Research Competencies among the Faculty Members of One Higher Educational Institution: Inputs for Research Development Program

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Abstract – *Research is one of the trifold functions of the university. However, doing research has always been a challenge among faculty members. This study aims to determine the research competencies among the faculty members, the motivating factors, and the issues and problems related to the conduct of research. This descriptive research was conducted among 150 faculty members from 10 colleges. Results revealed that respondents' competencies were as practitioners in research conceptualization, formulation of research design, data collection, data and analysis and research utilization. Moreover, respondents were greatly motivated to undertake research with the potential to learn new things, to make a positive contribution to society or their community, and to advance their careers. However, faculty members' class schedules and occasional lack of motivation were the frequent obstacles and issues in pursuing research. Interestingly, there is a significant relationship between research competencies and the factors that motivate researchers. Practical Implication was implied as a faculty research development plan was crafted based on the result of the study.*

Keywords – *research competencies, motivating factors, issues and problems, faculty members, research development plan*

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INTRODUCTION

The research competence refers to a set of personality traits that indicate a person's knowledge and skill in the field of research. The structure has four dimensions: motivating, emotional, involved, and reflective. This necessitates a set of shared skills, including value-semantic, professional development, general cultural, labor and social, educational, cognitive, communicative, and informational skills [1]. One of the primary functions of higher education is research. Universities are supposed to be leaders in the conduct of discipline-based, policy-oriented, technologically advanced, and original creative researchers who are both locally responsive and internationally competitive. Despite research competencies development is an important part of higher education, approaches for evaluating this result rely on self-evaluation [2].

Research is one of the trifold functions of the university. Faculty members are to embrace research as ways and means to advance quality education. They research to discover new knowledge of their field, improve practices of discipline, assess and evaluate students' output and outcomes, determine the relevance of the curriculum through graduates' employability and employers' feedback, analyze gaps between what is offered in the academe against industry needs, and discover innovative ways in learning and teaching.

Among the trifold functions of instruction, research, and extension, research productivity among faculty members in universities has been a ubiquitous challenge. Most of the time the faculty members revolve around teaching. Other than the actual class time spent delivering the lessons to the students and having consultations, they have to prepare course plans, presentations, reading materials, activities, quizzes and exams.

In the Lyceum of the Philippines University-Batangas, research is considered one of the institutional goals, entitled Supremacy in Research, which has its corresponding Key Results Indicators (KPIs). Complementing instruction and community extension programs shall ensure the compatibility of the targeted research programs with the vision and mandate of the school. Moreover, research is regarded as a vital instrument in achieving the mission – vision of the

university through institutionalizing research and strengthening the research culture and capability.

However, despite this mandate semestral research performance evaluation yields low scores for some faculty members. Some of the research KPIs such as research publication in Scopus-indexed journals and 100% research involvement among full-time faculty members for all colleges were not met. With the evident research thrust and gaps seen in the evaluation, assessing the research competencies of faculty members and determining the motivating factors that influenced them and the issues and problems challenges they encountered, are imperative.

The Center for Research and Innovation (CRIN), being responsible for championing research thrust and programs in the university, continues to prepare and support faculty members to perform research-related functions. It needs to assess the evolving needs and updated research competencies of the faculty members to come up with responsive and relevant research competencies development programs. Obtaining the specific competencies that faculty needs to develop is a prerequisite to a germane and supporting research program.

OBJECTIVES OF THE STUDY

This study aims to evaluate the research competencies among the Faculty Members of one Higher Educational Institution. More specifically, this study aims to assess the research competencies of the respondent in terms of research conceptualization, formulation of research design, data collection, data processing and analysis and research utilization; to determine the factors that motivate the faculty to conduct research; to determine the issues and problems related to the conduct of research among faculty, to test the significant difference on the responses when grouped according to profile and finally, proposed and develop a Faculty Research Development Plan based on the result of the study.

MATERIALS AND METHODS

Research Design

The researchers employed the quantitative descriptive research design to measure the competencies among the faculty members of Lyceum of the Philippines University Batangas. Apuke, [3] believes that quantitative research is described as the process of quantifying and evaluating variables to obtain results. It entails the use of statistical methods to analyze numerical data to answer questions such as who, how many, when, where, and how. It also refers to the process of obtaining numerical data to demonstrate a phenomenon.

