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# Recognizing Research Competence and Interest as Basis for Faculty Development Initiatives

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## ABSTRACT

University faculty members were the primary actors in the research production system. The study aimed to ascertain the level of competence of the College of Education (CE) faculty members in conducting research activities. The data were gathered through survey questionnaires and coded in Microsoft Excel. Frequencies and percentages were used in interpreting the data collected. It was revealed that most faculty members were either college or master's degree holders. Majority of them have not conducted research studies in the last 15 years. Most faculty members carried 21-25 units per semester teaching load. The study concludes that

they indicated a fair level of competence in conducting research. Their interest towards research activities exhibited a fair interest which was a positive attitude. They have also indicated high interest in professional development activities, yet they signified a relatively low interest in conducting research without funds and/ or research assistant. Overloaded-teaching units deprived them to their research responsibilities. Therefore, VSU should implement the 15-units-per-semester maximum teaching load. Moreover, faculty members must be encouraged to pursue advanced education. The level of competence in conducting research could be improved if appropriate qualifications and funds were met.

*Keywords* – Education, faculty of education, level of competence and interest, descriptive survey research design, Philippines

## **INTRODUCTION**

The role of the faculty members is not limited to teaching alone. They are also tasked to do research as part of their responsibilities to their institution. Wichian, Wongwanich, and Bowarnkitiwong (2009) conducted a study about the factors that affected research productivity of the faculty members from Thai public universities. Findings revealed that each faculty member could generate an average of 0.40 research pieces/year. They have high average competence in research as well as researchership. This was because they have moderate institutional support for their research activities. They have concluded that research competence, researcher characteristics, institutional support for research activities, and researchership have significant relationship on research productivity.

In a study of Salom (2013), faculty members' highest educational attainment, academic position, and teaching load affect competence towards research. Moreover, faculty members who attended university/campus in-house-reviews and seminars, and national research workshops/seminars are competent in all areas of research activities.

The College of Education (CE) of the Visayas State University, Philippines has subjected for a program evaluation under the Accrediting Agency of Chartered Colleges and Universities in the Philippines (AACCUP) standards. AACCUP is a type of quality assurance that assess educational institutions or programs to identify if applicable standards were met. If so, accredited status would be granted by the agency. Two curricular programs, Bachelor of Science in Secondary Education (BSED) and Bachelor of Elementary Education (BEED) of the Department of Teacher Education, were subjected for Level I-phase II accreditation last 2014.

The results of the AACCUP evaluation showed that both curricular programs have to improve in the area of research. One remarkable observation noted was the low participation rate of faculty in conducting research.

Findings of the study conducted by Medula (2013) pointed out that there is a relationship among level of competence, personal and environmental factors, and problems and/or difficulties towards research. Results revealed that most of faculty members have no possible chance in developing their required research competence. It could be that they have good level of the perceived research competencies, but due to certain issues, their interest decreases towards research. These external problems that affected them were workloads or overloaded teaching units, research funds, and other institutional research regulations. Additionally, the internal factors that were considered which could affect interest were personal, financial, and medical issues. These external and internal problems could limit someone's competence, interest, and productivity in research.

Based on the study conducted by Mallari and Santiago (2013), it was perceived that the accounting faculty in the state universities and colleges in Region III in the Philippines have limited research studies due to competence and interest towards research. It was discovered that there were faculty members who got a research competency level of master. However, there were also who got an apprentice level of competency. This means that they have a minimal research background, but their knowledge in conducting research was below professional average level. Research incentives were also very important to increase the interest of more researches to conduct studies. Incentives could include financial aid, deloading teaching units, and encouraging research presentations outside the Philippines.

It was also assumed that one of the possible reasons of this low participation rate among CE faculty in conducting research could be the level of competence in doing research work and interest towards it. Hence, the study was conducted.

## FRAMEWORK

The study was anchored on the Self-Efficacy Theory. A person's belief on their efficacy could affect the kind of proactive situations they create and practice (Bandura, 1993). Bandura (1993) explained further that those who visualized successful scenarios have high sense of efficacy. High sense of efficacy provided positive outlook and support to individual's performance. On the other hand, those who were hesitant on their efficacy think about failure scenarios and settle down on the things that they thought could go out of control. In other words, people chose to do what they believe they are capable of. Otherwise, they will not attempt to do it.

