# THE EFFECT OF COMMUNICATION BARRIERS ON DISTANCE LEARNERS ACHIEVEMENTS

# Abu Bakar<sup>a</sup>, Kiramat Shah<sup>a</sup>, Xu Qingyu<sup>a\*</sup>

## ABSTRACT

**Background:** Communication is a functional element of life. It transmits information, ideas, feelings and mutual understanding among people. Everyone has different capabilities to interact with others. There are specific barriers that restrict people's expression. The key objectives of this study were to elaborate on the communication barriers in distance education and their effects on the learning achievement of distance learners.

**Methods:** Stratified random sampling technique was used for 380 M.Ed Students from the five central regions of AIOU. The Academia in the Faculty of Education, Allama Iqbal Open University and all the Regional Heads were included in the study while 300 tutors of M.Ed program were also included in the sample. Four different set of questionnaires were used for data collection based on a five-point Likert scale. The data were analyzed by using descriptive statistical techniques, mean score and standard deviation.

Findings: Cultural barriers and psychological barriers showed no effect on academic achievement of distance learner. However, findings depicted that social barriers, cultural barriers, temporal barriers, technical barriers, psychological barriers, contextual barriers and collaborative barriers showed effect on academic achievement. It is clear from findings that communication gap had showed effect on academic achievement of distance learners.

**Results:** It was concluded that distance learners faced challenges in communication that effect the achievements of distance learners.

**Conclusion:** By providing better communication facilitates the distance learners through digital support services, immediate and timely feedback can enhance the teaching-learning process.

**Keywords:** Communication barriers, distance education, learning achievements, M.Ed. Students, M.Ed. Tutors.

## **1. INTRODUCTION**

Communication is a basic need of human beings in order to survive in this world. For effective learning and understanding, it is necessary for human beings to adopt effective communication, get information, exchange ideas and prompt feelings. Thus, communication is a procedure which emphasizes to transmit information and common understanding among individuals (Keyton, 2011). There is a variety of communication, such as verbal, nonverbal and oral communication. Due to verbal communication, a message or any information is transferred in word form. Nonverbal communication is a process in which a message or information can be transferred or conveyed in the form of a sign, body language, gestures and posture. In the last type, which is called Oral

<sup>a</sup>School of Education, Soochow University, Suzhou P.R China.

°Abu Bakar (Email: mrbakar.abu@gmail.com) °Kiramat Shah (Email: kiramatshah2u@gmail.com) °\*Correspondence: Xu Qingyu, Professor, School of Education, Soochow University, Suzhou P. R China (Email: qyxu@suda.edu.cn)

communication speeches, lectures, demonstration presentations, assignments, discussions, negotiation and aspects can be present orally. (İşman, Dabaj, Altinay and Altinay, 2003).

## **COMMUNICATION BARRIERS**

Communication is a functional element of life. People are socialized through effective communication skills. Effectiveness of communication depends on to what extent effective the process of communication and learning, and up to what extent there are communication barriers among the public, which are stakeholders. It is essential because every activity of a person involves direct or indirect

Abs. Dalana	11:	Ch all	a v	<b>0</b> :
Abu Bakar ª,	κιταπιαι	Snan	", ли	Qingyu **

interaction. Communication assistance dramatically effects the organization's behavior on a person (Brun, 2010; Summers, 2010). On the

other hand, deficiency of feedback communication slows down the organizational efficiency (Lutgen-Sandvik, 2010). That's why good communication skills play an important role in one's success as an administrator (Yate, 2009).

As a skillful communication passes among persons', different small and large group, industries and pubic private, different culture and races settings, that is why there are more exertion in overwhelming a greater diversity of barriers. The Communication barriers exist in all organization and these barriers may be particular or environmental or noise and cultural differences, bias within the organization. Communication barriers are being increased or emerged in education as technologies are getting better or expansion in their capacities and scope throughout the world. Communication methods have been expanded with Internet-capable devices and with this expansion, the opportunities for collaboration, context-aware problem solving and access to resources have also been increased. (Donaldson, 2011)

## PERCEPTION ON DISTANCE EDUCATION

According to Moore and Kearsley (2012) Distance education is defined as Distance education may be physical, pedagogical and social or cognitive. Cognitive distance is referring to how homogeneous students are amongst themselves. It is the failure of cognitive distance that due to it concept formation is difficult for learners the (Mumsch and Wilson, 2003). Pedagogical distance is a barrier among the teachers and during their educational experiences (Pereira, Lisbon and Lõhmus, 2005). So the major constraints which hunk effective communication are technical and web-based issues. But as due to the improvement of telecommunication systems, different types of communication barriers are added, so the need of training and guidance in an online context, unawareness of new technology, lack of satisfactory technology, participants defy of technological changes, difficulty in accessing the internet. difficulty in analyzing teachers' perspectives and delivering system. (Isman and Altinay, 2005).

Major Constraints is the unawareness of teachers and students from the communication roles Howevere there is faculty and organizational barriers due to the lack of information about their roles in distance education. (Galusha, 2001). Due to

this barrier students can feel uncomfortable, tensed, depressed, and isolated (Dennen, 2005

## **Psychological and Contextual Barriers**

Psychological barriers represent the interaction and presence of two persons; that is how one person closes with another while dealing with others. Contextual barriers refer to the difference of learning and problem solving between the abstract situations versus in an authentic situation presented to the student.

## ACHIEVEMENTS

Learning is a continuous lifelong process that starts from the mother's womb till last breath. Learning and development go parallel. Due to education, six aspects of an individual personality can be developed as physical status, mental ability, and social status, spiritual, esthetic and emotional behavior. The main goal of learning is to relate the development and achievement both. Dictionary of Education (2002) emphasizes that achievement is a better performance in a particular subject of concern study" (p.5). It is an abstract perception which can be assessed by some specified criteria. In accordance with Ofsted Book (2002) the mechanism of achievement is defined as to study check, elaborate and judged with all reference of the given progress made by a student or groups of students concern with their potential and ability.

Achievement outcomes are considered as made up of "skill" and "will" and are behaviors as separately terms because both are important for the development. The focus may be on the will or motivation to get a different outcome and it will be regarded separately from level of skill. The results of Hye-Jung Lee1 and Ilju Rha research (2009) mention that a well-structured program can be offered for educator's interaction inaccessible learning. Study shows that reasoning achievement in an interactive environment is noticeably higher than that of the achievement produces in structured teaching when critical thinking ability is pursued by learning contents.

## OBJECTIVES

Following were the main objectives of the study:

- 1. To identify the communication barriers in the distance education system.
- 2. To find out the learning achievements of distance learners.
- 3. To find out the effects of communication barriers on the achievements of distance learners.

