

## **Perceptions and Experiences about Covid-19-induced Online Education: A Study about Primary School Students in Pakistan**

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### **Abstract**



*This study explores the perceptions of the elite class, private sector primary school students in Pakistan about online education during Covid-19, its benefits and challenges, and the quality of education during the pandemic. It further explores if the students want online education to continue after Covid-19 or not. Semi-structured interviews were used to collect data from eight students. The students mostly used Google Classroom and Google Meet. Internet connectivity, electricity, the difficulty in operating different software and platforms, and the lack of socialization were mentioned as some of the biggest challenges during online education; while the opportunity to learn different software and platforms, flexibility, and staying at home were mentioned as some of its benefits. The students had mixed opinions about online classes and the quality of education during Covid-19. As compared to other studies about school students in Pakistan, these students felt more comfortable with online education; however, they did not want purely online education to continue after Covid-19. Despite multiple challenges, online education brings numerous benefits. The study suggests that to overcome infrastructural and internet-related issues, the blended mode should be adopted as it can maximize the benefits of the two modes, and overcome some of their challenges.*

**Keywords:** Blended Learning, Covid-19, Online Education, Pakistan, Primary Education.

### **Introduction**

The covid-19 pandemic affected education systems across the world, forcing them to change the whole teaching-learning paradigm (Toquero, 2020; Malik et al., 2022). Although online education served as a stand-in for classroom instruction and interactions, it ran into several roadblocks, especially in developing countries (Baytiyeh, 2019; Haleem et al., 2020; Mustafa, 2020). Some of the major issues hampering the effective implementation of online education have been the lack of technological knowledge and expertise for online education, inadequate and poor infrastructure, lack of access to online devices, and internet connectivity issues (Geven & Hasan, 2020; Mustafa, 2020). In many countries where the education system was deeply rooted in the traditional mode of learning, both the teachers and the students found themselves unprepared or at least under-prepared for this sudden paradigm shift (Tadesse & Muluye, 2020; Malik et al., 2022).

During the pre-Covid-19 era, the education system in Pakistan was also employing traditional approaches and strategies (Salam et al., 2017). Although some private school networks and systems were providing education through relatively modern pedagogical techniques and approaches; they were still using face-to-face, white-board-based methods, and approaches. The use of modern technologies and the internet in the classrooms mostly remained elusive (Salam et al., 2017). As a result, both the public and private schools in Pakistan faced immense challenges and difficulties in the continuation of the teaching-learning process during Covid-19. Primary school students generally faced greater challenges as not only they were less adept at modern technology; but also lacked the self-discipline and motivation required for effective online education (Flack et al., 2020; Ullah & Ali, 2022).

### **School education in Pakistan**

In Pakistan, school education lasts for twelve years: from grade one to grade twelve. It is generally divided into four levels: primary (grade one to grade five), middle (grade six to grade eight),

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secondary (grade nine and ten), and higher secondary (grade eleventh and twelve) (Punjab, n.d.).

There are great disparities in school education in Pakistan (Memon, 2007). Those disparities are not limited to the traditional public and private, and urban and rural lines. There are also parallel education systems in Pakistan that are different in all major aspects and areas i.e. curriculum, pedagogical techniques, assessment and evaluation, educational ideologies and philosophies, management system, and the students' socio-economic background (Malik & Hassan, 2015). Three of the most prominent and influential parallel education systems are government boards affiliated schools (leading to secondary school and higher secondary school certificates), British Council-affiliated schools (leading to O and A levels), and madaris (affiliated to different waqfs). They can be further divided into public and private, and urban and rural (although schools offering Cambridge and Edexcel syllabi are almost exclusively private, and situated in urban areas).

Private sector schools offer either matriculation (using government-approved and developed textbooks) or Cambridge/ Edexcel (English medium) syllabus (Malik & Hassan, 2015). Most of the low and middle-income private schools follow matriculation; while elite private schools, which cater to the needs of the privileged class, offer an English medium syllabus (Rahman, 2005). Although the elite schools use relatively modern pedagogical techniques and strategies; during the pre-Covid-19 era, most of them did not employ online or blended learning techniques.

They have been quite a few studies about the impact of Covid-19 in Pakistan; however, such studies about primary school students have been quite rare. Even more, studies about private sector primary school students are almost non-existent. This study tries to fill some of this research gap by investigating the challenges and experiences of elite-class private school students in Pakistan regarding Covid-19-induced online education.