It was conceptualized that the CE faculty has low sense of efficacy towards research. Hence, the college had low participation rate in research. Therefore, the study attempted to determine their level of competence and interest towards research.

The independent variables were the research involvement and profile of the CE faculty. The dependent variables were their level of competence in carrying out research activities and interest towards it.

# **OBJECTIVES OF THE STUDY**

The study sought to ascertain the level of competence of the College of Education faculty in conducting research activities. It also aimed to identify relationship between CE faculty's personal attributes such as department, educational attainment, tenure, and level of competence. Moreover, it aimed to find out the interest of CE faculty towards research, and identify relationship between personal attributes and the latter.

# METHODOLOGY

The study used the quantitative-correlational research design. According to Creswell (2012), correlational studies are defined as a statistical test to identify patterns or relationship in two or more variables. It followed complete enumeration wherein all of the 43 faculty members of the college served as respondents. CE was composed of Department of Teacher Education (DTE), Department of Communication and Development Education (DCDE), Institute of Human Kinetics (IHK), and VSU Laboratory High School (VLHS). Each department was contacted to inform them about the research. Survey questionnaires were personally given to them to gather the data. Descriptive statistics were used in interpreting the data collected. The Likert Scale was utilized to describe the respondents' level of competence and interest towards research. The results were analyzed further using the weighted mean score. In getting the weighted mean score, the number of respondents who selected for the column was multiplied by the weight of the latter. Then, the sum was divided by the total number of the respondents.

Moreover, mean (average value), standard deviation, and thematic analysis were further used to verify the data. Bivariate Correlation was applied to identify any relationship between personal attributes such as department, educational attainment, tenure, and competence. Lastly, Analysis of Variance (One-way ANOVA) was used to further interpret the data. There were a total number of 43 respondents. However, one respondent failed to answer the instrument for both research competence and interests which made the total number of respondents for the consequent analyses as n=42.

As for the identified sub-constructs, the following coding summarized the identifiers used in the analysis: Probcomp – competence in research problem conceptualization (items 1 and 2); RRLcomp – competence in literature review and development of the theoretical/conceptual framework (items 3 and 4); Methcomp –competence in choice of appropriate methodology and consequent data acquisition and analysis techniques (items 5, 6, and 7); Findcomp – competence in the choice of appropriate findings, analysis, interpretations, and conclusion of the study (items 8,9, and 10); and Disscomp – competence in research dissemination and publication (items 11 and 12)

To verify further the respondents' overall interest towards research, subconstructs were also identified the same as what was done in determining the levels of competence. The codes used in the sub-constructs were ProffEdint – interest towards professional development activities (item 1); Indint – interest towards conducting individual research (items 2 and 4); Collint – interest towards conducting collaborative research (items 3 and 5); FundRAint – interest towards conducting research without funding and research assistant/s (items 6 and 7); and Dissint – interest towards research dissemination and publication (items 6 and 7).

#### **Faculty Profile**

More than one-fourth of the respondents were 25 years old (27.91%) and below. Almost the same numbers were 51 years old and above (23.26%). The mean age was 36. It implied that the CE faculty was relatively young and in their productive age. It was also revealed that 53. 49% of the respondents were female and the rest were male. Nearly half of the respondents finished Master's degree (44.19%). Almost the same number of the respondents were college graduates (44.86%) while the rest were Ph.D. degree holders (13.95%). It means that almost half of the respondents needed to pursue advanced education. The academic level of the faculty members was the vital strength of the research capability at most

universities. Especially, Ph.D. degree holders were expected to have the skills and techniques essential for research activities (Musiige & Massen, 2015).

Almost half of the respondents have no major fields (17 out of 43). Meanwhile, other faculty members took Agricultural Education, Early Childhood Education, Mathematics, English and Music as their major fields.

More than half of the respondents passed the LET/ PBET (62.26%). Others took the Sub-professional examination (7.55%), and three of them took the Career Service Professional Examination (5.66%), Agriculturist (1.89%), and Chem. Eng. Board exam (.89%). Some were Honor's and P.D 907 grantees. Among the 43 respondents, more than half of them were newly hired employees. Therefore, 24 out of 43 faculty members do not have previous employment as presented in Table 3 below. Less than one-fourth of them were teachers/ instructors before. The rest of the respondents were science research assistant, field worker/researcher, ADFC, Agriculturist, district sale manager and school registrar in their previous employment.

