Teachers' Attitude towards Virtual Teaching and Learning Process during the Covid-19 Pandemic in Pakistan: A Questionnaire-Assisted Discourse Study

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Abstract: The COVID-19 pandemic's impact was felt worldwide, and its effects are expected to last for decades. One of the main concerns during the pandemic was ensuring continued education for students and teachers despite the lockdowns in affected countries. Consequently, educational institutions were forced to close off and on, and teaching and learning had to be rescued by digital media such as Zoom, Skype, and Team. However, in Pakistan, most places do not have internet access, and teachers are not accustomed to virtual teaching. As the restrictions and lockdowns persisted, distance education became necessary, and teachers adopted it as a common routine. This study aims to observe teachers' attitudes towards virtual teaching, their experiences during the pandemic, how they overcame technology-related issues, and how they envision the future of virtual teaching or blended-learning techniques in their on-campus teaching activities after the pandemic.
Keywords: COVID-19, Virtual Teaching, Questionnaire, Pandemic, Discourse analysis, Pakistan

Introduction

The COVID-19 pandemic is considered one of the deadliest pandemics in world history ever recorded which emerged in the city of Wuhan, China, in December 2019 (Adil et al. 2021). According to the report of the World Health Organization, (2022) this disease has already infected more than 500 million and killed 6.2 million people around the globe.[7] The impact of the COVID-19 pandemic has been seen in every aspect of human society such as the economy, ecology, education, entertainment industry, and politics, ranging from mild to severe.

The COVID-19 virus first appeared in Pakistan on 26 February 2020 and by the end of March, it had spread to all four provinces of Pakistan (UNICEF, 2020). The following figure 1 shows the statistics of coronavirus cases during the year 2020-2021.

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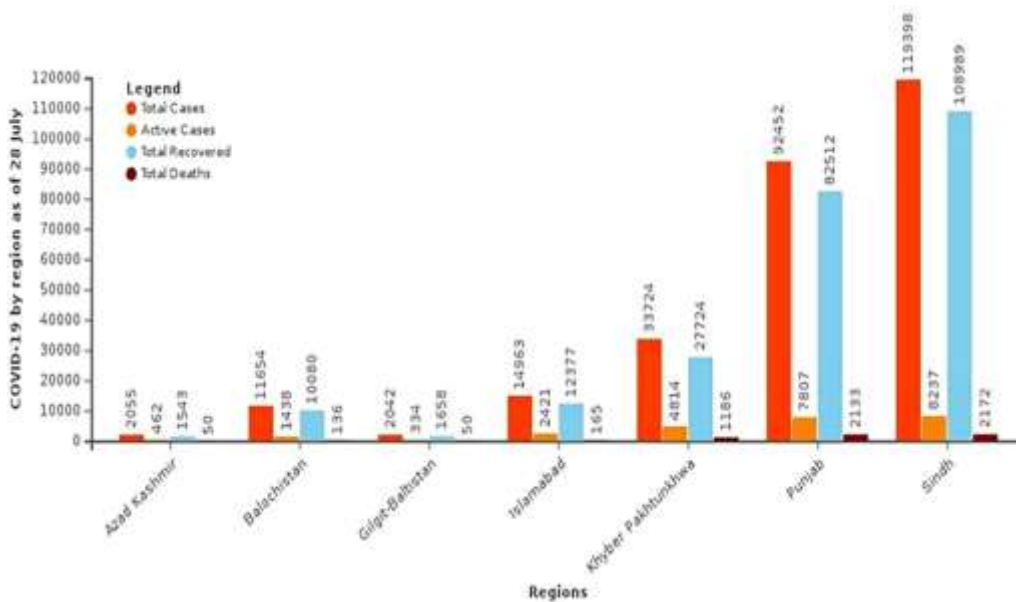[7] https://www.who.int/health-topics/coronavirus#tab=tab_1

Figure 1: Statistics of Corona Cases in Pakistan (2020/21)[8]

Pakistanis have witnessed all the dangerous waves of Coronavirus during the last two years. According to the report of the Ministry of National Health Services Regulations & Coordination (2022), more than 1.5 million were affected by the deadly virus, and 30,379 deaths have been reported since February 2020. On the other hand, the government of Pakistan has started door to door-to-door campaign to reach remote areas and administer COVID-19 doses. The following Figure 2 shows the statistics on the Corona situation and Covid vaccination status in Pakistan:

Figure 2: COVID-19 Status in Pakistan[9]

Covid-19 and Teaching-Learning Process

The current study aims to observe the impact of the Covid-19 pandemic on the education sector. According to a report by the United Nations International Children's Emergency Fund, (September 2020), the Covid-19 pandemic has forced almost 1 billion children to stop going to school due to restrictions to stop the spread of

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[8] The image is retrieved from: https://www.wikiwand.com/en/Statistics_of_the_COVID-19_pandemic_in_Pakistan.
[9] The Image has been retrieved from the official page of the Ministry of National Health Services Regulations & Coordination: https://covid.gov.pk/

coronavirus.[10] This trend has been stretched to the higher, graduate, and post-graduate levels and 90% of the educational institutions around the globe moved to the virtual teaching and learning process during the Covid pandemic (WHO, 2020).

Online or electronic learning was the only alternative to replace physical education in such a scenario (Ehlers & Pawlowski, 2006; Almahasees, 2021). Electronic Learning or Online Education as defined by Clark and Mayer (2011) is the way of completing the teaching and learning process through an online medium in an electronic form. Furthermore, Sinclair et al. (2015, p. 53) in their study stated that an online education system engages a large group of students in a convenient way from their place and time. Consequently, the use of digital apps such as Byjus, Zoom, Skype, WhatsApp, Alibaba Cloud, Teams network, etc. for online teaching and learning processes increased during the last two years.

Pakistan is also one of the countries that shifted to the online teaching and learning process soon after the restrictions on on-campus education were introduced. However, accepting such a sudden shift from the traditional chalk-and-board teaching and learning process to online or e-learning was not quick, and the teachers and students took time to adjust to this new teaching and learning process. Similarly, Hamid and Nisar (2021) in their study reported the same thing and stated that the students and teachers in Pakistan took time to accept what was already started outside the world. It was because of the lack of proper training in distance education and the existing methodology of teaching\learning in the country.

Similarly, the current study is designed to observe the impact of the COVID-19 pandemic on the Pakistani education system to see changes between the teachers' pre-pandemic experiences and post-pandemic experiences. This study will also explore how the teaching and learning process worked during the pandemic, how the teachers responded to the blended learning methodologies during the pandemic, and what new things were learned by the teachers from the e-learning process during the COVID-19 pandemic.

Methods and Materials

The current study aims to observe the teachers' behavior towards online teaching during the COVID-19 pandemic in Pakistan. For this purpose, the researchers of the current study have collected data through questionnaires and the analysis has been carried out manually following the methodology explained by the study by Clarke and Braun (2006).

A questionnaire-based study provides an opportunity for the researchers to observe the research subjects in a more natural setting which will provide the chance to get more genuine data in a shorter amount of time (Kelley et al. 2003). Furthermore, according to the study by Jones et al. (2013), a questionnaire-based study allows researchers to evaluate results based on a large amount of data gathered from numerous participants.

Data Collection and Materials

The current study is a corpus-based analysis of data collected through questionnaires in hard form or paper form in three different Pakistani universities; the University of Malakand, the University of Peshawar, and Qurtuba University of Science Information Technology among 20 participants (17 males and 3 female). The researchers distributed 20 questionnaires and received 17 responses (15 males and 2 females).

The questionnaire was designed following the guidelines described by the study by Kelley et al. (2003), Jenn (2006), and Jones et al. (2013). The questionnaires were comprised of 6 closed-ended and open-ended questions. A combination of both open and closed-ended questions paves the path to understanding the behavior of the research population from both social and psychological perspectives (Singleton & Staits, 2009). Participants were given the choice to write in the language of their choice. In addition, all the participants were asked to also undertake a written consent form to show their willingness to participate in the study (Kelley et al. 2003).