Research Respondents

The respondents of this study were 150 full-time faculty members of the Lyceum of the Philippines University Batangas. The researchers used a stratified random sampling to ensure the validity of the respondents, where in each college had an equal chance of being selected as a respondent.

Research Instrument

The instrument used in the study is adapted from Mallari and Santiago [4]. The instrument is subdivided into four parts (1) Profile of the respondents, (2) Research Competencies of the faculty in terms of research conceptualization of operationalization data collection data processing and analysis and research utilization (3) factors that motivate faculty to conduct research and (4) issues and problems related to the conduct of research among faculty. A pilot test was conducted and has the Cronbach alpha result as follows: Conceptualization (0.958), Research Design (0.971), Data Collection (0.961), Data Processing and Analysis (0.969), Research Application (0.971) Factors that Motivate the Conduct of Research (0.848) Issues and Problems Related to the Conduct of Research (0.752).

Data Gathering Procedure

The data of this research was taken from survey responses of the faculty members of the Lyceum of the Philippines University Batangas. The respondents were given ample time to answer the questionnaire through an online survey. The researchers retrieved the questionnaire immediately after completion. Data were tallied, interpreted, and analyzed.

Data Analysis

After the data had been gathered, the researchers encoded, computed, and analyzed it using Statistical Package for Social Sciences (SPSS). The data was treated using weighted mean and regression analysis which was based on the objective of the study.

To assess the Research Competencies, this research employed the five-point Likert scale with the corresponding interpretation as follows: 1 – Deficient, no knowledge of the particular research process.; 2 – 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; 3 – Practitioners, have average knowledge and are capable

and ready to use it but lack the speed and flexibility of the proficient researchers; 4 – 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; 5 - Expert, -Have a deep understanding of the total research situation and have an intuitive grasp of the particular research process. Are capable of proposing innovations of certain processes.

To identify the Factors that Motivate the Conduct of Research the researchers made use of a four-point Likert scale with the corresponding interpretation as follows 4- Highly Important, 3- Slightly Important, 2- Important and 1- Not Important

To determine the frequency of encountered Issues and Problems Related to the Conduct of Research the researchers made use of a four-point Likert scale with the corresponding interpretation as follows 4- Always, 3- Often, 2- Sometimes, and 1- Never.

Ethical Consideration

Before administering the study instrument, the researchers obtained complete consent from the respondents. All forms of contact were conducted in a very honest and transparent manner. Furthermore, individuals are free to choose whether or not to participate as respondents without any pressure or compulsion. There researchers ensured that all research protocols in data collection were properly observed by the Data Privacy Act of 2012. The results of this study were kept private for educational purposes only.

RESULTS AND DISCUSSION

Table 1 presents the research competencies on conceptualization. Data reveals that faculty are practitioner in terms of conceptualization having a composite mean of 3.18.

Indicators having the highest ranking are employing correct procedures in conducting a review of related literature (3.22) followed by formulating questions and objectives that can be answered by an investigation (3.20) and the ability to compile a review of related literature and apply proper paraphrasing and citation (3.17).

All indicators are verbally interpreted as practitioner. Based on the result the respondents are practitioner when it comes to conceptualizing research literature. With the help of the internet and materials, they can easily find sources that help them to theorize the research want to undergo. During this pandemic, the internet is one of the best tools that help researchers to conceptualize related literature. There are also journal web tools that can be accessed free on the internet which help in providing related literature. Aside from this, the Research Office conducted a seminar on conceptualizing Literature Review.

Table 1
Research Competencies on Conceptualization

Indicators	WM	VI	Rank
1. Identify potential sources of a research problem(s) in the field of-specialization	3.16	P	5
2. Appraise certain practices in the field of specialization that could create a research problem(s)	3.16	P	5
3. Formulate questions and objectives that can be answered by an investigation	3.20	P	2
4. Assess the appropriateness of scope and boundaries of a scientific research	3.16	P	5
5. Employ the correct procedures in conducting a review of related literature	3.22	P	1
6. Able to compile review of related literature and apply the proper paraphrasing and citation	3.17	P	3
Composite Mean	**3.18**	**P**	

Legend: 4.50-5.00=Expert (E);3.50-4.49=Master(M); 2.50 - 3.49=Practitioner(P);1.50-2.49=Apprentice(A);1.00-1.49=Deficient(D)

Neupane [5] cited that literature review is an integral part of the entire research process and makes a valuable contribution to almost every operational step. It also justifies the study, pinpoints niche in the existing studies and proves that the researchers have prepared the needed groundwork in research. Therefore, writing, editing, and re-editing of literature review when a researcher begins his work and continues up to the point where he has finished discussing the findings.

