



## **RESEARCH CAPABILITY OF THE TEACHING AND NON-TEACHING PERSONNEL OF A PRIVATE UNIVERSITY IN CEBU CITY, PHILIPPINES**

**Renato C. Sagayno**

University of Cebu, Cebu City, Philippines  
<https://orcid.org/0000-0002-2333-7269>  
renatosagayno@gmail.com

**Judy Ann Ferrater - Gimena**

University of Cebu, Cebu City, Philippines  
<https://orcid.org/0000-0001-5352-8253>  
jagimena@uc.edu.ph

**Yolanda C. Sayson**

University of Cebu, Cebu City, Philippines  
<https://orcid.org/0000-0003-3716-1003>  
uc.ycsayson@gmail.com

**Girlgrace A. Suico**

University of Cebu, Cebu City, Philippines  
<https://orcid.org/0000-0001-6654-3460>  
simplygracie78@gmail.com

**Ivie A. Lorejas**

University of Cebu, Cebu City, Philippines  
<https://orcid.org/0000-0003-2029-1928>  
ilorejas@uc.edu.ph

**Raymundo C. Rosada, Jr.**

Fairleigh Dickinson University, Vancouver, British Columbia, Canada  
<https://orcid.org/0000-0002-3294-5370>  
rcrjr@fdu.edu

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<b>Received:</b> 4 <sup>th</sup> December 2022 <b>Accepted:</b> 4 <sup>th</sup> January 2023 <b>Published:</b> 6 <sup>th</sup> February 2023	Higher Education Institutions (HEIs) in the Philippines have four-fold functions: instruction, research, community service, and production. This study was conducted to determine the extent of the university personnel's capability to conduct research. The researchers employed the descriptive-survey method of research with the use of a researcher-made questionnaire. The respondents of this study were the teaching and non-teaching personnel of the University of Cebu – Main Campus. The teaching and non-teaching personnel's overall research capabilities are both moderate. The top research capabilities or competencies of both groups of university personnel are more in the initial phase of research. At the same time, they need more training and exposure to the statistical aspect of research and preparing the final report in publishable articles. The test of the hypothesis also signifies that the research capabilities of the teaching and non-teaching personnel are both of the same level. Mentoring and the collaborating manner in doing research projects would eventually improve the research culture in the university.

**Keywords:** research capability, university personnel, descriptive – survey, Cebu City, Philippines

### **1. INTRODUCTION**

Research productivity is an essential component of raising university rankings and a vital indicator of the effectiveness of academic staff (Jameel & Ahmad, 2020). Meanwhile, the World Bank reaffirmed that research and development activities are creative activities carried out systematically to improve knowledge, including understanding humanity, culture, and society and applying knowledge in new ways (Regadio & Tullao, 2015). Higher Education Institutions (HEIs) in the Philippines have four-fold functions: instruction, research, community service, and production. Specifically, research delved into developing new theories and practices in schools, universities, and society (Chua, 2014). However, schools officials observed the needs concerning research production, publication, and utilization. The

lack of knowledge, skills, and confidence in research among university personnel were the reasons for the limited research outputs due to poor research foundations (Lumanlan & Leynes-Ignacio, 2018).

Prior researches on research productivity around the world reveals significant findings that are useful in institutional planning. Like in the study of (Jameel & Ahmad, 2020), they revealed that research funding has the most significant impact on research productivity, but other factors such as collaboration, ICT infrastructure, and work satisfaction also have a positive and significant impact. In the study of (Henry et al., 2020), they highlighted that age group, highest qualification, cluster, and track emphasis were revealed to be significant factors in predicting the research output of academic employees. On the other hand, (Uwizeye et al., 2022) stressed that personal drive, academic credentials, and research self-efficacy are considered personal determinants for research productivity. Meanwhile, the availability of research funds, level of institutional networking, and extent of research collaborations are considered institutional determinants.

In a private university in central Philippines, the researchers have observed that the teaching and non-teaching personnel's research productivity is considerably low. Only a few are engaged in research and publication, while the rest are seemingly not interested or have no concrete idea of the importance of conducting research. With the utmost desire to promote and inculcate a culture of research among the teaching and non-teaching personnel of the university, this study was conducted to determine the extent of the university personnel's capability in conducting research. Likewise, this study intends to uncover the factors that hinder the university personnel from engaging in research and other related activities. Hence, the study was conducted.

