

## Assessing University Students' Attitude towards Online Learning: A Mixed Methods Case Study

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### **Abstract**

*The researchers aimed to assess university students' attitudes toward online learning at the University of Balochistan. A mixed methods case study design was utilized to investigate the study. The quantitative data collection and analysis were followed by the collection of qualitative data through interviewing which were used to explain the initial quantitative results. A questionnaire with close-ended questions was designed by reviewing the literature on the phenomenon under study. The tool was a 5-point Likert scale which was filled by 299 undergrads enrolled in different departments of the University of Balochistan. Frequencies and percentages were calculated and used to conclude the study results in the first strand and then interviews were conducted with seven students whose responses were analyzed by using thematic analysis. It was reflected that students had high frequencies in their positive attitudes toward online learning. The students reflected that it is cost-effective in terms of time, money, and energy. Therefore, it is suggested that the university authorities need to organize online courses and classes to equip them with the practical acquaintance and uses of online learning in providing access to classes.*

**Keywords:** *Online learning, new trends, university students, mixed*

### **Introduction**

Computer-generated environment for teaching learning is luring the attention to a great extent in the fields of business and education (Muñoz Cristóbal et al., 2017). Especially after the closure of all educational and business ventures changed the working behaviors like serving, hiring, collaborating, and purchasing and selling goods and services etc. (Elyassi, 2021; Ruiz Estrada et al., 2021). The abrupt changes in the working behaviours of people and organizations have laid an unparalleled burden on the infrastructure of Internet (Favale et al., 2020). As a result, a rapid use of online learning platforms could be in place of face-to-face traditional learning like zoom, google meet etc. The students are well aware of the utilization and usefulness these apps and platforms of online learning (Al-Fraihat et al., 2020).

It becomes a norm that education and being a part of teaching-learning in a class is gone beyond the boundaries of traditional classrooms where the teacher and students need to be limited to the boundaries of a physical classroom. Now access to education can be easier for the masses by adopting different forms. Among these varied forms, there is online learning which is mostly developed and adopted mode of learning not only in advanced countries but in developing countries as well swiftly.

The term online teaching is defined by Carliner (1999) as teaching substance provided through a computer. Another definition came from Khan (1997) as an approach for sharing instruction with distant pupils via the internet. The definition of Carliner (1999) is quite different from Khan (1997) as the former is emphasizing a computer without sharing what medium will be used for instructions which do not give a comprehensive form of online teaching understanding while Khan (1997) is presenting a little comprehensive definition of online teaching.

Another definition by Anderson (2011) explains that "Online learning as a subset of distance education has always been concerned with the provision of access to an educational experience that is, at least more flexible in time and space as campus-based education". (Anderson, 2011, p. 53). The definition of Anderson (2011) is more comprehensive than the definitions

of Carliner (1999) and Khan (1997). The definition of Anderson will be used in the current study, given the importance of perception. Although Carliner (1999) and Khan (1997) say that online teaching is an experience through computer and the internet but ignoring the stance of flexible working environment and time. As it is the essence of online teaching that the students and teacher both enjoy teaching without any boundaries of space and time. The definition of Anderson is therefore more relevant to the current study.

The term attitudes are known and explained the behaviors that depict their likeness and dislikeness towards a specific thing or idea. (Schiffman and Kanuk, 2008). Neely and Tucker, 2010 elaborated that the attitudes of students regarding online learning are influential in determining the success and outcome of an online class.

Isabelle (2012) in his study on online learning aimed to bring about changes in the whole educational development. Several terminologies have been used to define Online-learning as web-based learning, online learning, and computer-assisted instruction. Online learning has many definitions in the context and background of its operationalization. According to Berteau (2009), some experts believed that online learning is a teaching method that tries to integrate multiple technologies while some believed that it is an alternative to distance education, which facilitates the use of is provided. The Internet is considered an effective means of high-speed communication. Nicholls (2003 ) indicated online learning as an integration of different types of technologies that are exclusively designed for promoting education.

During the outbreak of Covid-19 pandemic, the educational institutes all over the world were shifted to online from face to face traditional teaching and learning (Kauffman, 2015; Wong et al., 2019). In order to meet the demands of lifelong, economical and innovative learning have urged the development of online learning for higher education students (Lee-Post & Hapke, 2017; Prior et al., 2016; Sun & Chen, 2016).

