Exploration of Intentions to Produce Research by Teaching Faculty Members: Purposes and Hindrances

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ABSTRACT

During the last few years Pakistani higher educational institutions (HEIs) are putting stress on production of research and for this purpose higher education commission of Pakistan (HEC) facilitating and acknowledging the academic institution which are producing research. This study discovers the research productivity of the teaching faculty members of the top ranked universities of Lahore, Pakistan. Quantitative method of research was deployed to explore research productivity, purposes of doing research and hurdles being faced during research production. Research articles and conference papers were explored as the most significant publication types while Lack of interest in research work and financial constraint were exposed as major hurdles.

Introduction

During the last few years, social recognitions and economic development of the countries are linked to research out put. Countries which have more institutional research are making progress. Ogbogu (2009) stated that internationally economic and social improvements are growing as due to research output, its application and the research has become integral factor in 21st century especially in universities. Allen (2012) narrated that universities are considering as knowledge economies for countries and the research or knowledge created by universities is also contributing to economic development.

Research production is connected to research productivity of the researchers in their fields or area of interest. Williams (2003) explained research productivity as research exertion and production to the extent of which a researcher produces research. Gonzalez, Metcalfe, Fontes, Fisher and Snee (2011) considered the research productivity as the number of published articles in journals for the period of the last three years.

University faculty members produce research for many purposes which could be for promotions, incentives, self-respect, inner satisfaction, compulsion, innovations and so on.

Hormiga, Perez, Diaz, Rodríguez and Diaz (2016) narrated in their study that Entrepreneurial Orientation (Risk tasking & innovativeness) had negative direct impact on research productivity which converts into significant positive impact through mediating role of knowledge sharing on researchers' performance.

While doing any task one can face hindrances which might be for some one to abscond from the process. There are many hurdles reported in the literature while doing research but what is local Pakistani perspective is missing. Alrahlah (2016) presented some factors like lack of research training and lack of awareness about research which cause the reduction in research.

To acceleration research productivity of teaching staff of the universities there are many measures to incorporate in policies and regulations of the higher education institutions. These could be formation of research groups, provision of literary facilities, availability of labs, mentors, and training programs. Kozhakhmet, Moldashev, Yenikeyeva and Nurgadeshov (2020) exposed in their study that training and development practices have direct positive effect on research output. Defazio, Lockett and Wright (2009) explained in their study that collaborations and networks significantly enhance research out put.

So, it is imperative to explore the major purposes for which teaching faculty members of the universities conduct research so that universities can emphasize on the intention for better research production. Alongside, it will be more beneficial if the problems and hurdles which are being faced by the teaching faculty members of the universities may be explored. In this study the emphasis will be given on the purposes and hurdles of research productivity.

Literature Review

Hollister (2016) stated that research is being conducted to obtain benefits like promotions, to be permanent in institution and to earning further tenure. Aithal (2016) prescribed that organizational policies, availability of research centers and research funding could be the indicators of research productivity in universities. Quimbo and Sulabo (2014) prescribed some features which may be of interest to the research for doing research which are educational attainments, collaborations, incentives and other benefits. According to Azad and Seyyed (2007) three major factors compel researchers for production which are self knowledge (for the enhancement of their self knowledge), individual competencies (their skills, motivation and influence of their teaching on research) and work environment (institutional expectations, support and reduction in teaching workload). Ductor (2015) narrated that collaboration and specialization could be the reason of doing research which positively compel towards research productivity. Babu and Singh (1998) portrayed some indicators for enhancement of research are professional commitment, intelligence, learning capabilities, leadership and acces to literature. White, James, Burke and Allen (2012) defined that to get high ranks, to secure institutional support, to have lower workload, to enjoy less departmental workload and promotion are indicators of producing research.

