Education System Reform Agenda (BESRA) and the establishment of the Research, Innovation, and Policy Evaluation Secretariat (RIPES). Hence, the following questions were asked in this study: (1) What is the level of research skills of public

secondary school teachers in the Schools Division of Calbayog City as perceived by secondary school teachers themselves in terms of practical skills; problem-solving, thinking, and communication skills; personal attitudes and professional ethics; dissemination; roles and function; methodological skills; and research writing?; (2) What is the level of research competence of public secondary school teachers in the Schools Division of Calbayog City as perceived by secondary school teachers themselves in terms of the motivational-value component; methodology-reflective component; operational-activity component; and emotional-volitional component?; and (3) What are the research-related problems encountered by the secondary school teachers in the Schools Division of Calbayog City?

II. THEORETICAL FRAMEWORK

Learning is attained through constructing of knowledge as well as competency, and potential development. This study was rooted on the theory of Constructivism by John Dewey. According to this view, humans create meaning from their own knowledge and understanding of the world through experience and reflection (Educational Broadcasting Corporation, 2004).

Mendez and Delgado (2010) stipulated that education for action needs the engagement of educative community in identifying and enumerating the problems; generating of proposal, and analyzing and assessing this proposal before implementation. In this case, research comes into action.

This study was also linked on John Hattie's Meta-study Visible Learning (2009). As teachers begin to evaluate their own instruction, their position as educators is improved through visible learning. When teachers support their students in becoming their own teachers, they enable visible teaching and learning to take place. It is therefore, imperative for the teachers to know more about doing research so that they will be able to evaluate their own learning appropriately.

Additionally, teachers are essential in preparing future generations of K-12 students, and one of the most significant factors affecting students' performance and achievement on a larger scale is teachers' competencies (Hattie, 2009). Consequently, there is a must to examine the teachers' competencies to ensure students' individual growth and school quality.

Indeed, the notion of Ivanenko, et al. (2015) that the teachers should find and develop innovative projects themselves to improve the competitiveness of professional education institutions is very connected to this study. Likewise, Ryndina (2011) as cited by Ivanenko, et al. (2015), claimed that secondary school teachers should incorporate research into their professional activities as a sign of their willingness to innovate. This willingness to innovate is based on a teacher's high level of research competence development and their capacity to mobilize the necessary quantity and quality of personal and professional resources.

Hence, teacher-researchers has the freedom to search for the truth and this truth needs to be published and presented thus, their research competence must be enhanced. However, it is believed that teachers serve as the intermediary between

research efforts and the students who must develop into critical professionals. Therefore, it's critical to comprehend how teachers view their own level of self-efficacy in doing and executing research (Boerma, De Jong, Griffioen, n.d.). Moreover, Tai, Hu, Wang and Chen (2012) stipulated that teachers' self-efficacy and their teaching process have a high correlation with learning outcomes and learning satisfaction.

Grounded on the aforementioned theories, teachers who have indulged themselves to research undertakings are further likely to have self-efficacy which can lead them to a satisfactory performance as a teacher. Furthermore, a teacher who loves research possesses a capacity to solve problems pertaining to the different aspects in their field. Thus, research competence of the teachers should be assessed to provide enhancement program that will eventually help them attain self-efficacy and help them perform better.

III. LITERATURE REVIEW

Educational arena continually improves itself to better serve the nation by producing graduates with relevant training and enriched competencies. Teachers, being the frontrunner in delivering instructions to learners, must be engrossed in upgrading their educational knowledge, skills, and competencies. It is then the responsibility of the school to initiate programs and projects that will promote professional growth in its faculty, thereby, enabling them to perform their tasks as educators to their optimum potential. In this study, the competence of teachers was linked to the adoption of the Basic Education Research Agenda of the Department of Education, thereby identifying another recent competency that the teachers must possess – research skills and competence. Republic Act No. 9155 emphasized the relevant role of undertaking national educational research and studies. Ivanenko, et al. (2015) identified the component composition of the teachers' research competence: (1) motivational-value component, (2) methodology-reflective component, (3) operational-activity component, and (4) emotional-volitional component.