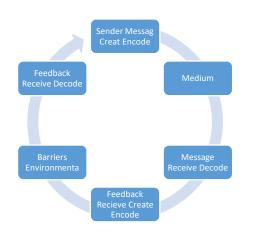
-	
14	

# 2. REVIEW LITERATURE CONCEPT OF COMMUNICATION:

Communication is taken from Latin

word communicare, which means "to share", it is an activity to convey a text through a shared system of signs, symbols and when sharing fails. ineffectiveness results (Northcutt 2009). Communication as defined by Reddi, (2009) "it is the procedures of transitory information and understanding and learning from one individual to another. It also the delivered ideas and making one self-understood by others" (p. 38). It is the exchange of concepts, thoughts, learning, and emotions between the sender and receiver so "communication is the mechanism of passing on data and common learning from one individual to another" (Keyton, 2011, p.16).

It is a way through transmitting information and making oneself to understand others and it is essential in educational institutions to take place (Ajmal, M., & Ahmad, S. 2019). Effective communication is an art that must be applied effectively in the classroom for successful achievement of goals of an organization, (Sanchez and Guo, 2005 For the development and success of an individual an effective communication skill is very important (Yate, 2009). Each of the communication process consists of two common elements that are the sender and the receiver. **The Cycle of Communication Process** 



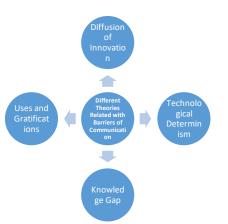
Source: McShane, and Von Glinow, (2003) Organizational Behavior:

Following are the Elements of communication that is the first one is sender, the second one is encoding, the third is a message, the fourth is medium, the fifth is decoding, the sixth is a receiver and the feedback. In the whole communication process, first sender initiates the text by using verses and signs to present data into a memo towards the handset. Here sender is an individual who originates and produces a message and

transports an idea to the receiver, the individual receiver is an individual due to which the message is conveyed. Text or Message may be in different way. When the telephone decodes the receivable message, it becomes significant information. An accurate decoded message makes communication more effective. Therefore, the ecological and particular barriers can hinder the communication process.

All these elements represent the quality of communication. In these elements, barriers can reduce the effectiveness of communication.

# Theories of communication barriers in distance education.



In the communication barrier, the related and connected theories can be classified as 1) Diffusion of Innovation 2) Technological Determinism 3) Knowledge Gap 4) Uses and Gratifications. Communication barriers consist of two parts, one is a technology and another is communication. "Diffusion of Innovation", and "Technological Determinism" theories are regarded as in the field of technology, and "Knowledge Gap" and "Uses and Gratifications" are considered in the area of communication.

## Diffusion of Innovation

Innovation is called something new and innovative as a new project, plan, idea or practice. In this process, information of an improvement to its implementation procedure which is helpful for the progression and development of an individual. Individuals are regarded as innovative when they adopt new concepts than other followers of a system (Owusu-Ansah, C. M., Rodrigues, A. D. S., & Walt, T. B. V. D. (2019).

According to Everett Rogers diffusion is that

Abu Bakar <sup>a</sup>, Kiramat Shah <sup>a</sup>, Xu Qingyu <sup>a\*</sup>

process in which due to some specific channels, an innovation is communicated among the associates of a social system" (2003, p. 5). People are feeling

anxiety when they change the teaching-learning process, from the out-of-date into face-to-face to the technologically facilitated learning experience.

### **Technological Determinism**

Bimber (1990) explained Technological Determinism

as Technology concerns the social structure and cultural values of society and its development. McLuhan and Innis (1994) are connected with this theory as Innis had analyzed human history with communication technology and argued that in the communication process human senses were very important and media expanded the intellects. According to McLuhan expands and states "The medium is the message". Therefore, television lets us to see and telephone for hearing distance. Other electronics apparatus that is computers and electronic media is uses store information, transmitted, properly manipulated far beyond capabilities and capacities of human nature.

#### **Knowledge Gap**

This Theory is primarily related with the unequal distribution of evidence which increases the inequality level within the social system. Inequality is because of socioeconomic status of individuals, as stated by Tichenor (1970) in their hypothesized Knowledge theory which emphasizes that "Due to the combination of information into a societal organization level promote developed socioeconomic condition of the population needs to obtain this data faster as associated to lower status." (pp. 159-160) Thus higher socioeconomic status accepts the mass media information faster as compared to low socioeconomic people in a society. Furthermore, there are five reasons of knowledge

Related social contact, selective exposure, media target markets, stored information Communication skills.

## **Gratifications Theory (UGT)**

Uses of UGT is actual an audience-centered method that stresses audiences' choice by selecting their reasons by means of media to obtain various gratifications from the media according to their different social and psychological requirements. It considers an active audience that discusses how users consciously select media content to satisfy various needs and allow one to improve knowledge, ethics, values and community interactions. Uses and gratifications according to Katz (1959) is "the procedures that need the question, not "What do the media do to individuals?" but "What do

individuals do with the media" (p.2). That is way powerful media message cannot affect individual the "uses" approach assumes that people's ethics, values, welfares, associations, and their social roles are predominant. People need "fashion" what they see it to their welfares. Severin and Tankard (1997) emphasized that "application and UGT theory methodology to understand that which people actively learn out certain media to satisfy precise desires. It is an audience-centered method for knowing mass communication and learning."

## **TYPES OF COMMUNICATION BARRIERS**



Barriers to communication are factors which breakdown the continuous communications loop especially in distance education system. Communication barriers can arise at any stage in distance education. Communication Barriers are categorized into six ways such as Social and Cultural, Temporal, Technical, Psychological, Contextual and Collaboration Barriers. (Berge, 2013)

## A) Social and Cultural Barriers

Communication is a social interaction process through which moves an intrapersonal, interpersonal and small group. But this social interaction process faces a variety of challenges that hinder its effectiveness. People socialize through communication as communication is considered an important tool to educate society. Communication is a way that provides a mutual understanding between students and teachers in an educational context. But there are some hindrances that prevent the effectiveness of the communication process in the educational sector. People face social and cultural distances because of these differences in class and socio-economic

status in society and these differences cause barriers in the communication process. Another view is that different cultural barriers are due to the

limited cultural environment. Russell, Gregory, Care, and Hultin (2007) stressed that cyber culture as "uniformly developing and rapidly changing considered by a certified language, specialized language like Anglo-American customs, characteristics of forcefulness, attractiveness and western-style efficiency" (p. 353).

## **B)** Temporal Barriers

Temporal Barriers are related to time barriers. Time is a main barrier of communication in distance education. Students do not receive their course materials, assignments and letters on time because of poor postal system. Students face fear of time which is one of causes of drop out. Time pressure effects the learning skills of students in distance education. As Pajo and Wallace (2001) discussed that teachers' attitudes, inadequate communication access, time constraints, and time pressures create hurdles in the teaching-learning process.