Almost half of the respondents served their previous employment between 1-5 years. More than one-third of them served within 6-10 years, while the rest were between 11-15 years. Only one served more than 21 years in service from their previous employer. The mean length service in previous employment was seven years. Moreover, more than one-third of the respondents have been working in VSU for 1-5 years. Less than one-fourth of them served VSU for more than 21 years. The rest has been with VSU within 6-20 years. The mean length of service in VSU was nine years. For the academic position of the respondents in VSU, more than half of them were instructors (62.79%) while the rest were part-time instructors (9.30%), associate professor (6.98%), assistant professor (11.63), and director (2.33).

## **RESULTS AND DISCUSSION**

More than half (62.79%) of the respondents were temporary workers. Less than one-fourth (23.26%) were permanent workers. The rest were provisional workers (13.95%). Data showed that more than half of them (55.81%) had a load between 21-25 units per semester. About one-fourth (25.58%) of the respondents have 16-20 total units per semester as their teaching load. The mean total teaching load of the respondents per semester was 22 units. It means that the respondents have overloaded teaching units. Nevertheless, the maximum teaching load of a regular full-time faculty was 15 units-per-semester (Commission on Higher Education, 2011).

No faculty members among the CE did research within 4-12 years. Additionally, 69.77% of them did not conduct any research at all. The remaining respondents conducted research studies within 1-3 years; particularly, eight faculty members from DTE, two faculty members from DCDE, and one faculty member from VLHS. Only two faculty members from VLHS conducted research within 13 years and above.

More than half of the respondents felt that research was very important (67.44%). The common reasons why they rated it as very important were the following: development of teaching skills, alternative ways in classroom instruction, development of research skills, and teaching efficiency. However, some respondents said that it was fairly important (25.58%) and only a few indicated that it was somewhat important (6.98%).

Prince, Felder, and Brent (2007) also believed that faculty research has a potential that could contribute to the effectiveness of quality higher education. With it, the universities have the obligation to strengthen the nexus between research and teaching.

#### **Faculty Competence in Conducting Research Activities**

Results show that the respondents felt that they were fairly competent in all stages of the research process, except in disseminating and publishing research works, deciding on statistical analysis, and developing the theoretical/conceptual framework. The CE faculty overall level of competence in conducting research was 3.53 or fairly competent. This has rejected the assumption that the reason for low participation rate in research was due to their level of competence.

According to Musiige and Maassen (2015), there are other factors that affect research productivity among faculty members. One of them is having more passion in teaching than research. They spend most of their time in teaching, therefore, having no time in conducting research. Salazar- Clemeña and Almonte- Acosta (2007) affirmed that maintaining the balance among the university responsibilities of faculty members was impossible. Based on the teacher-respondents of their study, teachers gave more priorities in teaching among their duties. Furthermore, they perceived that not all teachers have the passion for conducting research. They argued that there were two kinds of teachers; those were meant for teaching alone and those who were intended for research. Determining one's passion and priority would reflect on the time they allocate to each of their roles.

According to the results, CE's level of competence in conducting research was fairly competent with all sub-constructs except Disscomp. The latter was indicated as somewhat competent. It was also noted that the sub-construct of dissemination and publication has a relatively higher standard deviation among the rest. This implied that the responses regarding this particular sub-construct were polarized. Thus, there were also number of respondents who indicated higher level of competence in dissemination and publication.

Based on the Bivariate Correlation analysis, it was found that there were significant relationships existed: department and educational attainment r(41)=-.469, p=.002, educational attainment and tenure r(41)=-.450, p=.003, and competence in research problem conceptualization and tenure r(41)=.337, p=.031. In order to check the distribution of educational attainment for each department, crosstab function was used.

Tuble 1. Gross tubulation result of department and educational attainment					
		Educational Attainment			
		Ph.D.	M.A./M.S./ MagDev.	Baccalaureate	Total
	IHK	0	3	8	11
	VLHS	0	6	7	13
	DCDE	2	1	0	3
Department	DTE	6	5	5	16
Total		8	15	20	43

Table 1. Cross-tabulation result of department and educational attainment

The relationship existed might be attributed for majority of the faculty from DCDE and DTE obtained advanced degree. Ph.D. degree holders were expected to have the skills and techniques essential for research activities (Musiige & Massen, 2015). Furthermore, the significant correlation between educational attainment and tenure can be explained since one of the key components of promotion (tenure) was educational attainment. Lastly, the significant correlation that involved tenure and sub-construct of problem solving conceptualization might be hypothesized. This means that more seasoned faculty (higher tenure, e.g. permanent) was expected to have a relatively higher degree or level of competence compared to the respondents who have lower tenure (e.g. temporary and provisionary). Also, lower tenured faculty has less funding for workshops, trainings, and facilities than their tenured associates (McGill & Amber, 2012).

