

Predictors of Research Dissemination and Utilization in State Higher Education Institutions in Region IV, Philippines

MARIO A. FETALVER, JR.

mario30phd@yahoo.com

College of Arts & Sciences
Romblon State University

Date Submitte: Oct. 15, 2010

Plagiarism Detection: Passed

Final Revision Complied: Nov. 18, 2010

License No. 944146510808541

Original: 94%

Abstract - The study focused on the determinants that influence research dissemination and utilization in State Higher Education Institutions in Region IV, Philippines. The needed data were collected using the survey questionnaire. The statistical tools such as weighted mean, standard deviation, frequency counts, percentage, ranks, and stepwise multiple regression analysis were used in the study. The respondents involved 289 informants; 67 of them were administrators completely enumerated, and 222 faculty members chosen by stratified proportional random sampling. Findings on research dissemination indicated that there is a need to strengthen the scheme of effective communication or diffusion of research outputs. However, findings on research utilization reveal to the much extent of its user but it calls for a mechanism to monitor and evaluate research utilization. Regression relationship analysis showed that there is significant relationship between research dissemination and research rewards, position, age, leadership skills, library facilities, agenda and priorities in research, goals and objectives in research and foreign funds. While, research utilization is predicted by their attitudes and

interest in research, research networks and linkages, age, research training and library and library facilities, holdings and materials.

Keywords - Research improvement, human and material resource factors, research dissemination and utilization

INTRODUCTION

The challenge of globalization demands critical attention to research in order to generate knowledge and discover new strategies for improving the quality of human life. Through the years, however, research that could help in their solution seemed to have been neglected and undervalued. There are administrators of higher education institutions who believe that their sole primary function is instruction and that research is expensive, time-consuming, and not affordable. Research, however, is meaningful and productive. Its benefits are gauged in terms of the extent and direction of the growth and development of a growing society like the Philippines (Arcelo, 1994). Studies in the 1990's show that higher education institutions play a significant role in conducting productive research. Colleges and universities are looked up to for research that generates new knowledge and technologies. These institutions of higher education are seats of dynamic research activities and centers of creativity, development and excellence where recent theory and practice in various fields of human endeavor and data and information are readily available for public utilization. This study attempts to study the determinants of research dissemination and utilization in state higher education institutions in the Philippines.

OBJECTIVES OF THE STUDY

This study aimed to find (a) the predictors of research dissemination and utilization in State Higher Education Institutions in Region IV, Philippines, and (b) whether the following factors such as institutional research program, human resource and material resources predict the research dissemination and utilization in state higher education institutions in the Philippines.

CONCEPTUAL FRAMEWORK

The study is based on the belief that research and studies (Deza, 1999) should be conducted primarily for the delivery of quality education in order to cope with the challenges of globalization or internationalization (United Nations Educational, Scientific, and Cultural Organization-UNESCO, 1999), and to fulfill the research function of HEIs in the Philippines as decreed in the Education Act of 1982 (as cited by Banaag, 1994), to advance knowledge through research, and apply new knowledge to improve the quality of human life and respond effectively to fast changing societal needs and conditions of this millennium. Pursuant to Republic Act No. 7722, Commission on Higher Education (CHED) in 1994 was mandated to ensure and protect the advancement of learning in higher education institutions through productive and useful researches.

HYPOTHESIS

There are variables that predict the research dissemination and utilization in state higher education institutions in Region IV, Philippines.

METHODOLOGY

Research Design. The study made used of the descriptive-correlational method. This aims to describe, assess, and determine the research dissemination and research utilization as influenced by

independent variables. *Subject and Respondents of the Study.* There are two groups of respondents who are involved in the study. This group of informants involved 289 respondents including 67 administrators and 222 faculty members involved in instruction and research. *Sampling Techniques.* Complete enumeration is used in the choice of 67-administrator respondents, and the stratified proportional random sampling is used to get the final sample of the 222-faculty respondents of the study. *Research Instrumentation.* Data gathering was done using the two sets of survey questionnaires. One set was administered to the administrators and the other set to the faculty members. *Statistical Design and Treatment of Data.* The weighted mean, frequency counts, and percentages, were used to describe the variables in the study. Stepwise Multiple Regression Analysis was used in determining the significant determinants that predicted the research dissemination and research utilization in Region IV, Philippines.