Thangada (2010) comes up with such kind of hindering factors as lack of release time and the time devoted to course development. In comparison, Volery and Lord (2000) indicate that instructors' interaction motivates learners to contribute by eliminating temporal. So, teacher interaction eliminates temporal barriers and makes learning relaxed. Temporal barriers impede the communication of students and teachers, and effect the effective communication process.

## **C)** Technical Barriers

The advancement of technology takes human beings into a competitive world. Internet technology and computer-mediated communication allow educational institutes to expand their knowledge globally. But there are some technical distances in access to technology throughout the world that refer to the differences of individual competency to use technology. However, the advancement of communication technologies decreases such kind of technical distances. Communication technologies are getting fast and communication tools get people together through internet (Isbulan, 2011). Human beings cannot live without communicating so they need understandable tools for communication in educational institutions. Modern information technology also engages in communication and information exchanges of institutions (Kiyici, 2011).

Now-a-days education is technology-based

which enhances the communication process in learning. But technical issues hinder the effectiveness of communication (İşman and Altinay,

2005). Technical barriers during communication faced by learners and educators are a deficiency of experience about skill (Perreault, Waldman, Alexander, and Zhao, 2002). On the other hand, Karal, Çebi, and Turgut (2011) mentioned the different problems like teacher, atmosphere, distance, subject type, and duration related problems. They face some other technical barriers like freezing screen, sound disturbances and echoes. The resolution of the monitors is also a problem for the eyes. Such kinds of technical problems hinder the students learning and demotivate their understanding level.

## D) Psychological Barriers

Psychological or mental barriers are those hurdles that are created by the minds of people and that prevent them from communicating. It is also influenced by a psychological condition (Brainerd, J. C. (2020). Communicators are anxious by the mental disturbance which effect communication. Psychological barriers are also called mindassociated problems as every person's mind is unique and different. People involve in communication according to their own state of mind. Their fear and emotions create barriers in their communication.

Psychological issues are potential problems in the communication process. Sreenath (2009) focuses on attitudes and values which effect the individuals' state of minds and create psychological barriers in communication. Moreover, differences in perceptions, resistance to change and individuals' past experiences are also categorized as psychological issues. Such kinds of psychological issues are the cause of frustration among the students and tutors in distance education. As a result, students feel agitated, which move them towards the feelings of anxiety in their educational career.

## E) Contextual Barriers

Contextual barriers effect the communication process of individuals. Sometimes words that are used by one person are totally different in the context of another person. Both use words in a different context so that their level of understanding would also be different because of contextual meanings. Therefore, it is essential to understand the words with their contextual meanings, which enhance the understanding level of an individual.

#### 253

#### Abu Bakar °, Kiramat Shah °, Xu Qingyu °\*

Recently mobile devices work as a barrier in the contextual distance. These mobile communication devices make social networking fast and provide

support for education and training. Basically, mobile learning provides flexibility to access channels of communication, which supports the learning process of students. "Students desires to maintain a balance limit limit among theoretical and individual life by using phone message for message purpose" (Donaldson, 2011, p. 16). The usage of mobile devices is beneficial for students as they can communicate with classmates and instructors. But they find barriers of time, space and place regarding communication with instructors and classmates.

In fact, mobile devices are helpful for the teacher and students to enable them to interconnect with each other. Mobile devices are enhancing communication in learning environments and engaging students in different learning-related activities (Gay, 2001

#### F) Collaboration Barriers

Collaboration is teamwork in which people are directed to work together to achieve communal assignments and goals. They communicate with each other and sharing ideas and knowledge to gain their goals. As communication moves through small groups, people get to interact with each other, but at the same time, they face some barriers which hinder their communication process. Like in education sector, students used to combine study for their tough task and make them understandable. But it is not possible in distance education system because of geographical distances. However, collaboration among students enhances learning and increase motivation. But there are some communication barriers that hinder collaboration learning.

Now-a-days communication is expanded through internet devices which enhance the collaboration in online education system. But students face many difficulties while communicating others. Their time difference creates a communication gap. As Kim, Liu and Bonk (2005) pointed out that differences of time zone create communication problems among the online learners. They cannot follow the time and collaborate with each other. Time differences effect their group discussion as some students' follow time but others cannot because of certain reasons. For instance, in online group discussion some students do not response properly because of not knowing the group members. Unfamiliarity is a hurdle in collaborating process and their delayed

responses effect the communication and group performance (Koh and Hill, 2009).

## ACHIEVEMENTS

According to the Merriam-Webster Dictionary achievement is "up to some degree that has been done or accomplished through working: an end result of hard work. The condition of having accomplished something". So, effort and hard work is needed in achieving the desired goal. As mention Dictionary of Education (2005) by "The achievement is a successful accomplishment in certain subjects, areas, discipline or courses, usually in case of skill, profession and hard work and interest". In other words, "achievement is the conclusion of the successfulness, the extent the progress in learning educational practices that the individual involves in relation with his/her educational learning" (Isnian, 2009). So, achievement is a thing done by an individual which made a noticeable difference in the performance, added value and contributed to the advancement

Learning achievement represents academic routine outcomes explain that a person has skillful goals specifically in institute, college, and university specifically shown in the form of value. As from Shah (2008) the education improvement is the "degree of individual improvement in different subject oriented in institution which stated in the form of ratings" (p.91).

## ACHIEVEMENTS OF DISTANCE LEARNERS

Learning is needed for achieving goals and success. In educational system especially in distance education, students work hard to achieve success in their academic career. As in disstance learning they need more effort to get high scores, which determine the competence in their course. They work hard for getting the Grade Point Average (GPA) which processes the student's mean academic achievement across the courses taught in any given semester (McKenzie, Gow and Schweitzer 2004, Zeegers, 2004). So, it is vibrant to use GPA to calculate the student's performance for the particular semester.

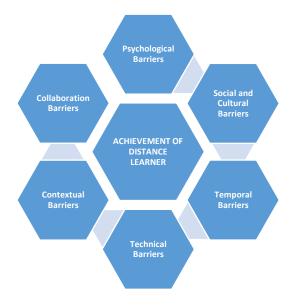
Both teacher and students are separate in the spatial dimension in distance learning, and use of technological resources fill this distance (Casarotti, Filliponi, Pieti and Sartori, 2002) and students who are learned through distance learning system called distance learner. Distance learners have various potential, intellectual and mental capacities. Students are self-regulated, self-directed and dynamic to learn. There are different needs for distance learners and motivations as compared to

others. So, for successful distance learning tutor need to be considered learners' individual traits and learning methodology during the learning process

## (Hussain, 2013).

Hoffman and Lowitzki (2005) pointed out that theoretical achievement, and student satisfaction are measures of academic success which determine the distance learner's satisfaction and enables the evaluation of not only learners' knowledge but also the effectiveness of teaching. Thus, there is a strong connection between learners' satisfaction and academic achievements (Dhagane and Afrah, 2016) in teaching-learning process. So, academic performance was influenced the final grade and distance learners' behavior.

