Factors Related to Low Research Productivity at Higher Education Level

Muhammad Zafar Iqbal Research Associate Department of Education International Islamic University Islamabad, Pakistan

Dr Azhar Mahmood (Corresponding author) Department of Education International Islamic University Islamabad, Pakistan E-mail: azhar.mahmood62@yahoo.com

Abstract

Research is vital and necessary part of modern university education; universities are producers of new knowledge. Role of universities is different from the 19th century; demands of the 21st century are enormously higher. The purpose of study was to find out the causes of low research productivity at university level. Population of the study was faculty members working at University. Sample consisting of 232 male and female faculty members was selected through the stratified sampling technique. Quantitative research methodology was adopted; data were collected through questionnaire. Data collected through the questionnaire was analyzed by using the statistical methods. To describe the data at the initial stage percentages were calculated. At the second stage Mean score, SD and Chi-Square, the test of significance was applied. The level of significance selected for the study was 0.05. On the basis of findings, the conclusions were drawn that extra teaching load, performance of administrative duties along with academic duties, lack of funds, nonexistence of research leave, negative attitude of the faculty towards research, lack of research skills, non availability of latest books, absence of professional journals, less number of university own journals, are the major causes of low productivity and reduced the research productivity of the university faculty members

Keywords: Research, Productivity, Higher education, University

1. Introduction

The role of universities is different from the 19th century; demands of the 21st century are very much higher. Universities are considered as producers of new knowledge. Role of university academicians is not limited to teaching only. Research is becoming vital and necessary part of modern university education. Universities are considered as modern entrepreneur engine and generator of knowledge through research. Research publications enable academicians to earn better salary package and get better tenure. University teachers considered that research and teaching are interlinked. University professors are many times considered as researchers. Involvement in research activities always supports teaching. Participation in research polished their thinking and creative abilities. Writing of research papers enables university teachers to quickly understand the originality & quality of the research work. According to Cresswell (1986), teaching and research are equally important for university teachers; they must give equal attention to research and teaching as a part of their duty, because participation in research directly improves the quality of teaching. Research is required for the improvement of general knowledge, research enable the academicians to understand their own selves, to analyze their own abilities, research also enable the academicians to fully understand their discipline, which is imperative for effective teaching.

Investigation of factors which bang the research productivity of the university faculty members is of greater interest to the academicians trying to preserve their academic status and to the University management to provide a smooth and progressive climate to the academicians. Although this study focused at one university for the rationale of time and scale, the study has been planned in such a way that it is valuable to other universities

facing similar situation. The study is supportive to the university management to formulate new research policy. This study provides new perspectives on the issue of publications and courteous for the faculty members having no publications to enhance research productivity. This study brings to light the cause of low research productivity. The objective of the study was to find out the causes of low research productivity at university level.

2. Review of Related Literature

Research is a continue process, in which we search for truth or try to reach near the reality. Research highlights new problems, collects data or information about those problems draw conclusions and make recommendations. Researcher carefully investigates data, analyze data, explain data and verify the facts, research corrects the mistakes, research add and advance the knowledge. Knowledge gained through research is always objective and scientific. Research based knowledge is always logical, rational and based on experience. Rashid (2001), Research is a conscious effort to collect information, to verify the information and to analyze the information. Research is an organized effort to solve the complex and teasing problems.

Research Productivity is combination of two words "Research" and "Productivity. "Research" means very careful, observant, and vigilant study or investigation of phenomena, particularly to search and find out new particulars, information and facts. While "Productivity" means production or out put, produced in duration of time. Both the words means different to different people. With reference to higher education, research productivity means, publications of papers in professional journals, in shape of books or presentation of research papers in conference proceedings. To work on projects, publication of monographs, development of experimental designs, production of artistic or creative works.

Research productivity and research activity are interrelated. Research means to conduct research, collecting data, analyzing data, productivity means writing, reading and publication of research reports in professional referred journals, displaying on the web or to make it known to public through any other mean, in shape of books or making its presentation on the television or radio. According to Creswell (1986), Research Productivity includes research publications in professional journals and in conference proceedings, writing a book or chapter, gathering and analyzing original evidence, working with post-graduate students on dissertations and class projects, 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

According to Weidenborner, (2007) successful research project is more than collection of information, it requires planning ahead, which sources to consult, what kinds of notes to take, and how to put it all together in to an effective paper, research process involves three essential operations.

