

Online Learning Experience of Students During Covid-19 Pandemic in Karachi, Pakistan

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ABSTRACT

Background, The Covid-19 disease was first reported in China in the end of the year 2019 and within a span of few months it spread drastically in different countries of the world. As a consequence of that the World Health Organisation (WHO) declared it a “pandemic” and the educational institutes all over the world shifted from conventional classroom learning to virtual mode of learning.

Aim, This study was conducted in Karachi, Pakistan for the assessment of the students’ perception about the general vision regarding online mode of learning and its advantages and draw backs.

Method, This study was a quantitative analysis based on an online questionnaire provided to students by Google Form in December, 2020. The questionnaire was circulated through social media platforms to the students of different educational institutes including school, colleges and universities. The students of age group 15-31 including post graduate students studying in any institute of Karachi, Pakistan were included in this survey. The results were assessed in the form of percentages.

Results, This study indicated that students found online learning method difficult as compared to face-to-face learning. Internet facility was accessible to more than half of students participated in this survey. Furthermore, majority of the students found that online learning has made them lazy. Students felt less enthusiastic about online learning and they described that different measures like frequent tests, assignments and presentations should be taken to increase their enthusiasm towards online learning. The students were also not satisfied with the online examination system. Most of the students preferred face-to-face learning as compared to online learning.

Conclusion, Though online mode of learning was found effective to continue the process of learning in the absence of conventional learning due to covid-19 pandemic but it cannot replace the significance of face-to-face learning. It is recommended that blended learning could make our educational process better in any emergency situations.

Keywords: Covid-19 Pandemic, WHO, Educational Institutes, Online learning, Students’ perspective.

1. INTRODUCTION

The Covid-19 is considered as an infectious disease emerged from the sea-food market of Wuhan city of China in the end of the year 2019. It is caused by a virus namely severe acute respiratory syndrome corona virus 2 (SARS-CoV-2) [1]. Upon clinical investigation of the virus, it was revealed that the disease is spreading vastly through person to person transmission and social distancing was recommended as the primary way to

decrease the spread of this deadly virus [2]. Covid-19 was declared as a pandemic by the World Health Organisation (WHO) on March 11, 2020 due to its severity, person to person transmission and the millions of deaths caused by it in the 21st century [1,3]. In Pakistan, the two initial cases of Covid-19 were reported by Federal Health Ministry in Islamabad and Karachi on 20th February, 2020 [4]. This disease has caused sudden closure of businesses, international travel, congregational prayers,

pilgrimages, sports activities and schools during its early days. Social distancing remained the major form of precaution in different parts of the world during the spread of Covid-19 pandemic [2].

Because of high mortality rate, Pakistani government had to shut down all the educational institutes throughout the country and the Higher Education Commission (HEC) instructed the higher educational institutes to shift their educational activities towards virtual mode of learning. As a result of that, schools, colleges and universities had to shift their classes from physical set-up to online set-up. Sudden shift from the conventional classroom set-up to the online learning mode came up with a number of challenges but because of the uncertain condition of the world due to this pandemic, students and teachers had to adjust themselves with the virtual mode of learning [5]. Distance Learning was a part of non-formal education in many parts of the world before the spread of Covid-19 but after the outbreak of this disease, it looks like the virtual mode of learning may remain an integral part of formal education for a long time [1].

Virtual mode of learning comes up with a number of benefits and drawbacks. The benefits of online learning include easy accessibility of education anywhere any time, transportation cost cutting, no hassle of getting ready every morning and ease of assessing students' performance via taking online quizzes. However, the drawbacks of this system include the issues of internet availability, internet connectivity, tiredness due to long exposure of computer screen, difficulty in performing lab experiments for science students and lack of face to face interaction with peers and teachers [6].

There are a number of soft-wares that are used by different educational institutes as learning management system in Pakistan. These include Moodle, Edmodo, Microsoft Teams, Google meet and Blackboard connect etc. On the other hand Zoom, Skype, Adobe connect and WebEx are utilized by different institutes for video conferencing [7].