## **2. FRAMEWORK OF THE STUDY**

The researchers primarily anchored the study on GROW model of coaching and mentoring by Whitmore (1992). According to this model, a team has four steps to success. First, the team must set its short- and long-term target goals. Second, the team has to conduct a reality check to assess the present situation. Third, the team has to determine options or alternative actions to achieve its goal. Fourth, the team has to identify what is to be done, when is the right time to do the action, who will do the action, and the securing that all persons involved are willing to complete their respective tasks (Grant, 2022). This study also adheres to Deci and Ryan's (1985) self-determination theory, which contends that a person is motivated to grow and change by three innate and universal psychological needs. Once a person's needs for competence, connection, and autonomy are satisfied, one becomes self-determined to accomplish something for the better. This study also adheres to the experiential learning theory by Kolb (1984), which focuses on learning by doing. According to experiential learning theory, a person can learn through experiences that facilitate the retention of information and recalling of facts.

## **3. OBJECTIVES OF THE STUDY**

The study determined the research capability of the teaching and non-teaching staff of the University of Cebu, Main Campus during the school year 2021-2022. Specifically, the study looked into 1) the teaching and non-teaching respondents' profile in terms of gender, highest educational attainment, and college or department (for teaching personnel only); 2) the level of the research capability of the two groups of respondents; 3) the difference of the research capability of the teaching and non-teaching personnel.

## **4. MATERIALS AND METHODS**

The study employed the descriptive-survey method of research with the use of a researcher-made questionnaire which was subjected to validation and pilot testing. The respondents of this study were the teaching and non-teaching personnel of the University of Cebu – Main Campus. The survey questionnaire (Google Form) was sent through email and facilitated by the co-researcher from the HR Department. Answering the survey questionnaire is voluntary, and the identity of the respondents was held confidential. The respondents of this study were fully informed that they would not receive any material or financial benefits. They are free to withdraw their participation within the duration of the study. The survey questionnaire has three (3) parts. Part I of the survey questionnaire gathered data on the profile of the respondents. Part II of the survey questionnaire gathered data on the respondents' level of research capability. The third part of the survey questionnaire gathered data on the factors that prevented the respondents from conducting or collaborating in research projects. Appropriate statistical treatment, such as the frequency count, percentage, weighted mean, ranking, and t-test for two independent samples, was used to summarize, analyze, and interpret the data gathered from the respondents.

5. RESULTS AND DISCUSSION

**Table 1**  
*Profile of the Teacher-Respondents*

Faculty (N=151)	Frequency	Per Cent (%)
<b>Age</b>		
• 23 – 29	49	32.45
• 30 – 39	41	27.15
• 40 – 49	35	23.18
• 50 – 59	21	13.91
• 60 & above	5	3.31
<b>Gender</b>		
• Male	60	39.74
• Female	91	60.26
<b>Highest Educational Attainment</b>		
• Doctoral Degree	27	17.88
• with Doctoral Units	17	11.26
• Master's Degree	25	16.56
• with Masteral Units	62	41.06
• College Degree Only	20	13.25
<b>College / Department</b>		
• Business & Accountancy	3	1.99
• Computer Studies	6	3.97
• Criminal Justice	12	7.95
• Engineering	11	7.28
• Hospitality Management	1	0.66
• Arts & Sciences	10	6.62
• Teacher Education	11	7.28
• Graduate School	11	7.28
• Senior High School	31	20.53
• Junior High School	44	29.14
• Elementary	11	7.28