Sulehri, Tariq and Chaudhry (2017) explored in their study the problems faced by LIS professionals during their research work which are less time availability, work overload and unavailability of guide are major hurdles for research. Okiki (2013) elaborated that low internet speed and some official constraints are hurdles of doing research. Azad and Seyyed (2007) stated that financial constraints are major problems for researchers to produce research. Hu and Gill (2000) emphasized that workload could be a problem for teaching staff to produce research during their career. Chen, Gupta and Hoshower (2006) explained that intrinsic and extrinsic rewards have significant positive effect on research productivity, time allocation for research and tenure status are also have correlations with research production positively. Sulehri, Tariq and Chaudhry (2018) defined five major hurdles for research are low internet speed, less interest in research, non-availability of mentor, lack of research funding and domestic problems.

Problem Statement

There are many factors that have effect on research productivity of the teaching faculty members of universities around the globe. But less research has been conducted to explore the reasons or purposes of doing research and the problems which are being faced the teaching faculty members of the universities during their research activities. So to fill up the gap and add some new knowledge in the existing literature hurdles and purposes of research should be explored.

Research Design

A quantitative research method was opted by following the survey research design to conduct this study. The faculty members from three universities were the population of this study. These three universities are Lahore based and fall under top ten (10) ranking as per prescription of Higher Education Commission of Pakistan (HEC) 2015 rating. The target population of this study was teaching faculty members University of the Punjab, Lahore, University of Health Sciences, Lahore and University of Veterinary and Animal Sciences, Lahore.

Selection of Sample

Following are the three top universities from Lahore which fall amongst the top 10 universities of the Pakistan as per HEC. Systematic Random Sampling was followed reach the sample of the study. Cumulative sample size was calculated through an online calculator then Ratio formula was followed to extract exact sample size from each university. There was eleven hundred and eighty five (N= 1185) cumulative/ total population and the aggregated sample size of the whole population was n=291. This sample size was further separated on the basis ratio technique.

Table 1: Extraction of Sample

Name of the Institute/ University	Total Number of Faculty Members in all Teaching Departments of the University (Population from each university)	Percentage and Targeted Sample Size (Sample Size from each university)
University of the Punjab (PU) Fall in HEC top 10 general ranking having rank 2	930	78%=**226**
University of Health Science (UHS) Fall in HEC top 10 general ranking having rank 9	35	3%= **10**
University of Veterinary & Animal Sciences (UVAS) Fall in HEC top 10 general ranking having rank 10	220	19%= **55**
Total Sample Size Calculated through Online Calculator (Survey monkey link cited above)	Cumulative/ Total Population (**N= 1185**) Cumulative/ Total Sample Size (**n= 291**)	226+10+55= **291**

Percentage from each university was examined, then the examined percentage was drawn from the aggregated sample size). The nth number from each university was selected as respondent. The nth number from PU was 4, the nth number from UVAS was 4 and the nth number from UHS was 3.
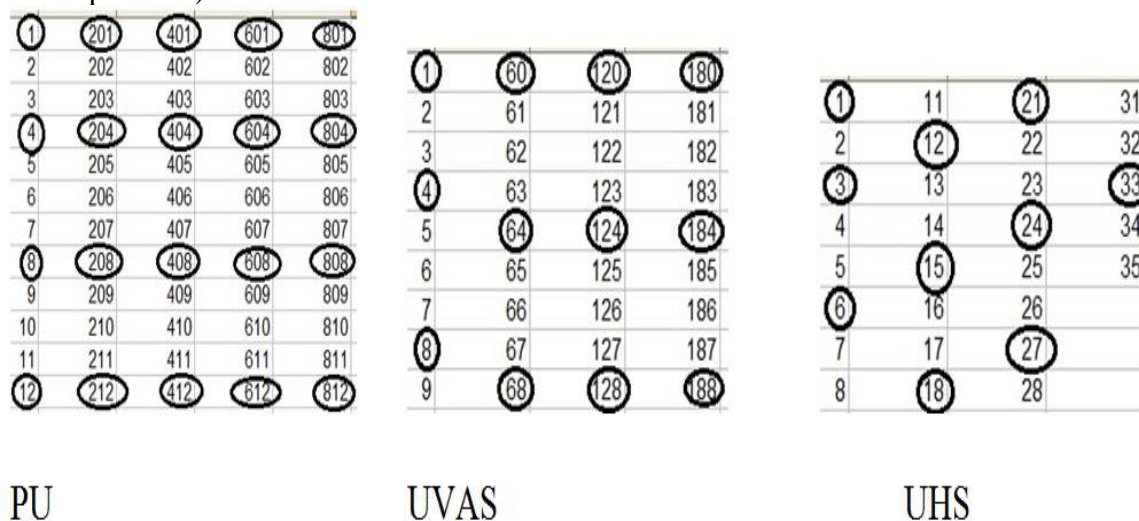