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[10] https://data.unicef.org/topic/education/covid-19/

Data Analysis

The current study uses questionnaires to collect data from university teachers about their thoughts on different questions related the online teaching during the COVID-19 pandemic. The current study follows the study of Clarke and Braun (2006) 'a 6-phase guide to doing thematic analyses' for the analysis of questionnaire data. According to Clarke and Braun (2006), their 6-phase guide to doing thematic analysis provides the researcher with opportunities to explore their data in a wider sense:

Familiarizing yourself with your data: Transcribing data (if necessary), reading and re-reading the data, noting down initial ideas. 2. Generating initial codes: Coding interesting features of the data systematically across the entire data set, collating data relevant to each code. 3. Searching for themes: Collating codes into potential themes, gathering all data relevant to each potential theme. 4. Reviewing themes: Checking if the themes work for the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic 'map' of the analysis. 5. Defining and naming themes: Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells, generating clear definitions and names for each theme. 6. Producing the report (p. 87).

Similarly, the current study uses all these six phases to analyze the questionnaires' data. The results of the current study will reveal the behavior of the teachers towards online teaching during the COVID-19 pandemic. In the section below each of the questions from the questionnaire will be discussed thoroughly about the responses received for them, respectively.

Results and Discussion

In this section, a detailed analysis of each of the questions is outlined. The study of Clarke and Braun (2006) provides the base for this analysis and all the results outlined in the current section are retrieved from the data using the thematic analysis technique.

Question No. 1

Choose your expertise in using digital mediums for teaching and learning before COVID-19.

Basic_____   Proficient_____   Expert_____

Analysis

The first question is open-ended and was posed to know about the knowledge of participants in using digital apps or modern applications for online teaching. This question is also important to understand the level of teachers in using online applications before the COVID-19 pandemic. The responses to this question are shown in Fig. 3 below:
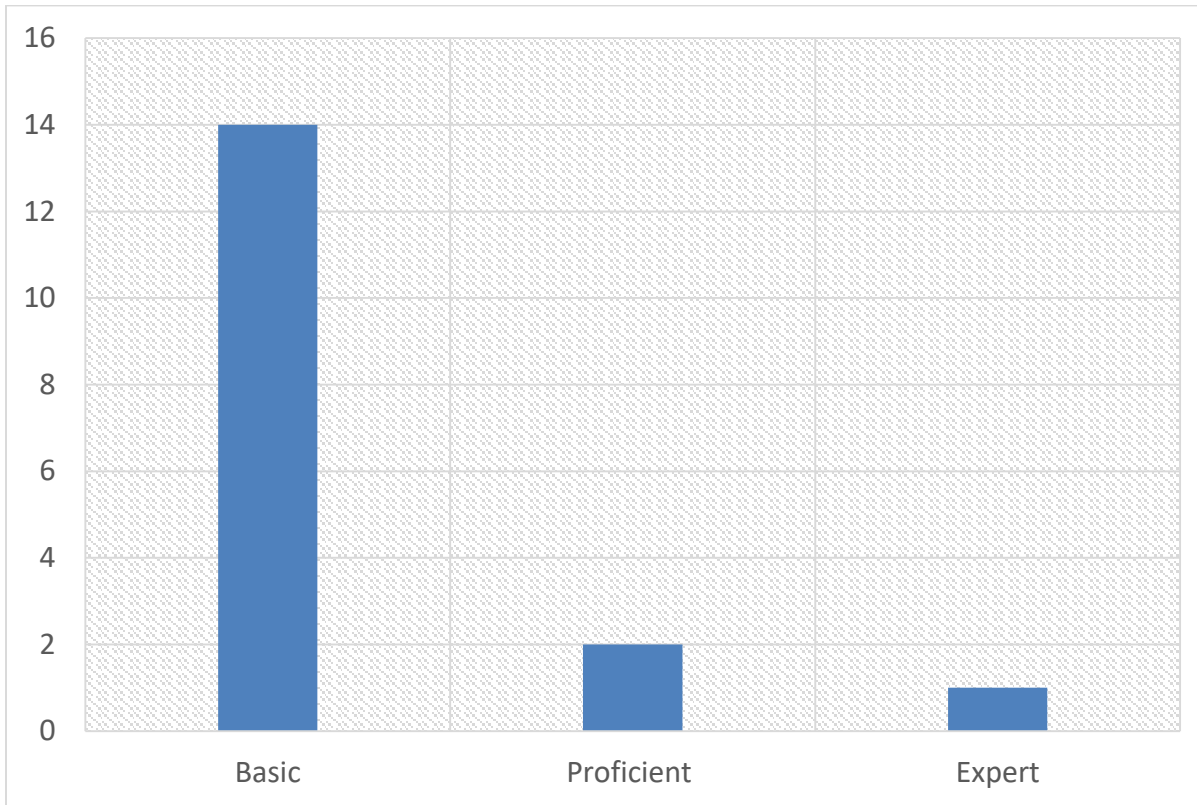
Figure 3: Statistics of Responses to Question No. 1

As shown in Figure 3 above almost 82% of the participants had basic or no knowledge of using online apps or digital apps for online teaching before the Covid-19 pandemic as compared to 11% proficient and 5% expert participants.

