

Faculty Researchers' Perspectives on Their Research Needs

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Abstract:

St. Paul University Philippines (SPUP) as a research university capitalizes on its faculty researchers who play a role in helping maintain the University's accreditations. By continuously monitoring their needs, SPUP is able to identify areas of concern not only to capacitate faculty researchers but also to uphold its research and development thrusts and its commitment to academic excellence. Through mixed methods, this study aimed to identify the research areas in which faculty researchers need assistance, with the objective that the University may take the necessary steps for intervention. Participants consisted of faculty and administrators from the different units of the University. A survey questionnaire was used to gather the data, which were treated using descriptive statistics and thematic analysis. Results revealed that the three areas of research writing were perceived as needs by the participants, that is, Writing the Research Proposal as Much of a Need while Writing the Final Research Report and Post-Writing Needs as Very Much of a Need. The participants require very much support in terms of data analysis, the use of research software, and publication. These needs merit more emphasis in the different research and development programs of SPUP.

Key Words: Research Capability, Research Capability Building, Research Needs, Research University

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I. INTRODUCTION

Research is one of the trifocal functions of a higher education institution (HEI). Its importance is inherent to the existence of an academe, the dynamo for social transformation through discovery, use, and transmission of knowledge. In other words, research advances the frontiers of knowledge and improves the quality of life^{1,2}.

The foregoing idea is affirmed by the United Nations Educational, Scientific and Cultural Organization (UNESCO), through the World Declaration on Higher Education for the Twenty-First Century: Vision and Mission, which states that "the advancement of knowledge through research is an essential function of all systems of higher education"³. This central place of research in the academe thus calls for the extensive promotion of research culture⁴, which implies that teachers no longer have to confine themselves to instruction but maximize their competencies through the conduct of scholarly researches, thereby actively participating in the academe's quest for knowledge – its *raison d'être*.

All around the world, faculty researches promote professional development besides providing a ticket for promotion^{5,6}. More importantly, research gives academic institutions their competitive edge in the highly dynamic sphere of higher education. In fact, research distinguishes a university from other types of higher education institutions. Research universities earn the highest esteem and recognition due to their scholarly ventures that generate inventions and innovations; they are lauded for their contributions to the wealth of knowledge that improves the quality of life and lifts human intellect to new levels. Hence, to be a research university means pursuit of academic excellence: It means prestige, pride, and privileges which are seldom or never accorded to other academic institutions. Research plays an important role in academic institutions because it improves pedagogy⁷ and allows professional development⁸.

In the Philippines, the Commission on Higher Education (CHED)⁹ promulgates the horizontal typology or classification of HEIs into professional institutions, colleges, and universities. In its *Handbook on Typology, Outcomes-Based Education, and Institutional Sustainability Assessment*, CHED states that an HEI with a university status should attain its mandate by having:

- 1) Faculty members with relevant degrees in their areas of specialization, as required by CHED, and who participate in research and development activities in their respective disciplines as evidenced by refereed publications, and other scholarly outputs; . . .

- 3) Viable research programs in specific (disciplinal and multidisciplinary) areas of study that produce new knowledge as evidenced by refereed publications, citations, inventions and patents, etc.⁹.

These guidelines point to the pivotal role of research in a 'university.' On the premise of the foregoing requirements, faculty members of universities are charged with the duty of engaging in researches – ones that are aligned with the research and development agenda of their institutions.

Unfortunately, research is no simple task due to the presence of one or more obstacles⁴, and academes have difficulties cultivating a research culture since faculty are normally employed as instructors and not as researchers¹⁰. Studies show that in certain academic communities, conducting research is one of the challenges that beset educators. For example, in a study it was found that researchers lacked favorable environment where collaboration is possible and faced challenges on "data storage, management, and preservation, as well as understanding publication impact and dissemination methods"¹¹. In another study, it was discovered that basic and advanced research skills are among the individual factors that influence research productivity¹².

For many teachers, the qualms about engaging in research are due to their inadequate knowledge and skills on research which in turn may reflect their lack of exposure to research training or actual research undertaking. Another crucial factor is the absence of support from their heads or their institutions. Lumped together, these issues, among others, could serve as barriers to teachers' production of researches which could have great potential in generating new knowledge and effecting change^{13,14}. In other words, the lack of necessary research capabilities attributed to the foregoing issues negates the possibility of great discoveries which, unraveled, may immensely benefit humanity.

