

FINANCIAL AND SOCIAL BARRIERS IN CONDUCTING RESEARCH AT POSTGRADUATE LEVEL IN PUBLIC AND PRIVATE SECTOR UNIVERSITIES OF KHYBER PAKHTUNKHWA

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ABSTRACT--Research highly contributes in the overall development of a country. To achieve this reality, Higher Education Commission (HEC) of Pakistan plays a significant role in establishing a sound base of research culture in the country. Despite the fact, researchers are facing number of issues during research which need to be addressed. Objectives of the study were to find out and compare the opinions of the respondents concerning different barriers in the execution of research in government and private level Universities of Khyber Pakhtunkhwa, Pakistan. As a study sample, the scholar selected eight (08) universities four from public and four from private level at random. It comprised of 640 respondents having four each from social and natural sciences. The researcher collected five twenty one responses. For getting feedback from the respondents, a questionnaire containing fifteen items was designed. One open-ended question was developed to get more responses. Data was evaluated applying statistical tools including percentage, mean, *t*-test and standard deviation. The open-ended questions were evaluated applying the method of content analysis. Results of the research study showed that there was uniformity among the views of the majority of the respondents with minor differences about financial and social barriers which are creating hurdles in carrying out research. After identifying and comparing the opinions of the respondents, areas are suggested where future efforts may be built on the findings of the research study.

Keywords-- Financial Barriers, higher education commission, postgraduate research, supervisor, scholar, Khyber Pakhtunkhwa

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I. INTRODUCTION

Research institutions throughout the globe are strong contributors to overall national development (Etzkowitz, 2000). Research is given much importance worldwide but studies reveal that there are manifold interweaved reasons which affect smooth research activities including, supervisory barriers, financial barriers, social barriers, personal barriers etc (Glode, 2005) (Golde, 2001) (Lovitts, 2001) (Nettles, 2006).

A university may increase its enrolment by providing financial assistance to its research scholars. Each kind of financial assistance has its effect on drop out and finishing point of degree ratio (Smith, 1993). Research projects entirely funded proves successful completion rates as compared to other partial waiver scheme (Kearns H. Gardiner, 2008).

Doctoral candidates confront so many issues including job pressure, competitive setting, and unsure state of affairs at times and feelings of isolation in the execution of research project. The scholars get admission having diverse economic, academic and social locale. They start their journey to achieve their objectives with different strength and devotion which provide them way in to mix up with faculty and be familiar with existing culture of the institution (Powell, 1986). Study reveals that this kind of adoptability depends on the determination and aspiration of the researcher where the willing ones swiftly fiddle with the existing culture until any external elements (financial, health, family issues) whereas those who demonstrate inflexibility shortly leave the research activities instead of understanding adjustments (Lovitts, 2001). Study conducted by Lovitt (2001) reveals that such type of loneliness and stress during the period can be minimized by the department through organizing seminars, workshops and conferences.

Objectives

The study objectives were:

1. To evaluate the views of the respondents of government and private level Universities of Khyber Pakhtunkhwa regarding research barriers.
2. To match up to the views of research scholars (Ph. D and M. Phil) concerning different barriers influencing research activities in Public and private Universities.
3. To match up the views of gender concerning barriers in carrying out research in government and private level universities.
4. To compare the judgments of the natural and social sciences' respondents concerning research barriers at Postgraduate level of both government and private Sectors.

Hypotheses

H_o (1): No important variation exists among the opinions of the respondents regarding the hurdles in carrying out research at government and private Universities.

H_o (2): No main variation subsists among the opinions of Ph. D and M. Phil scholars regarding barriers in execution of research activities in public and private universities.

H_o (3): No significant variation exists in the views of gender of public and private universities regarding various barriers during research.

Ho (4): No major variation subsists in the views of the study respondents (social and natural sciences) among public and private universities concerning barriers during research activities.

II. REVIEW OF LITERATURE

Research has done a wonderful job for boosting up the society and development of the economy in the field of social sciences (Loon, 2005). Study shows that research activities in the universities of developed world are given too much importance alongside other key functions of these higher education institutions (Sanyal, 2006).

Despite its importance, research activities face number of issues such as supervision issues, financial constraints, lack of learning resources, limited accessibility of information, lack of progress monitoring, gender disparity, social recognition of research^{and} so on (Lovitts, 2001) (Naveda, 2009) (Neumann, 2012)

Financial position of the researchers all the time matter in carrying out of research work. The research activities, if successfully have to carry on, rests on one of the key elements i.e how easily and adequately the financial resources are accessible to the research scholar (Bowen & Rudenstine, 1993). The study confirm the viewpoints that research scholars having inadequate financial funds take more time for the completion of their research endeavours than the researchers who are well off or get scholarships or other financial assistance from any source.

