### Relationship between On-Campus Facilities and Scholars' Attitude towards Research in Pakistani Universities

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#### Abstract

Research is an intellectual activity which not only improves the existing services but also secures the future generation by putting forward valuable recommendations. The quality of research is co-related with the research attitude of the researcher. The research attitude of the researcher depends upon several aspects. The study at hand is an effort to investigate the relationship of on-campus facilities with the research attitude of students. To conduct the survey MPhil and PhD level students of social sciences departments from 20 public and private universities were the target population. Conveniently selected 300 respondents were approached through two questionnaires to reveal that students' research attitudes and on-campus facilities were significantly co-related.

Keywords: On-campus facilities, research attitude, correlation, research facilities, survey research

#### Introduction

Today, higher education scenario of Pakistan research is being given much focus. Both the faculty members as well as teachers are giving much attention to the research relating to the academic as well as socio-cultural and scientific issues (Saleem, Saeed, & Waheed, 2014). There exist similar enthusiasm and positive attitude towards research among both the male and female researchers (Saleem,Farid & Akhter, 2015). The present research culture has evolved as a result of drastic development in the higher education system of Pakistan (Halai, 2013; Yusoff, & Khan, 2013). In social perspectives research is said to be the systematic way of problem solving through reliable collection of evidences (data collection) and making corresponding interpretations. Usually research increases the understanding of certain phenomenon under observation/investigation (Swindoll, 2012).

As far as the nature of research attitude is concerned, it is the liking or disliking the research activities by the people who are involved in research activities. In general attitudes include the behaviors, beliefs and emotions in favor or against the research

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process (Zan & Martino, 2007). Similarly, Papanastasiou (2005) is of the view that basically research attitude includes the individuals' interests and behaviors toward research. It had also been observed that women folk are bit reluctant is research and possess negative attitude towards research (Akhter, 2013; Elabbar, 2011).

The quality of higher education depends upon the facilities provided to the universities and shared with the students. Although with the passage of time the cost of higher education has risen considerably throughout the world yet the facilities for higher education has improved during the last two decades. Induction of information and communicational technologies to the field of education has opened new horizons for the researchers and academicians (Hoodbhoy, 2009, Azad, 2011).

Due to the rapid expansion of higher education there had been short fall of failities for the students. The prents and other stalkholders had expected much in less payments. Consequently the quality of higher educatin especially the qulity of research is being compromised (Ahmad, 2017). To earn a higher education degree has become major focus of research in the universities resulting in the form of unauthentic, useless and low quality research. Despite the provision of good laboratories and libraries unfortunatly the standard of research had considerably decreased. Ther is extansion of the research networks and thousands of researchers especially, in the social sciences are producing irrelevant and forged researches. Hassan (2015) states that though research output of Pakistani institutes has grown over the years, digging deeper into the data reveals an alarming situation in terms of quality of the research produced by the Pakistani institutions."

In the present scenario of enhanced higher education in Pakistan, the research is being given priority by the universities. Several measures had been adapted to improve the quality of research. Among these measures the provision of basic research facilities is the most significant one. Research incentives, provision of digital research resources, up gradation of research labs and libraries and provision of research based scholarships for foreign and indigenous studies and research work are few facilities being rendered by the Higher Education Commission of Pakistan (HEC, 2018)

Research on the scholars' attitudes in the academic set up is not a fresh idea. There had been several other studies in Pakistani perspective which had tried to investigate research attitudes along with its different contributors. For example, Butt & Shams (2013) revealed that in Pakistan the research attitude of enrolled scholars differs in public and private universities. The main causee behind this difference is the facilities being provided to the research scholars in the institutions/universities (Ahmad, 2017). Similarly, Higher Education Commission of Pakistan (HEC, 2018) had laid down certain parameters for the improvement of research quality in Pakistani universities. Certain physical components had become essential for the accreditation of research based degrees. These include a specified number of books in the library, availability of impact factor international journals, 50mb internet facility, laboratory equipment, appropriate physical infrastructure etc. it is hoped that in the coming years the quality of research in Pakistan will be in line with the internal standards.