This is why teachers as key agents of change are expected to possess the necessary competencies in conducting research, and one of the crucial roles of any educational institution is to ensure that its faculty are equipped and empowered to tackle the challenges of such scholarly endeavor. This principle holds water because "squeezing research out of people and departments that have no training, aptitude or inclination inevitably generates tensions"¹⁵. On this premise, this study aimed to determine the perspectives of faculty researchers of St. Paul University Philippines on their research needs. The findings shall serve as basis for interventions via the research capability and development programs of the University.

Conceptual Framework

The study was anchored on the principle that the University should continuously assess the research needs of faculty and provide the necessary support structure to ensure and sustain their high research productivity. To achieve its objectives, the study used the input-process-output (IPO) model. The participants' profile and perception of their research needs (input) were examined using descriptive statistics and thematic analysis (process) to come up with baseline data on their research needs (output) which would serve as a basis for informed decisions on research capability-building interventions of the university.

Statement of the Problem

The study aimed to determine the research needs of the faculty researchers of St. Paul University Philippines. Specifically, it sought answers to the following questions:

1. What is the profile of the participants in terms of unit/department?
2. How do the participants view their needs in the different research areas?
3. What other research-training needs do the participants think should be met?
4. What topics do they want included in the University's research and development program?

II. MATERIAL AND METHODS

Research Design

Using mixed methods, the study looked into the participants' perspectives on their research needs. The descriptive method delved on describing the participants' profile and their perception as regards their various research needs. The thematic analysis focused on clustering into themes the other research-related training needs as well as topics that the participants want included in the university's research capability-building programs.

Participants of the Study

Faculty from the different units or departments of St. Paul University Philippines participated in the study. Selected through convenience sampling, they were the attendees at the General Research Orientation conducted by the Research and Publications Office (RPO) in 2018.

The participants were the teachers of the basic education unit (BEU) handling Grade School (GrS), junior high school (JHS), and senior high school (SHS) classes. Others were college faculty members belonging to the School of Arts, Sciences and Teacher Education (SASTE), School of Information Technology and Engineering (SITE), School of Business, Accountancy and Hospitality Management (SBAHM), School of

Nursing and Allied Health Sciences (SNAHS). The rest were from the Graduate School (GS), School of Medicine (SOM), Christian Formation (CF), Guidance and Counselling Office (GCO), and Knowledge Information Resource Network (KIRN).

Instrumentation

Validated survey questionnaires were used to collect the data needed for the study. The research-needs questionnaire (RNA) lists the different necessities or concerns involved in the three identified areas of research undertaking in the university, namely: Writing the Research Proposal, Writing the Final Research Report, and Post-Writing Needs. The questionnaire was designed by the RPO to determine the participants' perceived research needs as well as to elicit other concerns they think require attention.

Data-Gathering Procedure

The RPO organized the General Research Orientation in 2018. As the faculty enlisted at the registration desk, the RPO team floated the questionnaires to the participants and explained to them the objectives of the study. Verbal consent of the participants was sought.

The faculty filled out the questionnaires before or after the orientation program, submitting them at the registration desk as they exited the hall at the end of the orientation. Afterward, the researchers collated the data using Excel and Word. Numerical data were imported to SPSS for statistical treatment. Results were then analyzed, interpreted, and reported in writing.

Data Analysis

In analyzing the data, the researchers used the following tools: *Frequency and percentage* were used to describe the profile of the participants in terms of unit or department. *Weighted mean* was used to determine the participants' perception of their research needs along the three identified stages or areas. Mean scores were interpreted using the following scale:

Table 1
Scale for Determining the Faculty Researchers' Perception of Their Research Needs

Mean Range	Qualitative Description
3.25 – 4.00	Very Much of a Need
2.50 – 3.24	Much of a Need
1.75 – 2.49	Slightly of a Need
1.00 – 1.74	Not a Need

Moreover, *thematic analysis* was employed to identify and cluster into themes the other research-related training needs of the participants, including topics they want further explored in the university's research and development programs.