Figure 1. Sample drawn from each university

Results

Following results have been achieved through this study. First demographic representation has been provided and then objective wise results are presented.

Designation and Age

Regarding designations the 31 participants (16%) were Professors' rank who took part in this study, 39 participants (20.1%) were Associate Professor, 58 participants (29.9%) were Assistant Professor and 66 participants (34%) were Lecturer by designation. There were 34 (17.5%) participants who had 25-30 years age, 42 (21.6%) respondents were between 31-35 years, 28 (14.4%) participants were between 36-40 years, 31 (16%) participants were between 41-45 years, 23 (11.9%) participants were between 46-50 years, 21 (10.8%) participants were between 51-55 years and 15 (7.7%) participants were more than 55 years of age.

Table 2: Age and designation of participants

		Frequency	Percentage	Cumulative Percentage
Designation	Professor	31	16	16
	Associate Professor	39	20.1	36.1
	Assistant Professor	58	29.9	66
	Lecturer	66	34	100
	Total	**194**	**100**	**100**
	25-30 Y	34	17.5	17.5
	31-35 Y	42	21.6	39.2
	36-40 Y	28	14.4	53.6
	41-45 Y	31	16	69.6
Age	46-50 Y	23	11.9	81.4
	51-55 Y	21	10.8	92.3
	More than 55 Y	15	7.7	100
	Total	**194**	**100**	**100**

Qualification of the Respondents

A large number of participants 122 (62.9%) had PhD degree, while only 6 participants (3.1%) having Masters degree qualification and 66 participants (34%) were MS/ M.Phil degree holders.
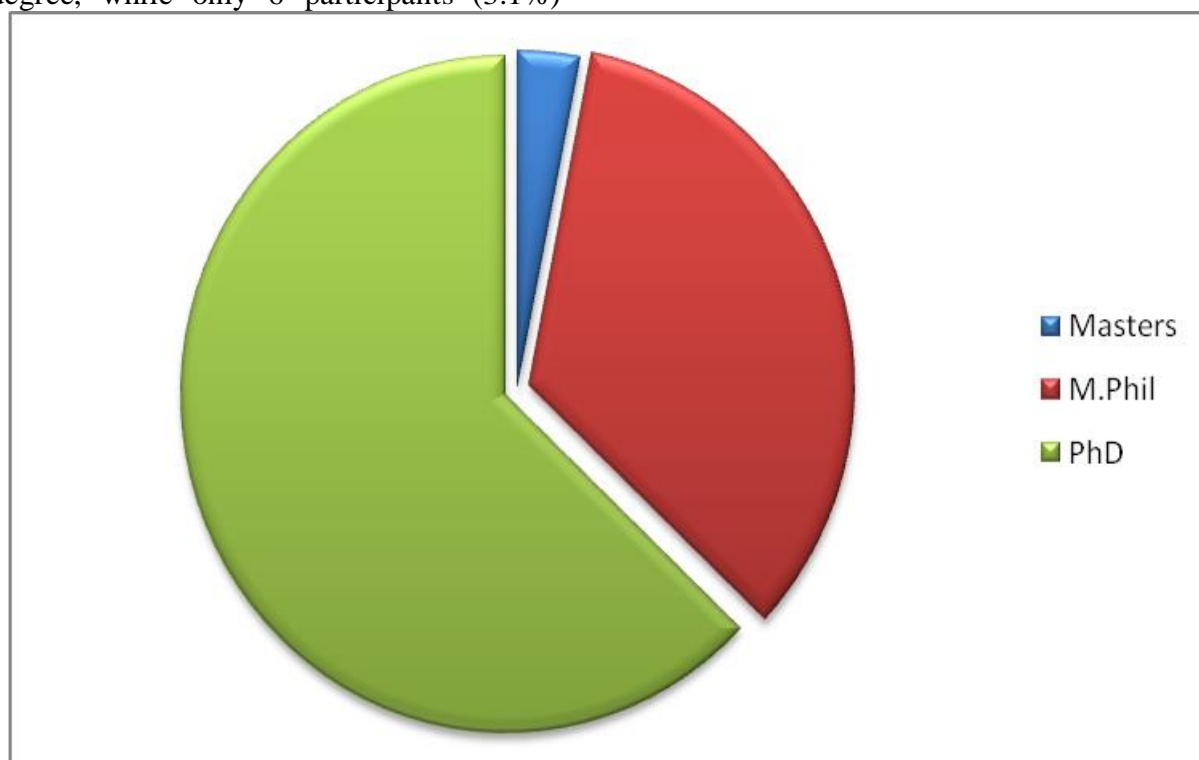