Searching—you must search harder than most people realize for a good topic, rarely can you find a topic merely by thinking about the matter. Then you must learn how to find the information you need, starting with the library's catalog of sources.

Reading –this operation involves more than understanding the materials you are reading; you must learn how to recognize what information is likely to be truly relevant to your research goals.

Writing—since you will be dealing with a great many ideas and pieces of information, most of which will have come from your sources, the ability to organize intelligently may count as much as, if not more than, a fine writing style. But that does not mean that style doesn't count, as you well know.

According to Isani (2005), Universities are like green houses; where various types of seeds grow in to plants and are send out throughout the world. University Education enables students to cope with the challenges of the dynamic world. University Education transmits the past controls the present and predicts the future. Universities are institutions of higher education and research, which awards academic and professional degrees in wide range of subjects, from graduate level to the post-doctorate level. Adeeb (1996) says that the purpose of Higher Education is to expand the knowledge and second is to establish a relationship between theory and practice. Nirman (2007) says that the mission of higher education is to advance knowledge, to create knowledge, to disseminate knowledge through research and to provide a service to the community. A relevant expertise assists societies in cultural, social and economic development, and promotes scientific and technological research in the social sciences, humanities and in the creative arts. Higher education means the education which is delivered by the universities, colleges and other degree awarding institutions. Higher education starts with inputs higher education produces thinkers, philosophers and persons with profound and unfathomable feelings. Higher

Education always plays an indispensable role for societal development. Presently concept of higher education is getting changed. Research is a necessary part of higher education.

According to Geiger, (1986) Higher education sector in the twenty-first century is very different from that of the late nineteenth and twentieth centuries. Universities now perform important roles as the guardians of public knowledge. Universities are considered as an important part of the modern entrepreneur, universities are recognized as generators of scientific and technological knowledge. There are changes in the internal and external environments of academic institutions that have resulted in significant differences in the ways in which the mission of institutions are now expressed. University teachers have to face many problems to carry out their academic responsibilities in day to day life. Some factors have special relevancy to produce research papers and to own research projects. These may include environmental factors, institutional factors, carrier development factors or demographic factors as martial status, age, teaching load, availability of sources, e.g. internet, library, availability of funds, visiting abroad facility, attitude of the administration, attitude of colleagues, appreciation by the Dean, Chairman, Chairperson, personal interest, social activities, institutional policies, financial status, caliber of the academicians, level of job satisfaction and may be few more. Simon (1974) studied the working habits of scientists and found that renowned scientists utilize most of their time for research work and deal with real problems. Woods (1990) conducted a study with teaching staff of Australian universities and found that motivation, ambition, self discipline, ability to work are important factors which effect research productivity of university academicians. Renowned academicians can manage heavy work load, spend time to conduct research, have intellectual curiosity, love to read and write. University teachers conduct research studies to fulfill the promotion criteria. Lack of reward, lack of confidence, fear of judgment by peers, contribute to reduce the research productivity of university academicians.

Maruyama (1992) says that, one final way in which research begins is from the availability of research funds. Federal & State funding priorities channel research in specific directions and encourage educational researchers to form partnerships to work in the desired areas. According to Whiston (1992), by and large funds are distributed to the universities according to their capacity to conduct fruitful research, quality of facilities, presence of research staff and graduate students. There is an obvious interrelationship between research grants and university research capacity. Hertzberg (1959) conducted a study the factors of the working place and found that most absorbing thing to the employees is the environment of the institution. People spend a larger part of the day while discussing about the working place, people talks about work in many ways, sometime, they discuss about colleagues, their personalities, about the attitude of seniors or juniors, few people like to discuss about the attitude of head of department. All such discussions show that how much people are interested to their working places. Even little time, we do not need to ask a person about his her organizational climate. Just his or her views are enough to know the level of job satisfaction. We can easily guess whether the employee is happy and contented or otherwise, nature of our feelings reflect our attitude towards the working place

