

## QUALITY OF RESEARCH IN DISTANCE EDUCATION: AN ANALYSIS OF ATTITUDE AND FACILITIES PROVIDED AT HIGHER

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### Abstract

*Research was based on five objectives. The major purpose of the research was to assess the impact of student's attitude and facilities on quality of research in distance education system. Further the research was focused on comparison of student's attitude, provision of facilities and quality of research in public and private sector distance education institutions. The research was based on descriptive- co relational style. All the higher level distance education institutions of Islamabad were considered as the population of the research. The researcher used the disproportionate stratified sampling technique to draw the sample for the study. 66 teachers contributed in the data collection process among which 30 were from public and 36 were from private sector. The study was delimited to the two distance education universities of Islamabad for the ease of the researcher. The researcher used a self developed questionnaire for the purpose of data collection. The tool was based on three major parts that were attitude assessment, facilities provision assessment and research quality assessment. The data revealed that attitude of the students was having 8.5% ( $p < 0.01$ ) effect on the quality of research while the provision of the facilities was having 39% ( $p < 0.01$ ) effect on the quality of research. However there was no statistically significant difference found between public and private sector universities with reference to the attitude of students, provision of facilities and quality of research. Thus it was recommended that the latest electronic facilities related to the media access through internet and web integration may be provided to the students in order to get maximum benefit. There is also a need to develop a serious attitude of the students towards the research activities. The research findings may also be applied in the practical situation to encourage the real creativity of the researcher.*

**Key Words:** Distance Education, Attitude, Facilities, Quality Research

### 1.Introduction

System of education is the most important element in the progress of the country. It provides the platform through which the nations are built. Education systems working all over the world are usually divided into different stages that can help the administration and government to deal with the issues and needs of the system. Every stage and form of education has its own needs, demands and functions. Each stage gives a base for the next and are interlinked in terms of targets. These stages are meant to achieve the national goals as a collective effort. Thus every stage and form of education is equally important in the development of the country. So is the case in Pakistan as well. In Pakistan we have three tier education system that consists of elementary, secondary and higher level of education. Each stage has its own role

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and importance in the development of the country. Other than these three stages we have two visible types of educational institution termed as formal and non formal system.

Along with the formal education system the non-formal system of education also provides the supportive hands towards the development of the individual. In many cases the students who want to increase their qualification along with their job and their family responsibilities are referred to the non formal education system. As non formal education system provides a relaxed schedule for the people who have other job and family related responsibilities or who have not an easy access to the educational institution on daily bases in terms of travelling. Distance education or non formal education is a complete system of education in itself and working in all major cities of Pakistan to facilitate the students. Government of Pakistan has a special concern towards the distance education institutions. Allama Iqbal Open University is the largest network organization for distance education in Pakistan.

However the quality of instruction in distance education is a debatable issue in the opinion of the experts. Especially the quality of research conducted through distance education as compared with the formal education system the distance/ non formal education differs in routine and facilities. This difference also effects on the attitude of the students and their level of motivation as well. Thus researcher has planned to investigate the difference in the attitude of the students enrolled in public and private sector distance education systems. Further, mainly researcher focus attention on finding out the impact of student's attitude and facilities on the quality of research produced in distance education system. In this way the researcher is interested to improve the quality of research by proposing a comprehensive plan of action to be adopted by the distance education institutions.

### **1.1 Research Objectives**

1. To assess the impact of student's attitude on quality of research in distance education system.
2. To assess the impact of facilities for research on quality of research in distance education system.
3. To compare the student's attitude towards the research activities on the basis of sector.
4. To compare the provision of facilities for research on the basis of sector.
5. To compare the quality of research on the basis of sector.

### **1.2 Research Hypothesis**

1. There is no impact of student's attitude on quality of research in distance education system.
2. There is no impact of facilities for research on quality of research in distance education system.
3. There is no difference in the student's attitude towards the research activities on the basis of sector.
4. There is no difference in the provision of facilities for research on the basis of sector.
5. There is no difference in the quality of research on the basis of sector.