The findings of the studies rendered by Wang, Kanfer, Hinn, and Aran (2001), and an and Frick (2006) concluded that the students' attitudes towards computer technology affect the students' attitudes towards online learning Further the Gunnarsson (2001) and Suanpang (2007) asserted that

there is a strong association between attitudes of students towards the subject and their attitudes towards online-learning if getting enrolled in an online course. In addition, the results of Lim, Morris, and Yoon (2006) study affirm the idea that students are having significant assertiveness towards online learning and were found satisfied. Nevertheless, Roberts and Dyer (2005) study results argued that it is too early to predict the students' attitudes concerning online learning before going in experiencing online learning. Rather Wu & Tsai (2006) in their study concluded it was a time taking and problematic approach in education.

The claim of Lim et al. and Selim regarding students' affirmative viewpoints towards online learning are precarious and important to predicting their willingness towards online learning. Furthermore, a meta-analysis carried out by Rhema & Miliszewska (2014) revealed the key influences and elements that are effective in determining the students' assertiveness to online learning that is demographic and computer skills in using for different purposes. The university of Balochistan in pursuance of face-to-face teaching to distance or online-learning or blended learning, an understanding regarding student's assertiveness to online learning is a necessity of the hour for taking decisions in adopting online learning to meet the needs of students who are deprived of their access to education in higher educational institutes due to any unavoidable reasons.

### **Objectives of Study**

The study aims to:

1. measure the students' attitude toward online learning at the University of Balochistan.
2. assess the perceptions of students' attitudes towards online learning.

### **Study Design**

Mixed methods case study was used in this study to measure the students' attitudes towards teaching online. This study utilized explanatory sequential mixed methods case study design (Creswell & Plano Clark, 2011) because little is known about what is students' attitudes towards learning during online courses at the University of Balochistan. Mixed-

methods research is unsurpassed for research problems where the variables are unknown and need to be explored (Creswell, 2005). In the quantitative phase of data collection, the data were collected from the students by utilizing a survey questionnaire. In the second phase of qualitative data collection, the students were interviewed through a semi-structured interview guide. A thematic analysis was made for the qualitative data.

### **Sample**

A sample of 299 students was taken from the university of Baluchistan Quetta as mentioned below for first phase of study to fill the questionnaire while 7 students were interviewed. In the **first phase**, the sampling was done using a simple random sampling technique whereas in the **second phase**, the sample was selected through a purposive technique.

<b>Department</b>	<b>Students</b>
IER	23
CS	75
Language	47
Pharmacy	55
DPT	44
Other	55

### **Instruments**

The study instruments were designed by reviewing the literature and further validated with the experts. Keeping in view the nature of the study, in the first phase a questionnaire was designed. The questionnaire contained eleven (10) questions and was designed to assess the attitudes of students. All questions were close-ended and mainly centered on general information, experience, and attitude of students towards online learning. In the second phase, interview protocols were used to analyze the perceptions of students 'attitudes toward online teaching.

### **Demographic Characteristics**

Demographic characteristics are provided in table 1 in which the majority (n=141, 47.2%) of the respondents are 25-30 years old. The majority

(n=75, 25.1%) of the respondents belong to the CS department. The majority (n=223, 74.6%) of the respondents are unmarried and the majority (n=194, 64.9%) of the respondents are female.

**Table 1**

*Demographic characteristics of respondents*

Question	Frequency	Percentage
How old are you		
20-25	141	47.2
26-30	137	45.8
31-35	21	7.0
Department		
IER	23	7.7
CS	75	25.1
Language	47	15.7
Pharmacy	55	18.4
DPT	44	14.7
Other	55	18.4
Gender		
Male	105	35.1
Female	194	64.9

Student attitudes are provided in table no: 2. In which the majority (n=109, 36.5%) of the respondents were neutral when we ask the question that it is difficult to understand online learning without getting appropriate guidance. The majority (n=151,50.5%) of the respondents agreed that it is difficult to favor online learning on regular basis due to the least face-to-face interaction among students and teachers. The majority (n=165, 55.2%) of the respondents agreed that slow computers and poor internet connection discourage to use of online learning. The majority (n=184, 61.5%) of the respondents agreed that as a useful program suggested to peers to

utilize online learning for online learning materials. The majority (n=124, 41.5%) of the respondent agreed that online learning is often avoided as it promotes social isolation. The majority (n=154, 51.5%) of the respondents agreed that online learning highly motivates students for taking advanced courses.