Social status of the researcher affects his/her research activities and leads to stress if the scholar does not adjust himself/herself in the environment (Wao, 2001). Study conducted by Powell & Dean (1986), reveals that a researcher confronts of two types of stress during thesis writing. One relates to social strain where scholar is ignorant of the actuality that the period which is being devastated with the social circle could have been used up for writing of thesis while other is assignment stress where the researcher involves in thesis writing becomes distracts of the members of his/her social sphere.

Doctoral research scholars face challenges like work stress, competitive environment, uncertain situations at times and feelings of loneliness during conducting research. They get enrolment in their respective programs having various social, economic and academic backgrounds and proceed with different energy level and commitment. They have to mould themselves according to the new environment. This process of social adoptability depends upon the will and wish of a researcher. The willing cases very quickly adjust according to the prevailing culture while those who show hardness soon quit their programs instead of accepting changes (Lovitts,2001).

III. METHODOLOGY

Population

All scholars (Ph. D and M. Phil) and their research supervisors belonging to Government and Private level Universities of Khyber Pakhtunkhwa, represented the study population.

Sample

Research study sample of 640 respondents in three stages was carried out by using Multistage sampling technique. During the first phase, the scholar chose eight universities at random from all the universities of Khyber Pakhtoonkhwa falling in general category. Four universities were selected from public while 4 from private sector

universities. At second stage, four from social and four from natural sciences were chosen at random. During the third phase, five twenty one respondents were chosen easily from the selected departments. The sample volume was determined in the light of Gay (Gay, 1996) who mentions that if the population range is large than 5000, then sample volume of four hundred to five hundred will be sufficient.

Data Collection Instruments

A questionnaire consisting of two parts was developed and administered to the research scholars and supervisors of the universities. First part of the questionnaire consisting of independent variables as: position of the university, position of the scholars, position of the supervisors, and character of the department, male and female status, and registration in study level. Second part of the survey was designed alike for the respondents. Five Likert.Type scale was designed having different items. The items assigned confidently are counted by 5, 4, 3, 2 and 1 correspondingly. Items assigned negatively are counted in the turn round mode. Misplaced or unacceptable replies are allotted a score of three whereas the final item was designed as open-ended question wherein the respondents (scholars and supervisors) were requested to mention two barriers at least.

Reliability

To get the reliability of the statistics tool, fifty four partakers (twenty seven supervisors and twenty seven scholars) of 2 Universities were taken randomly from Khyber Pakhtunkhwa respectively. This figure was kept out of the concluding study. Questionnaire's reliability was found .82.

Data collection procedure

Opinions of the enrolled scholars and their supervisors were obtained through the questionnaire. The major cause of the application of this method was that all the respondents were highly educated and knew how to reply. Further, they themselves had passed through the research stage at postgraduate level.

Analysis of Data

Statistical techniques such as Mean, Independent-samples, Standard Deviation and t-test were applied to analyze the data. Mean scores was characterized by Enueme & Egwunyenga (2008) into four categories (Enueme, 2008), which are presented as:

3.500 – 4.000 = Very high degree

2.500 – 3.490 = High degree

1.500 – 2.490 = Low degree

0.000 – 1.490 = Very low degree

For determining variation among the views of all respondents, the t-test was used. This test enables us to find out that there is any major variation between the samples means; such distinctive assessment for the important rank set for testing null hypothesis was 0.05. According to Stevens (Stevens, 1996) for all type of research study associated to social sciences, the alpha level of statistical significance is used at .05. Frequency distribution method was applied to analyze the open-ended statements of the respondents. Statistical software package SPSS version 16 was applied for data analysis.

IV. DATA ANALYSIS

The following section presents the data analysis and interpretation:

Table 1: Opinions of the respondents regarding Financial Barriers (Supervisor and Scholar wise)

Level	Respondents	N.	Mean.	SD..	t.	Df.	p-value.
Public sector	Supervisor..	139.	3.870	0.630	0.940	291.	0.340
	Scholar.	172.	3.960	0.490			
Private Sector	Supervisor	80	3.970	0.660	1.350	309.	0.177
	Scholar	130	4.010	0.540			

$p < 0.05$

Table 01 indicates that in public universities, supervisors' mean score is 3.870 and the scholars is 3.960 by $p = 0.340$ correspondingly. No major dissimilarity exists among the opinions of respondents about the financial hurdles. Hence, it is established on the basis of null hypothesis that all the respondents are on the same page concerning financial barriers.