In the light of the above discussion it seems inevitable to study the relationship of research facilities and scholars' research attitude. It is not important only for the judgment of the proper use of research facilities but also to determine the nature of research being carried out. The study would preferably bring t light the scholars' research attitude after th provision of needed facilities. Moreover, the study will be helpful for future planning regarding the prvision of research facilities in the universities.

#### **Purpose of the Study**

Research in one way or the other depends upon the attitude of the researcher which itself is the hinge on different factors including the research facilities at the disposal of the researcher. The study at hand intended to determine whether or not the on campus facilities available to the researcher have any relationship with the research attitude of students in the public and private sector universities in Pakistan. Therefore, an effort was made to determine the co-relation of on campus i.e. physical infrastructure, instructional resources, human resources, teacher support and research resources, with the research attitude of MPhil and PhD level students enrolled in public and private sector universities in Pakistan.

#### **Objectives of the Study**

- 1. To determine the status of on-campus research facilities available to students in public and private sector universities of Pakistan.
- 2. To ascertain the research attitude of students in public and private sector universities of Pakistan.
- 3. To ascertain co-relation between on-campus research facilities and research attitude of students in public and private sector universities of Pakistan.

#### **Research Questions**

- 1. What is the status of on-campus research facilities at the disposal of students in public and private sector universities of Pakistan?
- 2. What type of research attitude is possessed by the post-graduation level students of public and private sector universities of Pakistan?
- 3. Is there any significant relationship between research attitude of post-graduation level students and on-campus research facilities
- 4. Does there exist any significant relationship between post-graduation level students' research attitude and on-campus research facilities at public and private sector universities of Pakistan?

#### **Research Methodology**

This study intended to determine the relationship between on-campus facilities and research attitude of post-graduation level students of social sciences. The research design being used for this study was correlational. Moreover, the information needed were to be gathered from a vastly spread population. Therefore, survey was conducted to complete this research. Survey is the most popular method of conducting research in social sciences. These are relatively flexible designs and appear in variety of forms (Kalof, Dan

& Dietz, 2008). But, majority of types involve collection of data through questionnaire in face-to-face mode, telephonic administration of using on-line mode (Muijs, 2004).

The population of the study consisted of all the MPhil and PhD level students enrolled in the departments of social sciences at 188 Pakistani universities (HEC, 2018) which are recognized by Higher Education Commission of Pakistan. For the purpose of sample selection 20 universities, including 10 public and 10 private sector universities, were randomly selected from the list of general cadre universities. From each selected university 5 PhD level and 10 MPhil level students were conveniently selected. Only those students were selected for the data collection who had completed their course work and were conducting research. A total of 218 students from the sampled 300 students responded to both the questionnaires administered.

#### **Collection and Analysis of Data**

For the sake of data collection two questionnaires were used. This scale was developed by Elena C. Papanastasiou (Papanastasiou, 2005) and had been used in different perspectives. This scale at hand comprised of 32 items further dived into five sub-factors namely research usefulness, research anxiety, positive attitude, relevance to life and research difficulty. The scale was tried out in four randomly selected universities including two public and two private sector universities. The data analysis for the try-out process revealed that the coefficient of reliability was 0.881 which is rated as reliable in social sciences research instruments (Cohen, Manion, & Morrison, 2007). The scale was then finally administered to the sample of the study for data collection.

The second instrument i.e. Facility Identification Inventory, developed by Saleem, Naila & Mobeen (2015). The scale comprised of 48items divided into five sub-factors viz. physical infrastructure, instructional resources, human resources, teacher support, and research resources. The reliability coefficient for the scale i.e. Croanbach Alpha, was found as .835 during the pilot testing in the above mentioned four universities.