3. Methodology

Population of the study was comprised the 476 faculty members working at International Islamic University, Islamabad, Pakistan on regular, Tenure Track System, contract and adhoc basis. This study was quantitative in nature, sample was taken from the Deans, Chairmen, Chairpersons, Professors, Associate Professors, Assistant professors, Lecturers, Teaching/Research Associates and Programme Coordinators working at International Islamic University, Islamabad. Sample was drawn by applying the stratified sampling technique, out of four hundred and seventy six faculty members working at International Islamic University. Fifty percent academicians i.e. (232, of the total number) from each stratum were selected as sample. Questionnaire was developed for data collection, after reviewing the related literature, in consultation of International Islamic University manual and keeping in view the requirements of the Higher Education Commission, reviewing the previous related researches and in consultation with few academicians. The questionnaire was developed at Likert's five point scale, and consists of 40 items. Five options were given as SDA=1, DA=2, UD=3, SA=4 and SDA=5. Data were collected by administering the questionnaire developed for the study. To distribute the questionnaire, researcher personally visited all the departments and faculties of the International Islamic University. Few faculty members returned the questionnaire at the spot. Many faculty members were reminded and requested to return the questionnaire. After one week researcher remind the faculty members to return the questionnaires. 210 out of 232 questionnaires were returned. Three incomplete questionnaires were not included in the analysis. So 207 questionnaires were appropriate and provided the required data.

4. Conclusions

Table No.1shows that the significant number 94 (45%) of the responses regarding teaching load is a hurdle in writing and presentation of research papers goes to the option agree, while other responses lie between strongly agree, undecided and strongly disagree. Table No.2 shows that Mean score 4.16 depicted that the significant number of responses are agreed about the fact that performance of administrative duties along with academic duties is a cause of low research productivity. Table No.3 shows The Mean score 4.41 illustrates that the significant number of responses goes to the option strongly agree and revealed that knowledge of Statistics, research methodology and research skills are necessarily required to conduct research studies and to write research papers. Table No.4 shows that Mean score 3.76 depicted that the significant number of responses are agreed that attitude of the Faculty members and their interpersonal relations have its affect on their research out put. Table No.5shows that Mean score 79.13 is highest one and depicts that majority of the faculty members, desire to have funds to conduct researches, along with research leave, faculty members also desire to have access to latest books and journals, they want to reduce their teaching load and desire to attend seminars and conferences on research productivity.

5. Recommendations

University faculty members should given less teaching load, smooth and progressive environment should be provided to them. University teachers should be given no administrative duties along with their academic duties. Administrative duties may be given to the supportive/clerical staff. Faculty members need to manage their time properly and they must acquire basic knowledge of Statistics. Faculty members are required to comprehend the research methodology and they must develop research skills, which are necessarily required to conduct research studies and to write research papers. University administration is required to arrange training programmes for the new faculty members to train them to conduct research and write research papers. Teaching and Research are interlinked so faculty members are necessarily required to develop their interest to conduct research studies. University academicians are required to adopt positive attitude. University is required to provide funds to its faculty members to conduct research. Faculty members must be granted leave in a period of three years. Heads of the departments, Chairmen, Chairpersons, Deans and Directors must issue appreciation letters to the faculty members, who present their papers at conference proceedings or publish their work in recognized journals.

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| where | where fo=observed frequency, fe= expected frequency, χ^2 is a symbol of Chi-Square Test | | | | | | | | | | |
|-------|--|------|---------|---------------|---------------|-------|---------|----------|------|--|--|
| | fo | fe | fo – fe | $(fo - fe)^2$ | $(fo - fe)^2$ | Mean | SD | χ^2 | df | | |
| | 10 | IC | 10 - 10 | (10-10) | fe | Score | 50 | | | | |
| SDA | 14 | 41.4 | -27.4 | 750.76 | 18.13 | - | 52 1.24 | 117.95 | 9.49 | | |
| DA | 41 | 41.4 | -0.4 | 0.16 | 0.00 | | | | | | |
| UD | 6 | 41.4 | -35.4 | 1253.16 | 30.27 | 3.62 | | | | | |
| Α | 94 | 41.4 | 52.6 | 2766.76 | 66.83 | | | | | | |
| SA | 52 | 41.4 | 10.6 | 112.36 | 2.71 |] | | | | | |
| Total | 207 | | | | 117.95 | | | | | | |

Table 1. Responses of the Respondents about Teaching Load is a Hurdle in Writing and Presentation of Research Papers