The majority (n=165, 55.2%) of the respondents agreed that using online learning makes learning interesting. The majority (n=139, 46.5%) of the respondents agreed that it is a good option for learning in case of any pandemic or emergency. The majority (n=136, 45.5%) of the respondents agreed that it is time-saving for students in remote areas. The majority (n=137, 45.8%) of the respondent agreed that they find it easier to understand the concepts as compared to physical classes. The majority (n=146, 48.8%) of the respondents agreed that they prefer online learning to physical classes. The majority (n=157, 52.5%) of the respondents agreed that without practical exposure online learning produces quality students.

**Table 2**  
*Student Attitudes*

Attitudes		SD		D		N		A		SA	
		f	%	f	%	F	%	f	%	F	%
1	Difficult to understand online learning without getting appropriate guidance.	3	1.0	96	32.1	109	36.5	83	27.8	08	2.7
2	Difficult to favor online learning on regular basis due to the least Face to face interaction among students and teachers.	02	0.7	08	2.7	109	36.5	151	50.5	29	9.7
3	Slow computers and poor internet connections discouraged to use of online learning	00	00	03	1.0	56	18.7	165	55.2	75	25.1
4	As a useful program suggested that peers utilize online learning for online learning materials.	01	0.3	05	1.7	27	9.0	184	61.5	82	27.4
5	Motivates students for taking advanced courses	01	0.3	20	6.7	80	26.8	154	51.5	44	14.7

6	Makes learning interesting.	02	0.7	09	3.0	29	9.7	165	55.2	94	31.4
7	It is a good option for learning in case of any pandemic or Emergency	6	2.0	13	4.3	24	8.0	139	46.5	117	39.1
8	It is time-saving for students in remote areas	05	1.7	14	4.7	54	18.1	136	45.5	90	30.1
9	Understanding the concepts is easier as compared to physical classes	04	1.3	21	7.0	58	19.4	137	45.8	79	26.4
10	Do you prefer online learning on physical classes	04	1.3	25	8.4	47	15.7	146	48.8	77	25.8

### **Results of Interviews**

The responses of students were recorded and analyzed by using thematic analysis. The following themes were analyzed to conclude the study.

#### **Honing New Skills**

The idea of being present physically in the classroom for teaching and learning is changed over the last two years with the advent of online learning and use of technology for learning. It is no more a dream to access quality learning for the people which is now available on a single click on internet. This dream could be possible by revolutionizing the process of learning by entering the era of online learning. Now it has become a workable choice for the students of higher education who are living in the far-flung areas or could not continue their studies at higher education institutes due to poverty. As a student I think it may be an economical way for honing my skills in the subjects which are difficult and cannot be learnt from the teachers in the class sometimes.

The online classes and course are designed so prudently that support the students both cognitive as well as motor skills. These both skills are necessary to be combined in order to seek wide opportunities in employment. Resultantly, the students' confidence and professional growth is also boost up that help in building better working relationship with the colleagues and employers.

### **Flexibility**

In an online class, the students as well the teachers are free to set their own pace for teaching and learning. Moreover, it is flexible in setting schedules that may fit everyone who is involved in teaching and learning. It may allow the students who are the breadwinner of their families, can maintain a balance between work and education. It supports us to manage time for work and studies. It also prompts in us to accept more autonomy and responsibility in an online learning ohe part of students. As the online learning offers the students with complete control over learning rather being present in class physically. They are more accountable for their learning by adjusting time and make decisions for their learning. This accountability helps them to make use of learning resources and time at their best level. Like many students around us are earning best wages in the morning as compared to the wages be offered by jobs in the evening. Unlike traditional face to face classes, the online classes don't impasse the students to be present and utilize the resources and services of learning in its scheduled timing. Rather it lets the students to decipher how and when to learn by customizing their courses at their own pace and time. No doubt, it will lead the students to be more fruitful in utilizing the learning resources at their full.