III. Results and Discussion

On research dissemination. *Figure 1* revealed that 19.72% of them reacted that their research outputs are disseminated through research journals. Twelve or 4.15% said that generated knowledge is disseminated through newsletters and 9 or 3.11% through bulletin. 9 or 3.11% through bulletin. 9 or 3.11% through bulletin.

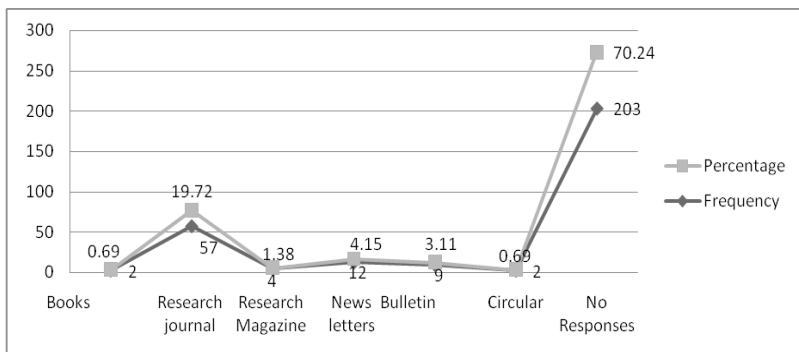


Figure 1. Research Dissemination as to Publication media

The finding implies the difficulty of publishing research outputs through these types of research channels. Reasons are insufficiency of funds; unawareness of the research activities on the part of the researchers; and hard-up leadership skills in managing research (Wolf, 1990 in Rowey, 1999). The data also indicate that only 29.75%, which is 25-49% of the research outputs are disseminated through these channels. The disseminated outputs only imply “low or 50% less than the minimum required.”

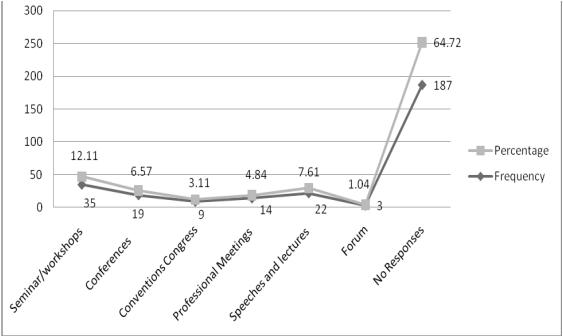


Figure 2. Research Dissemination as to Academic Works

It was shown in the academic works (figure 2) that research outputs were disseminated through these media (seminar-workshops, conferences, convention congress & congress, professional meetings, speeches and lectures and forum with 35.28 percentages which indicate that 35.28 percent is in the range of 25-49% of researches disseminated. This means that the dissemination is low or 50% less than the minimum standard required.

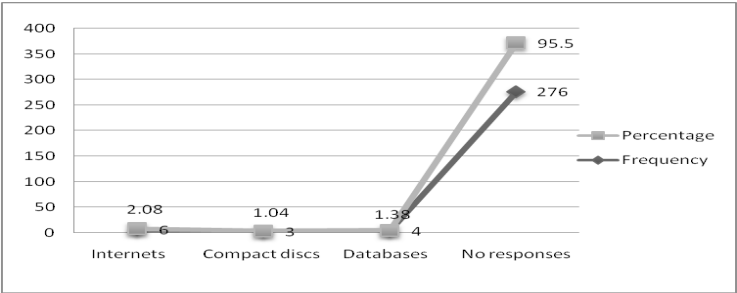


Figure 3. Research Dissemination as to WWW Channels

In like manner WWW Channels in figure 3 showed a 4.5% indicating that research outputs were disseminated through these channels. It means very low (less than 25% of the researches are disseminated) kind of dissemination.