For virtual mode of studies, both the students and teachers are required to be trained in order to get awareness regarding the usage of technology and learning management system. Most of the institutes have trained their teachers in order to maintain the quality of teaching during this pandemic but students were not trained in order to get aware with the usage of technology with virtual mode of learning [8].

As the virtual mode of learning is new to the students that's why there was a need to investigate the students' level of satisfaction with this mode of learning. This study was designed to assess the students' perspective about the online mode of learning.

2. MATERIALS AND METHODS

2.1 Study Design

This quantitative study was conducted in December 2020 in Karachi, Pakistan. An Online questionnaire was prepared on Google Forms and it was circulated via email and different social media platforms to the students of various institutes. The students from different schools, colleges and universities (age group 15-31 years including postgrad students) were selected for this study. A total of 224 students responded to this study. All the respondents of the survey questionnaire were informed that their responses will remain confidential and their personal details will not be shared with any one.

2.2 Data Collection

For conducting this study, a questionnaire was formulated for assessing the students' viewpoint regarding online learning. The questionnaire was designed in a way to instigate the students' perception regarding the efficacy, quality and output of virtual learning.

2.3 Statistical Calculation

Descriptive statistics was used to analyse the data. The students' learning status and their opinion regarding studies during covid-19 pandemic were calculated in the form of percentages. All the analysis was carried out by using SPSS version 21.

3. RESULTS

A questionnaire based on Likert scale was formulated and circulated to students of different institutes. Students' viewpoint regarding the virtual mode of learning was assessed by using a questionnaire. A total of 224 students responded to this survey and 218 responses were received in usable form.

3.1 Characteristics of participants

The characteristics of study population are shown in figure 1 which indicates that out of 218 respondents, 36 (16.51%) were males and 182 (83.48%) were females. The majority of students who participated in this survey were ranging between 19-21 years in age which indicates that mostly undergrad students participated in this survey.

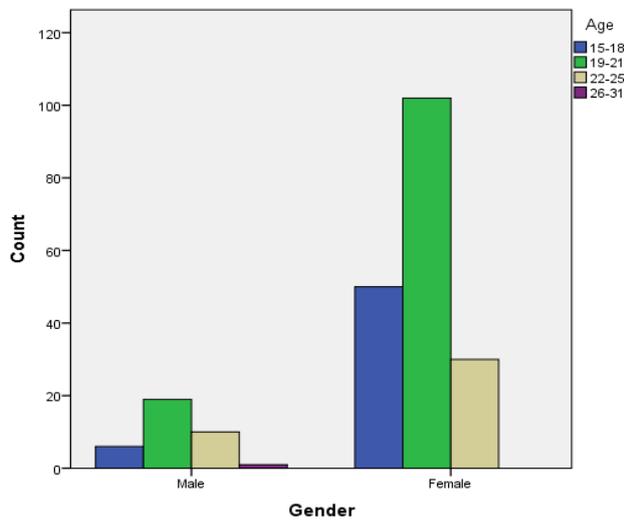


Figure 1 Characteristics of the participants

3.2 Shifting of physical classes to virtual classes after sudden outbreak of covid-19

Figure 2 indicates that almost 95.87 % students were agreed that their institutes had shifted to online mode of learning during this pandemic which clearly indicates that the educational institutes in Karachi, Pakistan have responded well to the emergency caused by this pandemic.

