Research Competency of the Basilan State College Faculty

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Abstract— One of the most significant challenges confronting higher education institution's faculty is the mandate on research for quality assurance of the institution and personal development. Thus, this study was conducted to assess the Research Competency of the 80 Basilan State College faculty in Isabela City. Specifically, this study focused on five stages in the research process that are crucial for a researcher to be ranked as proficient, namely: Research conceptualization, Formulating research design, Data collection, Data processing and analysis, and Research application. The descriptive survey method was used, with mean and standard deviation as tools for analysis. The findings revealed that the faculty have average knowledge and are capable and ready to use it but lack the speed and flexibility that of a proficient researcher, thus, on average, they were ranked as a practitioner. Their sources of research competencies were minimal, mainly that of a master's degree, while their interest ranges from attending seminars and training to improve personal skills and as mandated by CHED. They preferred to complete research with a faculty or with a team. Given these, this research study provides baseline data for Basilan State College to conduct research capability training and send faculty for national and internal research capability training.

Keywords— Data collection, data processing, practitioner, research application. research competency.

I. INTRODUCTION

Background of the Study

The challenges faced by modern society as a result of globalization demands critical attention to Research in order to generate new knowledge and discover new frontiers towards improving the quality of human life. (Fetalver, 2009). Research has played a pivotal role in response to the issues faced by this millennium. It is one of the quadruple functions of all Higher Education Institutions (HEIs), the other three are Instruction, Extension and Reproduction. "HEIs' are among the primary entities tasked to generate, transmit, disseminate and apply knowledge" as what Pardo, Florendo, and Bañez (2018) have emphasized. All State Universities and Colleges (SUCs) therefore are mandated to institutionalize the conduct of research since program accreditation, SUCs levelling, and all other institutional activities and programs for developments are based and should be based on research (Mallari & Santiago, 2013).

"The work of the faculty in higher education institutions has traditionally been trifocal, consisting of teaching, research and community service/extension. The University or College faculty members are mandated to become teachers, researchers, and service-oriented professionals. This traditional trinity is expected to operate in relation to the specific goals and mission of the college or university". (Clemeña & Acosta 2000).

Basilan State College shall carry on its mission and vision as it aimed for excellence, the reason why it applied for a Horizontal Typology as a measure of quality. – to be typed as University, one of the criteria is "At least thirty (30) full-time faculty members or 20% of all full-time faculty, whichever is higher, are actively involved in research" (CHED Handbook on Typology, OBE, and ISA (2014), CMO No. 46, series 2012). It has also subjected for programs evaluation under the Accrediting Agency of Chartered Colleges and universities in the Philippines (AACCUP). It is a type of quality assurance in which programs of the institution under evaluation will be examined in order to ascertain that applicable standards are met.

Results of the 2016 SUC Levelling showed that Basilan State College was typed as a College Level 1 and that one notable recommendation was to increase the number of faculty engaged in research activities. On the other hand, program accreditation showed that all of the programs applied for has to improve on the area of research. It has been generally observed also that a larger percent of the faculty members in general do not participate in conducting researches. It is in this light that the researcher would like to make an assumption that various reasons, among which are their capabilities to do research. It is in this context that this study was conducted, to find out the level of competency of Basilan State College faculty in conducting research in order to develop programs necessary for horizontal classification for improvement towards nation building.

Statement of the Problem

The purpose of this study was to determine the level of competency of the faculty members in conducting Research and suggest a program or development training based on the results gathered in this study for the enhancement of the research capability of the faculty members of Basilan State College.

Specifically, the study answered the following:
1. What is the profile of the respondents?
2. What is the level of research competency of the faculty members of Basilan State College in conducting a research on the following areas?
   a. Research conceptualization
   b. Formulating research design
   c. Data collection
   d. Data processing and analysis

e. Research application?
3. What are the sources of research competency of the faculty members of Basilan State College?
4. What is the level of research interests of the faculty members of Basilan State College?
5. What Development Program can be recommended for the enhancement of research capability of the faculty of Basilan State College?

Significance of the Study

The gaps that will be identified in this study will form the basis in planning for the enhancement of the research capability of the faculty members of Basilan State College. This will be done in support to the recommendation made by CHED on its initial evaluation in line with the colleges' application for horizontal typology, and program accreditation. Specifically, this study will benefit the following:

Scope and Delimitation of the Study

This study will be confined to Basilan State College, specifically, all tenured faculty of Basilan State College. Since this study will be limited only to the faculty of Basilan State College the results of this study will not allow us to determine the research capabilities of the faculty of other colleges.

Theoretical Framework

The UNESCO World Declaration on Higher Education for the Twenty-first Century (as cited in Pardo, Florendo & Bañez 2018) acknowledges that "knowledge creation, transmission, and application are the lifeblood of the knowledge-based economy". Higher education institutions therefore are among the primary entities mandated to generate, transmit, disseminate and apply knowledge. They are thus a major component of the nation's research and innovation system (Pardo, Florendo & Bañez 2018).

Research is an original investigation undertaken in order to gain knowledge and understanding. The first major task of research is to conceptualize, observe and systematically record events and processes to do with learning. The second task is to analyze such observations in order to describe accurately their conditions, contexts and implications. The third task is to publish accounts of all that is known about the particular topic under consideration, drawing on existing theory from one of the disciplines which contribute to our field, from educational theory itself, or from emerging theory that will itself be aided by the work. But even with a theoretical underpinning, the researchers' task is not complete for they have to relate their findings to political, economic and social aspects of society. The fourth task and main purpose of educational research is to further educational improvement (Salom, 2013).