Question No. 2

> Did you use online apps for online teaching during the recent COVID-19 distance teaching and learning process?
>
> Yes_____   No_____

Analysis

The second question in the questionnaire is closed-ended and was designed to know if the teachers had used digital applications or mediums for online teaching. Studies such as Nisar and Hameed () suggested that it took time for Pakistani teachers to go online to teach so the main concern of posing this question in the questionnaire designed for the current study was to make sure the teacher had been using online apps for teaching. The responses to this question are shown in Fig. 4 below:
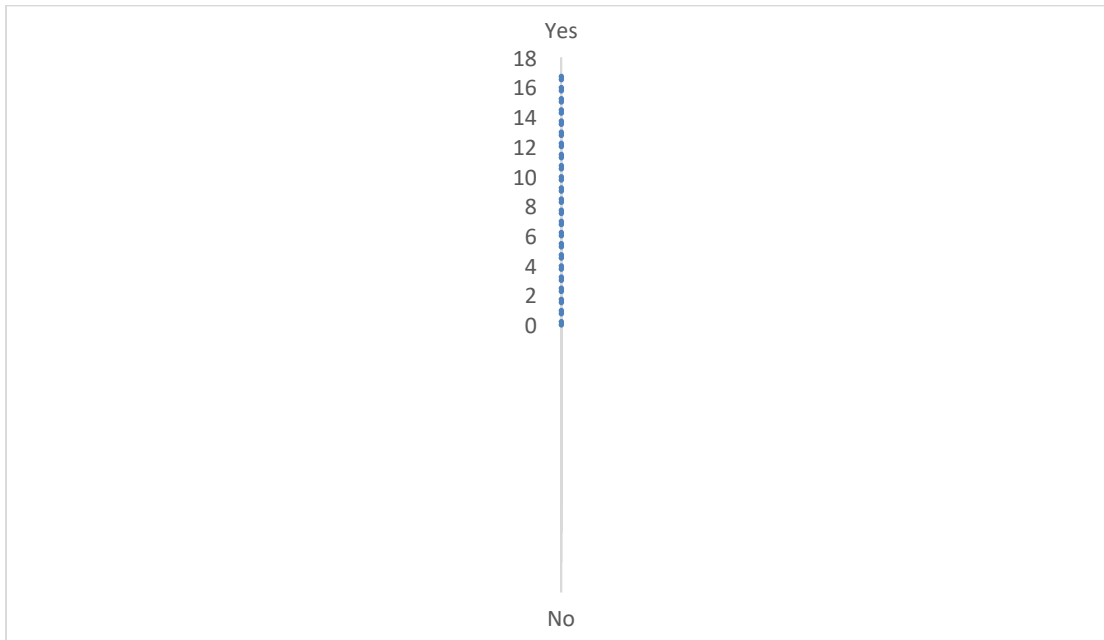
Figure 4: Statistics of Responses to Question No. 2

While conducting questionnaires for the current study, the participants had already been using or using digital apps for teaching online. The above figure 4 shows that all the teachers who participated in the current study used digital apps for online teaching during the COVID-19 pandemic.

Question No. 3

How was your experience of teaching online during Covid restrictions? Please, write about your experiences of using digital apps for online teaching during the COVID-19 pandemic.

Analysis

The third was an open-ended question designed to allow participants to write about their experiences of using digital applications and online resources for teaching during the COVID-19 pandemic. It is clear from their responses that most of the teachers were not used to online teaching and for the first time when they started distance education, it became hard for them to adjust as shown in the example below:

so, it was a nightmare and gave me headaches when we were asked to go online. I was like stuck somewhere with no direction and what to do next. and that is why I missed the first week of my lectures. I made an excuse. Then, later, I took the help of one of my students to help me understand the complications. And then I understood what it is all about and now it is easy at the back of my hand. (Respondent 3).