For the analysis of data coefficient of correlation i.e. Pearson r was calculated using SPSS 22 version. As for as the strength of the calculated coefficient of co-relation is concerned differ authors have suggested different interpretations to describe the correlation values. Cohen (1988) described the following range of the values of r for interpreting the co-relation between two variables.

i.	Small Co-relation	r = .1029
ii.	Medium Co-relation	r = .3049
iii.	Large Co-relation	r = .50 - 1.0

#### **Findings/Results**

The study revealed following results

#### Table-1

#### Status of Research attitude and research facilities in Universities

Variables	Ν	Mean	SD
Research attitude	218	4.165	.693
Facilities	210	3.511	3.51

The analysis of the status of the research facilities in the universities revealed that average ( $\bar{x}$ = 3.511>3.00) facilities are being provided to the students. Similarly, The research attitude of students tends to be above average ( $\bar{x}$ = 4.165>4.00).

#### Table-2

# Relationship between Students' Research Attitude and Research Facilities at Universities

Variables	Ν	Mean	Pearson r	Sig. (2-tailed)
Research attitude	218	4.165	.154	.023
Facilities	210	3.511	.134	.023

\*Correlation is significant at the 0.01 level (2-tailed).

To determine the relationship between students' research attitude and research facilities at universities coefficient of correlation (Pearson r) was calculated. The analysis of data reflected that students' research attitude is significantly (p = .023 > .05) correlated with the research facilities available to them at the universities.

#### Table-3

		Physical	Instructional	Human	Teacher	Research
		Infrastructure	Resources	Resources	Support	Resources
Research	r.	0.125	.003	0.232**	.252**	.142*
Usefulness	Sig.	.064	.959	.001	.000	.036
Research	r.	.048	.219**	053	026	.034
Anxiety	Sig.	.479	.001	.438	.703	.617
Positive	r.	.158*	019	.261**	.208**	.087
Attitudes	Sig.	.019	.782	.000	.002	.202
Research	r.	227**	277**	141*	285**	251**
Difficulty	Sig.	.001	.000	.038	.000	.000
Relevance	r.	.288**	.216**	.190**	.212**	.135*
to Life	Sig.	.000	.001	.005	.002	.046

**Relationship between Students' Research Attitude and Research Facilities** 

\*\*Correlation is significant at the 0.01 level (2-tailed).

\*Correlation is significant at the 0.05 level (2-tailed)..

Factor wise analysis of the research facilities and their co-relation with the sub-factors of attitude of students reflected that research difficulty is inversely co-related with all the aspects of on campus facilities i.e. physical infrastructure (r = -.227 & p = .001 < .01), instructional resources (r = -.277 & p = .000 < .01), human resources (r = -.141 & p = .038 < .05), teacher support (r = -.285 & p = .000 < .01) and research resources (r = -.251 & p = .000 < .01). It showed that the absence of on-campus facilities can make the research difficult and would be having negative attitude towards research at the university. Likewise the relevance of the research with the life is significantly and positively co-related with physical infrastructure (r = .288 & p = .000 < .01), instructional resources (r = .216 & p = .001 < .01), human resources (r = .190 & p = .005 < .01), teacher support (r = .212 & p = .002 < .01) and research resources (r = .135& p = .046 < .05). Similarly, usefulness of the research is significantly correlated with human resources (r = .232 & p = .001 < .01), teacher support (r = .252 & p = .000 < .01) and research resources (r = .232 & p = .001 < .01), teacher support (r = .252 & p = .000 < .01) and research resources (r = .142

&p = .036 < .05). Finally, the positive attitude is significantly co-related with physical infrastructure (r = .158&p = .019 < .05), human resources (r = .261 &p = .000 < .01) and teacher support (r = .208 &p = .002 < .01)

#### Table-4

<b>Relationship between Students'</b>	Research A	Attitude a	nd Research	Facilities a	at Public
and Private Sector Universities					

Variables	University	N	Mean	Pearson r	Sig.(2-tailed)
Research attitude	Public	131	4.190	-0.021	.814
Facilities		151	3.580	-0.021	.014
Research attitude	Private	87	4.126	.337	.001
Facilities	Flivate		3.409		

\*Correlation is significant at the 0.01 level (2-tailed).