Conceptualization of research is focused on identification of potential research problem and identification of the research scope and boundaries. Operationalization involves choosing the appropriate unit of observation of the study, evaluating the advantages and disadvantages of the different methods of conducting research, constructing an operational framework based on related research components and proposing

measurement methods for variables and their attributes. Data collection employs defining the population on which the research is to be conducted, calculating the sample size that is representative of the population, constructing an instrument for data gathering and employing a data gathering plan among others. Data processing and analysis includes demonstrating an understanding of several methods of data presentation, recognizing the different statistics that are appropriate for each kind of data, explaining the difference between data, facts and inferences, interpreting data gathered in relation to the research question, identifying relationships and differences in variables based on data gathered and composing research findings clearly and accurately (Mallari & Santiago, 2013). The study was also anchored on the theory of evaluation. According to Andres (as cited in Salom 2013), through evaluation, strengths and successes are amplified by means of positive feedback. Further, AACCUP, as cited in Salom (2013), affirmed this saying that diagnostic evaluation helps to diagnose difficulties and weaknesses of educational programs, provides basis for making decisions on needed improvements, and assists in setting up priorities for such improvements.

Conceptual Framework

Research is a process of asking questions and answering it in a logical or systematic way weather qualitative or quantitative, through experimentation or survey. As a process, it involves making an observation, identification of problem, choosing a research design, analyzing and interpreting the data gathered, and drawing of conclusion. In this study, research process will include conceptualization, formulating research design, data collection, data processing and analysis, and research application. The study will look into the research competency of Basilan State College faculty members in each of the five steps in the research process.

Figure 1. below is the conceptual framework showing the assumed reasons of the Basilan State College Faculties hesitation which causes the low level of participation in conducting a research. Probable reason could be the level of competence in conducting research activities.
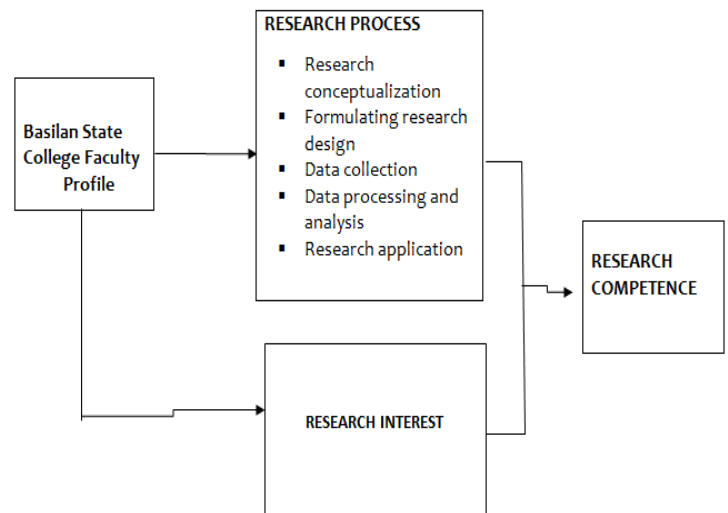

Figure 1. Conceptual paradigm of the study

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Basilan State College is the only government higher education institution in Basilan. It caters to diverse students from different municipalities all over the Province, with its off-site campuses from the three municipalities, producing more than two thousand graduates a year. Results of the 2016 SUC Levelling showed that Basilan State College was typed as a College Level 1 and that one notable recommendation was to increase the number of faculty engaged in research activities. On the other hand, program accreditation showed that all of the programs applied for has to improve on the area of research. It has been generally observed also that a larger percent of the faculty members in general do not participate in conducting researches. It is in this light that the researcher would like to make an assumption that various reasons, among which are their capabilities to do research. It is in this context that this study will be conducted, to find out the level of competency of Basilan State College faculty in conducting research in order to develop programs necessary for horizontal classification for improvement towards nation building.

Terminologies/Operational Definition of Terms

Research Competency – Research competency is the facility or potential of individuals, organizations, and systems to undertake and disseminate effectively and efficiently high quality research (Salom, 2013).

Research conceptualization - Conceptualization of research is focused on identification of potential research problem and identification of the research scope and boundaries. (Mallari & Santiago, 2013)

Formulating research design – Formulating a research design is focused on identifying the most suitable method in conducting the research.

Data collection - employs defining the population on which the research is to be conducted, calculating the sample size that is representative of the population, constructing an instrument for data gathering and employing a data gathering plan among others. (Mallari & Santiago, 2013)

Data processing and analysis - includes demonstrating an understanding of several methods of data presentation, recognizing the different statistics that are appropriate for each kind of data, explaining the difference between data, facts and inferences, interpreting data gathered in relation to the research question, identifying relationships and differences in variables based on data gathered and composing research findings clearly and accurately. (Mallari & Santiago, 2013)

Research application – is focused on how the researcher relates research findings, what are the contributions of research in knowledge building, and how the research findings are translated into a meaningful plan of action.

II. REVIEW OF RELATED LITERATURE

The changes faced by modern society as a result of the demands of the 21st century and globalization impelled us to search for new strategies, new discoveries and new knowledge which is only possible through research activities. For centuries, research endeavors have changed the quality of human lives as it impacted almost all facets of life. Engaging in research activities seems to be the vigor to some endless possibilities in response to the issues faced by this millennium. This section reviews the basis why there is a need to conduct research, the concept of Research, the Role of Research in Higher Education Institutions, the studies conducted by researches on the level of research competencies in terms of research and how research have played vital role in the development of academic institution.

Basis and the Goal of Research

The 1987 Philippine Constitution. Article XIV, section 10 mandated that the state shall give priority to research developments, invention and innovation, and even long before the ratification of the 1987 Constitution, Presidential Decree 6-a (1972) had already identified research as a main goal of Philippine Education. Moreover, the Education Act of 1994 otherwise known as the Republic Act No. 7722 created the Commission on Higher Education (CHED) which mandated the advancement of learning and research by formulating and recommending plans, policies, priorities, and programs. Its National Higher Education Research Agenda formulated in 1996 articulates the goals of higher education research as well as the mechanics and concrete steps for achieving this goal (Pardo, Florendo &, Bañez 2018).