#### ***Research questions***

This study is based on the following key research questions.

1. What kind of tools and platforms were used by the private sector primary school students for online education during Covid-19?
2. What are their perceptions about the benefits and challenges of online education during Covid-19?
3. What are their overall experiences with online education during Covid-19?
4. What is their opinion about the quality of education during Covid-19?
5. Should online education be continued after Covid-19 or not?

#### **Literature review**

##### ***Effects of Covid-19 on school education***

Covid-19 impacted the world in almost all fields, domains, areas, and regions (Caggiano et al., 2020). However, some areas and fields were especially hit hard due to their working environment, culture, and nature. Education was especially affected by this pandemic as it is traditionally delivered to groups in a social setting (Mailizar et al., 2020; Malik et al., 2022). Covid-19-induced social distancing and other relevant measures made it almost impossible for most of the schools to deliver education in the traditional manner (Toquero, 2020; Tadesse & Muluye, 2020), leading to immense academic losses (UNESCO, 2020). It radically altered the teaching methods utilized by school teachers who were accustomed to traditional classroom instructions (Zhang et al., 2020). Although many schools employed online education (Baytiyeh, 2019), they faced immense difficulties due to multiple issues, mostly related to access, expertise, resources, infrastructure, and the internet (Geven & Hasan, 2020; Mustafa, 2020). The sudden shift to online education with minimal professional development (Clinton, 2020), and at an unreasonably fast pace (Norman 2020; Rosevear, 2020) prevented most of the education systems from fully utilizing the benefits of online education.

Tadesse and Muluye (2020) conducted a review of the literature study about the impact of Covid-19 in developing countries. They pointed out that although many of the developing countries were trying to use online education during Covid-19, both the teachers and the students face many difficulties due to the inadequate infrastructure, and lack of expertise and resources. In their study, Dawadi et al. (2020) found that although the Nepalese government had taken a lot of initiatives for online education during Covid-19, both the teachers and the students still faced challenges due to faulty implementation strategies.

Many studies pointed out that neither the teachers nor the students reported positive experiences with online education during Covid-19. Jain et al. (2021) said that the teachers expressed

their dissatisfaction as they were not properly and fully trained for online teaching. While conducting a study about Indonesian students, Putra et al. (2020) found that the students faced multiple issues during Covid-19.

Schools in Pakistan also faced multiple issues during Covid-19. Geven & Hasan (2020) said that despite government efforts and initiatives, online education faced numerous challenges due to access and technological issues. They estimated that learning poverty would go up to 75% due to Covid-19 induced restrictions and issues. Ullah et al. (2021) carried out a study about both the university and school students. They found that 88 percent of the students complained about internet issues while 65 percent expressed their discontentment with online education.

While comparing the impact of Covid-19 on public and private school students in Pakistan, Ullah and Ali (2022) found that educational disparities were further magnified by Covid-19-induced online education. Whereas parents of those students who went to elite private schools were “less stressed about the learning disruption of their children due to protracted school closures”, the ones whose children would go to ordinary public schools, were a lot more concerned about the challenges associated with online education (p. 1091). While talking about the impact of Covid-19 on the education system in Pakistan, Malik et al. (2022) also pointed out the immense digital divide in the country which could manifold the existing disparities in the Pakistani education system.

#### ***Effects of Covid-19 on primary school education***

Covid-19 affected schools at all levels; however, numerous studies have indicated that primary schools generally suffered more during the pandemic (Flack et al., 2020; Ullah & Ali, 2022). Putri et al. (2020) carried out a study about the challenges faced by primary school teachers, students, and parents during Covid-19. They found that despite government efforts and support, most of the primary schools faced numerous challenges such as technological access and expertise, financial problems arising from higher use of the internet, longer screen time, and lack of socialization for the students. In another study, Rasmitadila et al. (2020) investigated the instructional strategies and the challenges faced by Indonesian primary schools. They also found motivational issues and access and expertise for the technologies to be some of the more important issues. Another study about Barbados and Jamaica found increased gender disparities and students' dropout during Covid-19 due to access, technological and infrastructural issues (Blackman, 2022). While conducting an experimental study on a primary school in Spain, Pozo-Rico et al. (2020) found that if the teachers were provided proper training about the use of technology, the teaching-learning process could improve a great deal during Covid-19.