### **1.3 Significance of the Study**

The formal and non formal system of education, both are equally important in the development of nation. Non formal education provides a relaxed environment to the ones who want to continue their education side by side their family, social and financial responsibilities. In this way it becomes more significant. As compare to formal education, Non formal education is not a very regular system. The relaxation in the regular class schedule sometimes affects the quality of education and teaching and learning process. So the research would help to assess the

quality of research in non formal system of education. In this way, the research would be beneficial for the students studying in distance education system. The findings of the study would be helpful to focus on the areas of research to improve the quality. It would also be beneficial for the teachers to understand and focus on the attitudes of students and by keeping in view their attitude towards distance education system. Keeping in view the available facilities the teachers would be able to utilize the facilities for the improvement of research qualities.

## **2.Literature Review**

Lee, Driscoll & Nelson (2004) states that Distance education institutions are developed all over the world to support and provide opportunities to the people who are engaged in family or professional responsibilities. According to Berge& Mrozowski (2001) it provides a relaxed platform to the professionals who want to improve their qualifications in a relaxed environment. Minnes (1985) reports that In developing and under developing countries distance education institutions' also provide educational facilities to the people living in rural and remote areas (Calvert, 1995). The people who cannot travel into the educational institutions because of the distance or other responsibilities or benefited from the system of distance education. There are many developing and under developing countries all over the world. These countries are continually making efforts to improve the literacy rate of its population. Being in the state of developing and under developing these countries has multiple issues in improving the literacy rate and the standard of education as a whole. Among these issues are the non-availability of the resources, low rate of literacy in adult and female sector and lack of awareness (Koble & Bunker, 1997).

Pakistan is also one of such countries, In many areas of Pakistan girl education is still a controversial issue. In many rural areas of Pakistan females not allowed to go to educational institutions' on daily basis. In many rural areas the people are not aware of the importance of female education. In all this situation distance education is a mode of education that not only provides educational facilities in rural areas but also contributing in enhancing the literacy rate. As compare to the formal education system the non formal or the distance education system is considered as a regular system for those students who are interested in education along with the job or after the gap from education at some stage (McGreal, (2004). Thus it effects on the attitudes of the students enrolled in distance education. Mishra (1997) said that the major responsibility to study independently, time management and concept understanding comes on the part of the students. As like formal system the environment of distance education is not strict one. Under this process of distance education, the students himself has to direct his studies (Osiakwan & Wright, 2001).

Here the ability and motivation of the student affects the quality of learning. Similarly at higher level of education, research is an integral part of education. The research skills among the students are also a sensitive area (Zawacki-Richter, 2009). Due to the lack of guidance and counseling, most of the students lacks in research related skills. The distance education system in Pakistan focuses the special attention the provision of facilities for the students in order to facilitate the students in different fields and skills. Still research is a vast area that needs personal attention, motivation and practice to get the skills related to the research (Saba, 2000). The distance education system is a complete system all over the world and many useful researches has been produced in this system in many countries of the world. Panda (1992) reports in his study the nine major areas of research being conducted in distance education system (p. 314): these area are "(1) concept, growth, and development; (2) curriculum, course planning, and development; (3) instruction and teaching; (4) media and technology; (5) learners and learning;

(6) institutional policy and management; (7) economics; (8) evaluation and programme evaluation; and (9) staff development”. In the same way Jegede (1994) conducted a research to assess the priorities of researchers in Australia in distance education system. He highlighted the following areas “(1) theory and philosophy; (2) learner characteristics; (3) equity and access; (4) design and development of study materials; (5) instructional and communications technology; (6) tele-teaching and learning; (7) management and planning; (8) student support services; (9) development of students’ study skills; (10) systems for the provision of feedback to students; (11) interactive multimedia; (12) discipline based context; (13) cognition and metacognition; (14) cost benefit analysis; (15) relationship between open learning and distance education; (16) industrial and business training context; (17) research methodology; (18) evaluation; (19) expert learning systems; (20) role of distance education in national development; (21) teacher education; and (22) professional development of distance educators”.

In Pakistan the common attitude towards research is not a very favorable one. Thus there is a need to not only improve the system but also to improve the attitudes. In order to produce the quality research we need to develop an insight and skills among the teachers and the students both.