In the above example, respondent 3 used two metaphors; 'headaches and 'nightmare' which show how much struggle the teacher did to get used to online teaching. And the main reason was that they were not fluent in using modern means of education as discussed by another participant:

what a pity that was. I will say we were technologically illiterate before this COVID-19 pandemic. on one hand, we should feel sorry for those who got affected but on the other hand, a person like me who only knows chalk and duster is now capable of making and designing his lectures. Respondent (8)

In the example above respondent 8 agrees with not knowing about the modern digital equipment for online teaching and has used the metaphor 'technologically illiterate' for not being aware of the current trends in teaching. The same can be found in the writing of another respondent who considers the COVID-19 pandemic as a blessing for him or those teachers who were not used to the modern trend in teaching as now, they know many things:

Yes, I must say it was an enjoyable time not for the affected people but for us teachers. We always want vacations, but the pandemic brought us hundreds of them. And yes, I have learned many things during this phase of my teaching career. it was not only good for my professional career but also, I am now a technology man (Respondent, 14).

Despite the personal achievements teachers received during the pandemic, there is an issue of attendance which according to the respondents were the main concern during online teaching and they consider this to be the only drawback or disadvantage during the non-physical classes. Attendance is one of the important parts of the Pakistani education system where the teachers must keep a record of all the present and absent students:

Undoubtedly, it was something new. The main thing to be concerned about was to keep an eye on each student who was looking strange because if you could not see them still some of them were marked present but if you called their name no one replied. They were missing. But anyhow I enjoyed it. (Respondent 6).

Question No. 4
Do you agree teachers' skills are improved (using digital mediums) during the distance teaching and learning process?
Agree_____   Partially agree_____   Disagree_____   May be_____
Analysis

This closed-ended question aimed to find out the teachers' responses to their skills development after using digital mediums for online teaching during the COVID-19 pandemic. The following fig. shows the statistics of the participants' responses:
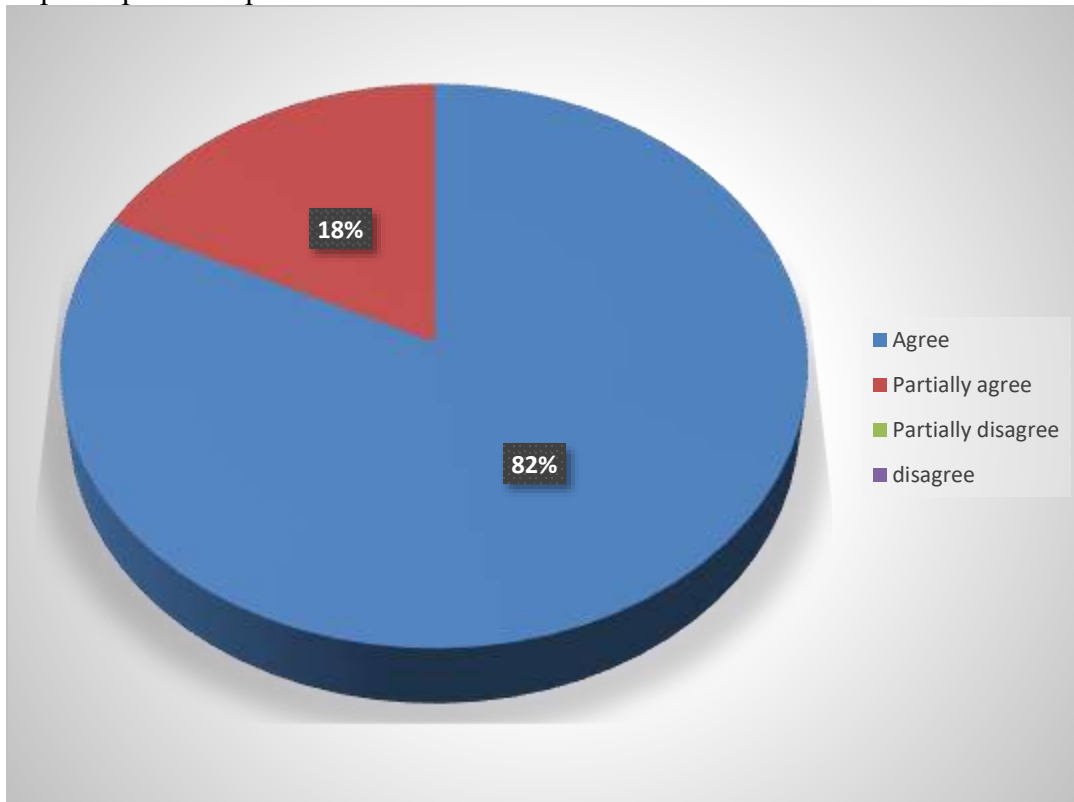

