

Lesson from Covid-19 Pandemic and Online Teaching: Challenges and Opportunities for Teachers in Higher Education

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Lesson from Covid-19 Pandemic and Online Teaching: Challenges and Opportunities for Teachers in Higher Education

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ABSTRACT

The COVID-19 has triggered mega changes worldwide. This disruption has forced the entire world to shut down several activities including formal teaching-learning systems. As a result of this, the face to face teaching couldn't carry on in the educational institutions and resulted in a shift from traditional learning to online learning. This pandemic response platform brought various challenges for teachers as well as the students. This study investigated the challenges during online teaching in the COVID-19 situation which transformed into opportunities. The current study investigated the challenges and opportunities for teachers during the online teaching learning in the COVID-19 situation. Research method used for this study was qualitative research method. The data was collected from randomly selected fifty-six public sector university teachers. All the participants contributed to this study through in-depth online interviews. Interview themes were developed which explored the perception of interviewee about online teaching learning, challenges in online teaching, opportunities, and compatibility and practices. The results demonstrated that factors of limited resources, COVID-19 anxiety and stress, lack of training, improper EdTech system in higher education, and weak online assessment system became bigger challenges for teachers. The teachers perceived COVID-19 lockdown situation and online teaching and learning system affecting their quality of instruction and learning. Most of the university teachers were less satisfied with online learning. On the other hand, digital transformation, research innovation, digital competencies, digital instruction delivery, technological innovation, and resource utilization were seen as opportunities by the teachers. Different research designs with comparative modes of online teaching learning may be used in further researches to gain more objectivity.

Keywords: COVID-19, Higher Education, Teachers, Online teaching learning, Challenges, Opportunities

1. Introduction

Coronavirus-19 became one of the major health crises in 2020, which rapidly evolved into a pandemic and the whole world has been influenced by it. After WHO alert, almost all countries have stopped formal educational activities due to which billions of students in different educational institutions were affected (Ahmed *et al.*, 2020; Arshad,*et al.*, 2020; Khan *et al.*, 2020). COVID-19 pandemic brought with it rapid and sudden changes which the educational providers and policymakers had to deal with (Chari, 2020).As it has forced the nations to shut down daily activities in every department, in this emergency, massive educational institutions are also suspended in provision of face to face teaching to the students. This global change shifted formal schooling into online teaching learning.A large-scale online education system was launched in almost every country. However, teachers, students, administrative, and parents differed in available resources and opportunitieswhich they had. It is evident that people with high socioeconomic status afforded more sophisticated academic opportunities in comparison to others (low and average). The consequences of availabilities and different resources clearly affect the online learning mode (Andrew,*et al.*, 2020).

In Pakistan, the COVID-19 impacts economics, social activities, education, and behaviors of people greatly (Ali *et al.*, 2020). This situation put higher education providers on the test to facilitate students with online and digital learning phenomena (Ali *et al.*, 2020; Javid, 2019), which has brought challenges too in the Higher education sector. Tertiary education institutes are forced to migrate to online education at every cost. Under the directions of HEC, the educational institutions started online education to address the changing needs and to meet the learning goals. Initially, the internet and technology infrastructure available in Pakistanwas feeble to facilitate the provision of online education at such a large scale (Chari, 2020; Javid, 2019; Wang, 2020). Teachers were to conduct the classes onlineand students required to attend and participate in the online teaching and even evaluation of the semester was also being done online. Higher education commission committed to consider recommendations of students with bundles of promises as cheap network services, resources, quality teaching, assessment, and packages for students.Firstly, the lockdown condition and then the sudden transit to online platform for continuation of educational activities resulted in an unclear and chaotic situation seen both among the students and teachers at university level.

As teachers' services are one of the major factors in successful online teaching learning operations, in this context, it is important to explore the extent to which education providers think out of the box and consider resources required by university faculty for online teaching, how EdTech (educational technology) cooperates with teaching, kinds of challenges which teachers come across in online teaching learning and opportunities of growth which are given to teachers by higher educational institutions. The current study investigates the university teachers' perception of online teaching learning during COVID-19 lockdown phenomena with reference to their experiences. In this study, the researcher evaluates the challenges, inequalities, and opportunities of teachers during this pandemic of COVID-19.

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1.1 Research Questions:

- 1) What challenges were faced by university teachers during online teaching learning in COVID-19 lockdown?
- 2) To what extent, teachers are satisfied with online teaching system in higher education?
- 3) What opportunities university teachers came across during online teaching mode of education?