Analysis of data reflects that there existed significant (p = .001 < .05) relationship (r = .337) between students' research attitude and research facilities at private universities whereas the relationship between the two variables of the study in insignificant (p = .814 > .05) at public sector universities.

#### Table-5

## **Relationship between Students' Research Attitude and Research Facilities at Universities at different Levels of Study**

Level	Variables	N	Mean	Pearson r	Sig.(2-tailed)	
MS	Research attitude	13	4.227	085	3.487	
	Facilities	15	3.771	085	3.407	
MPhil	Research attitude	170	4.128	.261	0.001	
	Facilities	170	3.494	.201		
PhD	Research attitude	34	4.323	206	0.243	
	Facilities	54	3.486	200		

\*Correlation is significant at the 0.01 level (2-tailed).

It was found that there did not exist significant (p = 3.487 > .05) relationship(r=-.085) between students' research attitude and research facilities for MS students. Similarly

insignificant (p = .243 > .05) co-relation (r=-.206) was found for PhD students. But, there existed a significant (p = .001 < .05) co-relation (r=-.261) between MPhil level students' research attitude and research facilities.

#### Table-6

Relationship between Students' Research Attitude and Research Facilities for Students Studying in Different Shifts

Timing	Variables	Ν	Mean	Pearson r	Sig.(2-tailed)	
Morning	Research attitude	68	4.236	055	0.66	
	Facilities	00	3.448	055	0.00	
Afternoon	Research attitude	29	4.334	.078	0.69	
	Facilities	2)	3.681	.070		
Evening	Research attitude	113	4.102	.308	0.01	
	Facilities	115	3.551	.500	0.01	

\*Correlation is significant at the 0.01 level (2-tailed).

There existed significant (p = .01 < .05) relationship(r=.308) between evening shift students' research attitude and research facilities. But, the co-relation was not significant for two remaining timings i.e. morning (p = .66 > .05 & r = -.055) and afternoon (p = .69 > .05 & r = .078).

#### Conclusions

The study at hand was conducted to determine the impact of on-campus facilities on the students' research attitude at post-graduation level in Pakistani universities. The analysis of data revealed that there existed average facilities in the universities. Similarly, the research attitude of the students was also average. The students possessed positive but weaker attitude towards research. As far as the relationship between on-campus facilities and students' research attitude is concerned, there existed positive but weak co-relation. It indicates that the on-campus facilities are important in developing positive attitude towards research. The detailed analysis reflected correlation of individual on-campus

facilities with different factors of research attitude. It was found that research difficulty was negatively and significantly co-related with the university infrastructure, support of the supervisor, human resources available at the campus, and the availability of research and instructional resources. Therefore, it is hereby concluded that without proper oncampus facilities are essential to smoothly continue research activities. Without proper provision of research facilities research cannot be carried out easily. The same is the conclusion of co-relation of research relevance to life and research facilities. The positive and significant co-relation reflects that research can only be relevant to actual life problems if there ample research facilities to conduct the research smoothly. Therefore, research facilities are needed to develop positive attitude towards everyday life relevant research. The research attitude of MPhil level scholars is more positive as compared to PhD and MS level students. Finally, the research attitude of evening shift scholars is significantly positive. Similarly, availability of suitable physical infrastructure, supervisor/teacher support, and human and research resources are essential to develop positive attitude towards research. In short, lack of research facilities not only hinder the research process but are also affects the research attitude of the researchers.

It was reflected from the outcomes of the research that the on-campus facilities had significant and positive relationship with the scholars' attitude towards research. It had previously found that the attitudes depend upon several factors including the environment especially physical infrastructure and psycho-social environment (Saeed, 2014). The same is the case with the positive attitude of private universities scholars. It is because of the facts that in private universities students pay heavy fees and enjoy fewer facilities (Saleem, Naila & Mobeen, 2015). Consequently, they had to complete their research work instead of the absence of basic on-campus facilities. It was also observed that difficulty is faced by the scholars due to limited infrastructure, defective support services, and fewer research resources. This result is also in line with the previous researches and the everyday observation.

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