Meanwhile, indicators tied to the lowest ranking are identifying potential sources of research problems, appraising certain practices in the field of specialization that could create a research problem and assessing the appropriateness of scope and boundaries of a scientific research. All indicators have a weighted mean of 3.16 and are verbally interpreted as practitioner.

This manifested that the faculty is having problems in formulating the research problem since this is the very first step in conducting research. Even though some of the faculty are seasoned researchers already they are

having a hard time formulating and conceptualizing research problems. Constructing and writing a research proposal should be regarded as the core preliminary activity for the researchers. It is the process of arriving at a clear and direct statement of the research problem. The problem is often articulated as the aim of the research. It may vary from seeking answers to a relatively straightforward question to developing a deep understanding of complex analytical problems [6]. Such a deeper understanding demands closer analytical techniques, and thus the aim of the research project, the research problem, demands an already deeper understanding of the discipline and of higher-order analytical techniques that may be applied [7].

Table 2
Research Competencies on formulation of Research Design

Indicators	WM	VI	R
1. Choose the appropriate design to be use in the study.	3.11	P	4.5
2. Evaluate the advantages/disadvantages of the different methods of research.	3.15	P	1
3. Propose the most suitable instrument of conducting the research	3.13	P	2.5
4. Formulate the proper research design based on certain relevant factors	3.11	P	4.5
5. Identify a set of variables and the corresponding indicators	3.13	P	2.5
6. Propose measurement methods for variables and their attributes	3.07	P	6
Composite Mean	**3.12**	**P**	

Legend: 4.50-5.00=Expert (E);3.50-4.49=Master(M); 2.50-3.49=Practitioner(P);1.50-2.49=Apprentice(A);1.00-1.49=Deficient(D)

Table 2 presents the research competencies on the formulation of research design. Data reveals that faculty are practitioners in terms of formulation of research design having a composite mean of 3.12.

Evaluating the advantages and disadvantages of the different methods of research (3.15) got the highest ranking followed by proposing the most suitable instrument for conducting the research and identifying a set of variables and the corresponding indicators tied with the weighted mean of 3.13. All indicators are verbally interpreted as practitioner.

These results manifested that the respondents have an average knowledge in understanding the different methods of research. Even the university are continuously providing research training and seminar they are still not proficient in identifying the research methods they will use in their research. Understanding the research methods gives validity and provides scientifically comprehensive findings to the results of the research. It will help the researchers to provide a detailed plan that keeps them on track, making the process smooth. According to Thattamparambil [8] choosing the right methodology determines the success and overall quality of the research. It is hence essential to get the initial stage of research right. It also shows how and why you applied and demonstrate that your research was rigorously conducted.

Meanwhile, indicators tied to the 4.5th rank are: choosing the appropriate design to be used in the study and formulating the proper research design based on certain relevant factors (3.11). While least on the rank is to propose measurement methods for variables and their attributes (3.07) All indicators are verbally interpreted as practitioner.

The results show that the respondents are not that knowledgeable in choosing and formulating research design in their study. This result shall be addressed and be part of the improvement since research design is the framework of research methods and techniques chosen by the researchers. According to Singchungchai and Chalerwannapong [9] research competencies can be measured by how the researchers will write and analyze the part of their research. The researchers will become adept at thinking critically about research methodology and design. In this way, they begin to think about investigative inquiry as a tool for acquiring and evaluating knowledge in all disciplines, as well as becoming knowledgeable of research data.

Table 3 presents the research competencies on data collection. Data reveals that faculty are practitioner in terms of data collection having a composite mean of 3.10.

Defining the population on which research is to be conducted (3.19) got the highest ranking followed by appraising the quality of data that are relevant to a particular study (3.13) and proposing the most appropriate method(s) of gathering data (3.11). All indicators are verbally interpreted as practitioner.