According to Aghaie (2006), the most vital competencies of a teacher were the following: (1) knowledge with and use of various thinking techniques; (2) employing innovative teaching and learning techniques; (3) managing the classroom and having special communication skills with the students; (4) knowledge with and ability to use communication and information technology in the classroom; (5) abilities to conduct research; and (6) capability of assessing academic success. As noticed, research abilities were included.

Mendez and Delgado (2010) defined scientific competence which is related to research competence. These scientific competencies include (1) contextualized issues and concerns, communication, modeling, and self-evaluation—all of which emerged through collaboration and teamwork; and (2) a didactic sequence including certain pre-activities like readings, using tools to acknowledge prior theories, and conducting experiments to hone observation, explanation, and prediction skills.

While conducting research can improve teaching abilities, teaching activities develop research capabilities (Gilmore &

Feldon, 2010). Additionally, according to the results of their study, oral communication abilities, information gathering abilities, and methodological understanding were among the unambiguous research skills that graduate students described having grown the most in. Furthermore, their research emphasized that graduate students' discernments of their research and teaching abilities were influenced by personal beliefs, their research, and their teaching methods.

Antipolo City's public school teachers have reported that they are only moderately competent of creating a publishable research paper or article, according to a study by Abarro and Marino (2016). In addition, the position of teachers in school is the sole factor that affects the research proficiency of public secondary school teachers. Moreover, civil status, research seminars/training attended, and sex and not highest educational attainment, position, and age are the factors that affect the research aptitudes of public elementary school teachers.

In their study, Davidson and Palermo (2015) employed certain research techniques such data collection and management, data assessment, independence, and critical thinking. Furthermore, the findings of their study revealed the congruency with the previous research in nutrition students that to develop research skills, experiencing research itself is deemed necessary.

Formatting research paper, using of correct grammar, constructing sentences, organizing research, and communicating are among the technical aspects identified by the respondents to be more confident in, however, they are least self-confident in methodology writing of the paper (Bay & Clerigo, 2013). Information seeking statistical analysis, methodology, communication, and problem-solving were the identified research skills of the undergraduate and post-graduate marks (Meerah, et al., 2012). Their study obtained a result in which it was emphasized that the graduates were well-equipped with research skills thus enabling them to conduct research on their own. Nevertheless, they pointed out that necessary improvements shall be made in the research skills, particularly in the methodology and quantitative investigation skills.

Teachers find research skills relevant and important and the majority of them revealed having a good attitude towards research (Dinagsao, 2013). Additionally, the researcher discovered that more than one-third of the respondents had the bare minimum of research competences, and the remaining respondents lacked confidence in their management, communication, and data analysis research skills.

Furthermore, it was discovered that accounting teachers in the Philippines have an average level of competency in the five research processes: conceptualizing, operationalizing, collecting data, processing and analyzing data, and applying research (Mendoza, 2008). It was also shown in the study that actual research experience is the main source of information and skills, proving the necessity for educational institutions to give faculty members access to research opportunities.

In addition, the study of Fuentes (2017) ranked the bases of research competency as follows: (1) a current course on research; (2) perusing scholarly sources for self-study or

research; (3) real-world research experience; (4) University-sponsored training and seminars; (5) courses or subjects from prior semesters that required research; (6) seminars and training; as well as (7) field trips, study missions, and exposure. Fuentes (2017) further recommended developing comprehensive instructional material for teaching research.

The researcher felt that the previously mentioned literature illuminated the current study and informed readers about the many parameters that were investigated. In addition, the researcher thought that the previously referenced literature had helped in identifying the research gap that was represented by the primary variables of this study—research skills and competence.

IV. METHODS

This was an exploratory research utilizing descriptive-assessment design to assess the research skills and competence of the public secondary school teachers in the Schools Division of Calbayog City. Unconcerned with any causal or other hypotheses, a descriptive research aims to characterize the distribution of the constructs (Aggarwal & Ranganathan, 2019). A researcher-made questionnaire was the primary tool in gathering relevant data needed to answer the problems posed in the study.

During the 2017–2018 academic year, this study was carried out in the Schools Division of Calbayog City, Calbayog City, Samar, Philippines. The study included ten (10) secondary schools as shown in Table 1. Through the universal sampling technique, there are 418 public secondary school teachers as respondents to this study.