Pursuant to Republic Act 7722 or "An Act Creating the Commission on Higher Education (CHED)", it is the mandate of the Commission "to inspire and enable Philippine higher education institutions (HEIs) in becoming platforms for research and development, innovation and extension in pursuit of inclusive social and economic development." Further, according to Mallari and Santiago (2013) Higher Educational Institutions are mandated to perform four functions. These are instructions, research, extension and production. State Universities and Colleges (SUCs) being higher educational institutions are therefore mandated to institutionalize the conduct of research. Research therefore is instrumental in transforming an institution, hence Academic Performance of any institution is anchored on the quality of research that it has completed which serves as one of the bases for budget allocations.

Role of Research in Higher Education Institution

Research is instrumental in transforming society. Through research man gains social, economic, cultural, and political benefits. Research consciousness is recognized as an essential factor in effecting innovations. Any change(s) in the structure of education, in school programs/projects/activities, and in approaches and techniques shall be first subjected to research because only research can provide factual bases of their effectiveness or ineffectiveness. In other words, all educational activities for total development are based on research. (Salom, 2013) but how do we define Research?

According to (Clemeña & Acosta 2000) "The work of the faculty in higher education institutions has traditionally been trifocal, consisting of teaching, research and community service/extension. The University or College faculty members are mandated to become teachers, researchers, and service-oriented professionals. This traditional trinity is expected to operate in relation to the specific goals and mission of the

college or university". The strategic directions of the institutions influence the level of concentration on each task to be given by faculty members. Moreover, each institution develops criteria to assess the extent to which a faculty member is an efficient teacher, productive researcher, and active university citizen". But what is Research?

Concept of Research

Research can be defined as the search for Knowledge or as any systematic investigation, to establish novel facts, solve new or existing problems, prove new ideas, or develop new theories, usually using a Scientific or a Systematic approach. It involves the mastery of skills needed to design and conduct a systematic, empirical, objective, public, and critical investigation of an identified problem or an issue. (http://youremployment.biz/competency/research-competency/)

According to Merriam dictionary, research is simply "the collection of information about a particular subject" broadly speaking it is an investigation or experimentation aimed at the discovery and interpretation of facts, revision of accepted theories or laws in the light of new facts, or practical application of such new or revised theories or laws. Naido (2011 p1) described Research as the basis of all developments, according to him, "research is the diligent systematic inquiry into nature and society to validate and refine existing knowledge and to generate new knowledge". On the other hand, Cooper and Schindler (as cited in Mallari, & santaigo 201) defined Research as a systematic inquiry which objective is to provide information needed to solve managerial problems. It is a disciplined process for conducting an inquiry of a management dilemma. Based on the three definitions of research expressed by the authors.

Research is simply a process of investigating or an inquiry into the nature about anything which may help solve the problems faced by the society with the result of generating new knowledge or technology in improving the quality of human life.

Roles played by Higher Education Institution Toward Research

"Studies in the 1990s show that higher education institutions play a significant role in conducting productive research. These institutions of higher education are seats of dynamic research activities and centers of creativity, development, and excellence where recent theory and practice in various fields of human endeavor and data and information are readily available for public utilization" (Fetalver, 2010). Therefore, school leaders and the faculty of HEIs are tasked or mandated to do the quadruple function of higher education that is; Instruction, Research, Extension and Production.

One area that is evaluated/looked into for the accreditation of the colleges' and university's academic programs, for horizontal typology, for awarding as "Center of Excellence" (COE) and "Center for Development (COD) and for normative funding is Research.

As emphasized in the Preamble of the World Declaration on Higher Education for the Twenty – First Century Vision and Action, (as cited in Talens, 2010) that "one of the missions and functions of higher education institutions is to advance, create and disseminate knowledge through research and provide, as part of its service to the community, relevant expertise to assist societies in cultural, social and economic development, promoting and developing scientific and technological research as well as research in the social sciences, the humanities and creative arts". Therefore, this mission and function of higher education in advancing knowledge through research must be institutionalized and that the leaders in higher education must be equipped with the necessary skills in building a culture for research so that the faculty are directed and motivated to do and engage in research activities.

One of the aims of any higher education institution is for university or horizontal typology/SUCs levelling or ranking. To be typed as University, one of the Key Results Area (KRA) is Research capability and output which include: Research Center including percentage of researchers to total plantilla faculty in the past three years, externally funded research, Completed Research-based Paper Published, Research-based paper presented in the past three (3) years, citations and inventions in the past three (3) years (Joint Cir.No.1 s.2016)

On the other hand, Accreditation is a process for assessing and upgrading the educational quality of higher education institutions and programs through self-evaluation and peer judgment. It leads to the grant of accredited status by an accrediting agency and provides public recognition and information on educational quality and one of the indicators for is research outputs (CMO 1.s 2005). The Accrediting Agency of Chartered Colleges and Universities (AACCUP) in the Philippines was created to survey/evaluate the SUCs not only for quality instruction but also for quality research, extension and production. In its primer, research indicators survey an institution along: 1) research priorities and relevance, 2) funding, institutional support, and other resources, 3) research outputs, 4) publication, dissemination and utilization, 5) impact of research on community development, and 6) research linkages.

Based on the given scenario above, there is a compelling need for State Universities and Colleges (SUCs) to reflect, transcending the traditional teaching functions and effectively respond to the mandate of the Commission on Higher Education (CHED) and the demands of times. There is a need for HEIs to develop their competency in doing a Research and get interested in Research activities as part of their functions, to include the service to be rendered to the community (Extension). Researches about capability building, competencies and interest in research abound in the literature.