The results showed that the respondents are practitioner in defining the population in their research. This means that faculty have average knowledge and are capable and ready to use it but lack the speed and flexibility of proficient researchers. This result is supported by the study of Alim [10] in terms of competencies on data collection, which found out that the SUC competencies on defining the population on

which research is being conducted are practitioner while on the other competencies on data collection such as calculating the sample size, construct of sampling design, propose appropriate methods of gathering data and construct of research instrument is in master level.

Table 3
Research Competencies on Data Collection

Indicators	WM	VI	R
1. Define the population on which research is to be conducted	3.19	P	1
2. Calculate the sample size that is representative of the population	3.07	P	5
3. Construct a reliable sampling design	3.01	P	6
4. Differentiate the purposes of the various methods of gathering data	3.08	P	4
5. Propose the most appropriate method(s) of gathering data	3.11	P	3
6. Appraise the quality of data that are relevant in a particular study	3.13	P	2
Composite Mean	**3.10**	**P**	

Legend: 4.50-5.00=Expert (E);3.50-4.49=Master(M);2.50-3.49=Practitioner(P);1.50-2.49=Apprentice(A);1.00-1.49=Deficient(D)

Construct a reliable sampling design (3.01) ranked 4th followed by able to calculate the sample size that is representative of the population (3.07). Least in the rank among the indicators is to differentiate the purposes of the various methods of gathering data (3.01) All indicators are verbally interpreted as practitioner. This means that not everyone from the faculty is knowledgeable on how to construct a reliable sampling. Therefore, faculty members are advised to seek the assistance of a statistician for proper guidance. This should be enhanced and be part of the improvement plan since it is one of the crucial parts in the success of the conduct of research. According to Lavrakas, sample designs is the outline that serves as the basis for the selection of survey sample and affects many other important aspects of the survey. In a broad context, survey researchers are interested in obtaining some type of information through a survey for some population, or universe, of interest.

Table 4 presents the research competencies in data processing and analysis. Data reveals that faculty are practitioner in terms of data processing and analysis having a composite mean of 3.12.

Demonstrating an understanding of several methods of data presentation (3.23) got the highest ranking followed by Demonstrating skills in terms of analyzing the data with the support of literature review (3.18) and Compose research findings clearly and accurately (3.15). All indicators are verbally interpreted as practitioner.

Table 4
Research Competencies on Data Processing & Analysis

Indicators	WM	VI	R
1. Demonstrate an understanding of several methods of data presentation	3.23	P	1
2. Recognize different statistical tool to use appropriately for each kind of data	2.97	P	6
3. Identify relationships and differences in variables based on data gathered	3.03	P	5
4. Recognize that data must be interpreted within a context to be of value and able to Interpret data gathered in relation to the research question	3.14	P	4
5. Demonstrate skills in the analyzing the data with the support of literature review	3.18	P	2
6. Compose research findings clearly and accurately	3.15	P	3
Composite Mean	**3.12**	**P**	

Legend: 4.50-5.00=Expert (E);3.50-4.49=Master(M); 2.50-3.49=Practitioner(P);1.50-2.49=Apprentice(A);1.00-.49 = Deficient (D)

Based on the result of the study, teachers have mastery of using different methods of data presentation and are able to interpret the data gathered as well as identify the relationship of the variable used in the study. It is an important indicator for a researcher's competencies to analyze the data.

The researchers will be able to turn research data into a more understandable presentation by using various tools, such as tables and graphs. Additionally, using various data presentation formats, such as graphs, tables, and the like, increases the likelihood that the knowledge graph will be effective. This can be done by using the knowledge graph to respond to questions about the various research inputs, which are primarily covered by surveys, and assessing how well the reader's information needs are represented by the question answers versus having them derive the same information from reading a research article [11].

Meanwhile, among the indicators, recognizing different statistical tools to use appropriately for each kind of data (2.97) got the lowest ranking followed by Identifying relationships and differences in variables

based on data gathered (3.03) and recognizing that data must be interpreted within a context to be of value and able to Interpret data gathered about the research question (3.14) interpreted as practitioner.

It is understandable that the teachers are practitioner when it comes to recognizing different statistical tools to use appropriately for each kind of data, since traditionally, the practice is that there is a statistician assigned to do the statistical treatment. However, it is important for researchers to at least understand what statistics to use and why is appropriate to use.