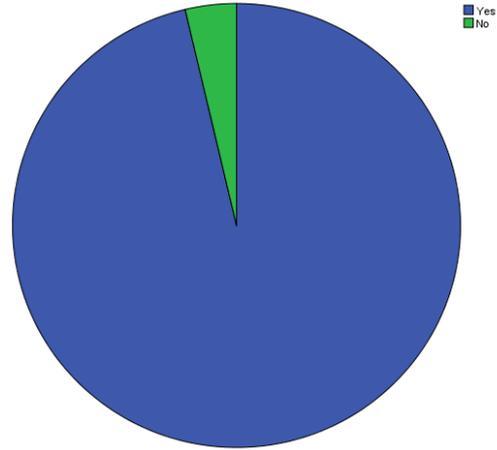


Figure 2. Students' response on shifting of their institutes from Physical Classes to Online Classes

3.3 Opinion about online/distance learning

Students have given mixed opinions regarding the trend of distance learning. On a scale of poor, below average, average, good and excellent 45.9% of the survey respondents opined that they feel average about online education. This indicates that students are not so pleased with this online mode of learning. The results are shown in table 1.

Table 1. Students' reviews on distance learning

Opinion	Frequency	Percentage
How do you feel overall about distance learning?		
Poor	45	(20.7%)
Below Average	34	(15.7%)
Average	100	(45.9%)
Good	34	(15.7%)
Excellent	4	(1.8%)

3.4 Usage of device during online classes

The data revealed that most of the students (54.4%) use Laptop for taking online classes as mentioned in figure 3. This clearly indicates that students prefer portable devices for taking online classes.

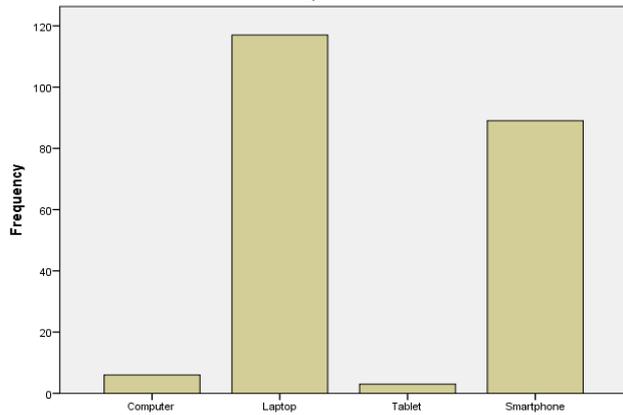


Figure 3. Devices used for taking online classes

3.5 Accessibility of internet

Internet accessibility is the essential component for continuing online education. Unfortunately internet connectivity and accessibility were not uniform for all the students. It was easily available for some students while others face difficulty in accessing it. The results about internet accessibility are shown in figure 4.

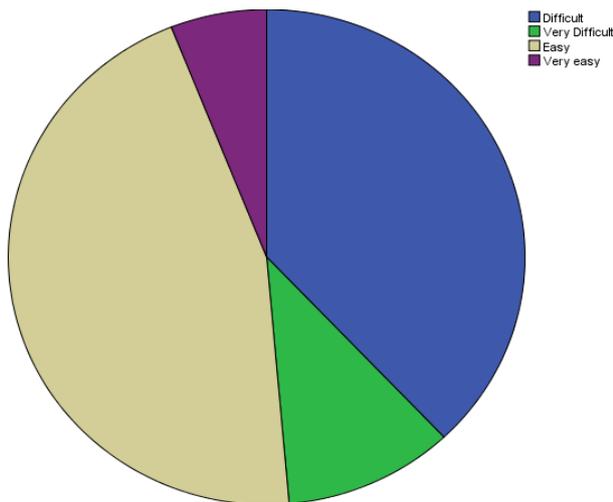


Figure 4. Internet accessibility issue

3.6 Online classes versus face to face classes

Students have given mixed reviews when they were asked about the comparison of online classes versus face-to-face classes. Majority of the students opined it's as "difficult" or "extremely difficult". The results are shown in table 2.

Table 2. Online classes versus face-to-face classes

Opinion	Frequency	Percentage
Do you think online studies are easier as compared to face to face classes?		
Easy	11	5.1%
Very Easy	09	4.1%
Somewhat Easy	54	24.9%
Difficult	86	39.6%
Extremely Difficult	57	26.3%

3.7 Impact of virtual studies on students

The participants were affected by the sudden closure of the educational institutes. A majority of them (88.4%) feel that the online education has made them lazy. The respondents opined that some measures should be taken to increase the enthusiasm of students towards studies such as quizzes, assignments and presentations should be taken frequently from students during this pandemic. Detailed information is shared in table 3.

