RESEARCH NEEDS ASSESSMENT OF TEACHING AND NON-TEACHING PERSONNEL: AS INPUT TO RESEARCH DEVELOPMENT PLAN

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ABSTRACT

This study explored the current status of the research competencies of teaching and non-teaching personnel of the college that will aid as an input to the college's research development plan. The 110 teaching and non-teaching personnel served as respondents in the Research Competency Scale survey and employed a descriptive correlation research design. A Welch's t-test and a Pearson Correlation was utilized to test the difference and relationship of variables. Findings revealed that the research competency of the teaching and non-teaching personnel is "moderately competent." Their sources of research competencies were ranked as follows: 1-research ethics, 2-research inquiry/literature reviews, 3-dissemination of research/scholarly writing, 4-quantitative research processes, 5-qualitative research processes, and 6-research sampling methods. There is no significant difference between the research competencies of teaching and non-teaching personnel. Furthermore, education attainment significantly positively affects personnel's research competencies. Teaching and non-teaching personnel with a higher level of academic degree (graduate studies) has a higher level of research competencies as compared to personnel who do have bachelor's degree. Henceforth, it is vital to develop a comprehensive plan to increase the research competencies of teaching and non-teaching personnel.

Keywords: research competency, teaching, non-teaching, academic degree

INTRODUCTION

Research is the process of creating new knowledge. In an academic institution, research is an essential tool for academic success. Research is also one of the accreditation standards for evaluating competent professionals and institutions. Further, it can respond to problems about curriculum, assessment, instruction, policy, program evaluation, allocation of resources (Ferrance, 2000), and could even address larger institutional and societal goals (Lytle, 2000). In addition to enhancing research competencies and outputs, experiences in the conduct of research represent the next frontier, following the improvement of educational delivery. Research competencies are the required knowledge and abilities for conducting research. These skills could have been acquired or honed through formal education and participation in seminars and similar activities.

The university teaching staff needs to be trained and educated to improve the quality of the staff, academic institution and community (Gaspard & Yang, 2016; Gould et al., 2004) . Top

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management has a high demand for information regarding the type of employee training that is necessary. Adentwi (2005) defined needs assessment as "a critical study or examination of the society for which an educational proposal is being designed to identify the problems, needs and aspirations, resources available, and feasible solutions" (Adentwi, 2005). It is a method for identifying the employee's learning needs for the future development program in order to boost job performance.(Lacsamana et al., 2018). Similarly, the research component is assessed when evaluating programs and institutions for accreditation, increasing institutional productivity.

Employees of Higher Education institutions should be hundred percent research competent. Even non-teaching employees are required to develop or improve their research skills in order to provide information through critical reading and data/statistical analysis. This study will examine the research competencies of Dr. Carlos S. Lanting College teaching and non-teaching. Identifying the teaching and non-teaching employee's weaknesses and strengths will allow the program to be tailored to the employee's needs in order to develop and improve research skills. The findings of this study will serve as the foundation for enhancing the institution's research development plan.

OBJECTIVES OF THE STUDY

This study aimed to determine the technical research writing competence of teaching and non-teaching personnel, in terms of research inquiry/literature reviews, research sampling methods, qualitative research processes, quantitative research processes, research ethics, and dissemination of research / scholarly writing. More so, it sought to ascertain the relationship of research competencies in terms of their demographic profiles. Accordingly, it also aimed to propose a development plan to address the teaching and non-teaching personnel's specific research needs.

METHODOLOGY

A Descriptive-correlational type of research was employed in this study to describe the respondents' demographic profile, the research competencies, and the association between them (Creswell, 2009).

All employed teaching and non-teaching personnel of Dr. Carlos S. Lanting College under the study with a total of 110 out of 149 were identified as the subject of the study using Raosoft sample size calculator, providing a 95% confidence level with a 5% margin of error (Raosoft, Inc.). Due to the work-from-home arrangement due to the current pandemic, a systematic sampling technique was utilized to obtain the required number of respondents (Etikan & Bala, 2017).

One hundred ten respondents comprising the 81 teaching personnel (73.6%) and 29 non-teaching personnel (26.4%) served as the respondents of the study. The other demographic profile of the respondents, such as their age, highest educational attainment, and the number of years in the institution, were also included. Furthermore, only 9 respondents had published research in local or international journal publications.

Table 1
Demographic profile of the respondents

		n	%
Age	20-30 years old	40	36.4%
	31-40 years old	32	29.1%
	41-50 years old	19	17.3%
	>50 years old	19	17.3%
Sex	Male	49	44.5%
	Female	61	55.5%
Highest Educational Attainment	College Graduate	62	56.4%
	Masters Degree Holder	39	35.5%
	Doctorate Degree Holder	9	8.2%
Employee Classification	Teaching Personnel	81	73.6%
	Non-teaching Personnel	29	26.4%
No. of years	<1 year	15	13.6%
	1-5 years	45	40.9%
	6-10 years	17	15.5%
	11-15 years	13	11.8%
	16-20 years	5	4.5%
	21-25 years	4	3.6%
	25-30 years	7	6.4%
	>30 years	4	3.6%
Do you have any published research, local or international?	yes	9	8.2%
	no	101	91.8%

N=110

This study employed data collection instruments consisting of two sections: a demographic questionnaire and the Research Competencies Scale (RCS). The research

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competencies were measured using the Research Competencies Scale (RCS), consisting of 54 items six areas of research competencies developed by Swank & Lambie (2016). The six areas assessed by RCS are research inquiry/literature reviews (ILR), research sampling methods (RSM), qualitative research processes (QUAL), quantitative research processes (QUAN), research ethics (RE), and dissemination of research/scholarly writing (DRSW). The items for each area of competencies were measured on a 5-point Likert scale (1=not competent, 2=limited competency, 3=moderate competency, 4=competent, 5=very competent). Cronbach's alpha was used to determine the internal consistency. A reliability coefficient of .995 was obtained, which according to George & Mallery (2020), is considered excellent for determining the appropriateness of the instrument.