Research Implementation in Higher Education

A study conducted by Gomez & Panaligan (2013) on the *Level of Research Competencies and Satisfaction of the Faculty Members from The College of Criminology* found that respondents are highly competent in research format but need reinforcement in the development of their communication skills. As to the major parts of the research paper, the respondents seem to need competency on the method

particularly in develop research design, constructing questionnaires and statistical tool/treatment.

Related study was conducted by Mallari, & Santiago, (2013) on *The Research Competency and Interest of Accountancy Faculty Among State Colleges and Universities in Region III* revealed that while there are SUC accountancy faculty members whose research competency is that of a master, there are also those whose research competency are that of an apprentice. This means that they have read about and studies the particular aspect of research but the knowledge is below average making short of the ability to use it professionally.

In another study conducted by Pardo, Florendo, Bañez (2018) on *Institutional Research Capability and Performance of the University of Northern Philippines* revealed that the implementation of research program, and the capability and performance of the UNP are Very High, however, the perceived outcome of the researches conducted in the community is high only. The research capability and performance of UNP is significantly influenced by the group consciousness and sex of the respondents.

While the three studies mentioned above suggests that the faculties under study seems to need competency on research, a study conducted by Salom (2013) on *Research Capability of the Faculty Members of DMMMSU Mid La Union Campus* revealed that the faculty have gained adequate knowledge and have developed skills in putting the rules and principles of the research process into practice; that there is much room to improve the faculty members' writing skills to present, to analyze, and to interpret effectively their research findings; that the level of competence of the faculty in using statistical measures can be strengthened; that the variables of academic rank, highest educational attainment, and teaching load affected the level of research capability of the faculty. This indicates that when an intervention will be done, the research competency of the faculty can be improved.

III. METHODOLOGY

Research Design

The study used the descriptive survey method. According to Salaria (2012) that descriptive survey research employs applications of scientific method by critically analyzing and examining the source materials, by analyzing and interpreting data, and by arriving at generalization and prediction. This study employed survey questionnaire that determined the level of competency of the faculty members of Basilan State College.

Respondents

The respondents of this study were all the tenured faculty members of Basilan State College

Sampling Procedure

Total enumeration was utilized in this study, since all the tenured faculty of Basilan State College was considered as study participants.

Selection of Respondents

The sample were determined from the total number of tenured faculty members. The list of the faculty was secured from the office of the Human Resource Management. All faculty members who were included in the list became the study participants of this study.

Data Gathering Procedure

The collection of data covered the period from October 2020 to December 2020.

First, permission to conduct the research was obtained through a letter from the College President of Basilan State College. After permission was granted, the researchers began to carry out the sampling plan of the study. Next, an orientation was conducted by the researcher to the respondents on how to accomplish the questionnaire as well as its ethical consideration, followed by the distribution and collection of the questionnaires. Then, data were recorded and tabulated. Finally, analyzing and interpreting of data was done by the researchers.

Instrument of the Study

Data was gathered through the use of a questionnaire. An adapted questionnaire was used by the researchers to answer all the questions raised.

Data Analysis

Responses from the participants were consolidated, tabulated, encoded and analyzed in response to the questions raised. Because of the nature of the investigation, descriptive statistics using mean and standard deviation were used in determining the level of competency of the faculty members of BaSC in conducting Research

Ethical Considerations

Before the administration of the questionnaire, the researchers explained the nature of the study and its purpose and made an assurance to the respondents that their responses will be treated with utmost confidentiality. Likewise, the researcher also made them realized that accurate results will not only contribute to their own welfare but to the entire program as a whole and the school as well. Individual consent was distributed by the researcher to the participants of the study before the distribution of the questionnaire in that no harm occurred during the conduct of the study, as the researchers ensured the protection of the rights of all the participants in the study. (Cohen et al., 2007).

IV. RESULTS AND DISCUSSIONS

This chapter presents the data collected in the study and reports the findings from the statistical analysis for each of the research questions. The results of the quantitative study using questionnaire is presented here.

The following tables are the results of the five areas of Research Competency: Area 1-Research Competency on Conceptualization, Area-2 Research Competency on Formulation of Research Design, Area 3- Research Competency on Data Collection, Area 4- Research

Competency on Data Processing and Analysis and Area 5-Research Competency on Research Application.

The researchers used the following norms to interpret the study:

Table 1. Descriptive Equivalent and Interpretation of the weighted mean

Mean Range	Numerical Rating	Descriptive Equivalent	Type	Verbal Interpretation
4.21 – 5.00	5	VERY Highly Competent	EXPERT	Have a deep understanding of the total research situation and have intuitive grasp of the particular research process. Are capable of proposing innovations of certain processes.
3.41 – 4.20	4	Highly Competent	MASTER	Have above average understanding of the overall research process and use it naturally and automatically. Know how to plan a research project and modify it based on a given situation.
2.61 – 3.40	3	Moderately Competent	PRACTITIONER	Have an average knowledge and are capable and ready to use it but lack the speed and flexibility of the proficient researcher.
1.81 – 2.60	2	Barely Competent	APPRENTICE	Have read about and studied the particular aspect of research but the knowledge is below average making short of the ability to use it professionally.
1.00 – 1.80	1	Not at all Competent	DEFFICIENT	No knowledge of the particular research process.