Table 3. Impact of online studies on students

Opinion	Frequency	Percentage
Do you think that the lockdown of educational institutes has any impact on the energy level of the students?		
Yes	200	92.2%
No	17	7.8%

If yes, do you think that the students have become lazy?		
Yes	190	88.4%
No	25	11.6%
If yes, then what should be done to improve the enthusiasm of students regarding studies?		
Frequent tests should be conducted	92	45.8%
Frequents assignments should be given	68	33.8%
Frequent Presentations should be taken	41	20.4%

3.8 Impact of Covid-19 on students and education set-up of Pakistan:

The covid-19 related health emergency led to a crisis that has also impacted the students. According to this survey most of the students (84.8%) feel that they are not studying with their full efforts during this pandemic. Moreover, the participants also responded that the covid-19 pandemic has affected the education set-up of our country. Majority of the participants feel that measures should be taken to improve online learning environment. The detailed results are mentioned in table 4.

Table 4. Impact of covid-19 pandemic on students and the educational system

Opinion	Frequency	Percentage
Do you feel students are studying with their full efforts during this covid-19 pandemic?		
Yes	33	15.2%
No	184	84.8%

What impact this covid-19 leave on the education set-up of our country?		
The system has improved drastically	17	7.9%
The system has collapsed totally	67	31.2%
Measures should be taken for improving online learning environment	131	60.9%

3.9 Students’ perception about online examination

During this pandemic, a number of educational institutes have conducted online examinations during strict lockdown period so that the students can be promoted to the next class. Conducting online examination is a challenge because it requires sound electricity and internet facilities. Upon asking the opinion about online exams, students have given mixed reviews. Results are shown in table 5.

Table 5. Students’ perception about online examination

Opinion	Frequency	Percentage
Are you satisfied with the online examinations during covid-19?		
Satisfied	45	20.8%
Somewhat Satisfied	52	24.1%
Strongly Satisfied	18	8.3%
Not Satisfied	67	31%
Extremely Unsatisfied	34	15.6%

3.10 Opinion regarding teachers’ performance as virtual instructors

This pandemic has resulted in a sudden shift of classes from face to face set-up to the virtual set-up. As a result of that both the students and teachers had to adapt themselves to the virtual mode of learning. In this survey, students were asked about their opinion regarding teachers’ performance as virtual instructors.

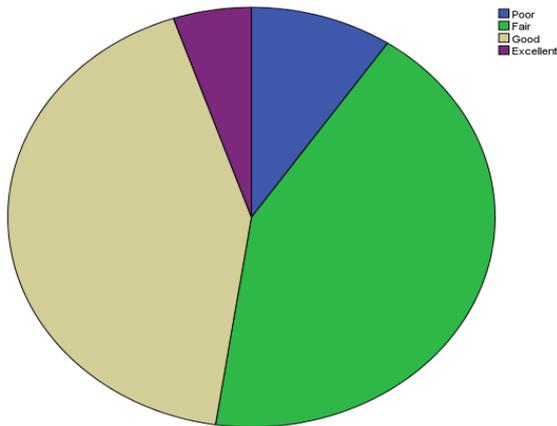


Figure 5. Teachers’ performance as online teachers

42.5% of the students have remarked the teachers’ performance as “good”, 42.9% as “fair”, 9.4% as poor and 5.2% as excellent (figure 5). This result clearly indicates that students are satisfied with the performance of teachers and teachers in Karachi, Pakistan have the ability to cope up with emergency situations.

3.11 Students’ remarks on continuation of distance learning after covid-19 pandemic:

As the year 2020 remain the year of online learning, around 57% of the students feel that the online learning shall remain part of the formal education after the covid-19 pandemic is over while 43% feel that it will not remain part of the formal education. Upon asking whether they prefer studying online after the spread of this infectious disease come in control, a vast majority of students (78.5%) replied that they will not prefer studying online once the covid-19 pandemic is over (table 6).