Figure 5: Statistics of Responses to Question 4

It is clear from the above statistics that almost 82% of the participants agreed that teachers' skills improved after using online teaching resources during the COVID-19 pandemic.

Question No. 5

> What are the benefits you or other teachers received from the online teaching process during the COVID-19 pandemic?

Analysis

The above open-ended question aimed to compel the participants to write about the possible benefits they think they received from their experience of using digital resources for the online teaching and learning process. The respondents consider the Covid-19 pandemic as a revolution in their professional teaching careers. They think they were unaware of the modern technologies before the Covid pandemic but now they know many new things. One of the participants considers the COVID-19 pandemic to be an imaginary University where he has learned many new things:

> The COVID pandemic gave us many bad memories but all those who were unfamiliar with the technology will always remember Covid as a University that introduced them to the technology. (Respondent 11)

> Yes, the biggest advantage I got from teaching in Covid time was always to go with computer-generated lectures through a computer-generated medium. (Respondent, 2).

On the other hand, as we saw in the responses of the participants in question 3 who were more concerned about the non-physical attendance of the students, however, still some teachers consider a wide range of using AMS and IMS datasets in different universities during the online teaching-learning process as a blessing that helps to keep updated about the daily attendance and task schedules assigned to the students:

> For me it was normal, I was an expert using all these tools for different online seminars, but I was more into Skype during the COVID-19 pandemic YES, I saw many new things and innovative technologies come into existence, especially in our country. Such as the IMS which we used for attendance, assignment tasks and uploading our lectures, etc. (Respondent 17)

Question No. 6

> Please select your post-Covid-19 expertise in using online apps for the teaching-learning process.
>
> Basic_____   Proficient_____   Expert_____

Analysis

The current question outlines the statistics of participants' responses about their expertise level after the online teaching and learning phase:
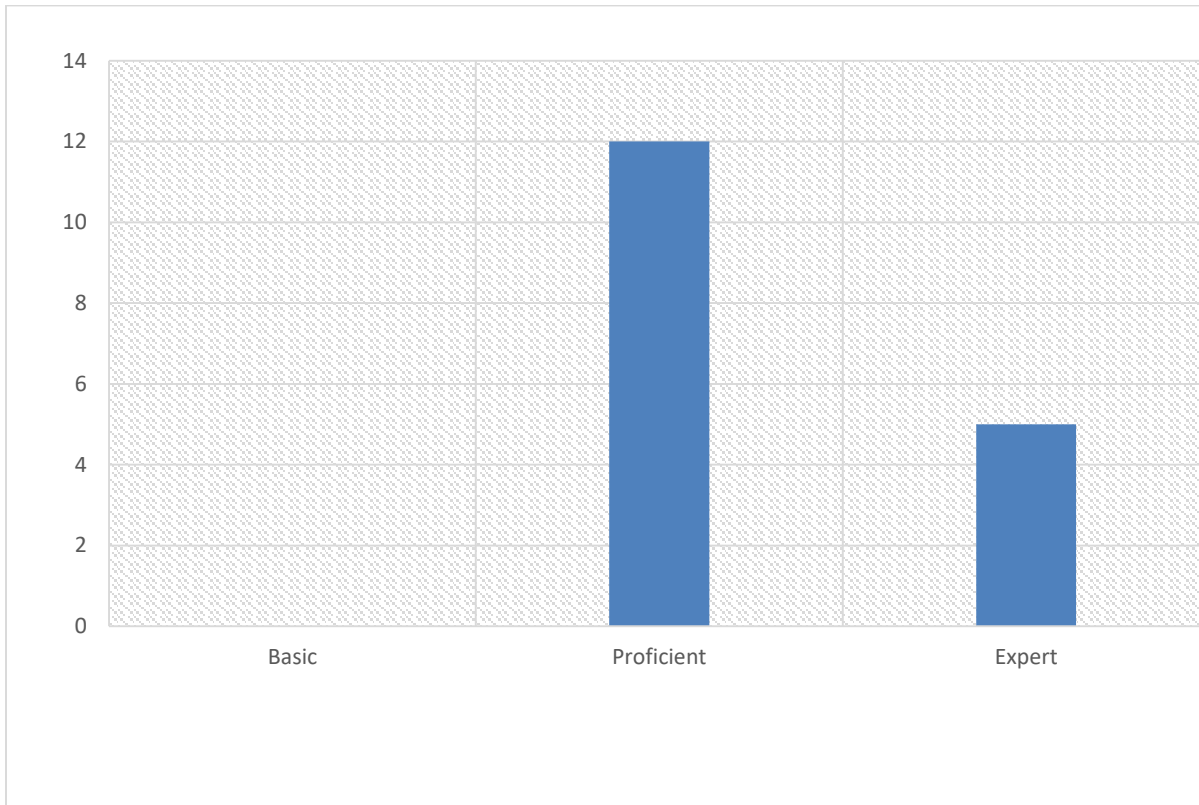
Figure 6: Statistics of Responses to Question 6