According to the study by Cranmer et al. [12] statistical approaches for the analysis of research results have seen tremendous progress over the past ten years, and their application has also significantly increased. These approaches have significant distinctions despite having the same overarching goal of statistically accurate inference in the context of substantial interdependencies. The possibility that the participant and the researchers will interpret the data in different ways is another practical problem. On the other hand, member testing does not provide a way to distinguish between competing assertions of experience-based knowledge.

Table 5
Research Competencies on Research Application

Indicators	WM	VI	R
1. Ability to construct research abstract	3.24	P	1
2. Relate search findings with the needs of a particular organization or community	3.20	P	2
3. Translate research findings into meaningful plans of actions, strategies or recommendations	3.13	P	5
4. Identify areas for possible future research agenda based on the findings of the study	3.18	P	3
5. Discuss the contributions of research in building the knowledge in a discipline(s)	3.16	P	4
6. Set up events or occasions where research findings can be disseminated	3.11	P	6
Composite Mean	**3.17**	**P**	

Legend: 4.50-5.00=Expert (E);3.50-4.49=Master(M);2.50-3.49=Practitioner(P);1.50-2.49=Apprentice(A);1.00-1.49=Deficient(D)

Research reproduction and continuation are crucial components of the contribution to the expanding body of knowledge. It is crucial to specify the recommended set of research interests for future researchers so that other academics can realize the necessity of conducting follow-up studies that have implications and noteworthy findings from the study's results. Researching global competencies will promote cultural and social understanding and courteous interactions in increasingly varied populations. In the modern world, research proficiency is essential for fulfilling the demands of a linked, complicated, and quickly changing environment. Education has advanced, as seen by the appearance of numerous ground-breaking digital apps [13].

On the fourth rank, Discuss the contributions of research in building the knowledge in a discipline(s) (3.16) and was followed by translating research findings into meaningful plans of actions, strategies, or recommendations (3.13) and set up events or occasions where research findings can be disseminated (3.11). All indicators are verbally interpreted as practitioner.

There is various scientific method in the research process. It is essential to identify these methods and their relation to the research being conducted. In addition, dissemination of research is also important as the mere purpose of research is to contribute to the growing body of knowledge, thus it is important to share the key findings of the research may it be through conference or publication. Not only dissemination more so, but it is also vital to utilize the output of the research so that it would bridge the gap and/or solve the research problem that was identified by the researchers. In the study of Camara [14], revealed that the Curriculum Competencies Checklists were found to have a high degree of spiral progression, contextualization, practicality, and acceptability. The study suggested that the proposed curriculum competencies checklist be implemented to ensure that the research findings may be properly disseminated and utilized to the target benefactors or organization.

Table 6 enumerates the factors that motivate the conduct of research. Among the all the indicators, faculty perceive these factors as highly important with a composite mean of 3.50.

Discovery of new knowledge (3.71), Potential contribution to society/community (3.70) and Potential for professional growth (3.69) got the highest ranking and was viewed as highly important. The main factors that motivate teachers are for discovery of new knowledge and that research has the potential for professional growth.

Table 6

Factors that Motivate the Conduct of Research

Indicators	WM	VI	R
1. Discovery of new knowledge	3.71	HI	1
2. Knowledge contribution to the discipline/field	3.65	HI	4
3. Potential contribution to the improvement of school management	3.61	HI	5
4. Potential contribution to society/community	3.70	HI	2
5. Compliance to school requirements for accreditation	3.55	HI	7
6. Potential for professional growth	3.69	HI	3
7. Opportunity to present paper abroad	3.47	I	8
8. Publication of research output in journals	3.56	HI	6
9. Promotion in work	3.38	I	10
10. Research compensation and incentive	3.44	I	9
11. Peer pressure	2.70	I	11
Composite Mean	**3.50**	**HI**	

Legend: 3.50-4,00=Highly Important (HI);2.50-3.49=Important (I);1.50-2.49=Less Important (LI);1.00-1.49=Not Important(NI)

In addition to providing information to the pupils, teachers also create information. They were able to produce information through the conduct of research and having the opportunity to advance their careers is a good incentive for them to be able to do so. According to Schipper et al [15]s study, putting a strong emphasis on technique, encouraging professional experimentation among colleagues, and supporting teachers will help teachers develop their adaptive teaching skills, particularly their research skills. On the other hand, many teachers have found it challenging to address the many educational learning objectives for a variety of reasons, and it continues to be a significant difficulty in many different countries [16].