Figure 2. Qualification of respondents

Teaching Experience and Teaching Status

Related to teaching employment status, there were 41 participants (72.7%) who possess permanent teaching employees' status of the universities, while 6 participants (3.1%) with visiting faculty status, only 9 participants (4.6%) had tenure track employment and 38 respondents (19.6%) were the contractual faculty members. There were 50 respondents (25.8%) who have less than 5 years teaching experience, 62 participants (32%) having 5-10 years, 23 (11.9%) having 11-15 years, 34 (17.5%) having 16-20 years, 22 (11.3%) participants having 21-25 years and only 3 (1.5%) participants having more than 25 years teaching experience.

Table 3: Teaching employment status and experience of participants

		Frequency	Percentage	Cumulative Percentage
Teaching Employment Status	Permanent	141	72.7	72.7
	Visiting	6	3.1	75.8
	Tenure Track	9	4.6	80.4
	Contract	38	19.6	100
	Total	**194**	**100**	**100**
Teaching Experience	Less than 5 Years	50	25.8	25.8
	5-10 Y	62	32	57.7
	11-15 Y	23	11.9	69.6
	16-20 Y	34	17.5	87.1
	21-25 Y	22	11.3	98.5
	More than 25 Y	3	1.5	100
	Total	**194**	**100**	**100**

Objective 1: Research output of Faculty Members

Research productivity of the top ranked Lahore based universities was examined and results indicate that cumulatively teaching faculty members of the universities produce 29 research articles during their while teaching career while conference papers second with the average of 11. There were 2 books produced averagely by faculty members while only 1 book chapter was produced and 3 other types of publications were published by the teaching faculty members of the universities.

Table 4: Research productivity of participants

Sr.	Type of Research Product	Average Productivity during whole Career
1	Research Articles	29
2	Conference Papers	11
3	Books	2
4	Book Chapter(s)	1
5	Others	3

Objective 2: Purposes of Research Productivity of Teaching Faculty Members

The following table depicts the purposes of doing research by university teaching faculty members. According to the data teaching faculty members from the top ranked universities of Lahore, Pakistan produce research for sake of "Enhancement of their insight" and "to build confidence among them" follows. On the third number "to get promotions in rank" was explored and "to enhance efficiencies and teaching skills" follows with the number four and on fifth number the purpose of producing research is "to switch another institute or university". There was only 0.5% participants who strongly disagree that they produce research "to get promotion in rank" while 3.1% participants disagree, 11.3% were neutral, 47.9% were agreed and 37.1% were strongly agreed with the statement. There was 1% participants who strongly disagree that they produce research "To get Fame or Nobility" while 10.8% participants disagree, 26.8% were neutral, 41.2% agreed and 20.1 were strongly agreed with the statement.