III. RESULTS AND DISCUSSION

Participants' Profile

Results of the descriptive analysis of the participants' profile in terms of unit or department (Table 2) show that teachers from the basic education unit (BEU) senior high school make up the highest number of faculty, while the School of Arts, Sciences and Teacher Education (SASTE) and School of Business, Accountancy and Hospitality Management (SBAHM) have the lowest number of faculty researchers. This indicates that the SPUP's biggest population of faculty researchers come from the senior high school.

Table 2
Profile of the Participants According to Unit/Department

Department/Unit	Frequency	Percentage
BEU - Grade School	21	15.56
BEU - Junior High School	17	12.59
BEU - Senior High School	41	30.37
SASTE	7	5.19
SBAHM	7	5.19
SITE	10	7.41
SNAHS	21	15.56
Graduate School, SOM, CF, Guidance, KIRN	11	8.15
Total	135	100

Descriptive analysis was also conducted on the participants' perspectives of their research needs along the three identified areas in the study, namely: Writing the Research Proposal, Writing the Research Report, and Post-Writing Needs. Results of the said analysis (Table 3) show that in terms of Writing the Research Proposal, the faculty researchers' strengths are writing the definition of terms, writing the scope and delimitation, and writing the significance of the problem. Their weaknesses are developing a research instrument (e.g., questionnaire, observation checklist, interview guide, etc.), ensuring the validity and reliability of data-gathering tools (such as questionnaire, tests, etc.), and identifying/using the appropriate statistical tool/measure for data analysis. The categorical mean is 3.16, which is interpreted as Much of a Need.

Specifically, writing the research proposal is perceived by the teachers of BEU grade school, junior high school, and senior high school as Very Much of a Need, while faculty of SASTE, SBAHM, SITE, SNAHS, Graduate School, School of Medicine, Christian Formation, Guidance and Counseling Office, and KIRN view it as Much of a Need. This implies that BEU teachers very much require assistance in terms of writing their research proposals, especially on developing a research instrument (e.g., questionnaire, observation checklist, interview guide, etc.), ensuring the validity and reliability of data-gathering tools (such as questionnaire, tests, etc.), and identifying/using the appropriate statistical tool/measure for data analysis.

In terms of Writing the Final Research Report, the participants' strengths are writing the recommendation, writing the summary of findings, and writing the conclusion. Their weaknesses include doing qualitative data analysis, knowing how to use a plagiarism-detection software (like Turnitin, Viper, etc.), and using research software to facilitate data analysis (e.g., SPSS, NVivo, etc.). The categorical mean is 3.29 whose descriptive value is Very Much of a Need.

When all the groups of faculty researchers are considered, Writing the Final Research Report is perceived by the faculty of BEU grade school, junior high school, senior high school, SNAHS, Graduate School, School of Medicine, Christian Formation, Guidance and Counseling Office, and KIRN as Very Much of a Need, while the teachers of SASTE, SBAHM, and SITE consider it as Much of a Need. This suggests that the former groups of teachers very much require support in terms of writing their final research report, especially on matters concerning doing qualitative data analysis, knowing how to use a plagiarism-detection software (like Turnitin, Viper, etc.), and using research software to facilitate data analysis (e.g., SPSS, NVivo, etc.).

In terms of Post-Writing Needs, the strengths are writing a journal article using the IMRAD format, identifying appropriate research journal for my publication, and knowing the peer-review process involving single- or double-blind review. On the other hand, the weaknesses consist of knowing concepts like impact factor, H-index, etc.; publishing research articles in refereed or peer-reviewed journal; and writing the article in publishable journal format following national/international standards. This category has a mean of 3.50, Very Much of a Need.

Post-Writing Needs are viewed as Very Much of a Need by all faculty members except those from SITE. This implies that the majority of faculty researchers very much require boost in terms of post-writing undertakings, especially those that relate to knowing concepts like Impact factor, H-Index, etc., publishing research articles in refereed or peer-reviewed journal; and writing the article in publishable journal format following national/international standards.