As shown in the fig. above the participants after their experiences online during the Covid-19 pandemic became proficient in using modern digital applications for online teaching.

Comparing the Pre-Pandemic and Post-Pandemic Expertise of Participants

The participants in the current study were asked twice to rank their expertise before and after the COVID-19 pandemic. The current study was of the rationale that using digital apps for online teaching helps teachers to improve their professional skills and as we can see now in the following fig. which compares the expertise of the participants based on their responses to question no. 1 and question no. 6. Hence, a clear shift from basic to proficient can be seen in the professional skills of the teachers who were once basic learners of the modern digital apps used for the teaching and learning process.
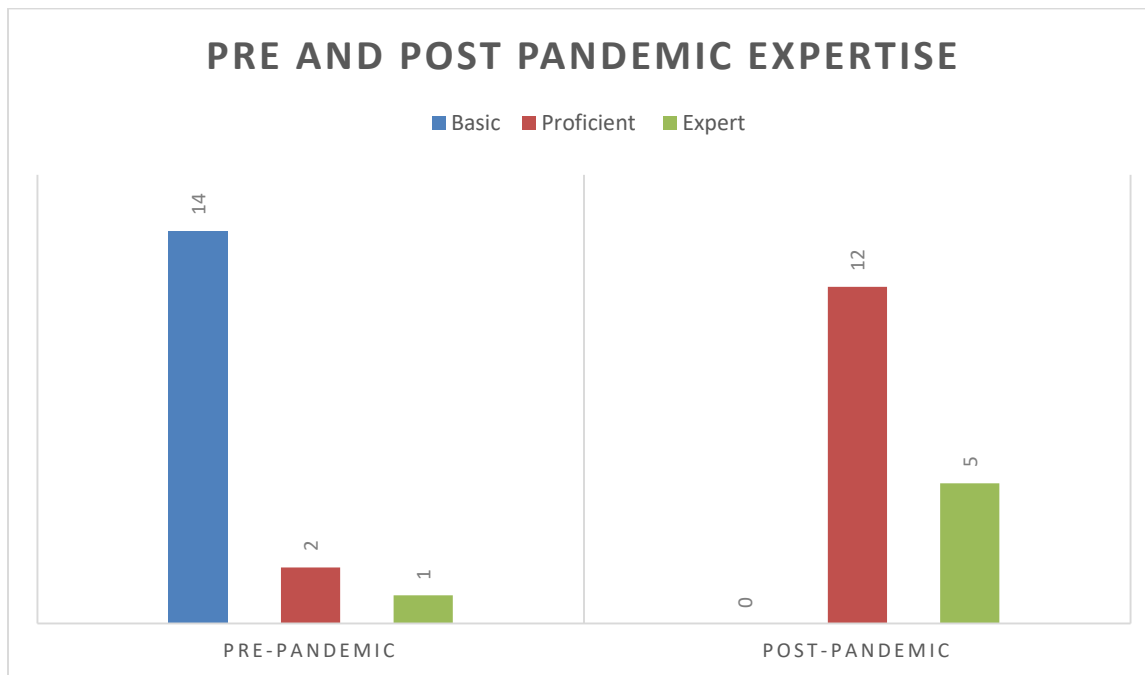
Figure 7: Statistics of Pre-Pandemic and Post-Pandemic Experiences