Table 5: Purposes of doing research

Rank	Purposes of Doing Research	SDA N (%)	DA N (%)	NANDA N (%)	A N (%)	SA N (%)	Mean	St. Deviation
1	To enhance the insight	2 (1)	1 (0.5)	17 (8.8)	91 (46.9)	83 (42.8)	4.30	0.736
2	To build confidence	1 (0.5)	2 (1)	21 (10.8)	85 (43.8)	85 (43.8)	4.29	0.742
3	To get Promotion in rank	1 (0.5)	6 (3.1)	22 (11.3)	93 (47.9)	72 (37.1)	4.18	0.791
4	To enhance efficiencies and teaching skills	5 (2.6)	10 (5.2)	52 (26.8)	76 (39.2)	51 (26.3)	3.81	0.969
5	To switch another institute or university	2 (1)	11 (5.7)	54 (27.8)	90 (46.4)	37 (19.1)	3.77	0.859
6	For tours of other countries	5 (2.6)	19 (9.8)	53 (27.3)	69 (35.6)	48 (24.7)	3.70	1.030
7	To get Fame or Nobility	2 (1)	21 (10.8)	52 (26.8)	80 (41.2)	39 (20.1)	3.69	0.949
8	For Financial earning	14 (7.2)	27 (13.9)	61 (31.4)	57 (29.4)	35 (18)	3.37	1.146
9	To reduce workload and universities/ institutional pressure	28 (14.4)	48 (24.7)	48 (24.7)	50 (25.8)	21 (10.3)	2.93	1.124

There were 7.2% participants who strongly disagree that they produce research "For Financial earning" while 13.9% participants disagree, 31.4% were neutral, 29.4% agreed and 18 percent strongly agreed with the statement. There was 1% participants who strongly disagree that they produce research "To switch another institute or university" while 5.7% respondents disagree, 27.8% were neutral, 46.4% were agreed and 19.1% were strongly agreed with the statement. There were 14.4% participants who strongly disagree that they produce research "To reduce workload and universities/ institutional pressure" while 24.7% participants disagree, 24.7% were neutral, 25.8% were agreed and 10.3 were strongly agreed with the statement. There were 2.6% participants who strongly disagree that they produce research "To enhance efficiencies and teaching skills" while 5.2% participants disagree, 26.8% were neutral, 39.2% were agreed and 26.3% were strongly agreed with the statement. There were only 1% participants who strongly disagreed that they produce research "To enhance the insight" while only 0.5% participants disagrees, 8.8% were neutral, 46.9 were agreed and 42.8% were strongly agreed with the statement. There were only 0.5% participants who

strongly disagreed that they produce research "To build confidence" while 1% participants disagree, 10.8% were neutral, 43.8% were agreed and 43.8% strongly agreed with the statement. There were 2.6% participants who strongly disagreed that they produce research "For tours of other countries" while 9.8% participants disagree, 27.3% were neutral, 35.6% were agreed and 24.7% strongly agreed with the statement.

Objective 2: Hindrances being face by Teaching Faculty Members

To explore the hurdles being faced by the teaching faculty members of Lahore based top ten ranked universities the following statements were asked. Results indicate that the top most first major hurdle is "Lack of interest in research work" and "Financial constraints" follows. On the third number the major hurdle pointed out by the teaching faculty members is "Poor/ low internet speed" and "Poor collaborations among faculty members and professional bodies" follows with fourth number. On the fifth number the major hurdle was explores as "lack of research trainings". There were 22 participants who were strongly disagreed that "Teaching workload" is a major hindrance for research while 21 participants were disagreed, 19 participants were neutral, 71 participants were agreed and 62 participants were

strongly agreed with the statement. There were 11 participants who were strongly disagreed that "Unavailability of research funding" is a major hurdle for research output while 22 participants were disagreed, 20 participants were neutral, 69 participants were agreed and 72 participants were strongly agreed with the statement. There were 3 participants who were strongly disagreed that "Lack of interest in research work" is a major problem for research productivity while 11 participants were disagreed, 18 participants were neutral, 97 participants were agreed and 65 participants were strongly agreed with the statement. There were 7 participants who were strongly disagreed that "Unavailability of proper guide or mentor" is a major problem for research while 13 participants were disagreed, 21 participants were neutral, 110 participants were agreed and 43 participants were strongly agreed with the statement. There were 9 participants were who strongly disagreed that "Domestic problems" are major hurdles for research while 17 participants were disagreed, 49 participants were neutral, 67 participants were agreed and 52 participants were strongly agreed with the statement. There were 17 participants who were strongly disagreed that "Dependent children" are major hurdles for research while 24 participants were disagreed, 63 participants were neutral, 57 participants were agreed and 33 participants were strongly agreed with the statement.