2. Research Methodology

The researcher adopted qualitative research method in this study. The approach adopted was phenomenological as this approach helps to explore and investigate the insight of the participants with primary experience of the phenomena, which further helps in identification of the similarities among the participants (Fraenkel *et al.*, 2016). Fifty-six public university teachers participated in this study. 52% of the participants were females, while 48% were male. All the teachers have taught at least a complete semester in online teaching mode of education during COVID-19. The data was gathered through semi-structured interviews. The researcher interviewed the participants from October 2020 to January 2021. Interview protocol was consulted with academic experts of the area to ensure credibility of the questions.

Interview themes were developed by the researcher which were to explore the perception of interviewee about online teaching learning, challenges in online teaching, opportunities, and compatibility and practices. The data collected was then transcribed in textual form, after this it was organized, analyzed, and arranged for graphical display through NVivo 12. The researcher analyzed the collected data under different themes. There were four parental themes as online teaching learning, challenges in online teaching, compatibility and practices, and opportunities for growth. The other detailed child themes are given in the table below.

Table 1
Themes Discussed During Semi-Structured Interviews

Online teaching learning	Challenges in online teaching	Opportunities for growth
Course content	Anxiety in teachers	Digital transformation
Live sessions	Limited digital resources	Research innovation
Instruction	EdTech limitations	Digital competencies
Communication	Heavy workload	Digital instruction delivery
Students Engagement	Lack of high-quality instructions	Technological innovation
Digital library	Impact of COVID-19 on behaviours	Resource utilization
Effectiveness of Video lecture	Limited resources	Compatibility and practices
Workload	Insufficient online assessment	Compatible mechanism
Students Response	Stress on teachers	Professional Development

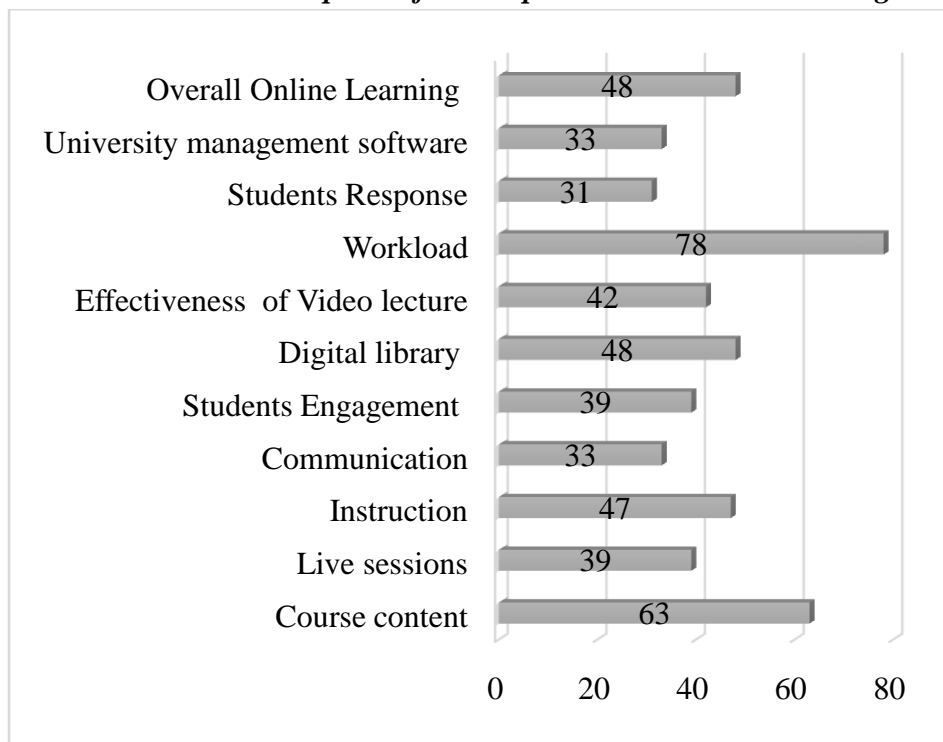
University management software Lack of technology-competency Support Teachers Technologically

Overall Online Learning

3. Findings

The researcher analysed the perceptions of the respondents on the basis of gender and found that the perceptions of male and female respondents are different about online teaching learning. The rating of university teachers (combined male& females) are shown in percentages in figure 1.

Figure 1
Collective Perception of Participants about online teaching learning



It can be seen in the figure that overall the participants exhibited less satisfaction with online teaching learning. The highest level of agreement is found at workload (78%). It can be said that majority of participants expressed that they have more workload during online teaching than the amount of work they used to do in the traditional learning environment. Further, lower level of satisfaction of the teachers was with students' responses during online sessions (31%), communication (33%) and universities' provided software (33%). The teachers' overall satisfaction with online teaching learning was reported to be 48%, which showed the teachers seemed not much satisfied with online teaching learning experience as they were expecting it to be.