Conclusion

The current study was a questionnaire-based corpus analysis designed to observe the responses of Pakistani teachers on the use of digital mediums for the online teaching and learning process during the COVID-19 pandemic. The current study was also important to unpin the drawbacks of Pakistani teaching and learning methodologies (Nisar & Hameed, 2021). Therefore, the findings of the current research study add profound literature on the transition of teaching methodologies and teachers' professional skills. The current study has found that most of the participating teachers consider online teaching during the pandemic as a 'headache' and 'nightmare' suggesting their challenging times or their struggle in acquainting with the modern techniques of online teaching and learning process. As pointed out by some of the participants it was because of their 'technological illiteracy.

Moreover, they are now confident that the pandemic gave them something good as they are now self-sufficient in making multimedia presentations or even attending online seminars, etc. They also consider their familiarity with online apps as a good thing because now if they are sick or out of the country can continue teaching or supervising their students through online apps. In addition, this study has also found an improvement in their knowledge of using digital means for virtual teaching before and after the COVID-19 pandemic (see Fig. 3, 6, 7).

On the other hand, Attendance is considered an important aspect of the teaching and learning process in the Pakistani education system, and in this regard regulating and involving students in the teaching and learning process was not an easy task. This study found that most of the teachers were not happy with the way students took these online classes lightly and usually made excuses for being asleep or busy with domestic work.

References

Adil, M. T., Rahman, R., Whitelaw, D., Jain, V., Al-Taan, O., Rashid, F., Munasinghe, A., & Jambulingham, P. (2021). SARS-CoV-2 and the pandemic of COVID-19. *Postgraduate Medical Journal*, 97, 110-116. https://pmj.bmj.com/content/97/1144/110

Almahasees, Z., Mohsen, K., & Amin, M. O. (2021). Faculty's and students' perceptions of online learning

during COVID-19. *Frontiers in Education*, 6. https://doi.org/10.3389/feduc.2021.638470

Clark, R. C. & Mayer, R. E. (2011). *E-learning and the science of instruction: Proven guidelines for consumers and designers of multimedia learning*. John Wiley & Sons.

Clarke, V. & Braun, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2):77-101. 10.1191/1478088706qp063oa

Ehlers, U. D., & Pawlowski, J. M. (2006). Quality in European e-learning: an introduction, in *Handbook on Quality and Standardisation in E-Learning*, eds Ehlers, U. D. and Pawlowski, J. M. (Berlin: Springer), 1–13. https://doi.org/10.1007/3-540-32788-6_1

Jones, T. L., Baxter, M. A., & Khanduja, V. (2013). A quick guide to survey research. *Annals of the Royal College of Surgeons of England*, 95(1), 5–7. https://doi.org/10.1308/003588413X13511609956372

Kelley, K., Clark, B., Brown, V., & Sitzia, J. (2003). Good practice in the conduct and reporting of survey research. *International Journal for Quality in Health Care*, 15(3), 261–266. https://doi.org/10.1093/intqhc/mzg031

Nasir, S. and Hameed, M. (2021). Impact of COVID-19 on the Learning Processes of Typically Developing and Special Needs Students in Pakistan. https://files.eric.ed.gov/fulltext/EJ1309091.pdf

Sinclair, P., Kable, A. & Levett-Jones, T. (2015). The effectiveness of internet-based e-learning on clinician behavior and patient outcomes: a systematic review protocol. *JBI database of systematic reviews implementation reports*,13(1), 52–64.

Singleton R. A., & Straits B. C. (2009). *Approaches to social research.* Oxford University Press.

UNICEF, (2020). Education and Covid-19. *https://data.unicef.org/topic/education/covid-19/#:~:text=Students%20lacking%20access%20to%20the,in%20education%20around%20the%20world*.