Table 1 shows that most of the teacher-respondents are 23 – 29 years old (32.45%), followed by 30 – 39 years old (27.15%). The majority of the teacher-respondents are female (60.26%), with master's units (41.06%), followed by those with master's degrees (16.56%). Most of the respondents were Junior High School (JHS) teachers (29.14%) and Senior High School (SHS) teachers (20.53%). These findings imply that the Junior High School and Senior High School teachers are interested in learning research activities considering that most of the ongoing, completed, and published research in the university were done by the faculties from the colleges and graduate school. Further, the findings imply an excellent opportunity to capacitate these JHS and SHS teachers to conduct research by exposing them to various research and statistics training. Likewise, they can be tapped by the college or graduate school faculties to collaborate in conducting institutional research. (Ransdell et al., 2021) asserted that developing research skills through mentoring is a crucial tactic for promoting faculty success. (Babalola et al., 2020) reiterated that under normal circumstances, if there is friendly and successful mentoring among colleagues, especially between the senior faculty and junior faculty, an increase in research productivity is not impossible. Teachers highly skilled at using ICT to acquire, collect, utilize, and disseminate information will undoubtedly be fruitful in research productivity in this information-driven age. Given the countless opportunities that the digital age has created, well-mentored, engaged in knowledge exchange, and versatile instructors would undoubtedly produce a ton of research given their abilities. Mentoring is unquestionably a vital tool for building lasting relationships that are friendly and productive, which in turn affects educators' research output.

**Table 2**  
*Profile of the Non-Teaching Respondents*

Non-Teaching Staff (N=50)	Frequency	Per Cent (%)
<b>Age</b>		
• 22 – 29	28	56.00
• 30 – 39	12	24.00
• 40 – 49	6	12.00
• 50 – 59	2	4.00

• 60 & above	2	4.00
Gender		
• Male	18	36.00
• Female	32	64.00
Highest Educational Attainment		
• Doctoral Degree	6	12.00
• with Doctoral Units	4	8.00
• Master's Degree	6	12.00
• with Masteral Units	14	28.00
• College Degree Only	20	40.00

As shown in Table 2, the majority of the non-teaching respondents are 22 – 29 years old (56%), female (64.00%), and college degree holders (40.00%). It is also notable that there are individuals who have master’s units (28.00%) and some with master’s degrees (12.00%), doctoral units (8.00%), and doctoral degrees (12.00%). These findings show a good chance that the non-teaching personnel can produce research and publishable articles if given the opportunity and training. Considering that twenty percent (20.00%) of non-teaching staff respondents have either a doctoral degree or doctoral units, they can mentor or collaborate with their peers in conducting research projects. Furthermore, faculty researchers can tap these non-teaching staff in doing research projects. As such, the non-teaching staff will be exposed to the processes of conducting research. Eventually, a good number of non-teaching staff will become primary researchers in the future. According to Sackey et al. (2022), training and development improve non-teaching staff performance. Training exposes non-teaching staff to skills that would help them in the future, increases staff efficiency, and enables them to meet their deadlines. Furthermore, training will enable non-teaching staff to work with little or no supervision and equip them with relevant work skills.

**Table 3**  
*Level of the Research Capability of the Teacher-Respondents*

Indicators	Mean	Description	Rank
1. Identifying or recognizing researchable problems	3.05	Moderately Capable	1
2. Preparing the rationale of the study	3.03	Moderately Capable	2
3. Linking the chosen research topic to a larger body of knowledge or theory	2.95	Moderately Capable	8
4. Finding related literature of the research topic	3.01	Moderately Capable	3
5. Finding related studies of the research topic	3.01	Moderately Capable	4
6. Synthesizing the related literature and studies	2.88	Moderately Capable	13
7. Organizing the related literature and studies to a logical manner	2.91	Moderately Capable	10
8. Utilizing the APA style of citing and referencing the related literature and studies	2.91	Moderately Capable	10
9. Writing the main problem of the study	3.00	Moderately Capable	5
10. Writing the sub-problems or research questions	2.95	Moderately Capable	8
11. Writing the null hypothesis of the study	2.88	Moderately Capable	13
12. Choosing the appropriate research design	2.77	Moderately Capable	20
13. Employing appropriate sampling technique	2.81	Moderately Capable	16
14. Utilizing appropriate research procedure	2.83	Moderately Capable	15
15. Preparing a researcher-made questionnaire	2.90	Moderately Capable	12
16. Validating the researcher-made questionnaire	2.81	Moderately Capable	16
17. Testing the reliability of the researcher-made questionnaire	2.74	Moderately Capable	22
18. Gathering of data according to the nature of the study	2.96	Moderately Capable	6
19. Choosing the appropriate statistical treatment of data	2.59	Moderately Capable	24
20. Employing manual computation if statistical software is not available	2.50	Less Capable	27
21. Utilizing available statistical software to speed-up the computation	2.48	Less Capable	28
22. Coding of data in a spreadsheet for processing	2.65	Moderately Capable	23
23. Utilizing data validation feature of Microsoft Excel to ensure the integrity of the encoded information	2.55	Moderately Capable	26
24. Preparing the summary tables of data for analysis and interpretation	2.79	Moderately Capable	18
25. Analyzing and interpreting data to expose its true meaning	2.78	Moderately Capable	19