Descriptive statistics such as frequencies, percentage, means, and standard deviation assess the participants of the study demographic characteristics and the six areas of research competencies. Data were analyzed using IBM-SPSS V27. A Pearson Correlation was utilized to test the intercorrelation of the sub-variables of the RCS. In addition, the point-biserial correlation coefficient was used to test the association between the respondents' demographic profile and the research competencies (Khamis, 2008). Furthermore, an independent t-test was used to test if there Is a significant difference between the research competencies of teaching and non-teaching personnel.

RESULTS AND DISCUSSION

1. Level of Research Competency

A study of the research's competencies of the teaching and non-teaching personnel of Dr. Carlos S. Lanting College. Based on the results, the overall research competency had a moderately high level of research competency (M=2.79, SD=0.93).

When considering each competency, it was found that that are research inquiry/literature reviews (ILR), research sampling methods (RSM), qualitative research processes (QUAL),

quantitative research processes (QUAN), research ethics (RE), and dissemination of research/scholarly writing (DRSW) has a moderately high level of competency in all aspects.

Table 2
Descriptive Statistics of the six variables of research competency

	N	M	SD	Descriptive Interpretation
RILR	110	2.81	0.94	Moderate competency
RSM	110	2.69	0.98	Moderate competency
QUAL	110	2.70	0.94	Moderate competency
QUAN	110	2.73	0.94	Moderate competency
DRSW	110	2.78	0.95	Moderate competency
RE	110	3.02	0.95	Moderate competency
Composite Mean		**2.79**	**0.93**	**Moderate Competency**

Note: M and SD are used to represent mean and standard deviation. Interpretation of the mean: 1-1.49=not competent, 1.50-2.49=limited competency, 2.50-3.49=moderate competency, 3.50-4.49=competent, 4.50-5=very competent.

Moreover, research sampling methods (RSM) got the lowest rank (M=2.69, SD=0.98), while Research ethics (RE) ranked first in the survey (M=3.02; SD=0.95). Having sufficient competency in doing research, there is a bigger chance in accomplishing or producing a research study (Ramos, 2017; Roman, 2021)

2. Differences between personnel's research competencies

Table 3
Differences between teaching and non-teaching personnel on research competencies

	Teaching (n=81)		Non-teaching (n=29)			
	M	SD	M	SD	t	p-value
ILR	2.86	0.96	2.66	0.87	.988	.325
RSM	2.74	1.03	2.54	0.80	.949	.345
QUAL	2.74	0.97	2.59	0.83	.752	.454
QUAN	2.79	0.97	2.59	0.87	.978	.330
DRSW	2.84	0.97	2.61	0.90	1.104	.272
RE	3.05	0.94	2.92	0.99	.640	.524
RC (Overall)	2.84	0.95	2.65	0.86	.640	.524

*p-value<.05, **p-value<.001

The research competency mean scores and standard deviations of the cluster of personnel are presented in Table 3 to determine teaching and non-teaching personnel ness though their self-perceive level of research competency.

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Moreover, the independent sample t-test results between the two groups of personnel are also reflected in Table 3 to determine whether there exists a competency gap. As presented, there is no significant difference between teaching and non-teaching personnel research competencies since the p-values are greater than the significance level of .05.

3. Association between demographic profile and research competencies

Table 4
Association between demographic profile and research competencies

	Age	Sex	Highest Educational Attainment	Employee Classification	No. of years in service
ILR	.054	.079	.233*	-.095	-.076
RSM	.002	.063	.234*	-.091	-.134
QUAL	.040	.114	.232*	-.072	-.097
QUAN	-.003	.090	.263**	-.094	-.137
DRSW	.036	.071	.235*	-.106	-.112
RE	.045	.117	.241*	-.061	-.073

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed)

CONCLUSIONS

The research skills of teaching and non-teaching personnel are both "moderately competent" This indicates that teaching personnel have the same level of research competencies as non-teaching personnel, which is a serious situation. There is a need for sustainable research training and programs to improve teaching and non-teaching personnel's current research skills. Rather than emphasizing support programs for actual research writing, it is crucial that teachers are equipped with the necessary skills to conduct research through research capacity building program. Additionally, it is imperative that as an educational institution that personnel should take higher degree of education. The challenge of motivating teaching and non-teaching personnel lies in developing their research writing skills. Developing an institutional culture of research is a promising endeavor that could yield promising results and ultimately raise the bar for the college performance in accreditation. It is possible for teaching and non-teaching personnel to use research in their everyday lives if there are good policies and programs that are based on research.

RECOMMENDATIONS

Crafting sound policies and programs to raise the bar of teaching and non-teaching personnel performance in research could yield to a favorable outcome. Developing a culture of research among teaching and non-teaching personnel is facilitated by the policies that are grounded in concrete, evidence-based perspectives. A customized training program that aims to assist and mentor teaching and non-teaching personnel to become competent researchers/research mentors. Also, a cycle or a yearly of training-workshop on research writing that will monitor the progress and areas that needs improvements.

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