A questionnaire created by the researcher and adapted from several questionnaires created by earlier researchers served as the tool utilized to collect the necessary data for the study. The instrument was composed of three (3) parts. Part I measured the basic research skills as practical skills; problem-solving, thinking, and communication skills; personal attitudes and professional ethics; dissemination; roles and function; methodological skills; and research writing. The first five categories of basic research skills were based on the Research Competencies Framework (2007) by the Faculty of General Dental Practice (UK), The Royal College of Surgeons of England. Meanwhile, the sixth basic research skill category which was methodological skills was adopted from Meerah, et al. (2012) in their study on developing a measuring instrument to measure research skills. Furthermore, the seventh basic research skill category which was the writing research skill was adapted from Din's (2017) study on the correlates of the competencies of the Grade 11 teachers teaching natural science subjects in the Schools Division of Northern Samar. This part was answered by the respondents by rating the statements following a 5-point rating scale where 5 was very competent (VC); 4 was competent (C); 3 was slightly incompetent (SI); 2 was incompetent (I), and 1 was very incompetent (VI). Part II, on the other hand, assessed the research competence of the respondents. The attributes, as well as, the categories such as, the motivational-value

component, methodology-reflective component, operational-activity component, and emotional-volitional component were drawn from findings and conclusions in the study of Ivanenko, et al. (2015). This contains a competency rating scale of 1 to 5: 1 - very incompetent (VI), 2 - incompetent (I), 3 - slightly incompetent (SI), 4- competent (C), and 5 - very competent (VC). The research-related problems encountered by the respondents were assessed in Part III of the research instrument. The researcher identified some problems that were possibly encountered by the teachers and the respondents have to check the item indicating that they have encountered such problem based on their experience.

Mean and standard deviation were computed to describe the basic research skills and the level of research competence. On the other hand, the ranking was used to ascertain the research-related problems encountered by the secondary school teachers in the Schools Division of Calbayog City.

V. RESULTS AND DISCUSSION

Basic Research Skills: Practical skills and problem-solving, thinking and communication skills

TABLE 1. Mean and Standard Deviation on the Level of Basic Research Skills

Basic Research Skills	AM	INT	SD
A. Practical Skills	4.02	C	0.67
B. Problem-solving, Thinking, and Communication Skills	3.90	C	0.69
C. Personal Attitudes and Professional Ethics	3.79	C	0.71
D. Dissemination	3.70	C	0.77
E. Roles and function	3.64	C	0.85
F. Methodological skills	3.54	C	0.86
G. Research writing	3.74	C	0.78
GRAND MEAN (GM)	3.76	C	0.76

Legend: Scale Interpretation
 4.51 - 5.00 Very Competent (VC) M: Mean
 3.51 - 4.50 Competent (C) INT: Interpretation
 2.51 - 3.50 Slightly Competent (SC) SD: Standard Deviation
 1.51 - 2.50 Incompetent (I)
 1.00 - 1.50 Very Incompetent (VI)

As reflected in Table 1, all of the indicators have been rated “competent” with an average mean of 4.02 and a standard deviation of 0.67 for practical skills and an average mean of 3.90 with a standard deviation of 0.69 for problem-solving, thinking, and communication skills. Thus, the data suggest that teachers perceived themselves to possess basic research skills such as using both primary and secondary online and printed resources, demonstrating techniques for observations, evaluating conclusions that would generate research questions, and using oral and written communication, among others.

Basic Research Skills: Personal attitudes and professional ethics and dissemination

Table 1 reveals the perceived level of basic research skills of the teacher in terms of personal attitudes and professional ethics and dissemination. Similarly, all of the indicators have been rated “competent” with an average mean of 3.79 and a standard deviation of 0.71 for personal attitudes and

professional ethics and an average mean of 3.70 with a standard deviation of 0.77 for dissemination.

Data revealed that teachers have perceived themselves to have basic research skills underpinning personal attitudes and professional ethics. This means that teachers have observed ethical standards when conducting research like safeguarding the rights and privacy of respondents. Moreover, teachers as researchers are also aware of the legal implications, particularly on plagiarism. As such, they have been rated as competent in this area, especially in observing proper behavior in conducting interviews, focus group discussions (FGD), etc., wherein the aspect has obtained the highest mean scores. Similarly, the respondents have pegged the same level of competence in terms of dissemination which means that teachers were also keen on complying with the requirements in disseminating research works.