26. Linking the result of analyses to other available knowledge or related studies	2.77	Moderately Capable	20
27. Making conclusions/generalizations	2.96	Moderately Capable	6
28. Writing the final research report in publishable article format	2.58	Moderately Capable	25
<i>Overall Mean:</i>	<i>2.82</i>	<i>Moderately Capable</i>	

Table 3 shows that the top research capabilities of the teacher-respondents include 1) identifying or recognizing researchable problems (mean = 3.05; moderately capable); 2) preparing the rationale of the study (mean = 3.03; moderately capable); 3) finding related literature of the research topic (mean = 3.01; moderately capable); 4) finding related studies of the research topic (mean = 3.01; moderately capable); and 5) writing the main problem of the study (mean = 3.00; moderately capable). Meanwhile, the least rated research capabilities of the teacher-respondents are on 1) choosing the appropriate statistical treatment of data (mean = 2.59; moderately capable); 2) writing the final research report in publishable article format (mean = 2.58; moderately capable); 3) utilizing data validation feature of Microsoft Excel to ensure the integrity of the encoded information (mean = 2.55; moderately capable); 4) employing manual computation if statistical software is not available (mean = 2.50; moderately capable); and 5) utilizing available statistical software to speed-up the computation (mean = 2.48; moderately capable). The data shows that teacher-respondents are capable of doing the initial process of conducting research, but they are less capable of processing the data and writing the final report. These findings imply that the teacher-respondents can conduct research, but they need more training and assistance on the statistical aspect of doing research. This finding is supported by (Akinagbe & Baiyeri, 2011), who said that teachers or lecturers need continuing professional development to maintain and upgrade their skills. They also need to exemplify a willingness to explore and discover new technological capabilities that would enhance and expand learning experiences. For good teaching and research in the university, lecturers must improve their ICT skills properly. The highest demand for ICT training among teachers or lecturers is for data analysis using computer software like SPSS, GEN STAT, Excel, E-view, etc.

**Table 4**  
*Level of the Research Capability of the Non-Teaching Respondents*

Indicators	Mean	Description	Rank
1. Identifying or recognizing researchable problems	3.04	Moderately Capable	5
2. Preparing the rationale of the study	3.04	Moderately Capable	5
3. Linking the chosen research topic to a larger body of knowledge or theory	3.08	Moderately Capable	2
4. Finding related literature of the research topic	3.08	Moderately Capable	2
5. Finding related studies of the research topic	3.04	Moderately Capable	5
6. Synthesizing the related literature and studies	3.08	Moderately Capable	2
7. Organizing the related literature and studies to a logical manner	3.00	Moderately Capable	9
8. Utilizing the APA style of citing and referencing the related literature and studies	3.00	Moderately Capable	9
9. Writing the main problem of the study	3.04	Moderately Capable	5
10. Writing the sub-problems or research questions	2.92	Moderately Capable	12
11. Writing the null hypothesis of the study	2.88	Moderately Capable	14
12. Choosing the appropriate research design	2.84	Moderately Capable	17
13. Employing appropriate sampling technique	2.84	Moderately Capable	17
14. Utilizing appropriate research procedure	2.92	Moderately Capable	12
15. Preparing a researcher-made questionnaire	2.88	Moderately Capable	14
16. Validating the researcher-made questionnaire	2.76	Moderately Capable	21
17. Testing the reliability of the researcher-made questionnaire	2.76	Moderately Capable	21
18. Gathering of data according to the nature of the study	3.12	Moderately Capable	1
19. Choosing the appropriate statistical treatment of data	2.72	Moderately Capable	25
20. Employing manual computation if statistical software is not available	2.64	Moderately Capable	27
21. Utilizing available statistical software to speed-up the computation	2.76	Moderately Capable	21
22. Coding of data in a spreadsheet for processing	2.84	Moderately Capable	17
23. Utilizing data validation feature of Microsoft Excel to ensure the integrity of the encoded information	2.64	Moderately Capable	27
24. Preparing the summary tables of data for analysis and interpretation	2.88	Moderately Capable	14
25. Analyzing and interpreting data to expose its true meaning	2.80	Moderately Capable	20