### 3.Methodology

#### 3.1 Research Design

The research was based on survey type descriptive research. The research was related to the present day issues. Further the research employed the co relational type of study under the descriptive research style. The major aspect of the research was to explore the impact of attitude and facilities on the quality of research being produced by the distance education system.

#### 3.2 Population

The population of research was based all the higher level distance education institutions of Islamabad. There were 7 universities present in Islamabad that were offering distance education courses. There were 3,734 faculty members serving in these universities who were considered as the population of the research. Following is the list of these universities

	Name of university	Sector	Faculty
1.	Allama Iqbal Open university	Public	159
2.	COMSATS Institute of Information Technology	Public	2163
3.	International Islamic University	Public	500
4.	NUML	Public	513
5.	Comwave institute of Sarhad University	Private	65
6.	Virtual university of Islamabad	Private	280
7.	Preston university	Private	54
	<b>Total</b>		<b>3,734</b>

### 3.3 Sample

The disproportionate stratified sampling technique was used to select the sample for the research. In total 100 questionnaires were distributed among the sample respondents, 50 to the public sector and 50 to the private sector. 66 questionnaires were returned back, thus the return rate was 66 %. At the final stage 36 teachers from public and 30 teachers from private sector contributed in the research data collection process by giving their valuable opinion.

### 3.4 Data Collection Tool

To address the independent variables (Attitude and Facility Provision), A self-developed scale was developed by the researcher.

The scale related to the assessment of attitude towards the research activities based on 10 items. The second part was based on assessment of available facilities for the students. The second part was further divided into five sub-parts according to the nature of facilities (Scholarship/funds, Professional /technical support, Labs/library/internet, Supervision and Organization support). In total it was based on 23 items.

To address the dependent variable (Quality of Research), the scale was developed by the researcher in the light of theoretical parameters given by Obiagiel crystal oluka, shaofa Nie, Yi sun (2014). Research quality assessment scale was divided into 7 sub sections (Clarity In Aims/ Questions, Study Method, Data Collection, Research Context, Data Analysis, Results and Ethical Approval) and was based on 34 items in total.

### 3.5. Data collection:

The data was collected by the researcher herself by visiting the distance education institutions. During the workshops and seminar held at the campus, as it was easy and feasible to contact the teachers during the workshops and seminars.

### 4.Data analysis

The collected data was analyzed with the help of SPSS 21<sup>st</sup> edition for the purpose of analysis Cronbach alpha reliability, correlation, regression analysis and T test were used.

**Table No. 1 Reliability of the Scale**

Scale	Items	Cronbach's Alpha Reliability
Attitude towards Research Activities	10	.93
Facility Provision Assessment	23	.84
Quality Research Assessment	34	.94

Table No. 1 show that the scales developed for the research were found reliable and can be referred to the other researches as well. The reliability of students' Attitude towards Research Activities Assessment Scale was .93, the reliability of Facilities Provision Assessment Scale was .84, while the reliability of Quality Research Assessment Scale was .94.

**Table No. 2 Inter Correlation between the Scales**

Attitude towards Research Activities Assessment Scale	Facilities Provision Assessment	Quality Research Assessment Scale
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Scale				
Attitude towards Research Activities Assessment Scale	1			
Facilities Provision Assessment Scale	.425**	1		
Quality Research Assessment Scale	.292*	.629**	1	

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

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

Table No. 2 shows the inter correlation of the scales. It was found that all three scales were found significantly correlated with each other.

**Table No. 3 Impact of Student's Attitude on Quality of Research**

Independent Variable	Dependant Variable	$\beta$ (Coefficients)	t	Sig.	R Square
Attitude	Quality of Research	0.83	2.43	0.01	.085

Independent Variable: Attitude

Dependent Variable: Quality in Research

Table No.3 shows the effect of student's attitude on the quality of research. The value (0.085) represents that student's attitude had 8.5% effect on the quality of research. While  $\beta$  value (.83) shows that this effect was statistically significant ( $t=2.43$ ) at 0.01 level of significance.