Basic Research Skills: Roles and function, methodological skills, and research writing.

As reflected in Table 1, the roles and functions are rated with a mean of 3.64 and a standard deviation of 0.85. The methodological skills are rated with an average mean of 3.54 with a standard deviation of 0.86. Meanwhile, the research writing is rated with an average mean of 3.74 with a standard deviation of 0.78. As a result, all these indicators have been rated as “competent”. This means that teachers have perceived themselves to possess basic research skills.

Nevertheless, one indicator under research writing, “conducts action research annually or periodically” has been rated as “slightly competent” by the teachers. This item most likely means that even though the respondents have perceived themselves generally as “competent” in some aspects of basic research skills, when it comes to conducting action research regularly, they admit their limitations in this area. This means that teachers are aware that they could not really cope with the requirement of producing research works amidst other concerns and workloads.

To sum up, the respondents perceive themselves as “competent” in the different basic research skills (GM = 3.76, SD = 0.76). This implies then that teachers can undertake research undertakings since they have manifested the basic research skills as reflected by the highest mean, to wit: practical skills (M = 4.02, SD = 0.67); problem-solving, thinking and communication skills (M = 3.90, SD = 0.69); personal attitudes and professional ethics (M = 3.79, SD = 0.71); research writing (M = 3.74, SD = 0.78); dissemination (M = 3.70, SD = 0.77); roles and function (M = 3.64, SD = 0.85); and methodological skills (M = 3.54, SD = 0.86). Scrutinizing the means, the teachers are good in practical skills but weak in methodological skills. However, they are competent in all aspects. One of the reasons could be the continuing effort of the teachers in enhancing their research capabilities through enrolling in graduate school where research is one of the major undertakings in most subjects.

Research Competence: Motivational-Value Component and Methodology-Reflective Component

As reflected in the Table 2, all of the indicators have been rated “competent” with an average mean of 3.65 and a

standard deviation of 0.80 for the motivational-value component and an average mean of 3.56 with a standard deviation of 0.79 for the methodology-reflective component. Both means are described as “competent”. Nonetheless, there are two indicators under methodology-reflective component which teachers have rated themselves as “slightly competent” only. These are on, “possesses the capacity to synthesize, analyze, and generalize basic and applied research” and “demonstrates a willingness to take chances while doing research and inquiries”. Undeniably, the teachers know their predicaments and they are honest to admit them.

TABLE 2. Mean and Standard Deviation on the Level of Research Competence

Research Competence	M	INT	SD
A. Motivational-Value Component	3.65	C	0.80
B. Methodology-Reflective Component	3.56	C	0.79
C. Operational-Activity Component	3.59	C	0.81
D. Emotional-Volitional Component	3.62	C	0.76
GRAND MEAN (GM)	3.61	C	0.79

Legend: Scale Interpretation M: Mean
 4.51 - 5.00 Very Competent (VC) INT: Interpretation
 3.51 - 4.50 Competent (C) SD: Standard Deviation
 2.51 - 3.50 Slightly Competent (SC)
 1.51 - 2.50 Incompetent (I)
 1.00 - 1.50 Very Incompetent (VI)

Thus, the teacher-respondents believe that they have manifested research competence in terms of the motivational-value component and methodology-reflective component. However, they lack the competence for analyzing, synthesizing, and generalizing investigation and they find it hard to take risks in conducting research activities. These skills are necessary since they serve as a basis for coming up with appropriate recommendations towards rectifying, if not, solving the problem that the study attempted to investigate. The absence of these skills among teachers would mean that their research skills are not complete to warrant quality outputs.

Research Competence: Operational-Activity Component and Emotional-Volitional Component

As gleaned from Table 2 as well, all of the indicators have been rated “competent” with an average mean of 3.59 and a standard deviation of 0.81 for the operational-activity component and an average mean of 3.62 with a standard deviation of 0.76 for the emotional-volitional component. Thus, the teacher-respondents believe that respondents have manifested research competence in terms of the operational-activity component and emotional-volitional component.

Marked competent in these two aspects of research competence imply that respondents are capable of undertaking activities like paper presentations, manipulating computers, use of computer software and others with ease and they can adapt to any given circumstance like stress and other emotional disturbances brought about by the pressure and challenge of conducting research.

