

Factors Limiting Research Productivity of Faculty Members of a State University: The Pangasinan State University Alaminos City Campus Case

Asia Pacific Journal of
Academic Research in
Social Sciences
Vol. 2, 43-48
November 2017
ISSN 2545-904X

Christopher J. Cocal, Evangeline J. Cocal, Brandy Celino
Pangasinan State University Alaminos City Campus
cjc_psu@yahoo.com

Date Received: October 6, 2017; Date Revised: November 24, 2017

Abstract- *One of the fourfold functions of a state university is research. With this, all faculty members, regardless of academic rank are mandated to research. The study was conducted to assess the factors limiting research productivity of the faculty members of the Pangasinan State University Alaminos City Campus. The descriptive research design was utilized in the study with the faculty members as respondents. Results of the study show that the research productivity of the faculty members is very low, wherein, only 46% of the faculty members were conducting research, 25% have presented their research outputs either in international, national, regional or local conferences, and 8.33% have research publication. In general, the faculty members were moderately knowledgeable and moderately skilled on the different processes of research. Lack of financial resources, teaching overload, and other duties and functions were the problems encountered by those who have conducted researches. These were also the primary reasons why faculty members are not doing research.*

Keywords – *Research productivity, state universities, and colleges*

INTRODUCTION

One of the major functions of faculty members of state colleges and universities, along with instruction and extension services, is research. For faculty members with the academic rank of instructor, 10% of their work is on research while that holding professor rank, 50% of their workload is research and extension. Although the most significant part of the workload of a faculty member is on instruction, the importance of research to university is undeniable. Research and publication is a function of all institutions of higher education throughout the world [1]. Aside from the significant role of research in knowledge and technology development, the conduct of research is a fundamental requirement for program accreditation and leveling of university status. However, data on the research productivity of faculty members of state colleges and universities in the Philippines found very low. It is therefore essential to determine the factors that limit research productivity of faculty members of state colleges and universities.

Determinants of research productivity include publications in refereed journals, proceedings, book chapter, and literature review, and other forms of

writing. Obtaining research grants, carrying out editorial duties, obtaining patents and licenses, writing of monographs, developing experimental designs, producing works of an artistic or creative nature, engaging in public debates and commentaries are also forms of research productivity [2].

Understanding productivity determinants can be of critical importance for administrators of universities and research laboratories, public or private. Being able to estimate expected productivity of researchers, taking into account individual characteristics, past history, and institutional variables, can help design policies to enhance productivity, or can plan for a balance in groups to compensate for the potential existence of age, cohort or other effects [3].

Research conducted found that faculty members did not consider any of the aspects of research culture in their institutions as being strong [4]. This is supported by the fact that the average of each faculty member's research productivity was 0.40 research pieces per year. Researchship and research competence were high in average, and institutional support for research work was moderate [5].

Researches have already determined the factors that affect research productivity. For research and non-research institutions, faculty collaboration with either domestic or international colleague is essential for research productivity. Faculty collaboration with international colleagues is the best predictor of research productivity. Faculty preferences in research lead to higher research productivity at research institutions, but not apparently at non-research institutions. School administration plays no role in improving research productivity [6]. In state universities and colleges in the Philippines, research culture research climate, financial support, and other incentives, technical support has no significant effects on research productivity [7].

Faculty productivity is being influenced more by individual and institutional characteristics; group productivity was more affected by institutional and leadership characteristics [4]. Staff qualifications, research environment, funding, and time available to staff could predict significantly the research output by the university staff [8]. To improve research productivity of faculty members, time, strong belief in research endeavor, faculty involvement, positive group climate, working conditions and organizational communication, decentralized research policy, research funding, and clear institutional policy for research benefits and incentives are necessary incentives (Salazar-Clemeña & Almonte-Acosta). However, faculty profile such as gender, age, educational attainment, faculty rank, CCE points, years of teaching experience, workload, and seminars and training do not affect research productivity [7]. A number of policy implications for institutions of higher learning including the need to have a strong faculty development program, enhanced research collaboration, improved research productivity, and good incentive system in order to promote and enhance the research culture in higher education institutions [9].