Table 3
Participants' Perspectives on Their Research Needs

AREA	NEEDS	BEU (GrS)	BEU (JHS)	BEU (SHS)	SASTE	SBAHM	SITE	SNAHS	GS, SOM, CF, GCO, KIRN	TOTAL MEAN PER ITEM
WRITING THE RESEARCH PROPOSAL	Writing the definition of terms	3.29	3.29	3.02	2.67	2.14	2.90	2.62	2.91	2.86
	Writing the scope and delimitation	3.29	3.47	3.05	2.50	2.29	2.78	2.90	3.09	2.92
	Identifying the respondents/subjects/participants	3.33	3.44	3.29	2.83	2.29	2.90	2.95	2.91	2.99
	Writing the References/Bibliography	3.33	3.53	3.17	2.67	2.43	2.80	3.10	3.10	3.02
	Writing the significance of the problem	3.33	3.47	3.34	2.60	2.14	2.80	2.95	3.10	2.97
	Writing the introduction/background of the problem	3.38	3.41	3.32	2.83	2.43	2.90	3.00	3.09	3.05
	Identifying the problem of the research	3.43	3.59	3.32	2.83	2.57	3.10	3.19	3.09	3.14
	Writing the hypothesis	3.43	3.47	3.37	2.67	2.43	3.20	3.05	3.18	3.10
	Using the APA referencing system	3.43	3.71	3.25	2.67	2.86	2.90	3.00	3.40	3.15
	Writing the review of related literature & studies	3.48	3.65	3.27	2.83	2.43	3.30	3.19	3.09	3.16
	Writing the statement of the problem	3.48	3.47	3.43	2.67	3.00	3.20	3.14	3.18	3.20
Identifying the sample size to be used	3.48	3.71	3.27	3.33	2.86	2.80	3.19	2.91	3.19	

	and the sampling technique to be employed									
	Writing the conceptual framework	3.48	3.59	3.22	3.00	3.00	3.00	3.33	3.18	3.23
	Knowing the different research designs	3.48	3.53	3.51	3.00	2.71	3.00	3.33	3.27	3.23
	Identifying the appropriate data-gathering tools to be used	3.52	3.53	3.51	3.14	3.00	3.00	3.38	3.18	3.28
	Knowing the ethical requirements of research in the use of a particular research tool, especially the use of human subjects	3.52	3.65	3.49	3.00	3.00	3.56	3.19	3.22	3.33
	Identifying the appropriate research design	3.52	3.65	3.56	2.83	3.00	3.10	3.38	3.36	3.30
	Developing a research instrument (e.g., questionnaire, observation checklist, interview guide, etc.)	3.57	3.65	3.51	3.14	3.00	3.20	3.48	3.27	3.35
	Ensuring the validity and reliability of data-gathering tools (such as questionnaire, tests, etc.)	3.62	3.59	3.49	3.00	3.00	3.56	3.48	3.50	3.41
	Identifying/Using the appropriate statistical tool/measure for data analysis	3.62	3.53	3.51	3.50	3.14	3.30	3.62	3.40	3.45
	Categorical Mean	3.45	3.55	3.35	2.89	2.69	3.07	3.17	3.17	3.16
WRITING THE FINAL RESEARCH REPORT	Writing the recommendation	3.43	3.47	3.24	2.67	2.43	3.10	3.10	3.22	3.08
	Writing the summary of findings	3.43	3.53	3.22	2.67	2.43	3.20	3.19	3.11	3.10
	Writing the conclusion	3.43	3.41	3.22	2.67	2.86	3.20	3.24	3.22	3.16
	Writing the research abstract	3.43	3.59	3.56	3.00	2.86	2.90	3.29	3.11	3.22
	Organizing gathered data (tabular, graphical, etc.)	3.52	3.47	3.49	3.00	2.71	2.80	3.38	3.30	3.21
	Doing quantitative analysis of data	3.52	3.59	3.56	3.00	3.00	3.10	3.67	3.11	3.32
	Doing qualitative data analysis	3.57	3.65	3.54	3.29	3.29	3.40	3.62	3.33	3.46
	Knowing how to use a plagiarism-detection software (like Turnitin, Viper, etc.)	3.62	3.65	3.76	3.57	3.00	3.30	3.48	3.67	3.51
	Using research software to facilitate data analysis (e.g., SPSS, NVivo, etc.)	3.71	3.53	3.61	3.43	3.29	3.30	3.67	3.78	3.54
	Categorical Mean	3.52	3.54	3.47	3.03	2.87	3.14	3.40	3.32	3.29
POST-WRITING NEEDS	Writing a journal article using the IMRAD format	3.48	3.59	3.59	3.50	3.00	3.11	3.48	3.67	3.43
	Identifying appropriate research journal for my publication	3.62	3.59	3.56	3.50	3.43	3.30	3.57	3.33	3.49
	Knowing the peer-review process involving single- or double-blind review	3.62	3.59	3.54	3.29	3.43	3.20	3.76	3.67	3.51
	Knowing concepts like Impact factor, H-index, etc.	3.62	3.59	3.66	3.50	3.43	3.10	3.71	3.56	3.52
	Publishing research articles in refereed or peer-reviewed journal	3.67	3.53	3.63	3.43	3.43	3.20	3.67	3.56	3.52
	Writing the article in publishable journal format following national/international standards	3.71	3.59	3.68	3.50	3.57	3.20	3.57	3.67	3.56
	Categorical Mean	3.62	3.58	3.61	3.45	3.38	3.19	3.63	3.58	3.50
OVERALL MEAN	3.53	3.56	3.48	3.12	2.98	3.13	3.40	3.36	3.32	