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Table 2

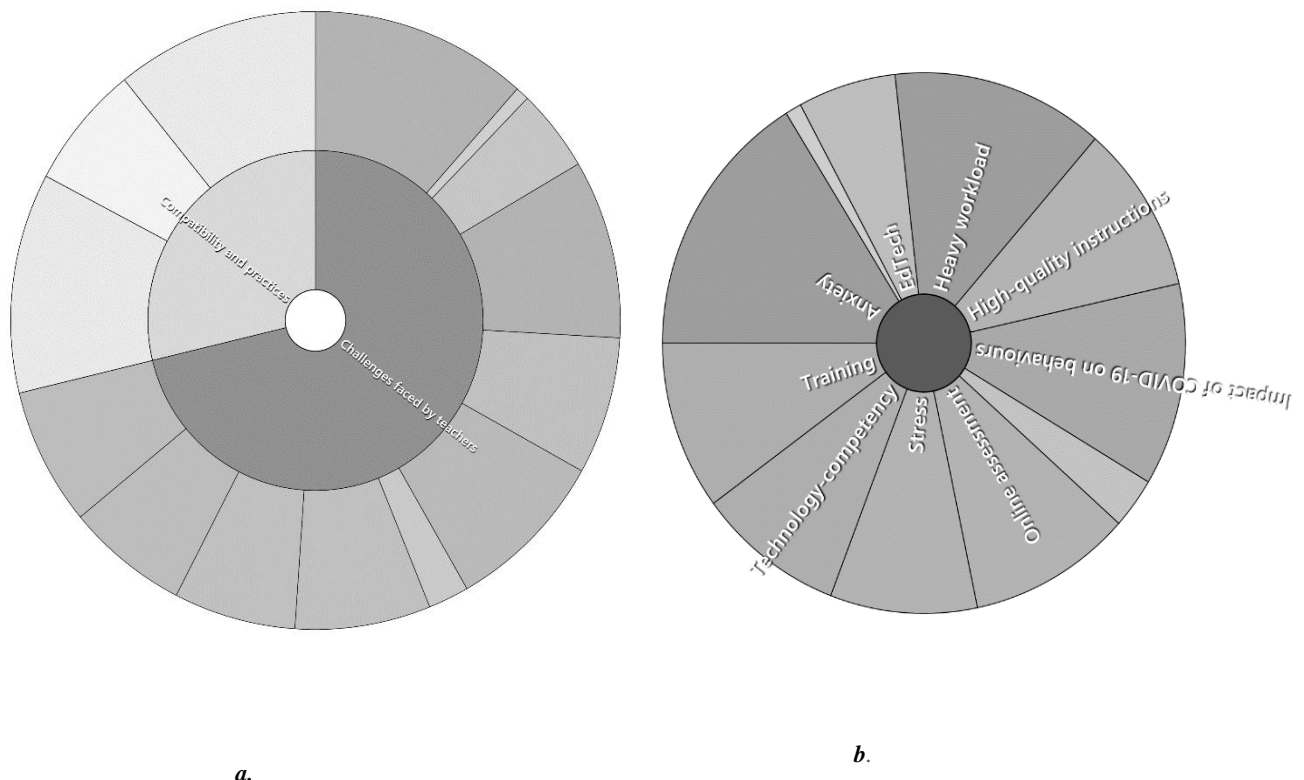
Perception of Participants about Challenges and capabilities/practices during online teaching learning during in COVID-19 (in percentage)

Challenges	Male	Female
Anxiety in teachers	60.58%	79.42%
Limited digital resources	71%	78%
EdTech limitations	65.94%	64.06%
Heavy workload	31.97%	68.03%
Lack of high-quality instructions	71.43%	58.57%
Impact of COVID-19 on behaviours	94.04%	95.96%
Limited resources	70.51%	79.49%
Insufficient online assessment	64.29%	75.71%
Stress on teachers	98.59%	91.41%
Lack of technology-competency	78%	52%
Lack of teachers training	48%	54%
<hr/>		
Compatibility and practices		
Compatible mechanism	57.09%	42.91%
Professional Development	72.9%	67.1%
Support Teachers Technologically	61.16%	38.84%

The comparative item analysis based on gender is presented in table 2. The perceptions and experiences of male are different from female university teachers. It is examined that male teachers reported more stress and lack in high-quality instructions delivery during online teaching learning. While, Edtech limitations, impact of COVID-19 on their behaviour was reported almost similar by both genders. On the other hand, female teachers demonstrated that they face anxiety, greater workload, insufficient online assessment, and limited digital resources more than male teachers. In practices, male teachers were more compatible with online working and supported technological usage in comparison to the female teachers.