# EFFECTS OF COMMUNICATION BARRIERS ON ACHIEVEMENTS OF DISTANCE LEARNERS

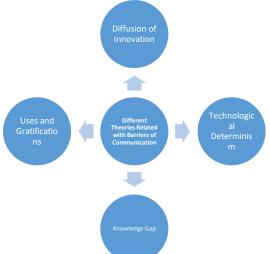


**The Communication Process** 



Source: McShane, and Von Glinow, (2003)Organizational Behavior:

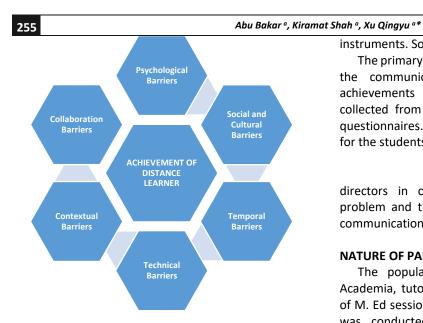
Theories on communication barriers in distance education.







EFFECTS OF COMMUNICATION BARRIERS ON ACHIEVEMENTS OF DISTANCE LEARNERS



#### **DESIGN OF THE STUDY**

Learners face communication barriers in all over the world, which effect their learning. It affects not only the formal system of education but also the non-formal system of education as in AIOU. Learners of AIOU face communication barriers because they are in distance level, so survey design is used to get the opinion of distance learner about the communication barriers which effect their learning and achievements. The study was quantitative, non-experimental and descriptive in nature. Data do not need to be always available in quantitative form. For this purpose, noncan quantitative data be converted into quantitative form through measurement Population of Study

The primary purpose of the study was to find out

instruments. So survey design was used.

the communication barriers its effect upon achievements of distance learners. Data was collected from the respondents by using survey questionnaires. Four questionnaires were framed for the students, tutors, academicians and regional

directors in order to deeply understand the problem and their opinions about the effects of communication barriers.

## NATURE OF PARTICIPANTS

The population for the current study was Academia, tutors, regional directors and students of M. Ed session enrolled 2014 at AIOU. The study was conducted on the effects of C.B upon achievements of distance learners. Effects of C.B were seen through the scores of students which they achieved in the last semester of M.Ed (Autumn-2013).

## **POPULATION OF THE STUDY**

The population of research covered:

Tutors of M.Ed. of Provincial Headquarters 1. and Islamabad, i.e. 1104.

2. M.Ed Students of Provincial Headquarters and Islamabad, i.e. 33120.

Regional Directors of AIOU stationed at 3. Provincial Headquarters and ICT 12.

4. Academia of the Faculty of Education, i.e. 20.

opulation of 5tu	uy			
Regions	Tutors	Students	Academicians	<b>Regional Directors</b>
Islamabad	231	6930	20	2
Lahore	229	6870	-	3
Karachi	252	7560	-	3
Quetta	202	6060	-	2
Peshawar	190	5700	-	2
Total	1104	33120	20	12

#### SAMPLING OF THE STUDY

The sample size of tutors and students is based on the formula generated by Krejcie and Morgan (1970). According to these 1104 tutors' population sample size is 300 and 33120 students' population sample is size is 380.

1. M.Ed. Tutors of Provincial Headquarters and Islamabad, i.e. 300.

- 2. M.Ed. Students of Provincial Headquarters and Islamabad, i.e. 380.
- 3. Regional Directors of AIOU stationed at Provincial Headquarters, i.e. 12 (100%).
- 4. Academia of Faculty of Education, i.e. 20 (100%).

Sample of the Stud	y
--------------------	---

Regions	Tutors	Students	Academicians	<b>Regional Directors</b>			
Islamabad	70	80	20	2			
Lahore	70	80	-	3			
Karachi	60	75	-	3			
Quetta	50	75	-	2			
Peshawar	50	70	-	2			

256		Abu Bakar ª, Ki	ramat Shah ª, Xu Qingyu	*	
Total	300	380	20	12	

## The instrument of the Study

Debois (2019) defines a tool as an instrument for collecting data that response to a set of oral or written questions on a given subject. It is a practical and quick way of collecting data. The instrument is a vital part of survey research. Questionnaires were the instrument of the study. Four different sets of questionnaires were developed for that purpose that is for students, for tutors, for academicians and questionnaire for regional directors.

## **RESPONSES RATE**

#### Responses Rate

Population	Sample Size	First	Final Response after	Total	Rate
		Response	second/third requests	Responses	
Tutors	300	200	50	250	83%
Students	380	170	103	273	72%
Academicians	20	20	20	20	100%
<b>Regional Directors</b>	12	12	12	12	100%

## Validity

A pilot study was conducted on ten students who were selected to test the reliability of the instrument. These students were not part of the sample of this study. On the other hand, Questionnaires of a tutor, was presented to five tutors, questionnaires for academicians was presented academicians while to two questionnaires for regional directors were presented to 2 expert and suggestions were accommodated. These teachers were experts in this field and had the experience of 20-25 years. They found the instrument valid and suitable to ascertain the effects of communication barriers on the achievements of distance learners. The final versions of research instruments were developed with the consultation of the supervisor.

## Reliability

The validity of tools was tested by experts, followed by a pilot study on a small scale. The population included in this pilot study was not included in the actual launch. Moreover, Cronbach  $\alpha$  was used to measure the reliability of the tools. Cronbach  $\alpha$  was developed by Cronbach  $\alpha$  in 1951, which measures reliability or internal consistency, and that is the most common measure of consistency. The reliability of the questionnaires for Tutors was calculated .9. The reliability value of questionnaires for Academia was calculated .9. The reliability of questionnaires of Students was .94, and Cronbach  $\alpha$  for questionnaires for Regional Directors was .98. The final version of the Questionnaires contained Questionnaires for tutors 34 close-ended statements, Questionnaires for students 34 close-ended statements, Questionnaires for academia 34 close-ended statements and Questionnaires for Regional

Directors 37 close-ended statements.

## 3. DATA ANALYSIS

Data were collecting by survey method. Hence, these research tools were intended to collect the data from Regional Directors, Academicians of Faculty of Education, Tutors of M. Ed and students. Moreover, the results were recorded and tabulated orderly, systematically and carefully. Later, percentage, mean score, Standard deviation and ANOVA were applied.