The same table shows that in private level universities, supervisors' mean score is 3.970 and the scholars is 4.01 at $p = 0.177$ respectively. No significant variation exists in the opinions of the respondents about the financial barriers. Hence, it is not established on the basis of null hypothesis that all the respondents are on the same page concerning financial barriers.

Table 2: Opinions about Financial Barriers (Program Wise)

Level	Respondent	N.	Mean.	SD.	t.	df.	p-value.
Public Sector	Ph.D	61	3.960	0.550	0.260	167	0.790
	M.Phil	108	3.950	0.580			
Private Sector	Ph.D	26	4.000	0.430	0.570	128	0.560
	M.Phil	104	3.990	0.570			

$p < 0.05$

Table 2 shows that in public universities, the Ph. D scholar's mean is 3.960 while M. Phil scholar is 3.940 on $p = 0.790$ correspondingly. Considerable variation does not exist in the opinion of the respondents concerning the financial barriers. Hence, it is established on the basis of null hypothesis that all the respondents are on the same page concerning financial barriers.

The same table shows that in private level universities, the Ph. D scholar's mean is 4.000 and the M. Phil scholar is 3.990 on $p = 0.560$ correspondingly. Significant variation does not exist in the opinion of the respondents concerning financial barriers. Hence, it is established on the basis of null hypothesis that all the respondents are on the same page concerning financial barriers

Table 3: Evaluation of opinions concerning Financial Barriers (Sector and Gender Wise)

Level	Respondents	N.	Mean.	SD..	t.	Df.	p-value.
Public	Male	238	3.900	0.600	1.200	309	0.220
Sector	Female	32	3.990	0.400			
Private	Male	147	3.960	0.550	0.350	208	0.720
Sector	Female	63	3.930	0.610			

$p < 0.05$

Table 3 depicts that in public universities, the male mean is 3.900 while the female is 3.990 on $p = 0.220$ correspondingly. Considerable variation does not exist in the opinion of the respondents concerning financial hurdles. Hence, it is established on the basis of null hypothesis that all the respondents are on the same page concerning financial barriers.

The table depicts that in private level universities, the male mean is 3.960 while the female is 3.930 on $p = 0.720$ correspondingly. Considerable variation does not exist in the opinion of the respondents concerning the financial hurdles. Hence, it is established on the basis of null hypothesis that all the respondents are on the same page concerning financial barriers.

Table 4: Comparison of Opinions regarding Financial Barriers (Discipline wise)

Level	Respondents	N.	Mean.	SD.	t.	Df.	p-value.
Public	Natural	167	3.960	0.540	1.240	308	0.210
	Sciences						
Sector	Social	143	3.880	0.570	0.220	209	0.820
	Sciences						
Private	Natural	63	3.930	0.580	0.220	209	0.820
	Sciences						
Sector	Social	148	3.950	0.600			
	Sciences						

$p < 0.05$

Table 4 depicts that in public universities, the respondents of natural sciences' mean is 3.960 while mean of the social sciences 3.880 on $p = 0.210$ correspondingly. Considerable variation does not exist in the views of the respondents concerning financial barriers. Hence, it is established on the basis of null hypothesis that all the respondents are on the same page concerning financial barriers.

The table shows that in private level universities, the respondents of natural sciences' mean is 3.930 while the respondents of social sciences mean is 3.950 on $p = 0.820$ respectively. Significant variation does not subsist in the opinion of the respondents concerning the financial hurdles. Hence, it is established on the basis of null hypothesis that all the respondents are on the same page concerning financial barriers.

Table 5: Opinions of Supervisors and Scholars concerning Social Barriers (Supervisor and scholar Wise)

Level	Respondents	N.	Mean.	SD.	t.	Df.	p-value.
Public	Supervisor	139	3.540	0.690	1.080	291	0.270
Sector	Scholar	172	3.630	0.630			
Private	Supervisor	80	3.620	0.680	1.190	309	0.230
Sector	Scholar	130	3.760	0.520			

$p < 0.05$

Table 5 reveals that in public universities, the supervisors' mean is 3.540 while the mean of the research scholars is 3.630 on $p = 0.270$ correspondingly. Considerable variation does not exist in the opinion of the respondents regarding social hurdles. Hence, it is established on the basis of null hypothesis that all the respondents are on the same page concerning financial barriers.

The same table shows that in private level universities, the supervisors' mean is 3.620 while the scholars' mean is 3.760 on $p = 0.230$ correspondingly. Considerable variation does not subsist in the opinion of the respondents regarding social barriers. Hence, it is established on the basis of null hypothesis that all the respondents are on the same page concerning financial barriers.