Table 2. Area 1 - Research Competency on Conceptualization

Competency Statements	n	Weighted Mean	SD	Numerical Rating	Descriptive Rating	Type
Identifying a problem	76	3.31	1.03	3	Moderately Competent	Practitioner
Stating the research question/problem	76	3.21	1.03	3	Moderately Competent	Practitioner
Construct hypotheses that can be subjects of an empirical study	76	3.19	1.03	3	Moderately Competent	Practitioner
Writing the review of related literature	76	3.26	0.97	3	Moderately Competent	Practitioner
Use the literature review in enhancing the research question and framework	76	3.24	0.95	3	Moderately Competent	Practitioner
Average		**3.242**	**1.002**	**3**	**Moderately Competent**	Practitioner

Table 3. Area 2 -Research Competency on Formulation of Research Design

Competency Statements	n	Weighted Mean	SD	Numerical Rating	Descriptive Rating	Type
Propose the most suitable method of conducting the research	76	3.06	1.06	3	Moderately Competent	Practitioner
Formulate research design	76	2.99	1.02	3	Moderately Competent	Practitioner
Developing the theoretical/conceptual framework	76	3.08	1.04	3	Moderately Competent	Practitioner
Identifying and controlling set of variables	76	3.09	1.06	3	Moderately Competent	Practitioner
Writing the methodology	76	3.04	1.04	3	Moderately Competent	Practitioner
Average		**3.052**	**1.044**	**3**	**Moderately Competent**	Practitioner

Table 2 presents the weighted mean scores, standard deviation, numerical rating, descriptive rating and the type of researcher in terms of competency, for Area 1 – *Research competency on Conceptualization*. Specifically, it can be gleaned from the table that all the five statements displayed a weighted mean above 2.60 with a numerical rating of 3 which indicates that all statements have a relatively even response; meaning that on the average, the Faculty of Basilan State College were moderately competent in performing all the statements under this area. Further, the faculty reported an average weighted mean of 3.242 with a standard deviation of 1.002 which indicates that on the average, the faculty perceived that they were moderately competent in conceptualizing research, and thus they were typed as "Practitioner" in this particular area of research, which means that the faculty have an average knowledge and are capable and ready to use it but lack the speed and flexibility of a proficient researcher.

Table 3 presents the weighted mean scores, standard deviation, numerical rating, descriptive rating and the type of researcher in terms of competency, for Area 2 – *Research competency on the Formulation of Research Design*. All of the five statements displayed a weighted mean above 2.60 with a numerical rating of 3 which indicates that on the average, the Faculty of Basilan State College moderately competent in performing all the statements under this area. Further, the

faculty reported an average weighted mean of 3.052 with a standard deviation of 1.044 which indicates that on the average, the faculty perceived that they were moderately competent in formulating research design, and thus they were typed as "Practitioner" in this particular area of research, which means that the faculty have an average knowledge and are capable and ready to use it but lack the speed and flexibility of the proficient researcher.

Table 4 presents the weighted mean scores, standard deviation, numerical rating, descriptive rating and the type of researcher in terms of competency, for Area 3 – *Research competency on Data Collection*. It can be noted from the table that the highest weighted mean reported was statement 3 (*Define the population on which research is to be conducted*) with a weighted mean of 3.12 and a standard deviation of 1.09, and the lowest weighted mean reported was statement 5 (*Construct a reliable sampling design*) with a weighted mean of 3.00 and a standard deviation of 1.05. This finding seemed coherent, this means that while the faculty can easily define the population, they seemed to find it hard to construct a reliable sampling design. However, the faculty reported an average weighted mean of 3.05 with a standard deviation of 1.05 which indicates that on the average, the faculty perceived that they were moderately competent in collecting data, and thus they were typed as "Practitioner" in this particular area of research, which means that the faculty have an average

knowledge and are capable and ready to use it but lack the

speed and flexibility of the proficient researcher.

Table 4. Area 3 -Research Competency on Data Collection

Competency Statements	n	Weighted Mean	SD	Numerical Rating	Descriptive Rating	Type
Designing the data collection tool	76	3.07	1.03	3	Moderately Competent	Practitioner
Construct a research instrument for data gathering	76	3.05	1.00	3	Moderately Competent	Practitioner
Define the population on which research is to be conducted	76	3.12	1.09	3	Moderately Competent	Practitioner
Calculate the sample size that is a representative of the population	76	3.01	1.08	3	Moderately Competent	Practitioner
Construct a reliable sampling design	76	3.00	1.05	3	Moderately Competent	Practitioner
Average		**3.05**	**1.05**	**3**	**Moderately Competent**	Practitioner

Table 5. Area 4 -Research Competency on Data Processing and Analysis

Competency Statements	n	Weighted Mean	SD	Numerical Rating	Descriptive Rating	Type
Presenting the data	76	3.05	1.05	3	Moderately Competent	Practitioner
Designing on statistical analysis	76	2.91	1.10	3	Moderately Competent	Practitioner
Presenting analysis and interpretation	76	2.97	1.01	3	Moderately Competent	Practitioner
Writing the summary, conclusion and recommendation	76	3.11	1.04	3	Moderately Competent	Practitioner
Average		**3.01**	**1.05**	**3**	**Moderately Competent**	Practitioner

Table 5 presents the weighted mean scores, standard deviation, numerical rating, descriptive rating and the type of researcher in terms of competency, for Area 3 – *Research competency on Data Processing and Analysis*. Results shows that each statement displayed a weighted mean above 2.60 with a numerical rating of 3 which indicates that on the average, the Faculty of Basilan State College were moderately competent in performing each of the competency statements under this area. However, it can be noted from the table that statement 4 (*Writing the summary, conclusion and recommendation*) with a weighted mean of 3.11 and a standard deviation of 1.04, and the lowest reported weighted mean was that of statement 2 (*Designing on statistical analysis*) with a weighted mean of 2.91 and a standard deviation of 1.10. This finding suggest that the faculty of Basilan State College seemed to have a difficulty in in designing on statically analysis, but can adequately write the summary, conclusion and recommendation. Further, the Faculty reported an average weighted mean of 3.01 with a standard deviation of 1.05 which indicates that on the average, the teachers perceived that they were moderately competent in data processing and analysis, and thus they were typed as "Practitioner" in this particular area of research, which means that the faculty have an average knowledge and are capable and ready to use it but lack the speed and flexibility of the proficient researcher.