## DATA ANALYSIS OF TUTORS 4. SUMMARY

The success of an institution depends upon effective communication, but due to some barricades that hinder the communication process. In this study communication, barriers are defined and examined in distance education. Afterward, theories related to barriers of communication in distance education are categorized into four types that are a) Diffusion of Innovation b) Technological Determinism c) Knowledge Gap and d) Uses and Gratifications. Communication barriers are divided into two parts, one is a technology and another is communication. "Diffusion of Innovation", and "Technological Determinism" theories are related to the field of technology, and "Knowledge Gap" and "Uses and Gratifications" area related to communication

Further communication barriers are categorized as physical barriers, technical barriers, temporal barriers, psychological barriers, contextual barriers, social barriers, cultural barriers, interaction barriers and collaboration barriers. These barriers effect the learning achievements of distance learners. Therefore, achievements of distance learners have been discussed and their significance regarded communication barriers. Concluding effects of 257

communication barriers on the achievements of distance learners have been discussed.

## 5. FINDINGS

On the basis of data analysis, following are the findings that were drawn: Objective No.1: To identify the communication barriers in distance education system.

## **Findings of Academicians**

Academia found social barriers, cultural barriers, temporal barriers, as a big challenge in the process of teaching-learning in distance education. They found it as a main obstacle in communication, social networking followed by cooperative by the students. Academia also found technical barriers,

psychological barriers as a big challenge in the process of teaching-learning in distance education. They found main hindrance in communication, satisfactory postal services and student support services followed by technological devices by the students. Besides all that academia found contextual barriers, Collaborative barriers, communication barriers were big challenges in the teaching learning process of distance education. They found main obstacle in communication, understanding of complex topics followed by misunderstanding of meaning by the students.

## **Findings of Regional Directors**

Regional directors found social barriers as a big challenge in the process of teaching learning in distance education. They found main obstacle in communication, interactive and direct communication followed by social learning environment by the students. Further, regional directors also found cultural barriers, temporal barriers, technical barriers, as a big challenge in the teaching learning process of distance education. They found main hindrance in communication, differences of lingual pattern and attitudes followed by understanding by students.

Psychological barriers, contextual barriers, Collaborative barriers, communication barriers, were also found by regional directors were big challenges in the teaching learning process of distance education. They found main impediments in communication; immediate feedback followed by immediate support by students.

#### **Findings of Tutors**

Tutors found social barriers, cultural barriers, temporal barriers, technical barriers, were big challenge in the process of teaching learning in distance education. They found main obstacle in communication, social learning environment and social networking followed by cooperative by the students.

Tutors also found technical barriers, Psychological barriers, contextual barriers, Collaborative barriers, communication barriers were big challenges in the process of teaching learning in distance education. They found main hindrance in communication, student support services and satisfactory postal services followed by technological devices by the students.

## **Findings of Students**

Students found social barriers, cultural barriers, temporal barriers, technical barriers, were big challenge in the process of teaching learning in

distance education. They found main obstacle in communication; interactive communication followed by interactive social learning by the students.

Besides all that students found contextual barriers, Psychological barriers, Collaborative barriers, communication barriers were big challenges in the teaching learning process of distance education. They found main obstacle in communication, understanding of concept followed by complex topics by students.

## Findings of Distance Learners' Achievements Objective No.2: To find out the learning achievements of distance learners.

Communication barriers are big challenge in distance education, which effect performance and the achievements of distance learners to achieve the highest scores.

# Findings of the effect of Communication Barriers on the Achievement of Distance Learners.

Objective No.3: To find out the effects of communication barriers on achievement of distance learners. It is found that social barriers, cultural barriers, temporal barriers, technical barriers, psychological barriers, contextual barriers and collaborative barriers paid effect on academic achievement of distance learners.

#### 6. DISCUSSION

Henke and Rusum (2000) in their study recommended that separation among individual can generate a sense of inaccessibility in many students that's why they identified to use mail, websites forums and internet facilities to decrease the isolation feeling. The research also recommends the interaction through tutorial and social media, as this can reduce the isolation of the

students.

Shen (2004) in her study pointed out that for most people communication is difficult with strangers and tutors, this study also supports these findings. Zacharia (2008) in his study finds that pitiable dexterity and effective communication between supervisors and scholars are due the causes of dropout in distance education while study also supports Zacharia work by recommending that immediate and timely feedback from tutors to the students can reduce the dropout.

Pajo (2001) in his study pointed out that incompetency to use the web-based are associated with the technology which may hinder the student from transferring his/her intentions into behavior while this study recommends that accessibility of

internet and skills with new technological devices as well as social media networking enhance the teaching-learning process. On the other hand, O'Hanlon (2001) recommends in his study that lack of technical support create barriers in distance learning while this study also recommends technical support.

However, Belchair and Cucek (2001) in their study pointed out two barricade that is lack of interaction and lack of time is the second greatest barrier of distance education while this study supplements Belchair and Cucek by suggesting immediate and timely interaction between students and tutors.

Kamal and Sultana (2000) emphasized that limited use of media obstructs effective communication in distance learning, while this study also highlights the importance of media in distance education.

Sali (2008) in his study pointed out that a lack of social interaction is a barrier which de-motivates the students learning in distance education. While this study carried out by the researcher also supports the value of social interaction.

Koh and Hill (2009) in his study pointed out that lack of online group work obstructs the operative communication in learning while this research supports the due importance of online group work for learner's success.

Pillai (2011) in his study pointed out that language barriers and lack of subject knowledge hinder effective communication in distance learning while this study also highlights the importance of language and subject knowledge.

## 7. CONCLUSION

It is concluded that distance learners faced challenges in communication. These challenges often overlap one another and increased the complexity and anxiety of distance learners. In distance education, such barriers effect the actual communication and also disrupt the achievement and learning experience of distance learners.

Communication barriers are a significant challenge in distance education, which effects the distance learners' performance and achievements.

## 8. RECOMMENDATIONS

The following recommendations are being made:

- 1. Provide better communication facilitates to the distance learners through digital support by student support services.
- 2. Provide timely feedback to the distance learners, which enhance the teaching-learning

#### process.

- 3. It is also recommended to facilitate the monitoring process of postal services by the Pakistan post office.
- 4. Accessibility of the internet and skills with new technological devices facilitates distance learners through social media networking.
- 5. More group interaction through tutorials enhances the distance learners' performance by adequate meeting time.

## ACKNOWLEDGEMENT

This paper is supported by National Institute of Education Sciences Project "The Research of the construction quality of the science research group of universities" (Project Code: BIA200166).