Note. BEU (GrS) = Basic Education Unit (Grade School)
 BEU (JHS) = Basic Education Unit (Junior High School)
 BEU (SHS) = Basic Education Unit (Senior High School)
 SASTE = School of Arts, Sciences and Teacher Education
 SBAHM = School of Business, Accountancy and Hospitality Management
 SITE = School of Information Technology and Engineering
 SNAHS = School of Nursing and Allied Health Sciences
 GS, SOM, CF, GCO, KIRN = Graduate School, School of Medicine, Christian Formation, Guidance and Counseling Office, Knowledge Information Resource Network, respectively

In general, SPUP faculty researchers very much need assistance on Writing the Final Research Report and on Post-Writing undertakings. Specifically, these needs concern data analysis, the use of research software, and publication. These findings are supported by a study that identified the difficulties encountered by academicians (at a university in Turkey) in the academic research process; the said study found that academicians faced “difficulties in the *data analysis* process, problems in *publishing their researches*, time

problems in their researches, problems in collaborative works with their colleagues and difficulties in reaching international resources [emphasis added]¹⁶.

Other Research Needs and Topics Identified by the Participants

The researchers also asked the participants about other research-training needs the latter would want included in the research capability-building program of the University. Their responses were analyzed and classified according to themes, which include: Hands-on Training on Research Software (e.g., SPSS, Nvivo, Turnitin, Grammarly), Research Relevance (to SPUP and Society), Multidisciplinary and Collaborative Research, Research-based Strategies Integrated in the Dynamic Instructional Plans (DIPs).

Likewise, the participants were also asked about the topics they would like explored in the different research and development programs. Their responses were classified into the following: Writing Review of Related Literature and Studies with Integrity, Academic Performance of Engineering Students, Stress Anxiety and Coping Mechanism, Students' Perceptions of Guidance Counselors and Staff, Academic Dishonesty of Senior High School, and Difficulties of TVL Faculty.

IV. CONCLUSION

The faculty researchers of SPUP perceived the three research areas as needs at different degrees. They considered Writing the Research Proposal as Much of a Need, while Writing the Final Research Report and Post-Writing Needs as Very Much of a Need. This means that SPUP faculty researchers still need much assistance on writing their research proposals, but they require much more support in terms of writing their final research report and post-writing needs, especially on matters that concern data analysis, the use of research software, and understanding the concepts of publication. This further implies that the different research and development programs of SPUP should focus more on the faculty researchers' final research-report writing and post-writing needs.

V. RECOMMENDATIONS

Based on the findings and conclusion of the study, the researchers offer the following recommendations:

The Research and Publications Office (RPO) may consider strengthening its research and development programs, with more emphasis on data analysis, the use of research software, and the publication process.

The RPO may review its faculty research policies, with a focus on guidelines regarding rewards or incentives that would encourage faculty to produce excellent researches, motivating them to engage more in research endeavors.

The University may include relevant research-related topics, issues, and trends in its faculty development sessions as part of enhancing teachers' research capabilities.

Faculty researchers may consider doing internal or external research collaborations to learn more about group dynamics, sharing of resources, enriching knowledge and writing skills, improving the life of the community through research.

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