Table 6. Area 5-Research Competency on Research Application

Competency Statements	n	Weighted Mean	SD	Numerical Rating	Descriptive Rating	Type
Relate research findings with the present needs of a particular organization or community	76	3.10	1.07	3	Moderately Competent	Practitioner
Discuss the contributions of research in building the knowledge in a particular discipline	76	3.05	1.07	3	Moderately Competent	Practitioner
Translate research findings into meaningful plans of actions or strategies	76	3.05	1.05	3	Moderately Competent	Practitioner
Average		**3.06**	**1.06**	**3**	**Moderately Competent**	Practitioner

Table 6 presents the weighted mean scores, standard deviation, numerical rating, descriptive rating and the type of researcher in terms of competency, for Area 5 – *Research competency on Research Application*. Specifically, it can be gleaned from the table that all the three statements displayed a weighted mean above 2.60 with a numerical rating of 3 which indicates that all statements have a relatively even response; meaning that on the average, the Faculty of Basilan State College were moderately competent in performing all the statements under this area. Further, the teachers reported an average weighted mean of 3.06 with a standard deviation of 1.06 which indicates that on the average, the teachers perceived that they were moderately competent in applying research concepts, and thus they were typed as "Practitioner" in this particular area of research, which means that the faculty

have an average knowledge and are capable and ready to use it but lack the speed and flexibility of the proficient researcher.

Results of the data showed that in all the stages of Research Process, the faculty have responded and reported an average weighted mean of 3.08 with a standard deviation of 1.03 and a numerical rating of 3, which is described as moderately competent and thus typed as a practitioner, which means that the faculty have an average knowledge and are capable and ready to use it but they lack the speed and flexibility that of a proficient researcher.

Table 8 below presents the Sources of Research Competency. Results shows that most of the participants of this study, that is 48 out of 76 which is 63.15 percent chose *Master's course in Research* as their source of Research Competency, followed by undergraduate course in Research which is 46 out of 76 or 60.52 percent, next is seminars and

trainings which is 41 out of 76 or 53.94 percent, followed by *actual research experience*, *reference materials on research by study*, and doctoral *course in research*, which is about

28.94 percent, 26.31 percent, and 22.36 percent respectively. Very few have chosen *Field exposure/trip or study missions* as their source of Research Competency.

Table 7. Summary of Research Competency of the Faculty

Areas of Research Competency	n	Weighted Mean	SD	Numerical Rating	Descriptive Rating	Type
Conceptualization	76	3.242	1.002	3	Moderately Competent	Practitioner
Formulation of Research Design	76	3.052	1.044	3	Moderately Competent	Practitioner
Data Collection	76	3.05	1.05	3	Moderately Competent	Practitioner
Data Processing and Analysis	76	3.01	1.05	3	Moderately Competent	Practitioner
Research Application	76	3.06	1.06	3	Moderately Competent	Practitioner
Average		3.08	1.03	3	Moderately Competent	Practitioner

Table 8. Sources of Research Competency

Statements	n	f	%
Undergraduate course in research	76	46	60.52
Master's course in research	76	48	63.15
Doctoral course in research	76	17	22.36
Seminars and Training	76	41	53.94
Reference materials on research by self-study	76	20	26.31
Field exposure/trip or study missions	76	13	17.10
Actual research experience	76	22	28.94

Table 9. Research Interest

Statements	n	Weighted Mean	SD	Numerical Rating	Descriptive Rating
Attends Seminars or Trainings related to research	76	4.73	0.48	5	Very much Interested
Conducts research as mandated	76	4.66	0.60	5	Very much Interested
Conducts research to improve personal skills	76	4.53	0.70	5	Very much Interested
Prefer to conduct research alone	76	2.10	1.53	2	BARELY Interested
Prefer to conduct research with other faculty/or in a group	76	4.62	0.59	5	Very much Interested
Conduct research without funding	76	1.08	0.65	1	Not at all Interested
Average		3.62	0.75	4	MUCH Interested

Table 9 presents the weighted mean scores, standard deviation, numerical rating, and descriptive rating for Research Interest. Looking at the table, the faculty reported the highest mean score of 4.73 with a standard deviation of 0.48 on statement 1 (*Attends Seminars or Trainings related to research*) rated numerically as 5 which is described as Very much interested for this statement, while statement 6 (*Conduct research without funding*) obtained the lowest mean score of 1.08 with a standard deviation of 0.65 which is numerically rated as 1 described as not at all interested for this particular statement. Although conducting research as mandated and to improve the skill reported also as very much interested, the faculty barely interested in conducting research alone, as such they are very much interested in conducting research with other faculty/or in a group. However, the faculty reported an average weighted mean of 3.62 and a standard deviation of 4 which is numerically rated as 4 which indicates that on the average the faculty of Basilan State College are much interested in conducting research given the following conditions as listed in the result of the table above.

Summary of Findings

Based on the results of the quantitative study on the Research Competency of the Basilan State College Faculty, the following findings were established.

Research Question 1: What is the profile of the respondents?

A great percentage (21 or 27.63%) of the respondents are aged 45 above, teaching for 11-20 years (22 or 28.94%), Instructors (46 or 60.52%). Majority are females (45 or 59.21%), with Master's degree holder (32 or 42.10%).