### REFERENCES

- Ajmal, M., & Ahmad, S. (2019). Exploration of Anxiety Factors among Students of Distance Learning: A Case Study of Allama Iqbal Open University. Bulletin of Education and Research, 41(2), 67-78.
- [2] Allan, B. (2003). Approaches to learning and academic achievement of Filipino students. The Journal of Genetic Psychology, 164, 101-114.
- [3] Belcheir, M. J. & Cucek, M. (2001). Student Perceptions of Their Distance Education Courses. Research Report 2001-04. Retrieved from http://files.eric.ed.gov/fulltext/ED480923.pdf,

on 6th February 2016, at 11:30pm.

 Berge, Z. L., (2013). Barriers to Communication in Distance Education, Turkish Online Journal of Distance Education-TOJDE January 2013 ISSN 1302-6488 Volume: 14 Number: 1 Article 31. Retrieved from https://tojde.anadolu.edu.tr/yonetim/icerik/m akaleler/866-published.pdf, on 14th February

2017, at 12:40pm.

- [5] Bimber, B., (May 1990). Karl Marx and the Three Faces of Technological Determinism. Social Studies of Science 20 (2): 333–351. Retrieved from doi:10.1177/030631290020002006, on 21st October 2016, at 3:00pm.
- [6] Brainerd, J. C. (2020). Examining Barriers to Distance Learning Instruction in Alternative Education: A Single Case Study (Doctoral dissertation, University of Phoenix).
- [7] Brown, J., & Metcalf, D. (2008). Mobile learning update. Elliott Masie's Learning Consortium Perspective. Retrieved from http://www.numerons.in/files/documents/M-Learning-Forecast.pdf on 1st July 2015, at 10:30am.
- [8] Brown, T. H. (2006). Beyond constructivism: Navigation in the knowledge era. On the Horizon, 14(3), 108-118. Retrieved June 8, 2008, from ProQuest database.
- [9] Casarotti, M., Filliponi, L., Pieti, L. & Sartori, R. (2002) Educational interaction in distance learning: Analysis of one-way video and twoway audio system. Psych Nology Journal, 1(1), 28 – 38.
- [10] Debois, S., (2019). Ten Advantages and Disadvantages of Questionnaires (Updated 2019). Retrieved from https://surveyanyplace.com/questionnairepros-and-cons/ on 20th July 2019, at 10:00am.
- [11] Dennen, V. P., (2005). From Message Posting to Learning Dialogues: Factors Affecting Learner Participation in Asynchronous Discussion, Distance Education, 26, pp.127-148.
- [12] Dhaqane, M. K., & Afrah, N. A. (2016). Satisfaction of students and academic performance in Benadir university. Journal of Education and Practice, 7(24), 59–63.
- [13] Dictionary of Education compiled by Mamta Mehndiratta. (2005). New Delhi: K. S. Paperbacks.
- [14] Donaldson, R.L. (2011). Student acceptance of mobile learning. Doctoral dissertation, Florida State University. Retrieved from http://etd.lib.fsu.edu/theses/available/etd-05312011-074842/unrestricted/Donaldson R dissertatio

n 2011.pdf, on 11th May 2018, at 7:00 pm

- [15] Ferguson, D. & Perse, E. (2000). The World Wide Web as a functional alternative to television. Journal of Broadcasting & Electronic Media, 44 (2), 155-174.
- [16] .Galusha, J.M., (2001). Barriers to learning in Distance Education. The Infrastructure Network, University of Southern Mississippi. Galusha,

J.M., "Barriers to Learning in Distance Education" The Infrastructure Network. New Jersey City University, 1997. Retrieved from http://www.njcu.edu/, on 15th February 2015, at 12:40pm

- [17] Gay, G., Stefanone, M., Grace-Martin, M. & Hembrooke, H. (2001). The effects of wireless computing in collaborative learning environments. International Journal of Human– Computer Interaction, 13, 2, 257–276.
- [18] Henke, H. & J. Russum (2000). "Factors influencing attrition rates in a corporate distance education program" Education at a Distance Journal, 2000, Vol. 14 (44)
- [19] Hoffman J. L., & Lowitzki, K. E. (2005). Predicting college success with high school grades and test

scores: Limitations for minority students. The Review of Higher Education, 28(4), 455–474. https://doi.org/ 10.1353/rhe.2005.0042.

- [20] Hussain, I., (2013). "A Study of Learners' Reflection on Andragogical Skills of Distance Education Tutors", Online Submission 6, no. 1 (2013): 123- 38.
- [21] Isbulan, O. (2011). Opinions of University Graduates About Social Networks According to Their Personal Characteristics. Turkish Online Journal of Educational Technology.10(2).184-189.
- [22] İşman, A., & Altinay, F. (2005). Communication barriers: A study of Eastern Mediterranean University students' and teachers of online program and courses. Turkish Online Journal of Distance Education, 6(4) Article 13. Retrieved from

http://tojde.anadolu.edu.tr/yonetim/icerik/ma kaleler/224-published.pdf, on 1st July, 2015 at 12:30am.

- [23] Isman, A., Canan, O., Isbulan, O. & Demir, Z.
  (2008). Communication Barriers: A Study of Teacher Candidates of Using Technology. International Educational Technology Conference 2008. Eskisehir. 201 – 208.
- [24] İşman, A., Dabaj, F., Altinay, F. & Altinay, Z.
  (2003). "Communication Barriers in Distance Education", The Turkish Online Journal of Educational Technology, Volume 2, Issue 4.
- [25] Isnian H. M.S., (2009). Definition of Achievement. Retrieved from http://hmsofyanisnianspd.blogspot.com/2009/ 08/definition-of-achievement.html, on 17th February 2016, at 4:15pm.
- [26] Kamal, M. Z. & Sultana, S. A. (2000). Barriers to Development in Open Learning and Distance Education, Bangladesh, Bangladesh University Press.

- [27] Karal, H., Çebi A. & Turgut, Y. E. (2011).
  Perceptions of Students Who Take Synchronous Courses through Video Conferencing about Distance Education. Turkish Online Journal of Educational Technology. Volume: 10 Issue: 4, Pages: 276-293. Retrieved from http://www.tojet.net/articles/v10i4/10428.pdf, on 1st July 2015, at 1:30am.
- [28] Katz, E., (1959). Mass Communications Research and the Study of Popular Culture: An Editorial Note on a Possible Future for this Journal. Departmental Papers (ASC): 1–6.
- [29] Keyton, J. (2011). Communication and organizational culture: A key to understanding work experience. Thousand Oaks, CA: Sage.
- [30] Kiyici, M. (2011). Determination of Perceptions

of the Teacher Candidates Studying in the Computer and Instructional Technology Department Towards Human-Computer Interaction and Related Basic Concepts. Turkish Online Journal of Educational Technology.10(2).54-62.