Researches have established that faculty members do not consider any of the aspects of research culture in their institutions as being strong. The impact of research, administrative practices, inter-institutional collaboration, institutional research strategy, financial reward system, infrastructure, the presence of ethical policies, and the availability of research funding as research culture exist moderately in universities [4].

The study was conducted to determine the profile of faculty members, their research productivity, level of knowledge and skills on the different research processes, and the factors limiting their productivity.

METHODS

The study made use of the descriptive - survey research design considering that the objectives of the study were to determine the profile of the faculty members; their research productivity, level of knowledge and skills on the different research processes, and the factors limiting their productivity.

The subject of the study was the faculty members teaching in Pangasinan State University-Alaminos City Campus. A total of 24 faculty members who were randomly selected from the three departments served as respondents of the study.

The main instrument employed in the gathering of pertinent data was a questionnaire checklist divided into four parts. Part 1 dealt with the profile of the faculty members, part two dealt with their research productivity, part three dealt with the level of their knowledge and skills on the different research processes, and part four dealt with the factors affecting their research productivity.

Frequency counts and percentages were utilized in determining the profile of the respondents as well as their research productivity. The level of knowledge and skills of the faculty members were rated using the Five-point Likert scale as highly knowledgeable (5); knowledgeable (4); moderately knowledgeable (3); lowly knowledgeable (2); and not knowledgeable (1). Frequency counts and percentages were also used in determining the factors affecting the research productivity of the faculty members.

RESULT AND DISCUSSION

A majority (91.67%) of the faculty members belong to the age bracket 21 – 39, females (62.50%) and single (75%) (Table 1). The result is indicative that state colleges and universities prefer to hire young individuals who are educated with the recent trends along their fields of specializations to become faculty members who will impart knowledge and skills among their students. Likewise, results show that the teaching profession is still female dominated.

Regarding educational attainment, only 8.33% have doctorate degrees. However, 12.50% have doctoral units, and 37.50% have masters' degrees. Further, 8.33% were graduates only of bachelor' degrees. Results show that state colleges and universities hire faculty members with academic degrees lower than the set academic requirement by the Commission on Higher Education which is master's degree. It is worthy to note however, that the faculty members are pursuing

graduate and post-graduate degrees to comply with the requirements set by CHED.

The faculty members belong to various disciplines such as Mathematics (8.33%), Natural Sciences (8.33%) including Biology, Physical Sciences (4.17%), Social Sciences (20.83%), and General Education (20.83%). The percentage of faculty members is proportionate to the programs offered by the universities and the number of students enrolled in the particular program.

Regarding employment status, only 12.50% are permanent. A majority are hired as contractual faculty members. Results show that there is a need to create more plantilla items for the contractual members to become permanent faculty members of the university. Having more plantilla item will be beneficial to the university as the university will save millions of pesos from its income. The salary of contractual faculty members is derived from the income of the university, largely, from the tuition fees collected from the students.

Regarding years in service, 70.83% have been teaching in the university for five years or less. The faculty members are still young in the service and are in the process of establishing their careers.

Table 1. Profile of the Faculty Members

Variable	f	%
Age	21 - 39	22 91.67
	40 - 59	4 8.33
Sex	Male	9 37.50
	Female	15 62.50
Civil Status	Single	18 75.00
	Married	6 25.00
Educational Attainment	BS/BA	2 8.33
	With Masteral Units	8 33.33
	With Master's Degree	9 37.50
	With Doctoral Units	3 12.50
Discipline	With Doctorate Degree	2 8.33
	Mathematics	2 8.33
	Natural Sciences	2 8.33
	Physical Sciences	1 4.17
Employment Status	Social Sciences	5 20.83
	Business and Management	3 12.50
	Languages	2 8.33
	Communication Arts	1 4.17
	General Education	5 20.83
	Agriculture	3 12.50
	Permanent	3 12.50
	Contractual	21 87.50
Years in Service	5 years or less	17 70.83
	more than 5 years	7 29.17