Table 6: Opinions regarding Social Barriers (Program Wise)

Level	Respondents	N.	Mean.	SD.	t.	Df.	p-value.
Public	Ph. D	61	3.490	0.710	2.020	167	0.040*
Sector	M. Phil	108	3.700	0.580			
Private	Ph. D	26	4.100	0.420	1.560	128	0.120
Sector	M. Phil	104	3.920	0.540			

$p < 0.05$

Table 6 indicates that in public universities, Ph. D scholars' mean is 3.490 while the M.Phil scholars' is 3.700 on $p = 0.040$ correspondingly. Considerable variation exists in the opinion of the respondents regarding the social hurdles. Hence, it is not established on the basis of null hypothesis that all the respondents are on the same page concerning financial barriers.

The table shows that in private level universities, the Ph. D scholars' mean is 4.100 while the M. Phil scholars' mean is 3.920 on $p = 0.120$ correspondingly. Important variation does not subsist in the opinion of the respondents regarding social hurdles. Hence, it is established on the basis of null hypothesis that all the respondents are on the same page concerning financial barriers.

Table 7: Opinions regarding Social Barriers (Gender Wise)

Level	Respondents.	N..	Mean..	SD..	t.	Df..	p-value..
Public	Male.	238.	3.560	0.680	1.290	309	0.190
Sector	Female.	32.	3.670	0.560			
Private	Male	147	3.800	0.680	1.030	208	0.300
Sector	Female	63	3.900	0.570			

$p < 0.05$

Table 7 shows that in public universities, mean score of male is 3.560 and the female is 3.670 at $p = 0.190$ correspondingly. Significant difference exists in the opinions of the respondents about the social barriers. Hence, it is established on the basis of null hypothesis that all the respondents are on the same page concerning financial barriers.

The same table shows that in private level universities, mean score of male is 3.800 and female is 3.900 at $p = 0.300$ correspondingly. No significant variation exists in the opinions of the respondents about the social barriers. Hence, it is established on the basis of null hypothesis that all the respondents are on the same page concerning financial barriers.

Table 8: Opinions concerning Social Barriers (Discipline Wise)

Level	Respondents	N..	Mean..	SD..	T..	Df..	p-value..
Public	Natural	167	3.610	0.670	0.780	308	0.430
Sector	science						
	Social	143	3.560	0.640			
	science						
Private	Natural	63	3.820	0.500	0.150	209	0.870
Sector	science.						
	Social	148	3.830	0.700			
	science.						

$p < 0.05$

Table 8 reveals that in public universities, the respondents of natural sciences' mean is 3.610 while the social sciences is 3.560 on $p = 0.430$ correspondingly. Considerable dissimilarity does not exist among the judgements of the respondents regarding social hurdles. Hence, it is established on the basis of null hypothesis that all the respondents are on the same page concerning financial barriers.

The table shows that in private level universities, the respondents of natural sciences' mean is 3.820 while the social sciences is 3.830 on $p = 0.870$ in that order. Considerable variation does not subsist in the judgments of the respondents regarding social barriers. Hence, it is established on the basis of null hypothesis that all the respondents are on the same page concerning financial barriers.

V. CONCLUSION

Conclusion is drawn on the ground of the results of the research study. The results reveal that the respondents of both sectors are on the same page regarding financial barriers such as non-accessibility of research assistantship from any inside or outside basis and unforeseen expenses throughout research endeavours. Research scholars put down the research activities in the middle considering research of low financial profits than other profitable careers. Most of the supervisors and scholars have similar views regarding social barriers except slight dissimilarity of opinions exist among the respondents (Ph. D and M. Phil) of public sector universities. Cause of the dissimilarity in the views may be the lack of the skills of adoptability of the respondents as they might not adjust themselves in the society, inner clashes and unbalanced contacts of research supervisors and supervisee during the research project. Feelings of loneliness exist among the research scholars that lead to stress because of unfriendly research setting in the department. Majority of the respondents are of the opinions that there is lack of peer conversation and engagements for counselling mechanism to lessen stress and isolation at department during research initiatives. The respondents have strong harmony that by and large social responsibilities of the researcher derail them from research activities.

VI. RECOMMENDATIONS

i) It is suggested that both Higher Education Commission (HEC) and Higher Education Department (HED) might allot ample financial resources to public and private level universities for developing a sociable research setting as well as make the best use of the available funds.

ii) The results reveal lack of proper awareness of the significance of research in the general public. It is highly recommended that worth of research as driver of socio-economic advancement of a state could be extensively disseminated through print as well as electronic and print media to obtain respect in the social order.

iii) Females are usually not allowed to go outside their houses for collecting data and attending normal meetings with male research supervisors in conservative families. It is suggested that department with the active support of university authorities might organize scholastic gatherings both on-campus as well as out-side campus in which family and colleagues of the female scholars share their views and provide social support to the scholars.

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