Extent of research dissemination. Getting research findings known to society is critical for utilization and use. Researchers have the duty to ensure that research dissemination takes place (Ricafort, 1995) as table 1 indicates it. It reveals that the overall average weighted mean of 2.74 of the group reactions, which shows the weighted mean ratings of 2.93 for administrators and 2.55 for faculty, is to a “much” extent. The highest ranked indicator reveals that administrator (3.00) and faculty (2.63) respondents “write a technical research report” to a “much” extent. As they “disseminate research output in a locally available materials” and produce research materials for instruction/training, operation purposes” to a “much” extent.

Table 1: Extent of research dissemination of research outputs

Research Dissemination Indicators (1-4 Scale)	Weighted Mean	Descriptive Rating
1 Write a technical research report.	2.82	Much
2 Disseminate research output in a locally available materials	2.80	Much
3 Produce research materials for instruction/training, operation purposes.	2.77	Much
4 Write a research paper in publishable form.	2.72	Much
5 Publish a research output.	2.69	Much
6 Present research output and findings in different academic media channels.	2.65	Much
<i>Grand Mean</i>	2.74	Much

Extent of research utilization. Research that is relevant has immediate utility, practicality, and relationship to the real and everyday problems of society. *Table 1 revealed* grand mean of 2.96, indicating the use of research outputs as to much extent..

Table 2: Extent of research utilization of research outputs

Research Utilization Indicators (1-4 Scale)	Weighted Mean	Descriptive Rating
1 Uses research results to solve problems.	3.03	Much Extent
2 Utilize findings to improve the instruction.	3.02	Much Extent
3 Utilize research results to develop community and extension services.	3.00	Much Extent
4 Utilize the research outputs to improve and develop curriculum.	2.97	Much Extent
5 Interpret research findings accurately.	2.97	Much Extent
6 Utilize research output for the development of administrator, faculty and staff of research.	2.92	Much Extent
7 Use research results to formulate and make policies.	2.88	Much Extent
8 Promote the production of devices	2.86	Much Extent
Grand Mean	2.96	Much Extent

It can be noted from the table that respondents “use research results to solve problems” (wm=3.03) indicating much extent in the use of research outputs. That is, coping with change in schools needs knowledge and information, and problems are solved using the generated knowledge through research (Navarro, 1997). As Bennet (1983) in Deza (1999) puts that unused knowledge is useless knowledge. One indicator of research utilization implies “the improvement of the instruction per se.” Research can support the education through the improvement of instruction and monitor important instructional concerns (Gray, 1998 in Katz and Coleman, 2001). Extension services

and community development is one of the higher education's functions aside from research and instruction and is integral part of research utilization (Cuyno, 1989).

Regression Analysis between Research Dissemination and determinants

Publication Media. The best predictors of the research dissemination in terms of publication media were rewards ($\beta=.3024$, $p<.01$) . This implies that rewards trigger them to publish their outputs in this type of research channels. This concurs on the study of Chamberlain and Tang (1997) that productive researches and disseminated are positively influenced by the rewards be it extrinsic or intrinsic ones. More likely, the dissemination of researches is significantly influenced by the Leadership Skills ($\beta=.1026$, $p<.05$) in managing and monitoring research activities of the respondents. This affirms the belief of Ricafort (1995) that disseminating researches require leadership skills. Able leadership can possibly encourage faculty researchers to use different publication media in disseminating their research outputs.

It can be noted that the availability of Library Facilities, ($\beta=.0940$ significant at .0769 levels) implies the development of research culture through strengthened dissemination of research outcomes. The influence implies that those who published researches also depend on the adequacy of library holdings and facilities. The new knowledge being flourished by the presence of recent materials found in the library are as important as publishing it. However, position held by the respondent ($\beta= -.2629$, $p< .01$) and Age ($\beta= -.0991$, $P <.05$) negatively and significantly influenced research dissemination as to Publication Media. The impact of Position simply means that respondent-administrators and faculty regardless of their position can publish research outputs. The figures 19.1302 very significant at .0000 levels reject the joint hypotheses that the variables Rewards, Position, Leadership Skills, Library Facilities, and Age do not influence Research Culture as to research dissemination in terms of using the publication media. The 21.22% of the variance of the dependent variable is explained by these predictors.