**Table No. 4 Impact of Facilities for Research on Quality of Research**

Independent Variable	Dependant Variable	$\beta$ (Coefficients)	T	Sig.	R Square
Facilities	Quality in Research	0.87	6.46	0.00	.39

Independent Variable: Facilities

Dependent Variable: Quality in Research



Table No.4 shows the effect of facilities on quality of research. The data revealed that provision of facilities had 39% effect on the quality of research ( $\beta=0.39$ ) while the effect ( $\beta=0.87$ ) was statistically significant ( $t=6.46$ ) at 0.01 level of significance.

**Table No. 5 Difference in the Student's Attitude (t Test)**

Variable		N	Mean	T	df	Sig
<b>Attitude towards Research Activities</b>	Public	36	37.31	1.48	64	.14
	Private	30	34.33			

\*p <0.05, \*\*p <0.01

Table No. 5 shows the difference in student's attitude towards the research activities on the basis of sector (public & private). The data revealed that there was no statistically significant difference found between public & private sector ( $t=1.48$ ) with reference to student's attitude towards the research activities.

**Table No. 6 Difference in the Facility Provision (t Test)**

Variable		N	Mean	t	df	Sig.
<b>Facility Provision Assessment</b>	Public	36	74.81	.33	64	.74
	private	30	76.20			

\*p <0.05, \*\*p <0.01

Table No. 6 shows the difference in provision of facilities on the basis of sector (public & private). The data revealed that there was no statistically significant difference found between public & private sector ( $t=.33$ ) with reference to the provision of facilities for the research activities.

**Table No. 7 Difference in the Quality of Research (t Test)**

Variable		N	Mean	T	df	Sig
<b>Quality of Research Assessment</b>	Public	36	106.33	.71	64	.47
	Private	30	102.20			

\*p <0.05, \*\*p <0.01

Table No. 7 shows the difference in quality of research on the basis of sector (public & private). The data revealed that there was no statistically significant difference found between public & private sector ( $t=.71$ ) with reference to the quality of research.

### 5. Discussion

Research is the major function of higher education. It provides sustainable development for the nation (Bernard, Abrami, Lou & Borokhovski, 2004). Universities being responsible for higher education need skilled teachers to train the youth of the country (Charlton, 2004). The

youth is the future of the nation, thus there is a need to train and develop skill among the youth and make them able to participate in the progress of the country. The youth in Pakistan is full of capabilities and potentials. The government needs to provide assistance to get the productive out come by investing in the area of research (Neumann, 2007). Unfortunately in the education system of Pakistan, the field of research is ignored all levels. From the early stages of education the creativity and innovation among the children is ignored rather snubbed. Our education system and teacher training programmes both needs to focus on developing research related skills (Perraton, 2000). The quality of research produced defines the quality of education (Rourke & Szabo, 2002). The quality of research is not an independent factor. It is affected by many factors. Attitude and facilities are the major factors that can affect the product. Thus in the current study attitude and facilities were considered as independent factor while research quality as dependant factor. The data collected showed that attitude and facilities both had significant impact on research quality. In this context the Hypothesis No. 1 “There is no impact of student’s attitude on quality of research in distance education system” & 2 “There is no impact of facilities for research on quality of research in distance education system” were rejected. As the findings of the research shows that the students’ attitude was having 8.5% impact on the quality of research produced. While facilities had 39 % impact on the quality of research. Hypothesis No. 3, 4 and 5 were approved. There was no significant difference found between public and private sector related to student’s attitude, Facilities and research quality.

#### **6.Recommendations**

1. On the basis of the findings of the study it is recommended to the distance education institutions to introduce a separate and special system of mentoring for the research scholars. As it was observed that research students in distance education needs special guidance so in each department there may be one full time research mentor available for the students. So that they may consult him any time to seek guidance related to their problems.
2. It is also observed that well established labs is the most important need of the research students so the universities need to pay special attention to develop computer labs for the students through which they may have easy access to the online libraries and journals.
3. As distance education students are not regular contact of teachers so it is recommended that additional workshops on monthly basis related to research writing skills may be introduced.
4. There may be a system of having open sessions in distance education institutions on regular basis to discuss the research related problems of the students in order to get immediate solution.
5. It is also recommended that the latest electronic facilities related to the media access through internet and web integration may be provided to the students in order to get maximum benefit.
6. There is also a need to develop a serious attitude of the students towards the research activities. The research findings may also be applied in the practical situation to encourage the real creativity of the researcher.



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