Table 2. Trainings/Seminars on Research Attended by the Faculty Members

Variable	f	%
A. Trainings Attended		
International	0	22 91.67
	1 - 2	2 8.33
National	0	21 87.50
	1 - 2	3 12.50
Regional	0	18 75.00
	1 - 2	5 20.83
	3 - 5	1 4.17
University-based	0	17 70.83
	1 - 2	6 25.00
	3 - 5	1 4.17
Campus-based	0	5 20.83
	1 - 2	19 79.17
B. Seminars Attended		
International	0	21 87.50
	1 - 2	2 8.33
	3 - 5	1 4.17
National	0	19 79.17
	1 - 2	3 12.50
	3 - 5	2 8.33
Regional	0	17 70.83
	1 - 5	6 25.00
University-based	6 or more	1 4.17
	0	13 54.17
Campus-based	1 - 2	8 33.33
	3 - 5	3 12.50
Campus-based	0	5 20.83
	1 - 2	19 79.17

As presented in Table 2, the majority (91.76%) of the faculty members have not participated in international training on research. Almost the same percentage (87.50%) has not participated in any national training on research. The same scenario was observed regarding attendance to seminars on research. Results show that most of the faculty members are not given the opportunity to participate in training or seminars on research for them to develop or enhance their knowledge and skills in the conduct of research. Participation in training will make them better understand what they should do and how they should do research.

Table 3. Research Performance of the Faculty Members

Variable	f	%
Number of Research Conducted		
0	13	54.17
1	4	16.67
2 - 5	6	25.00
6 - 10	1	4.17
Type of Research Conducted		
Experimental	2	8.33
Quasi-experimental	1	4.17
Non-experimental	9	37.50
Area or Discipline		
Agriculture	4	16.67
Education	4	16.67
Social Sciences	2	8.33
Health Science	1	4.17
Policy and Development	1	4.17
Participation		
Project Leader	2	8.33
Study Leader	10	41.67
Authorship		
Primary	5	20.83
Co-author	7	29.17
Research Presentation		
International	2	8.33
National	5	20.83
Regional	5	20.83
University	7	29.17

Note: Those who have presented in the international have also presented their papers in the national, regional, and university research symposium.

As shown in Table 3, 50% of the faculty members have not conducted any research while they were teaching in the University. Further, 29.17% have conducted 2 – 5 researches while 4.17% have conducted more than five researches. Results show that although research is one of the major functions of the faculty members, the conduct of research is not their priority.

Of those who have conducted researches, 37.50% have conducted non-experimental researches with 8.33% experimental research. Results further show that the faculty members who conducted researches mostly belong to agriculture (16.67%), education (16.67%),

and social sciences (8.33%). The faculty members were acting as study leaders. Only two or 8.33% have served as project leaders. Regarding authorship, 20.83% were primary authors, the rest (29.17%) were co-authors.

Regarding presentation, 8.33% have presented research outputs at international conferences, 20.83% in national and regional conferences. Only 29.17% have presented their research papers in the University In-house Reviews.

Research productivity in state universities is low. There is a need to strengthen the research culture in state colleges and universities to ensure that faculty members are performing research as one of their major functions together with instruction and extension services. Faculty productivity is being influenced more by individual and institutional characteristics; group productivity was more affected by institutional and leadership characteristics [4].

Regarding the level of knowledge and skills of the faculty members on the different processes of research as shown in Table 4, it was found the faculty members were moderately knowledgeable and moderately skilled in general. This was shown by the overall average weighted mean values of 2.96 and 2.90 respectively.