Research Question 2: What is the level of research competency of the faculty members of Basilan State College in conducting a research on the following areas?

a. Research conceptualization

Research competency on conceptualization includes identification of a problem, stating the research question/problem, constructing hypotheses that can be subjects of an empirical study, writing the review of related literature, and using the literature review in enhancing the research question and framework. The Faculty of Basilan State College were on the average moderately competent in conceptualizing research, as evident in the reported average weighted mean of 3.242 with a standard deviation of 1.002. As a practitioner, these imply that the BaSC faculty members have average knowledge and are capable and ready to use it but lack the speed and flexibility of the proficient researcher. The two competencies on conceptualization of research have means of 3.31 and 3.26 each with a description of practitioner. These are on the areas of identification of a problem and writing the review of related literature respectively.

b. Formulating research design

Research competency on formulating research design includes proposing the most suitable method of conducting the research, formulating research design, developing the theoretical/conceptual framework, identifying and controlling set of variables, and writing the methodology. The BaSC faculty reported an average weighted mean of 3.052 with a standard deviation of 1.044 which indicates that on the average, the faculty perceived that they were moderately

competent in formulating research design. As a practitioner, these imply that the BaSC faculty members have average knowledge in formulating research design and are capable and ready to use it but lack the speed and flexibility of the proficient researcher.

c. Data collection

Research competency on collecting data includes designing the data collection tool, constructing a research instrument for data gathering, defining the population on which research is to be conducted, calculating the sample size that is a representative of the population and constructing a reliable sampling design. The BaSC faculty reported an average weighted mean of 3.05 with a standard deviation of 1.05 which indicates that on the average, the faculty perceived that they were moderately competent in collecting data, as a practitioner, these imply that the BaSC faculty members have average knowledge in collecting research data and are capable and ready to use it but lack the speed and flexibility of the proficient researcher.

d. Data processing and analysis

Research competency on processing and analyzing data includes presenting the data, designing on statistical analysis, presenting analysis and interpretation, and writing the summary, conclusion and recommendation. The BaSC faculty reported an average weighted mean of 3.01 with a standard deviation of 1.05 which indicates that on the average, the faculty perceived that they were moderately competent in data processing and analysis, as a practitioner, these imply that the BaSC faculty members have average knowledge in processing and analyzing research data and are capable and ready to use it but lack the speed and flexibility of the proficient researcher.

e. Research application

Research competency on applying research findings includes relating research findings with the present needs of a particular organization or community, discussing the contributions of research in building the knowledge in a particular discipline, and translating research findings into meaningful plans of actions or strategies. The BaSC faculty reported an average weighted mean of 3.06 with a standard deviation of 1.06 which indicates that on the average, the teachers perceived that they were moderately competent in applying research concepts, as a practitioner, these imply that the BaSC faculty members have average knowledge in applying research findings and are capable and ready to use it but lack the speed and flexibility of the proficient researcher.

Research Question 3: What are the sources of research competency of the faculty members of Basilan State College?

The sources of research competency of BaSC faculty includes undergraduate course in research, master's course in research, doctoral course in research, seminars and training, reference materials on research by self-study, field exposure/trip or study missions, and actual research experience. Results shows that most of the participants of this study, that is 48 out of 76 which is 63.15 % chose Master's course in Research as their source of Research Competency, followed by undergraduate course in Research which is 46 out of 76 or 60.52 %, next is seminars and trainings which is 41 out of 76 or 53.94 %, followed by actual research experience,

reference materials on research by study, and doctoral course in research, which is about 28.94 percent, 26.31 %, and 22.36 % respectively. Very few that is 13 or 17.10% have chosen Field exposure/trip or study missions as their source of Research Competency.

Research Question 4: What is the level of research interests of the faculty members of Basilan State College?

Parameters to determine the level of research interest of the faculty of BaSC includes attending Seminars or Trainings related to research, conducting research as mandated, conducting research to improve personal skills, preferring to conduct research alone or with other faculty/or in a group and conducting research without funding. The findings of this study suggest that on the average the faculty of Basilan State College are much interested to participate in all the research activities. Notably the faculty are very much interested to Attend Seminars or Trainings related to research, conduct research as mandated, conduct research to improve personal skills, but preferred to conduct research with other faculty/or in a group, rather conducting research alone and without funding.

Research Question 5: What Development Programs can be recommended for the enhancement of research capability of the faculty of Basilan State College?

Higher Educational Institutions are mandated to perform a quadruple functions. These are instructions, research, extension and production. The conduct of research should be institutionalized, because one of the parameters to measure the academic performance of SUCs is the quality of completed researches. The motivation for BaSC faculty for the conduct of research is the potential contribution to the improvement of school management, as such BaSC must introduce programs/activities to boost the interest and improve the capability of the faculty to conduct research. "Research competency generally refers to needed skills and experience to do research. Such skills could have been developed or enhanced through schooling, seminars and similar activities attended. Experiences in the conduct of research also contribute to enhancing research competencies" (Mallari & Santiago, 2013)

The following programs/activities may be considered to enhance the capability and thus increase the level of competence of BaSC faculty in conducting research.

Capacity Building for BaSC Faculty

Faculty in higher education institutions are mandated to do research, the moment they enter the grounds of higher institutions they are also commissioned to do research, extension and production as the four-fold functions of all SUCs. It is therefore expected that all faculty in higher education institutions are capable of doing research.

Research capability refers to one's facility to undertake high-quality studies (Salom, 2013). Ismail et al. (as cited in Caingcoy) theorized it as an "ability to carry out data collection involving planning and selecting appropriate data collection tools or instruments, identifying an appropriate method for interpreting and manipulating data and applying an appropriate statistical tool for [the] test of significance besides understanding" (p. 245). Such capability may develop over

time, through experience, continuing and relevant capacity-building activities (Manongsong, as cited in Caingcoy). Capacity building broadens the faculty understanding about strategic issues facing an organization. Results of this study shows that on the average, BaSC faculty are considered as practitioners in terms of conceptualizing research, formulating research design, collecting, processing and analyzing data, as well as applying research results. Thus, capacity building will help the BaSC faculty in this research parameters and activities.