Academic Works. It is also depicted in the same table 4 the

predictors of research dissemination such as rewards (beta=.2554, p<.01), position (beta = .1499, p<.01), agenda & priorities (beta=.1421, p<.0144), and library facilities (beta=.1026, p<.05). As Katz and Coleman (2001) attributed research output dissemination to rewards, incentives and recognition (RIR) provided by the school. However, the quality of disseminated research output can be characterized as to the recent availability of library facilities and holdings. New knowledge and information explored from the library is a big help to make quality types of researches. The low quality type of library facilities would mean a poor type of research dissemination to the society. **WWW Channels.** The presence of modern research technologies implies quality type of research diffusion as variables foreign funds with beta=.1636, p<.01), position (beta=. 1277, p<.05), and goals and objectives with beta=. 0399) also influenced research dissemination.

Table 3: Stepwise multiple regression analyses between research dissemination and the on independent variables, n = 289

Independent variables	Research Dissemination										
	Publication Media			Academic Works			WWW Channels			Extent of Dissemination	
	B	Beta	Level	B	Beta	Level	B	Beta	Level	Beta	Level
Agenda & Priorities				.3826	.1421*	.0144					
Goals & Objectives							.1558	.1222*	.0399		
Rewards	1.2860	.3024**	.0000	1.6470	0.2554**	.0000					
Gender										-1.1032	-.0952* .0464
Age											-1.1196 -.2242* .0000
Civil Status											
Position	.2847	-.2629**	.0000	.2462	.1499**	.0089	.1001	.1277*	.0326	.6774	.2301** .0000
Research Training										.9730	.2649** .0000
Leadership Skills	.0527	.1026*	.0407							.2909	.2084** .0002
Foreign Funds							.1750	.1636**	.0049		
Library Facilities	.1389	.0940*	.0469	.2302	.1026*	.0336					
<i>R Square</i>	0.2122			0.1746			0.0630			0.2793	

<i>F Stat</i>	19.1302	15.0149	6.3927	21.9400
<i>Sig. of F</i>	.0000	.0000	.0004	.0000
<i>Decision</i>	Reject Ho	Reject Ho	Reject Ho	Reject Ho

Legend: * Significant at 5% ($p < .05$), ** Very Significant at 1% ($p < .01$)

Extent of Dissemination. *Table 3* presents the regression analysis between the extent of dissemination and the independent variables. The extent of dissemination is best predicted by five factors, namely (a) Research Training (beta=. 2649, $p < .01$), (b) position (beta=. 2301, $p < .01$), (c) Leadership skills in research (beta= .2084, $p < .01$), Age (beta= -.2242, $p < .01$) and Gender (beta= -.0952, $p < .05$). The figures 21.940 highly significant at .0000 do accept the joint hypotheses that these variables do influence research culture as to the extent of research Dissemination.

Regression Analysis between Research Utilization and the Determinants

Table 4 reveals that research utilization is predicted by (a) attitudes and personal interest on research (beta= .2785, $p < .01$), (b) Age of the respondents (beta = -.1725, $p < .01$), (c) linkaging and networking (beta= .2020, $p < .01$), (d) research training attended (beta =.1814, $p < .01$), (e) position (beta =.1526, $p < .01$), and (f) library facilities of the school (beta = - .0921, $p < .05$). The relevance of research has its immediate utility, practicality and significant relationship to the real and everyday problems of society (Bramble and Mason, 1989). The influence of attitudes and personal interest in research indicates positive behavior as regards knowledge in the use of research outputs. Linkaging and networking imply access to disseminating research necessary for its utilization. However, those who are in the position to publish their research output should do so, thereby providing the necessary venue for research utilization.