To summarize, the teacher-respondents perceive that they are capable to undertake research (GM = 3.61, SD = 0.79). This is due to the fact that they have rated themselves “competent” in the different indicators to wit; motivational-value component (M = 3.65, SD = 0.80), emotional-volitional

component (M = 3.62, SD = 0.76), operational-activity component (M = 3.59, SD = 0.81), and methodology-reflective component (M = 3.56, SD = 0.79). Data show that methodology-reflective and operational-activity have the least means that manifest their limited competence in research. Hence, these can be given focus in the research enhancement activities. However, this finding is contrary to the finding of Dinagsao (2013) who claimed that more than one-third of the respondents were below basic competencies in research work.

Research-related problems encountered

The research-related problems encountered by the public secondary school teachers were also tallied to get the frequency distribution and ranking. Table 3 presents the data on the research-related problems encountered by the respondents.

As explicitly shown in Table 3, the top ten (10) research-related problems encountered are as follows: (1) inadequacy of training and seminar on research activities; (2) lack of technical assistance in doing research; (3) lack of enough time to carry out research in the school; (4.5) no confidence in undertaking research due to lack of research knowledge and skill; (4.5) difficulty in constructing of interpretation, analysis, findings, conclusions and recommendations; (6) difficulty in identifying researchable issue and constructing of research title; (7) too many teaching loads/assignments; (8) lack of funding at the institution for research; (9) issues with data statistical treatment or choosing the right statistical instrument; and (10) library's reference collection is insufficient.

TABLE 3. Ranking on the Research-Related Problems Encountered

Problems Encountered	f	Rank
Inadequacy of training and seminar on research activities	312	1
Lack of technical assistance in doing research	283	2
Lack of enough time to carry out research in the school	279	3
No confidence in undertaking research due to lack of research knowledge and skill	252	4.5
Difficulty in constructing of interpretation, analysis, findings, conclusions and recommendations	252	4.5
Difficulty in identifying researchable issue and constructing of research title	247	6
Too many teaching loads/assignments	242	7
Lack of funding at the institution for research	236	8
Issues with data statistical treatment or choosing the right statistical instrument	224	9
Library's reference collection is insufficient	217	10

With these, the teachers seemingly admitted that they had difficulty undertaking research work having no sufficient technical knowledge and skills necessary to conduct relevant and publishable research materials. On the other hand, some conditions that were least rated were conflicting ideas, difficulty in tallying results, and lack of moral support from the administration as evidenced by their low frequencies. This means therefore that teachers had not experienced being left out by their colleagues when conducting research nor they had encountered problems simply because of tallying of scores. Notwithstanding the ranking of the problems, the mere fact that all identified problems were acknowledged and rated by the respondents gave an impression that indeed, teachers were

encountering many problems related to research work and productivity.

VI. CONCLUSIONS

Overall, secondary public school teachers believed they had the skills and abilities required to conduct research work. Nevertheless, inadequacy of training and seminar on research activities, lack of technical assistance in doing research, and lack of enough time to carry out research in the school are considered problems encountered by the public secondary school teachers. Despite many limitations, the teachers' claim of competence in terms of their research skills and research competence, seems inconsistent with their acknowledged problems encountered. Teachers may have the potential to conduct research given their competence and acquisition of basic research skills. However, developing more research skills would lead to higher research competence. Therefore, it can be concluded that despite the claim of competence, teachers are still confronted with so many challenges which if not addressed, could pull them down in their aspiration for advanced competence.

VII. RECOMMENDATIONS

The School, District, and Schools Division offices need to intensify the conduct of training, seminars, conferences, and workshops for the teachers to keep them abreast with the latest development in the academe such as the issuance of BERA and BERF, thereby, refining their skills especially in undertaking research and helping them bridge their learning gaps. Public secondary school teachers may indulge themselves in professional development and advancement activities such as, enrolling themselves in graduate studies and/or continuing their graduate studies to improve their research skills and competence. Effective planning for the schedules of the teachers may be implemented by the school heads, thereby, giving the former enough time and concentration in facilitating and carrying out research work. Another study may be conducted by future researchers to find out the differences and relationship among the profile, research skills and research competence of the public school teachers in the Schools Division of Calbayog City, public elementary and secondary school teachers in the other divisions as well as in the private sectors.

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