Figure 2

Hierarchy nodes compared by number of coding references to extent of coding references



Word Cloud was initially used by the researcher to get an insight and identify the commonly used words in the interview by the interviewee. Tag cloud displayed 8 frequent and prominent theme among the highlighted words used by the interviewee, the most frequently used pattern included technology-competency, EdTech, impact of COVID-19 on behaviours, online assessment, high-quality instructions, digital resources, digital transformation, digital competencies, and resource utilization.

The researchers ran hierarchy nodes compared by number of coding references to extent of coding references against themes (Figure 2). Hierarchy nodes compared in terms of coding is display in these graphical presentations. It analysed the expressions of participants regarding challenges, compatibility and practices during online teaching in COVID-19. The extended form of this explains perception of participants. The largest areas cover participants views greater than other nodes (fig 2a). The area of challenges for teachers emerged bigger than other nodes (online teaching learning & opportunities). The teachers highlighted that challenges of technology-competency, EdTech, negative effect of COVID-19 on behaviours, insufficient online assessment, heavy workload, anxiety & stress, impact of resources differences in learning outcomes, challenge of high-quality instructions, and digital resources were the biggest challenges (fig 2b). The other nodes online teaching learning and opportunities for teachers the average area was equal. The themes under opportunities during COVID-19 situation included digital transformation, research and technological innovation, digital competencies, digital instruction delivery and resource utilization.

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Figure 3
Coding Query to compare the extent of coding references

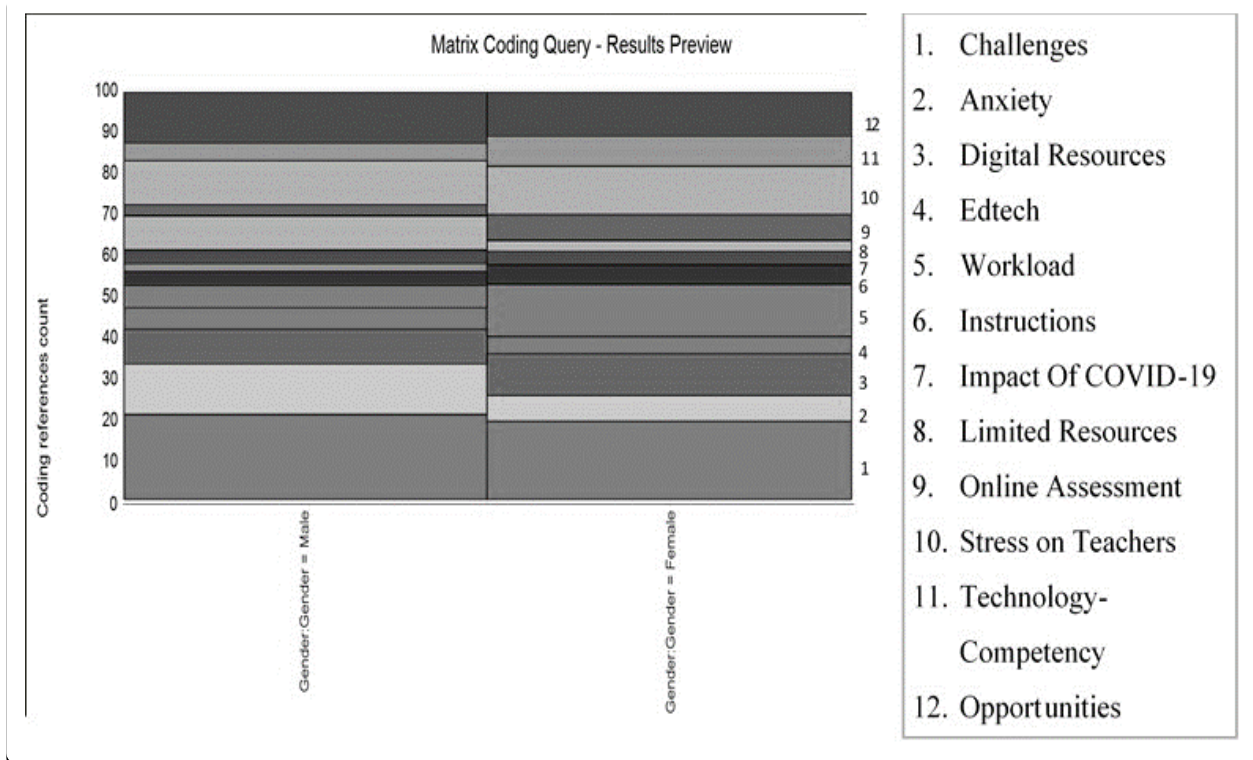


Figure 3 demonstrated the coding query for comparing the extent of coding references “gender”. This coding query demonstrated the major areas of discussion in comparison to male and female university teachers. The participants expressed their views about parental themes (challenges and opportunities) including subthemes. The male teachers discussed challenges, anxiety, and opportunities more than female teachers. However, the conversation of female teacher revolved around limited digital resources, heavy workload, stress of online teaching& COVID-19, and insufficient online assessment more in comparison to male teachers.