Table 4: Stepwise multiple regression of research utilization on independent variables, n = 289

Independent Variables	Research Utilization		
	B	Beta	Level
Linkage and Networking	.7447	.2020**	.0010
Age of the Respondent	-.1011	-.1725**	.0007
Position	.4941	.1526**	.0062
Attitudes and personal interest in research	.7649	.2785**	.0000
Research Training Attended	.7325	.1814**	.0027
Library Facilities	-.4072	-.0921*	.0337
	<i>R Square</i>	0.3300	
	<i>F Stat</i>	23.1362	
	<i>Significance of F</i>	.0000	
	<i>Decision</i>	Reject Hypothesis	

Legend: * Significant at 5% (p< .05), ** Very Significant at 1% (p< .01)

CONCLUSIONS

The real test of any research endeavor is the dissemination of research findings through different media channels such as publication media, academic works, and worldwide web channels, that is, an indication that they are aware of the effective dissemination and utilization of research findings. Regression analysis showed that research dissemination as to publication media is predicted by rewards, age, position, leadership skills, and library facilities. However, research dissemination in terms of academic works is predicted by agenda and priorities, rewards, position, library facilities. While research dissemination through website channels is predicted by goals and objectives, position and foreign funding. On the other hand, the extent of dissemination of research is predicted by the rewards, their gender, position, research training, and leadership skills of the respondents. Research utilization is influenced by the linking and networking, age of the respondents, position, attitudes and interest, research training and library facilities.

RECOMMENDATIONS

The researcher recommends the following recommendations:

1. The system of research networks and linkages should be given much attention and prioritization be it local, national or international, because developing the research capacity would mean effective means and systems of networking and linking.

2. Findings and results must known to society. Research findings must be disseminated through the following media: books, research journals, research magazines, newsletters and news releases, circulars and bulletin, seminars, workshops and conferences, professional meetings, speeches and lectures, internet, compact discs, and databases.

3. The refereed research journals and e-journals and modern technology should be provided and be made accessible those who conduct researches for effective and wider research dissemination.

4. The system of research networks and linkages must be prioritized by the institution. It is recommended that the administrators and faculty should (if possible) be sent oftentimes to attend trainings and seminars/workshops in relation to research. Possibly, more research trainings and seminars must be provided for them to enhance their skills.

LITERATURE CITED

- Arcelo, A. A. (1998). Research in Private Higher Education. National Centennial Congress on Higher Education: Higher Education in the Philippines From the Revolution to the 21st Century. Manila. pp. 1-6.
- Banaag, I. A., (1994). Research Capability and Productivity of A State College: An Institutional Assessment. Dissertation. De La Salle University, Taft Avenue Manila.
- Bramble, W. Jr. and E. J. Mason. (1989). Understanding and Conducting Research: Applications in Education and the Behavioral Sciences. "Some Perspectives on Research and Reality." McGraw-Hill Book Company, New York. Pp. 425.

Challenges of Globalization. UNESCO at the dawn of the 21st century 1988-1999.

Chamberlain, Mitchell and Thomas Tang. Attitudes Towards Research and Teaching: Differences Between Administrators and Faculty Members. Edited by Leonard Blair. *Journal of Higher Education*. Ohio State University Press. vol. 68, No. 2, March-April 1997, pp. 212-225.

Commission on Higher Education. (1998). CHED Research Priorities and Grants. National Higher Education Research Agenda (NHERA - 1998-2007). Pasig city. pp. 1-7.

Cuyno, R. V. (1993) Research Planning, Evaluation and Monitoring in Obnamia, C. (Ed) *Research Management*. TUP University Research and Development Services, Manila, pp. 50-53.

Deza, F. C., (1999). Research Capability, Productivity, and Utilization in the Ten Saint Paul Higher Education Institutions. Dissertation. De La Salle University, Taft Avenue, Manila.

Katz, E. & M. Coleman. (2001). The Growing Importance of Research at Academic Colleges of Education in Israel. *Education + Training*. Vol. 43 No. 2. MCB University Press. pp.82-93.

Ricafort, N. C. (1997). Research Utilization in Organizations & Research Dissemination and Utilization. *LNU Research Journal*, Leyte. Vol. 4 October. pp. iii-5

Rowey, J. (1999). Developing Research Capacity: The Second Step. *International Journal of Educational Management*. Vol. 13 Number 4. MCB University Press. pp.208-212.

FOR INQUIRIES, WRITE TO:

The Managing Editor

Liceo Journal of Higher Education Research

Liceo de Cagayan University

Cagayan de Oro City, 9000 Philippines

Email: liceojournal@yahoo.com.ph

Fax: 63+ (08822) 727459

URL: <http://www.ejournals.ph>

<http://www.liceojournal.com>



Copyright 2010