26. Linking the result of analyses to other available knowledge or related studies	2.76	Moderately Capable	21
27. Making conclusions/generalizations	3.00	Moderately Capable	9
28. Writing the final research report in publishable article format	2.68	Moderately Capable	26
<i>Overall Mean:</i>	<i>2.89</i>	<i>Moderately Capable</i>	

Table 4 shows that the top research capabilities of the non-teaching respondents are 1) linking the chosen research topic to a larger body of knowledge or theory (mean = 3.08; moderately capable); 2) finding related literature of the research topic (mean = 3.08; moderately capable); 3) synthesizing the related literature and studies (mean = 3.08; moderately capable); and 4) gathering of data according to the nature of the study (mean = 3.12; moderately capable). Meanwhile, the non-teaching respondents’ most minor research capabilities include 1) choosing the appropriate statistical treatment of data (mean = 2.72; moderately capable); 2) writing the final research report in publishable article format (mean = 2.68; moderately capable); 3) employing manual computation if statistical software is not available (mean = 2.64; moderately capable); and 4) utilizing data validation feature of Microsoft Excel to ensure the integrity of the encoded information (mean = 2.64; moderately capable). Considering the top research capabilities of the non-teaching respondents, it shows that they are more capable of looking for literature and gathering data. For the minor research capabilities, the non-teaching respondents need more training on the statistical and writing the final report of the research. These findings imply that the non-teaching respondents or personnel may collaborate with the teaching personnel in research projects to find related readings and as data gatherers. Similar to the teacher-respondents, the non-teaching personnel need more training and exposure to statistical software and preparation of the final research report for possible publication. This finding is supported by (Benesisto et al., 2020), who said that the research center and the various departments/units should adopt innovative strategies to motivate the teaching and non-teaching personnel to engage in institutional research. The school administrators may consider creating a group of researchers composed of teaching and non-teaching personnel with master’s or doctoral degree who will serve as mentors of other personnel to engage or participate in various research undertakings of the institution.

**Table 5**

Difference Between the Level of Research Capability of the Teaching and Non-Teaching Personnel

Grouping	Mean	df	t-computed	t-critical	p-Value	Decision on Ho	Interpretation
Faculty	2.82	56	1.7442	2.0032	0.09	Failed to Reject Ho	Not Significant
Non-Teaching	2.89						

Table 5 indicates that there is no significant difference in the research capabilities of the teaching and non-teaching personnel. This finding implies that the research competencies of the teaching and non-teaching personnel are more likely similar. Hence, both groups of respondents can be jointly exposed to capability building training related to research and statistics. Segismundo (2021) proposes training and support for department personnel with little expertise in scholarly production to become skilled in all research techniques (conceptual, computational, and technical). She continued by saying that developing a research culture could take years; therefore, policies governing research must be implemented consistently over time to become accepted. Following the adoption or acceptance of policies, various research activities must be found and carried out with the assistance of faculty members with extensive research expertise.

**6. CONCLUSIONS**

The overall research capabilities of the teaching and non-teaching personnel are both described as moderate. The top research capabilities or competencies of both groups of university personnel are more on the initial phase of researching. At the same time, they need more training and exposure to the statistical aspect of research and the preparation of the final report in the form of publishable articles. The test of hypothesis also signifies that the research capabilities of the teaching and non-teaching personnel are both of the same levels. Furthermore, the least rated research capabilities are the strong points to consider in implementing research capacity-building activities in the university. Lastly, the teaching and non-teaching personnel profile, wherein some individuals have doctoral units and degrees, can be tapped to mentor and collaborate with those who are still in the process of grasping the essence of doing research. Such mentoring and the collaborating manner in doing research projects would eventually improve the research culture in the university.

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