4. Discussion and Conclusion

Worldwide, the COVID-19 forced countries to shut down all routine activities. Across the world, all the educational institutions closed, and teachers and students were encouraged to take part in online teaching and learning (Ali *et al.*, 2020; Arshad *et al.*, 2020; Mohapatra, 2020). An effective online teaching learning consists of online quality instructions, participative learning, boosting research works, principles of digital learning, prototypes, online educational theories, ethics and appraisal of assessment, concentrations on online curriculum design, and infrastructure (Hodges *et al.*, 2020; Bozkurt & Sharma, 2020).

In Pakistan, since 1990s several natural and artificial made calamities caused more than one-hundred thousands of deaths (Arshad *et al.*, 2020). This under-developing country became the fifth country who announced smart lock-down from the last week of February 2020. All the social, physical, private, educational, and business activities are pushed towards online platform. Students of

tertiary education resumed their education through online system (Arshad, *et al.*, 2020; Siddiqi, 2020; Yousaf, 2020). While, this sudden digital transformation of instructional delivery brought several technological challenges, attitudinal competencies, and developmental opportunities (Omotayo and Haliru, 2020). This study was designed to investigate the satisfaction, challenges, competencies, opportunities for university teachers during online teaching in COVID-19 lockdown. The results of this indicate that pandemic related anxiety and stress influenced teachers (Ahmed *et al.*, 2020; Barkur *et al.*, 2020; Hiremath *et al.*, 2020), the unprepared transformation affect their performance (AlkaPwnige, 2020; Bozkurt & Sharma, 2020), majority of teachers' performance was affected by limited resource differences (Hodges *et al.*, 2020; Ribeiro, 2020), the large number of teachers were not trained and ready to deliver high-quality online instruction (Fishbane and Tomer, 2020; Flaherty, 2020; Manfuso, 2020; Omotayo and Haliru, 2020; Pietermaritzburg, 2020). As a result of this, majority teachers had less satisfaction with the quality of online teaching. The teachers' dependency on novel online teaching platforms, insufficient ICT infrastructure, internet resources, lack of training became biggest challenge (Table 1 & 2). These challenges with low quality digital instructions lack behind the quality of online teaching learning, and assessment. The online examinations carried out limited proxy supervision of learners that regulated cheating and dishonesty. Most of participants (94% male and 95% female) admitted greater impact of COVID-19 on their behaviour (Table 2). The situation of COVID-19, online teaching learning, quality education, assessment techniques, and sudden transformation put huge workload, anxiety, and stress among teachers (figures 1, 2 & 3).

Most of the participants explained that they still have opportunities of flexible instructions, innovative researches, digital transformation, alignment with social media communication, and professional development (Murphy, 2020). This roadmap provided an advantage for teachers to redesign their instructional delivery according to novel platform. In conclusion, online teaching learning became general and acceptable mode to engage people worldwide (Beech, 2020; Manfuso, 2020; Poon & Peiris, 2020). The university teachers realised use of technological gadgets to respond in modern era (Vlachopoulos, 2020). This gave a chance to teachers learn more about technology, share experiences, and enhance their professional ability.

5. Recommendations and Suggestions

All the teachers perform their duty to equip students with the knowledge, skills, and resilience that help them to cope effectively with upcoming challenges as pre and post COVID-19 pandemic situations. The public higher education subsidy and support in the future may requires capacity building in upgrading digital infrastructure and using technology in universities. The considerations of updated and modern online tools may transform teachers' professional abilities. This may be beneficial to cope with challenges in the future as online teaching learning during natural and human-made emergencies. There is need to provide models to accommodate the contemporary changes in online teaching learning. The Regulatory authorities and employers of higher education institutions should revisit their existing policy frameworks by reviewing digital transformation of institutions, redesigning scalable and personalized EdTech models, designing new strategies and technical structures to assist their teachers in successfully embracing the EdTech to

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deal with any crisis in the future. Different research designs with comparative modes of online teaching learning may be used in further researches to gain more objectivity.

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