- [31] Koh, M. H., & Hill, J. R. (2009). Student perceptions of group work in an online course: Benefits and challenges. Journal of Distance Education, 23(2): 69-91.
- [32] Krejcie, R.V. & Morgan, D.W. (1970).
  Determining sample size for research activities.
  Educational and Psychological Measurement,
  30, 608. Copyright© 1970 by Sage Publications.
  Reprinted by permission of Sage Publications,
  Inc
- [33] Lutgen-Sandvik, P. (2010). Destructive organizational communication: Processes, consequences, and constructive ways of organizing. New York, NY: Routledge.
- [34] McKenzie, K., Gow, K.& Schweitzer, R. (2004). Exploring first-year academic Achievement through structural equation modeling. Higher Education Research & Development, 23, 1, 95-112.
- [35] McLuhan, M. (1964). Understanding Media: The Extensions of Man; 1st Ed. McGraw Hill, NY; reissued by MIT Press, 1994, with introduction by Lewis H. Lapham; reissued by Gingko Press, 2003 ISBN 1-58423-073-8. Cited in Wikipedia – The Free Encyclopedia. Retrieved from http://en.wikipedia.org/wiki/Marshall\_McLuha n, on 30th on 29th June 2015, at 6:00am.
- [36] McShane, S. L., & Von Glinow, M. A. (2003). Organizational behavior: Emerging realities for the workplace revolution (2nd ed.). Boston: McGraw-Hill.
- [37] Mumsch, T., & Wilson, B. (2003). The role of online, asynchronous interaction in

development of light and color concepts. The Journal of Interactive Online Learning, 2(2): retrieved

from http://www.ncolr.org/jiol/issues/PDF/2.2. 5.pdf, on 14th February 2015, at 3:40pm

- [38] Northcutt, S. (2009). SANS Leadership and Management Competencies. Bethesda, MD: The SANS Institute.
- [39] Owusu-Ansah, C. M., Rodrigues, A. D. S., & Walt, T. B. V. D. (2019). Integrating digital libraries into distance education: A review of models, roles, and strategies.
- [40] Pajo, K., & Wallace, C. (2001). Barriers to the Uptake of Web-Based Technology by University Teachers. Journal of Distance Education, 16(1). Retrieved from

http://www.jofde.ca/index.php/jde/article/vie w/171/127, on 1st July 2015, at 12:10am.

- [41] Pajo, K., (2001). Barriers to the Uptake of Webbased Technology by University Teachers. Journal of Distance education. 16(1).
- [42] Pereira, A. Lisbon, A., & Lõhmus, K. (2005). Chapter 4: Pedagogical issues in ODL. In K. DePryck (Ed.), Getting started with open and distance learning. (pp: 43-55). Antwerp, Belgium: Garant Publishers. Retrieved from http://www.odlexpert.net/getstart/chapt er4.pdf, on 14th February 2015, at 4:00pm.
- [43] Perreault, H., Waldman, L., Alexander, M., & Zhao, J. (2002). Overcoming Barriers to Successful Delivery of Distance Courses. Journal of Education for Business v. 77 no6, p. 313-1. Retrieved from http://www.tojet.net/articles/v2i4/242.pdf on 15th February 2015, at 4:20pm.
- [44] Pillai M. (2011). Barriers to Effective Communication. Retrieved from http://www.buzzle.com/articles/barriers-toeffective-communication.html, on 12th May 2018, at 7:00 pm.
- [45] Reddi, C.V. (2009). Effective public relations and media strategy. PHI learning private limited, New Delhi.
- [46] Rogers, E. M., (1995). Diffusion of Innovations. (4th ed). New York: Free Press. Retrieved from http://en.wikipedia.org/wiki/Diffusion\_of\_inno vation, 30th June 2015, at 4:57am.
- [47] Sanchez, Y. & Guo, K.L. (2005). Workplace Communication. In N. Borkowski (Eds.), Organizational behavior, theory, and design in health care (P.77-110). Canada. Jones and Bartlett Publishers, Inc.
- [48] Severin, W., Tankard, J., (1997). Communication theories: Origins, methods, and uses in the mass media. Longman.

- [49] Shen, C-Y. (2004). The impact of cultural factors in distance learning: A reviewing research. In L. Cantoni & C. McLoughlin (Eds.), Proceedings of World Conference on Educational Multimedia, Hypermedia and Telecommunications 2004 (pp. 3743-3748). Chesapeake, VA: AACE.
- [50] Sreenath, S. (2009). Communication Barriers. Retrieved from http://www.slideshare.net/sreenath.s/commu nication-barriers, 10th February 2016, at 2:40am.
- [51] Stine, L., (2004). "The Best of Both Worlds: Teaching Basic Writers in Class and Online", Journal of Basic Writing, 23, pp.49-69.
- [52] Thangada, D. (2010). Factors Affecting Distance Education at Southern University at New

Orleans. A Historically Black University. New Orleans, 2010 Proceedings of the Academy of Information and Management Sciences, Volume 14, Number 1. Retrieved from http://www.alliedacademies.org/pdfs/proceedi ngs26/AIMS%20Proceedings.pdf, on 20th

### **Figures and Tables**

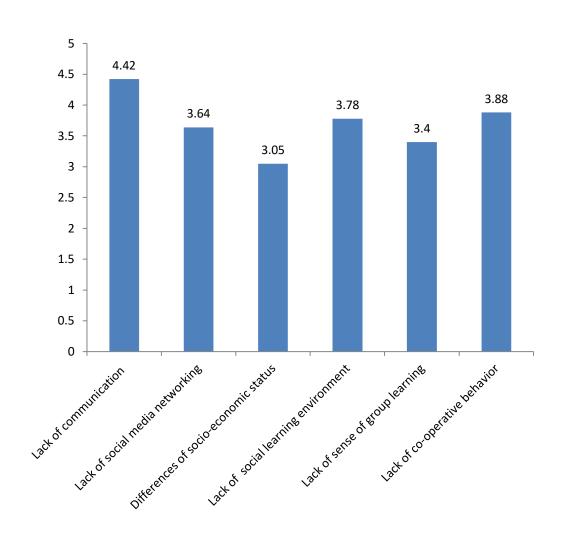
261

September 2016, at 12:10am.

- [53] Tichenor, P.A., Donohue, G.A., & Olien, C.N. (1970). Mass media flow and differential growth in knowledge. Public Opinion Quarterly 34 (2): 159–170. Retrieved from doi:10.1086/267786, on 1st October 2016, at 7:00pm.
- [54] Volery, T., and Lord, D. (2000). Critical Success Factors in Online Education. The International

Journal of Educational Management, 14(5), 216-223. Retrieved from http://www.emeraldinsight.com/journals.htm? issn=0951354X&volume=14&issue=5&articleid =838758&show=pdf, on 16th April 2015, at 12:10am.