Level of significance 0.05

Table 2. Responses of the Respondents about Performance of Administrative Duties along with Academic Duties Affect Research Productivity of Faculty Members

| where | where fo=observed frequency, fe= expected frequency, χ^2 is a symbol of Chi-Square Test | | | | | | | | | |
|-------|--|------|---------|---------------------|---------------------------------------|------|------|----------|------|--|
| | fo | fe | fo – fe | $(\text{fo -fe})^2$ | $\frac{(\text{fo -fe})^2}{\text{fe}}$ | Mean | SD | χ^2 | df | |
| SDA | 5 | 41.4 | -36.4 | 1324.96 | 32.00 | | | | | |
| DA | 11 | 41.4 | -30.4 | 924.16 | 22.32 | | | | | |
| UD | 8 | 41.4 | -33.4 | 1115.56 | 26.95 | 4.16 | 0.91 | 210.08 | 9.49 | |
| Α | 104 | 41.4 | 62.6 | 3918.76 | 94.66 | | | | | |
| SA | 79 | 41.4 | 37.6 | 1413.76 | 34.15 | | | | | |
| Total | 207 | | | | 210.08 | | | | | |

Level of significance 0.05

Table 3. Responses of the Respondents about Knowledge of Statistics, Research Methodology and Research Skills are Necessarily Required to Conduct Research Studies and to Write Research Papers

| where | where fo=observed frequency, fe= expected frequency, χ^2 is a symbol of Chi-Square Test | | | | | | | | | | |
|-------|--|------|---------|-------------------------------|--|------|-------|----------|------|--|--|
| | fo | fe | fo – fe | $(\mathrm{fo}-\mathrm{fe})^2$ | $\frac{(\text{fo - fe})^2}{\text{fe}}$ | Mean | SD | χ^2 | df | | |
| DA | 7 | 51.8 | -44.8 | 2007.04 | 38.75 | | | | | | |
| UD | 10 | 51.8 | -41.8 | 1747.24 | 33.73 | | | | | | |
| Α | 81 | 51.8 | 29.2 | 852.64 | 16.46 | 4.41 | 0.738 | 152.10 | 7.81 | | |
| SA | 109 | 51.8 | 57.2 | 3271.84 | 63.16 | | | | | | |
| Total | 207 | | | | | | | | | | |
| | | | | | 152.10 | | | | | | |

Level of significance 0.05

| where fo= | where fo=observed frequency, fe= expected frequency, χ^2 is a symbol of Chi-Square Test | | | | | | | | | | |
|-----------|--|------|---------|-------------------------------|--|------|-------|----------|------|--|--|
| | fo | fe | fo – fe | $(\mathrm{fo}-\mathrm{fe})^2$ | $\frac{(\text{fo - fe})^2}{\text{fe}}$ | Mean | SD | χ^2 | df | | |
| SDA | 3 | 41.4 | -38.4 | 1474.56 | 35.62 | 3.76 | 0.812 | 283.70 | 9.49 | | |
| DA | 18 | 41.4 | -23.4 | 547.56 | 13.23 | | | | | | |
| UD | 27 | 41.4 | -14.4 | 207.36 | 5.01 | | | | | | |
| Α | 137 | 41.4 | 95.6 | 9139.36 | 220.76 | | | | | | |
| SA | 22 | 41.4 | -19.4 | 376.36 | 9.09 | | | | | | |
| Total | 207 | | | | 283.70 | | | | | | |

Table 4. Responses of the Respondents about Attitude of Faculty Members and Interpersonal Relations have Its Affect on Research Publications

Level of significance 0.05

| Table 5. Suggestions | of the Respondents | to Remove the | Cause of Low | Research Productivity |
|----------------------|---------------------------------------|---------------|--------------|-----------------------|
| 88 | · · · · · · · · · · · · · · · · · · · | | | |

| | Opinion | Frequency | Percentage | Mean |
|-------|---|-----------|------------|--------|
| 1 | Allocation of funds and research leave | 6 | 2.9 | 2.91 |
| 2 | Provision of latest books and journals | 19 | 9.2 | 12.14 |
| 3 | Publication of university own journals | 3 | 1.4 | 13.59 |
| 4 | less teaching load | 18 | 8.7 | 22.33 |
| 5 | Arrangement of seminars and conferences | 15 | 7.7 | 29.61 |
| 6 | All of above | 102 | 49.3 | 79.13 |
| 7 | no opinion | 44 | 20.8 | 100.00 |
| Total | | 207 | 100.0 | |