Table 6. Students’ remarks on continuation of virtual/distance learning after covid-19 pandemic

Opinion	Frequency	Percentage
In your opinion (due to the current circumstances created by covid-19) when schools fully reopen, will online/distance teaching remain part of learning practice?		

Yes	122	57%
No	92	43%
Will you prefer studying online after the covid-19 pandemic is over?		
Yes	46	21.5%
No	168	78.5%

5. DISCUSSIONS

The sudden shift from conventional learning to online learning as a result of covid-19 pandemic indicates that the education system can be interrupted by certain emergency situations [2]. The present study revealed that a vast number of the institutes in Karachi, Pakistan responded well to the educational emergency and they tried to continue the process of education during this pandemic via using virtual learning technology. Results indicated that students faced internet accessibility and connectivity issues during the online classes. Another study conducted by Mukhtar et al. also verified that for smooth running of online classes, internet connection with high speed is essential and telecommunication companies should take interest in expanding their 4G services [7]. This study showed that online learning is difficult as compared to traditional classroom learning. This finding is also supported by another study conducted by Adnan et al. which reported that conventional face-to-face learning is more fruitful as compared to online learning because of direct interaction of students with teachers and their peers [5]. This study further revealed that students have become lazy as a result of online learning. This is because of the reason that conventional classroom learning involves physical activities, socialization, lab-based practical works, group activities and face-to-face interaction of teachers with students. All these activities motivate students to remain focused throughout the class whereas in online learning students are not interacting with teachers and peers physically that’s why they felt lazy. This situation can be tackled by continuous interaction of the teachers with the students throughout the online class and by conducting question-answer session at the end of every online class. Another study conducted by Muthuprasad et al. also supported the idea that frequent quizzes and assignments at the end of every class can enhance the quality of online learning [9]. The present study also indicated that students are not studying with their full potential during this pandemic.

This may be because of the stress related to the health related emergency caused by this pandemic however the teachers can enhance the students' enthusiasm by giving them motivating lectures about the importance of time and education. This study further revealed that students were not satisfied with online examinations. Basically online examination requires good quality of internet connection and continuous electric supply so that the questions can be uploaded on time and students don't face any hindrance in answering the question paper. Moreover, it also requires technically sound learning management system (LMS), therefore, the educational institutes should invest in improving their LMS and government should take necessary steps to tackle these issues. Moreover, students should be motivated to avoid cheating because examinations are taken to assess their performance. This study also found that students are satisfied with the performance of teachers as virtual instructors. This shows that teachers have tackled this challenging situation quite well. This study also indicated that majority of the students wont prefer studying online after this lock-down phase is over. This is because students enjoy socializing with peers and teachers, physical activities and hands on practice in labs that's why they don't feel energetic while studying online. However they should be motivated to study with their full potential because it is the only way to continue the process of education during this pandemic.

6. CONCLUSION

Through this study we conclude that online mode of studies requires more engaging content of the syllabus. In order to be productive, teachers should be trained in such a way to grasp the attention of students who are studying virtually. For this, continuous two-way communication is essential during online-classes. Students should be encouraged to ask questions during online classes. Moreover, students should be engaged in different tasks which require critical thinking and analysis so as to increase their enthusiasm towards studies. For this, frequent quizzes should be taken from students in order to assess their performance. Students should be given assignments so that they can enhance their skills during this phase of studies. Furthermore, frequent presentations should be taken from the students in order to engage them fully in the process of learning.

AUTHORS' CONTRIBUTIONS

Erum Shah: Study design, Data collection, Writing, Reviewing and Editing.

Tehseen Quds: Calculations, Reviewing, Editing and Supervision.

Faheema Siddiqui: Data analysis and Supervision.

Syeda Kiran Mansoor: Study design and Data collection.

Syed Asad Ahmed: Study design and Data collection.

Ammarah: Study design and Data collection.

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