Training to Provide BaSC Faculty Mastery Experiences in the Conduct of Research and Professional Development

Just as the Teacher's knowledge base for strategies aiding the teaching learning process must be improved, so must the research knowledge base considering their additional responsibilities and the level of educational experiences. In-service Research Training that will provide an avenue of camaraderie, shared experiences, collaboration and team-based decision- making is integral in boosting the interest of the participants to achieve their goals and pursue other related-trainings outside. Attendance, monitoring, tutoring, and remedial counseling are important during the in-service training, so that the participants will understand how to deal with research activities and manage their time for appropriate and relevant research activities.

Results of this study shows that on the average, BaSC faculty are considered as practitioners in terms of conceptualizing research, formulating research design, collecting, processing and analyzing data, as well as applying research results. Thus, the In-service Research training will help the BaSC faculty in enhancing their research competencies.

Providing a venue for National and International Research Training and Activities.

Adherence to national and global standards means the awareness of the changing landscape of educational systems and the way we view institutional research is different from a global view, hence, all researchers per se must join/attend national and international seminar/workshops on research. According to Salom (2013) in his study on the Research Capability of the Faculty Members of DMMMSU Mid La Union Campus, "besides attending the University/Campus in-house reviews and research seminars, the faculty also attended national seminars/workshops on research".

Provision of Scaffolding for the Development and Articulation of Research in Basilan State College

The provision of scaffolding to research development and articulation can be provided by the Commission on Higher Education as reflected under the CMO.52-s-2016. It presents three interrelated Pathways namely: *Pathways to Equity*, *Pathways to Relevance* and *Pathways to Advancements.* Such as Grants-in-Aid Program for Research and Innovation, Ancillary Support Programs and Activities, and the like.

V. CONCLUSION AND RECOMMENDATIONS

As Philippine higher education continues to face pressing challenges to adhere to global standards especially in various stages of the research enterprise, the need to improve the

research capability of faculty in higher education institutions is emphasized in CMO.52-s-2016. That is in improving the research capabilities of faculty, research staff and graduate students, entail the following essential dimensions namely: a) research design, b) research methodology, c) research organization, d) critical examinations which demands from researchers the ability to critically examine research, whether one's own or those of others, to question the assumptions, methodology and results of research, and to explore alternative explanations to the phenomenon being observed.

Research is defined as a systematic inquiry which objective is to provide information needed to solve managerial problems. It is a disciplined process for conducting an inquiry of a management dilemma (Cooper and Schindler, 2005). Doing research needs a lot of focus, efforts and interest. There is also a need to allot time for the completion of a research undertaking. (Mallari & Santaigo 2013).

Basilan State College like all other SUCs has submitted their programs to Accrediting Agency for Chartered Colleges and Universities of the Philippines (AACCUP). One of the major areas that the accreditation looks into is research. This include the quantity and the quality of researches completed, the greater involvement of faculty in doing researches and the publication and presentation of completed researches to local and international fora and conferences. It was emphasized in CMO. No. 1 series of 2005, that program to be accredited level III must have a strong research system and program. (Mallari & Santaigo 2013).

The following are the conclusions of the research based on the findings earlier presented:

1. The present study revealed that on the average, the research competency of Basilan State College Faculty is that of a practitioner in the areas of Research conceptualization, formulating research design, Data collection, Data processing and analysis, and Research application, that is, the faculty have an average knowledge and are capable and ready to use it but lack the speed and flexibility of the proficient researcher.

2. A greater percentage of the BaSC faculty chose Master's course in Research as their source of Research Competency, followed by undergraduate course in Research which is 46 out of 76 or 60.52 %, next is seminars and trainings, followed by actual research experience, reference materials on research by study, and doctoral course in research, very few that is 13 or 17.10% have chosen Field exposure/trip or study missions as their source of Research Competency. This finding can be attributed to the fact that a greater participants of the study are Master's degree.

3. The level of research interest of BaSC faculty differs from each other. The highest level of interest is that of attending Seminars or Trainings related to research, conduct research as mandated, conduct research to improve personal skills, they preferred to conduct research with other faculty/or in a group, rather conducting research alone and without funding.

4. In general, there are a lot of activities and programs which can be developed in order to enhance the research capacity

of BaSC faculty, notably, capacity building which can be done on a yearly basis, that is to capacitate newbies in the organization, seminar workshops and trainings done locally, nationally and globally – by giving the faculty the opportunity to attend such, it will not only help in enhancing the capability of the faculty to do research but also boost their interest as they are motivated to do so. The commission on Higher Education also has lined-up several programs and opportunities where SUCs can avail in terms of research endeavors.

Recommendations

Based on the above conclusions the following are recommended:

1. Since the research competency of BaSC faculty in terms of the areas being studied was categorized as "practitioner" there is a need to conduct a training/seminar workshop to enhance the research capacity of the faculty.
2. The Research Training/Workshop should be conducted on a regular basis, and ensure the preparation of the research proposals.
3. The sources of research competency presented in this study could be the basis for updating the research training module of the institution, provisions of reference materials on research and programs that would encourage actual conduct of research among the faculty with different disciplines.
4. To address the concerns posted in this study, the Basilan State College could revisit or update the provision of the Research and Extension Manual.
5. This study is only limited to mapping the research competency of the BaSC faculty, further studies on the determinants and the factors affecting the conduct of research and determine the challenges faced by the faculty in doing research as well as the drivers and support

given/received by the faculty in doing research is highly recommended.

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