On the other hand, even though viewed as important, Research compensation and incentive (3.44), Promotion in work (3.38) and Peer pressure (2.70) got the lowest rank. Peer pressure was the least driving element, though. This demonstrated that there aren't any colleagues conducting research on their own or at least encouraging others to do so. Therefore, it is advantageous for teachers to be able to recognize the value of having co-authorship to at least feel the peer-good pressure during the research process. Olaleye [17] asserts in a recent study that it is important to assess and comprehend who is qualified to contribute as an author to a publication.

Table 7

Issues and Problems Related to the Conduct of Research

Indicators	WM	VI	R
1. Lack of interest	2.30	S	2
2. Class schedule does not allow conduct of research	2.75	0	1
3. Research is not a priority	2.25	S	3
4. No clear policy on research	1.96	S	5
5. The university does not have systems for the conduct of research	1.73	S	7.5
6. No trainings held for the conduct of research	1.73	S	7.5
7. Incentives not attractive	2.00	S	4
8. No funds available	1.85	S	6
9. No administrative support	1.72	S	9
Composite Mean	**2.03**	**S**	

Legend: 3.50-4.00=Always (A);2.50-3.49=Often(O);1.50-2.49=Sometimes(S);1.00-1.49=Never (N)

Table 7 enumerates the issues and problems related to the conduct of research. Among all the indicators, faculty affirms that they sometimes encountered issues and problems related to the conduct of research with the composite mean of 2.03.

Faculty often has problems relating to class schedule, as it does not allow the conduct of research (2.75). Second on the rank is on lack of Interest (2.30) and followed by research is not a priority (2.25) which was encountered sometimes.

Time is of the utmost importance to teachers. The biggest issue that instructors have, when it comes to teaching preparatory work, university requirements, and paperwork to be turned in, is typically that their schedules prevent them from conducting research, or if they do, the rewards are not very alluring. In-depth interviews in the recent study by Rohwer et al. [18] revealed that authorship rules are clear in theory but not always applied, attitudes are shaped by academic rank and power, organizations and culture support unethical behavior, and researchers are uncertain of what a conflict of interest entails and how it can affect research. It also doesn't help that many organizations have started implementing more sophisticated incentive programs for promotions, tenure, and grants, some of which favor the roles of authors. Transcripts with study participants were infrequently consulted by researchers who utilized non-participatory techniques. This wasn't always because the participants weren't interested; some of them didn't think it was important or even noticed that the participants weren't interested [19].

On the other hand, even though encountered sometimes, the university does not have systems for the

conduct of research and No training held for the conduct of research (1.73) and no administrative support (1.72) got the lowest rank. Occasionally, teachers will express concern about the university's lack of a research structure, administrative assistance, and funding. This is because most colleges and universities have a research office to oversee and direct the instructors' research projects. A recent study of Rohwer et al. [18] in developing countries found that a lack of institutional processes to support and promote research integrity was frequently cited as a factor contributing to the high prevalence of research misconduct. These processes include offices to promote research integrity, establish and disseminate guidelines on research misconduct, and provide outlets for whistleblowing when misconduct is detected.

Table 8
Correlation between Research Competencies and Factors

Variables	r-value	p-value	I
Conceptualization	0.362	0.000	Significant
Research Design	0.185	0.027	Significant
Data Collection	0.338	0.000	Significant
Data Processing and Analysis	0.331	0.000	Significant
Research Application	0.404	0.000	Significant

Legend: Significant at p-value<0.05

Table 8 denotes the correlation between research competencies and the factors that motivate the conduct of research. It was revealed that research competencies in terms of conceptualization (0.000), formulation of research design (0.027), data collection (0.000), data processing and analysis (0.000), and Research utilization (0.000) have a significant relationship on the factors that motivate the conduct of research since the computed p-value is less than 0.05. It is a positive aspect of the teacher's research competencies because it will enable and equip them to undertake research. In his paper, Moises [20] proposes new methods for gathering data during pandemics, including the use of individual or institutional online development resource subscriptions for quantitative data collection. On the other hand, data collection for qualitative research can be carried out in several ways, such as replacing traditional direct observation with participant diaries and reflections, conducting an interview over the phone or by cell phone, and conducting the main participant for the interviews and focus group discussions via videoconferencing.