There were 7 participants who were strongly disagreed that "Unavailability of information resources" is major problems for research output while 15 participants were disagreed, 38 participants were neutral, 85 participants were agreed and 49 were strongly agreed with the statement. There were 7 participants who were strongly disagreed that "Poor collaborations among faculty members and professional bodies" is a major hindrance for research while 10 participants were disagreed, 24 participants were neutral, 95 participants were agreed and 58 participants were strongly agreed with the statement. There were 6 participants who were strongly disagreed that "Financial constraints" are major hurdles for research while 9 participants were disagreed, 21 participants were neutral, 93 participants were agreed and 65 participants were strongly agreed with the statement. There were 5 participants who were strongly disagreed that "Lack of research trainings" is major problem for research while 7 participants were disagreed, 41 participants were neutral, 84 participants were agreed and 57 participants were strongly agreed with the statement. There were 4 participants who were strongly disagreed that "Lack of interest in research work" is a major hurdle for research productivity while 12 participants were disagreed, 31 participants were neutral, 75 participants were agreed and 72 participants were strongly agreed with the statement.

Table 6: Problems faced by teaching faculty members for research productivity

Rank	Hurdle Faced	SDA N (%)	DA N (%)	NANDA N (%)	A N (%)	SA N (%)	Mean	St. Deviation
1	Lack of interest in research work	3 (1.5)	11 (5.7)	18 (9.3)	97 (50)	65 (33.5)	4.08	0.889
2	Financial constraints	6 (3.1)	9 (4.6)	21 (10.8)	93 (47.9)	65 (33.5)	4.04	0.954
3	Poor/ low internet speed	4 (2.1)	12 (6.2)	31 (16)	75 (38.7)	72 (37.1)	4.03	0.984
4	Poor collaborations among faculty members and professional bodies	7 (3.6)	10 (5.2)	24 (12.4)	95 (49)	58 (29.9)	3.96	0.978
5	Lack of research trainings	5 (2.6)	7 (3.6)	41 (21.2)	84 (43.3)	57 (29.4)	3.93	0.939
6	Unavailability of proper guide or mentor	7	13	21	110	43	3.87	0.954

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			(3.6)	(6.7)	(10.8)	(56.7)	(22.2)	
7	Unavailability of research funding	11 (5.7)	22 (11.3)	20 (10.3)	69 (35.6)	72 (37.1)	3.87	1.195
8	Unavailability of information resources	7 (3.6)	15 (7.7)	38 (19.6)	85 (43.8)	49 (25.3)	3.79	1.022
9	Domestic problems	9 (4.6)	17 (8.8)	49 (25.3)	67 (34.5)	52 (26.8)	3.70	1.098
10	Teaching workload	22 (11.3)	20 (10.3)	19 (9.8)	71 (36.6)	62 (32)	3.68	1.324
11	Dependent children	17 (8.8)	24 (12.4)	63 (32.5)	57 (29.4)	33 (17)	3.34	1.159

Conclusion and Discussion

This study was conducted to explore the intention of producing research by the teaching faculty members and to sort out hurdles which are being faced during research activities. Research articles published in research journals exposed as the top most types of production. It was astonishing to see that only 1 chapter by each faculty member was produced during their whole career. Lack of interest in research was exposed as the top most hurdles for research productivity. So, the universities should take some steps to decrease hurdles. Universities should motivate their teaching faculty members to produce research and offer them incentives and charming rewards for more production of research. Hopefully, this study will add knowledge to the existing knowledge and will guide to the university's management to take necessary measures for reduction of hurdles to get more published research from their teaching faculty members.

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