To ascertain this hypothesis, One-way ANOVA was utilized. The levels of problem solving competence of respondents were compared across tenure F(2,38) = 2.500, p = .095. The results indicated no significant difference existed among the groups. This implied that regardless of tenure, the level of competence

in research problem conceptualization was relatively equal. It has negated several scholars' findings. On the other hand, Musiige and Maassen (2015) pointed out that it was collaboration and networking with other co-researchers which helped enhance one's competence in research.

## **Faculty Interest towards Research**

The respondents claimed that they were very interested to attend seminar/ workshop (mean=4.64). The respondents also indicated that they were fairly interested in preparing research proposal alone or with other faculty, conducting research alone or with other faculty, and presenting and publishing research result. Others were somewhat interested in conducting research without funding and/or research assistant. The respondents' overall interest was 3.88 or fairly interested. Therefore, it has also rejected the hypothesis that faculty member's level of interest was one of the reasons for low productivity in research. From the data in the table below, it could be concluded that conducting research without funding/or research assistant affected their level of interest.

Clemeña and Acosta (2007) suggested that a variety of strategies should be implemented to increase the interest of full-time, part-time, professors and lower rank faculty members. The strategies should include distributing the workload, deloading for research activities, hiring junior researchers or research assistants, observing proper time management, and providing research funding.

In general, the CE faculty exhibited fairly interested towards research as well as most of the identified sub-constructs. The respondents also signified very interested towards professional development. In addition, the same sub-construct has the least standard deviation (.63438) among the variables of interest. This means that the responses of the respondents were relatively close. Moreover, the sub-construct FundRAint indicated somewhat interested. This sub-construct likewise merited the highest standard deviation among the rest of variables. It implies that the responses of the faculty were relatively polarized.

The same principles were utilized to find relationship between some of the personal attributes and interest towards research. Bivariate Correlation was again used to ascertain significant relationships between salient personal attributes with the main construct of interest towards research and the identified sub-constructs.

The result show that there was no significant correlation existed to the main construct of interest towards research as well as on the identified constructions when correlated to the department, tenure, and educational attainment. Therefore, regardless of the department, tenure, and educational attainment, the faculty members' interest towards research is the same. The study was limited only to the level of competence and interest of the faculty in conducting research and it did not consider other factors that could probably vary the results.

# CONCLUSIONS

It was concluded that the CE faculty indicated a fair level of competence and interest in conducting research activities. Therefore, the study has negated that the reason for low participation rate was due to their competence and interest towards research. However, it was discovered that they have weakness in disseminating and publishing research works, deciding on statistical analysis, and developing the theoretical/conceptual framework.

The study also revealed that conducting research with no funds and research assistant somewhat lessens the interest of CE faculty. This is most likely the possible reason why there is low research productivity in the College of Education. Another factor that might decrease their interest towards research was their teaching load. The results revealed that the faculty members' average total teaching load per semester was 22 units. This might deprived them from conducting research and other faculty roles due to overloaded teaching units. Mallari and Santiago, 2013 affirmed that non-cash and cash incentives motivated faculty to do research. Non-cash incentives could be financial aid/grant, deloading teaching units, encouraging research presentations outside the Philippines, hiring of research assistant, and others. Monroe and Kumar (2011) also supported that there were correlations among non-cash/cash incentive, motivation, and positive attitude factors. The relationship among those factors verified the most vital component in increasing research productivity among faculty members.

Furthermore, findings of the study revealed that there is a relationship existed between faculty's personal attributes and competence. However when verified further, it indicated no significant relationship existed. Additionally, it was found that there was no relationship between faculty's personal attributes and their interest towards research.

# TRANSLATIONAL RESEARCH

The result of the study could be translated through newsletters, radio, social media, and other media for information dissemination and reinforcement of the 15 units-per-semester maximum teaching load for a regular full-time faculty. Additionally, stakeholders might be able to translate it into a strategic proposal

that could increase the interest of professors, full-time, part-time, and lower rank faculty members towards research.

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