An empirical study about primary schools in Australia, however, found that Covid-19-induced online education did not make much of a difference in students' academic learning (Gore et al., 2021). It may be due to the advanced education system in Australia which heavily incorporates digital technology into the educational process.

#### **Methodology**

##### ***Research method and approach***

The study employs qualitative research method as it can gather in-depth data about a relatively unknown problem (Patton, 2002). Also as the participants were young (9 to 10 years old), qualitative data collection tools were considered the most suitable. Furthermore, the study uses a basic interpretative approach.

##### ***Context and participants of the study***

As this research aimed to analyze the problems faced by the elite class primary school students during Covid-19, and their experiences with the online learning process; the researchers decided to gather data from one of the elite, private school systems in Pakistan. That school system has over 150 branches across the country and offers education up to both matriculation and O and A-level classes. However for both pre-matriculation and pre- O level, English medium books published by foreign publishers are used. This school system mostly caters to the needs of the elite or at least above-average class with very high fees and associated expenditures.

Three primary branches were selected for this study. All of them are located in Lahore, one of the biggest cities in Pakistan. Grades 4 and 5 students were selected as they are the most mature students in a primary school, and can comprehend and respond to the questions more logically and sensibly. Eight students were selected, out of which, two were boys and six were girls. They all belonged to well-off families.

### ***Data collection tools and techniques***

The researchers decided to use semi-structured interviews as they gives the freedom to ask supplementary questions. Based on the research questions, an interview guide was developed consisting of six main interview questions. All the researchers discussed the initial interview guide to refine it. Later it was sent to three experts for content validity. After incorporating their suggestions, it was finalized.

The interviews were one-to-one, and face-to-face. Three of the researchers gathered data from the students. Interviews were carried out in their schools during the free lessons. To ensure that the participants were able to speak freely and without any influence, the interviews were held in a separate room. As the students belonged to elite schools where English was both a medium of instruction and interaction, the interviews were carried out in English. The interviews were audio-recorded as per the research protocol.

### ***Data analysis***

First of all, the interviews were transcribed. For data analysis, Marshall and Rossman's (2006) model was employed. After transcribing the data, two of the researchers read it independently to familiarize themselves with it. Later data was coded. Those codes were put under different themes. Both established and emergent themes were used. The themes were then discussed by all the researchers in a group meeting. Some themes were merged, reworded, or deleted. Important words, phrases, and sentences were also identified during the process. They were used in the final draft.

As the interviews were limited in numbers, no qualitative data analysis software was used. Data analysis was carried out using MS Word. Cut, copy, paste, and highlight functions were used for this purpose.

### ***Ethical considerations***

Interviewing young children is a difficult task, and its credibility, validity, and trustworthiness are often questioned (Cole & Loftus, 1987; Ornstein et al., 1992). For this purpose, confirmatory statements and questions were frequently asked.

Also one has to go beyond the common ethical protocols as they may be too young to express their apprehension or give formal consent. As a result, consent was not only taken from the students but also from their school principals and parents.

The researchers not only focused on their words but also looked at the body language for any signs of anxiety or discontentment. If they could not understand a question, it was rephrased in simpler words. The researchers used encouraging words and avoided cutting them off even when they were going off the topic.

### ***Data findings and analysis***

Other than the background information, data findings and analysis are divided into five main parts: tools, and platforms used for online education during Covid-19, perceptions of the students about the benefits and challenges of online education, experiences with online education, perceptions about the quality of education during Covid-19, and if online education should be continued.

### ***Background information of the participants***

Out of eight participants, two were male (P1 and P8) while the rest were females. Three of them (P2, P4, and P5) were in grade 5, and were ten years old; while the others were from grade 4 and nine years old.

### ***Tools and platforms used for online education during Covid-19***

The participants were first asked about the tools and platforms used for online classes during Covid-19. When it came to the tools and gadgets, most of them did not face much of an issue as many of them belonged to well-off families. The participants used smartphones and laptops for online classes. P1, P2, and P3 used personal smartphones while P4 and P5 used laptops. P6 used both a smartphone and a laptop as she owned both of them; however, she preferred the smartphone. P7, however, said that “due to network issues”, she could not attend online classes. Most of the students preferred smartphones due to their ease of use and portability. P8 said that he could use a smartphone at any place and anytime; while for operating a laptop, more preparations were required.