Among the different processes, the faculty members were knowledgeable the most in identifying research area/problem followed by formulating research objectives and developing a theoretical/conceptual framework. Average weighted mean values of 3.33, 3.13 and 3.13 were computed respectively, descriptively rated as moderately knowledgeable. On the other hand, the faculty members were knowledgeable the least in writing publishable research/scientific paper. Average weighted mean value of 2.67 was computed, also rated as moderately knowledgeable (Table 4).

Of the different research processes, the faculty members were also found skilled the most in identifying research area/problem. Average weighted mean value of 3.25 was computed, descriptively rated as moderately skilled. Reviewing literature and discussing research findings followed.

Results show that the faculty members were skilled the least in writing publishable research/scientific paper. Average weighted mean value of 2.50 was computed, descriptively rated as lowly skilled. It has to be noted that the faculty members were also least knowledgeable in writing publishable research/scientific paper.

Table 4. Level of Knowledge and Skills in the Different Research Processes

Research Process	Level of Knowledge		Level of Skills	
	AWM	Descriptive Rate	AWM	Descriptive Rate
1. Identification of research area/problem.	3.33	MK	3.25	MS
2. Formulation of research objectives.	3.13	MK	3.00	MS
3. Formulation of a hypothesis.	3.08	MK	2.92	MS
4. Development of theoretical/conceptual framework.	3.13	MK	2.96	MS
5. Review of relevant literature.	3.04	MK	3.09	MS
6. Identification of research design base on research objective(s).	2.96	MK	2.96	MS
7. Development and use of appropriate data gathering instrument(s) (e.g., valid and reliable questionnaire).	2.96	MK	2.96	MS
8. Use of appropriate data collection techniques/procedures.	2.75	MK	2.79	MS
9. Data management.	2.79	MK	2.88	MS
10. Data analysis/use of appropriate statistical tools based on the level of measurements and analysis needed.	2.61	MK	2.57	MS
11. Presentation of research findings.	3.04	MK	3.04	MS
12. Discussion of research findings.	3.00	MK	3.09	MS
13. Drawing of conclusions based on research objectives and findings.	2.92	MK	2.96	MS
14. Writing of research abstract based on standard formats (200 – 250 words abstract).	3.04	MK	2.79	MS
15. Referencing/citing reviewed literature using APA/MLA/Harvard style.	2.92	MK	2.71	MS
16. Writing publishable research/scientific paper.	2.67	MK	2.50	LS
Overall Average Weighted Mean	2.96	MK	2.90	MS

Legend: MK – Moderately Knowledgeable; MS – Moderately Skilled; LS – Lowly Skilled

Table 5. Problems Encountered in Conducting Research (n=11)

Problem	f	%
1. Lack or minimal funding support from the University to conduct the research study/project.	9	81.82
2. Non-completion of the research on time due to:		
a. Teaching overload	10	90.91
b. Duties and functions inherent to designation	10	90.91
c. Too many school activities.	6	54.55
d. Personal activities not related to my functions as faculty member	5	45.45
3. In-availability of facilities and equipment to conduct the research procedures/activities.	8	72.73
4. Difficulty in gathering pertinent data to answer the objectives of the study.	3	27.27
5. Difficulty in data management, analysis, and preparation of the final output.	4	36.36

Note: Only those who have conducted research were considered in this area.

The level of knowledge and skills of the faculty members on the different processes of research was found low; this could explain why very few are doing research which in return contributes to low research productivity. As reiterated, there is a need for them to undergo seminars, training, and workshop on research to improve or enhance their capabilities in the conduct of research.

The faculty members have encountered problems in their conduct of research as presented in Table 5. Lack or minimal funding support from the University to conduct the research study/project was encountered by 81.82% of those who have conducted research. On the other hand, due to their designations and teaching overload, 90.91% of those who have conducted research said that they were not able to complete their

research on time. In-availability of facilities and equipment was also one of the reasons that brought difficulty in the conduct of research. Results show that financial and physical resources are the major causes or contributors of problems why faculty members experienced difficulties in their conduct of research. The impact of research, administrative practices, inter-institutional collaboration, institutional research strategy, financial reward system, infrastructure, the presence of ethical policies, and the availability of research funding as research culture exist moderately in universities [4].