Table 9
Research Competencies Development Plan for Faculty Members for One Higher Educational Institution

KRA/ Objectives	Strategies	Performance Indicators	Person Responsible	Logistics/ Budget
Research Conceptualization	- Conduct a workshop focusing on identifying research problems and research gap. - Provide relevant and updated resources to establish trends and identify research gaps.	100% of the faculty researchers can identify the potential source of research problem, appraise certain practices to identify a gap and determine the scope and boundaries of the study.	Center for Research and Innovation (CRIN) Director Human Resource and Management Development Office (HRMD) Director Deans Research Coordinators	Resource Speakers Fee Workshop Materials Venue Time
Research Application	-Screen the identified intended utilization in the research proposal for its applicability. -Set a timeline for faculty members to disseminate the research findings.	100% of the faculty researchers can translate research findings into meaningful plans of action, strategies, or recommendations and disseminate research findings.	Center for Research and Innovation (CRIN) Director Human Resource and Management Development Office (HRMD) Director Deans	Venue Time

			Research Coordinators	
Research Design	- Conduct a workshop on crafting a questionnaire. - Provide exercise to critique the author-made questionnaire. -Establish consultation time with technical personnel.	100% of the faculty researchers can propose measurement methods for variables and their attributes.	Center for Research and Innovation (CRIN) Director Human Resource and Management Development Office (HRMD) Director Deans Research Coordinators	Resource Speakers Fee Workshop Materials Venue Time
Data Processing and Analysis	- Conduct a workshop on the application of appropriate statistical tools. - Provide exercise to critique the author-made questionnaire. -Establish consultation time with the university statistician.	100% of the faculty researcherss can determine the appropriate statistical tool to use for each kind of data.	Center for Research and Innovation (CRIN) Director University Statistician Human Resource and Management Development Office (HRMD) Director Deans Research Coordinators	Resource Speakers Fee Workshop Materials Venue Time
Data Collection	- Conduct a workshop on the application of various sampling techniques. - Provide exercises on the application of various sampling technique. -Establish consultation time with university statistician.	100% of the faculty researchers can construct a reliable sampling technique.	Center for Research and Innovation (CRIN) Director University Statistician Human Resource and Management Development Office (HRMD) Director Deans Research Coordinators	Resource Speakers Fee Workshop Materials Venue Time
Researcherss Motivation	-Recognize novel and high impact research.	100% of the faculty researchers' discovery of new knowledge	Vice-President for Academics and Research	Monetary incentive Awards materials
	-Increase points for researchers in their promotion.	100% of the faculty researchers' potential for professional growth		

Researchers Hindrances	-Allocate research time for faculty members to make progress in the conduct of their research.	100% of the faculty researcherss have allocated time to conduct research	Center for Research and Innovation (CRIN) Director Human Resource and Management Development Office (HRMD) Director	Manhour
	-Improve research monetary incentives and recognitions.	100% of the faculty researchers have an interest in research		
	-Institutionalize the need for faculty members to conduct research regularly.	100% of the faculty researchers make research a priority.		

CONCLUSION AND RECOMMENDATION

Faculty members are practitioners in research conceptualization of operationalization data collection data processing and analysis and research utilization. Faculty members perceive the discovery of new knowledge, Potential contribution to society/community, and Potential for professional growth as highly important that motivate them to conduct research. One of the often issues and problems related to the conduct of research is the faculty's class schedule and sometimes lack of interest. It was found that Research competencies have a significant relationship with the factors that motivate the conduct of research. However, research competencies have no significant relationship with the factors that motivate the conduct of research. A Faculty Development Plan was developed based on the result of the study.

The university may continue to provide opportunities to expose faculty to research workshops and trainings, especially those who haven't yet participated; while those who have already attended may conduct a re-echo webinar. The University may consider having a research day to be implemented to ensure that faculty would have time to do research and complete the set time frame in conducting research. Center for Research and Innovation may conduct regular research mentoring and consultation for faculty researcherss during the most convenient time for the researchers. College Deans and Research Coordinators may encourage and motivate their faculty in the conduct of research and may establish a buddy system. Future researchers may conduct a similar study exploring the impact of the pandemic on the quality of research produced and attitude in the conduct of research. Since there is limited research on inclusive education in the country, future research will be conducted to determine comprehensive teacher preparation, development programs, and services, which also include professional competence in inclusive pedagogy.

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