- [55] Yate, M. (2009). Hiring the best: A manager's guide to effective interviewing and recruiting. Cincinnati, OH: F & W Media.
- [56] Zacharia, R. R. (2008). Factors Causing Students Drop out from Education Programme at the Open University of Tanzania. The Case of Tanga Regional Centre. M. Dist. Education Thesis. The Open University of Tanzania



Mean score

Figure 1. Social Barriers in the learning process of Tutors

2020, Vol. XXIX, N°5, 248-264 REVISTA ARGENTINA **DE CLÍNICA PSICOLÓGICA** 

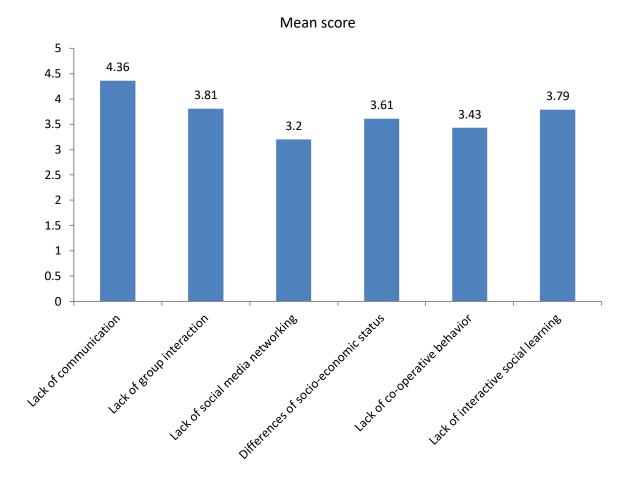
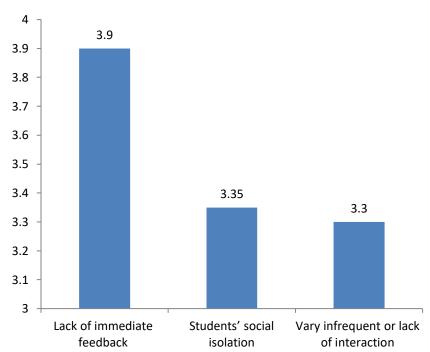


Figure 2. Social Barriers in the learning process of Students



Mean score

igure 3. Psychological Barriers in the learning process of Academicians

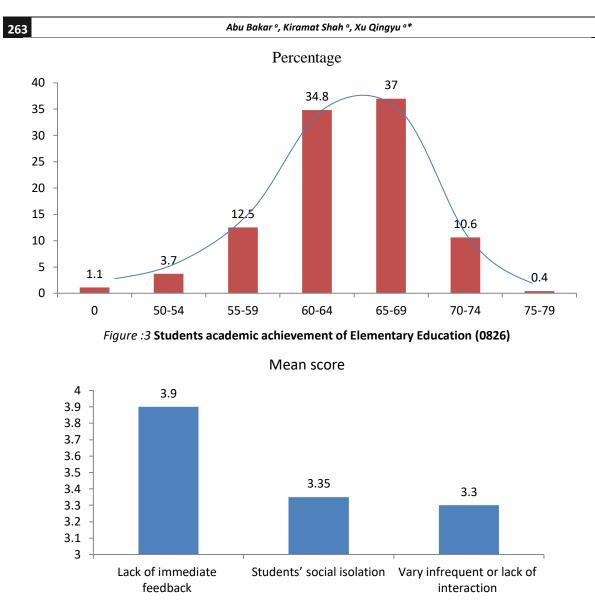


Figure 4. Psychological Barriers in the learning process of Academicians

Tahle 1	Social	<b>Barriers</b> i	in the	learning	process of	Tutors
TUDIC I.	<b>300</b> 000	Durriers	in the	icui iling	p1000033 01	10015

Sr. No	Statement	Mean score	S. D
1	Lack of communication between student and tutor hinders the	4.42	.685
	teaching-learning process in distance education.		
2	Lack of social media networking (Internet, mobile phone services)	3.64	.882
	hinder the teaching-learning process in distance education		
3	Differences of socio-economic status among students create	3.05	1.129
	hindrances in the teaching-learning process		
4	Lack of appropriate, desirable social learning environment hurdles	3.78	.723
	teaching and learning in distance education		
5	Lack of sense of group learning among students hinders the teaching-	3.40	.896
	learning process in distance education		
6	Lack of co-operative behavior of tutors and students create	3.88	.840
	hindrance in the teaching-learning process.		
Total		3.69	

## **Data Analysis of Social Barriers of Students**

Table 2. Social Barriers in the learning process of Students

Sr.No	Statement	Mean score	S.D
1	Lack of communication among students hinders the learning process in distance education	4.36	0.752
2	Students face difficulties due to the lack of group interaction in distance education	3.81	0.898
3	Lack of social media networking (Internet, mobile phone services) hinders the learning process in distance mode	3.20	1.115
4	Differences in socio-economic status among students create barriers in distance education	3.61	0.903
5	Lack of co-operative behavior of tutors towards students creates hindrance in the teaching-learning process	3.43	1.008
6	Lack of proper interactive social learning environment creates hurdles in distance education	3.79	0.829
Total		3.7	

## Data Analysis of Psychological Barriers of Academicians

Table 3. Psychological Barriers in the learning process of Academicians Sr.No Statement Mean score S.D 1 Lack of immediate feedback from tutors causes anxiety. 3.90 0.788 2 Students' social isolation hinders the teaching-learning process in 3.35 0.933 distance education 3 Very infrequent or lack of interaction with class fellows creates a sense 1.081 3.30 of isolation in students of distance education 3.51

#### Total

# Data Analysis of Achievement Score of M. Ed Students

## Table 3. Score Interval

S.No	Courses	Ν	50-54	55-59	60-64	65-69	70-74	75-79	Fail
1	Elementary Education (0826)	273	10	34	95	101	29	1	3
2	Secondary Education (0827)	273	11	32	76	101	45	4	4
3	Higher Education (0828)	273	16	39	68	103	43	3	1
4	Teacher Education in Pakistan (0829)	273	3	25	76	109	58	2	0

## Table 3. Students Percentage of Score of Course Elementary Education

Range of students score	Frequency	Percentage	
0	3	1.1	
50-54	10	3.7	
55-59	34	12.5	
60-64	95	34.8	
65-69	101	37.0	
70-74	29	10.6	
75-79	1	.4	
Total	273	100.0	

## Data Analysis of Psychological Barriers of Academicians

Table 4. Psychological Barriers in the learning process of Academicians

Sr.No	Statement	Mean score	S. D
1	Lack of immediate feedback from tutors causes anxiety	3.90	0.788
2	Students' social isolation hinders the teaching-learning process in distance education	3.35	0.933
3	Infrequent or lack of interaction with class fellows creates a sense of isolation in students of distance education	3.30	1.081
Total		3.51	