Table 6. Reasons for Not Conducting Research

Reason	f	%
1. Lack or minimal funding support from the University to conduct the research study/project.	4	36.36
2. Non-completion of the research on time due to:		
a. Teaching overload	7	54.55
b. Duties and functions inherent to designation	6	45.45
c. Too many school activities.	5	36.36
d. Personal activities not related to my functions as faculty member	4	27.27
3. Lack of skills to do research.	3	18.18
4. Doing research is not my priority.	2	36.36
5. I do not see the importance of researching with my profession.	4	36.36

Note: Faculty members have multiple responses

Staff qualifications, research environment, funding, and time available to staff could predict significantly the research output by the university staff [8]. School administration plays no role in improving research productivity [6]. In state universities and colleges in the Philippines, research culture research climate, financial support, and other incentives, technical support has no significant effects on research productivity [7]. However, these are found to be some of the reasons why faculty members of state universities are not doing research.

CONCLUSION

Faculty members of state universities have very low research productivity. This could be attributed to their moderate knowledge and skills with the different research processes. Teaching overload and having too many duties and functions attached to their

designations are the number one factors that affect their research productivity.

REFERENCES

- [1] Jeffrey E. Hoyt, Susan R. Madsen, Scott C. Hammond, and James W. Fenton. "Tracking Faculty Research Productivity: Analysis of a Survey Instrument" *International Journal of Applied Management Education and Development* 4 (2008). Retrieved from <https://goo.gl/g5tJh3>. August 12, 2016.
- [2] Creswell, J.W. (1986). 'Measuring Faculty Research Performance'. San. Francisco Jossey-Bass
- [3] Gonzalez-Brambila , C. & Veloso, F. (2007). The Determinants of Research Productivity: A Study of Mexican Researchers. *Research Policy*, 36, 7, 1035-1051. Retrieved from: <https://goo.gl/9VRD4x>
- [4] Salazar- Clemena RM & Almonte- Acosta SA (2007) *Developing Research Culture in Philippine Higher Education Institutions: Perspectives of University Faculty*. Paper
- [5] Wichian, S. N., Wongwanich, S. & Bowarnkitiwong, S. (2009). Factors Affecting Research Productivity of Faculty Members in Government Universities: Lisrel and Neural Network Analyses. Retrieved from <https://goo.gl/kCDfAw> presented at the Regional Seminar 'Competition, Cooperation, and Change in the Academic Profession: Shaping Higher Education's Contribution to Knowledge and Research', Hangzhou, China, 18– 19 September 2007
- [6] Ju, Ming, "The Impact of Institutional and Peer Support on Faculty Research Productivity: A Comparative Analysis of Research Vs. Non-Research Institutions" (2010). *Seton Hall University Dissertations and Theses (ETDs)*. Paper 1608.
- [7] Rolliver M. Baciles. Research Productivity among Selected State Universities and Colleges - Teacher Education Institutions in Central Luzon, Philippines. www.ijrs.com. *International Journal of Innovative Research and Studies*. 3 (6).
- [8] Sulo T. Kendagor, R. Kosgei D, Tuitoek D., and Chelangat S. (2012). Factors Affecting Research Productivity in Public Universities of Kenya: The Case of Moi University, Eldoret. *Journal of Emerging Trends in Economics and Management Sciences (JETEMS)* 3(5): 475-484. © Scholarlink Research Institute Journals, 2012 (ISSN: 2141-7024). jetems.scholarlinkresearch.org
- [9] Quimbo, MA.T. and Sulabo, E.C. (2014). Research productivity and its policy implications in higher education institutions. *Studies in Higher Education* Vol. 39 , Iss. 10,2014. <https://goo.gl/rDuxoJ>