### **Cost-Effectiveness**

Likewise, internet with its width and vastness in teaching us infinite competencies and skills that are the demands of today' global markets employability, online courses are being offered by maximum universities and educational institutes at different levels and a great variety subjects and skills vastly. The students can learn different programs and skills by choosing their own option in order to get certified diplomas and degrees which are most of time are free, if not free, the fee is so nominal that can be afforded by students easily because it costs nothing to travel, therefore it is effective in term of time, and saves energy. That's why the educational institutes all over the world are familiar with the value and effect of online learning in term of cost effectiveness, are now introducing and shifting some of the theory courses to online. In online classes, the students are not only engaged by teachers but it also saves the time of students and teachers

in assigning and completing the tasks which cannot be completed during classes.

### **Findings**

- The majority of the respondents were neutral when we ask the question that it is difficult to understand online learning without getting appropriate guidance.
- The majority of the respondents agreed that it is difficult to favor online learning on regular basis due to the least face-to-face interaction among students and teachers.
- The majority of the respondents agreed that slow computers and poor internet connection discourage to use of online learning.
- The majority of the respondents agreed that a useful program suggested to peers to utilize online learning for online learning materials.
- The majority of the respondents agreed that online learning is often avoided as it promotes social isolation.
- The majority of the respondents agreed that online learning highly motivates students for taking advanced courses.
- The majority of the respondents agreed that using online learning makes learning interesting.
- The majority of the respondents agreed that it is time-saving for students in remote areas.
- The majority of the respondent agreed that they find it easier to understand the concepts as compared to physical classes.
- The majority of the respondents agreed that they prefer online learning to physical classes.
- The majority of the respondents agreed that without practical exposure online learning produces quality students.

### **Discussion**

The present study results are parallel to the findings of Dhamija (2014) that evaluated undergraduate attitudes towards online learning for academic purpose and reported the positive attitudes towards online learning. Rehman, Siddiqua, & Waheed, Z. (2021) yield the same result as online education enables us to teach and learn anytime and anywhere in

the world which is a good initiative being taken by educational institutes. As it does not bound students to place to arrive neither to observe a strict timing for learning which is helpful in retaining the educational activities. Jamil, Sethi, & Ali (2016) results affirm the present study outcomes about the readiness of students' attitudes for adopting E-learning for teaching and learning mode. In addition, the results of Lim, Morris, and Yoon (2006) study affirm the idea that students are having significant assertiveness towards online learning and were found satisfied. Several pieces of research conducted by Berge (1997), Stocks & Freddolino (1999), Cunningham, McDonnell, McIntyre, & McKenna (2009), Çiftci, Güneş, & Üstündağ (2010), Rhema & Miliszewska (2014) depicted the significance to study and report the attitudes of students regarding online-learning to develop and establish online courses in a university. Further, the studies by Sanders & Morrison-Shetlar (2001), Alomyan (2004), and Zhang & Bhattacharyya (2008) delineated the students' assertiveness and views towards online-learning are the means and detriment to determine the outcome of online learning.

The claim of Lim et al. and Selim regarding students' affirmative viewpoints towards online learning are precarious and important to predicting their willingness towards online learning. The present study results are in contrast with Nagar & Darji (2021) whose study reported a 63.25% students have moderate attitudes towards online learning but 63.25% students have adequate attitudes.

### **Conclusion**

The higher frequencies in the positive attitudes, indicate that the students of Balochistan University show their agreement and readiness in attitudes toward online learning which is a strong indication that the University of Balochistan students are ready to adopt online-learning as a teaching mode but they are reluctant in some attitudes as they don't have improved access because of a slow computer and poor internet connection that discourage to use online learning. This survey may be productive in providing a baseline for university authorities in deciding between the adoption of online learning and distance mode in the wave of eliminating the B. A and M.A. annual as private examination and providing an insight into

discovering the reasons that made the student uncertain about their positioning in terms of adopting online learning as a mode of teaching in place of traditional face-to-face teaching. The students can learn different programs and skills by choosing their own option in order to get certified diplomas and degrees which are most of time are free, if not free, the fee is so nominal that can be afforded by students easily because it is cost nothing to travel, effective in term of time, and saves energy.

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