Talking about the platform and the software, the students said that it was not their choice, but their teachers. They mostly used Google Classroom and Google Meet during Covid-19. P1 explained how they used the two platforms for different purposes, “Google meet was for online classes and

Google classroom was for assignments”. Along with those two main platforms, they also used some specialized software and interactive websites like Jamboard and KooBits for mathematics.

Most of the participants said that their teachers would also share YouTube videos pertaining to their lessons. Some teachers also used self-developed PPTs for online lectures.

***Perceptions of the students about the benefits and challenges of Covid-19-induced online education***

The students were then asked about their perceptions of the benefits and challenges of online education that they used during Covid-19. While talking about the benefits, most of the participants said that it gave them multiple opportunities to learn and explore new apps, software, and online platforms such as Google Classroom, Google Meet, Microsoft PowerPoint, Padlet wall, and Jamboard. It also allowed them to stay with their families all the time.

P6 said that they could stay in the comfortable and caring environment of the house, and “spend quality time together”. The students also pointed out that it helped them in becoming independent learners and improved their time management skills.

The biggest challenges of the online classes were reported to be constant interruptions, and poor voice and video quality arising from internet and electricity issues. These issues made it hard to get the maximum benefits of online classes. There were also other issues like microphone and headphone issues, sound quality, etc.

P4 and P5 also pointed out constant eye strain which would eventually lead to headache and dizziness. P4 said, “Eyesight gets weaker due to increase of screen time. I get headaches very often and I think it affects my mind as well.”

P2 and P6 said that the school was not just a learning place, but also a place to socialize and make new friends. They said that online meetings and interactions were not as “beautiful” as in-person. Students said that they very badly missed socializing with their friends, talking to them, and walking and playing in the playgrounds.

***Experiences of the students with online education***

The next research question from the students was about their experiences with online education. The students had mixed experiences with some sharing positive experiences and some negative.

P3, P4, P7, and P8 said that their overall experience with online education was not pleasant. P3 called it “not so pleasant”, while P7 said that it was “simply bad”. They mentioned multiple issues relating to internet connectivity, electricity, and software/ platform.

Despite belonging to relatively well-off and affluent families, the students complained about internet speed and connectivity issues. Although the severity of the problem varied greatly depending on the type of internet device or connection they used, and the area where they lived. For some, internet issues proved to be extremely detrimental to their learning during the pandemic. P7 appeared to be the worst affected by it as she said, “Due to the network issues, I wasn’t able to attend online classes.” P4 lived in a newly established housing society where the internet signals were weak; consequently, she faced continuous issues with it. These issues led to very poor learning experiences for those students during online classes. P3 described it further in these words, “There was a lot of distortion and I could not hear the teacher very well”. Electricity was another major issue that disrupted their classes and soured their learning experiences.

Many students said that online classes were not well managed. P5 said that they did not like online classes as there was a lot of disturbance when all students started speaking at the same time. She, however, pointed out that it was easier in Google classroom as it had a "raise hand" option. P4 and P5 also said that they often struggled with the software which affected their learning pace. These issues made it extremely difficult for them to have an enjoyable and conducive learning experience.

Some students (P1, P2, P5, and P6) on the other hand said that despite some difficulties and challenges, they liked online learning and had positive experiences with it. They said that online education helped them with better learning. P6 said, “They helped me improve my computer skills more because we do like apps like Jamboard and Padlet wall a lot like I never knew they even existed until like online classes. I learned about many new apps.” P1 also said that it helped him to learn many useful software and applications. The students also believed that the online learning environment was more colorful, interesting, and fun. P5 mentioned an important point. She said that online learning "sharpened my time management skills” and made her an independent learner. As a result, it may not only improve the learning experiences but also make them better independent learners.

***Students' opinions about the quality of education during Covid-19***

Having asked them about their perceptions and experiences with online education during Covid-19, the students were then asked to give their opinions about the quality of education during the pandemic. Three of them (P1, P5, and P6) believed that the quality of education during Covid-19 was "quite good" as they had more flexibility and could "attend the classes" repeatedly (by watching the recorded lectures).

P2, P3, and P8 said that the quality of education was just okay. Although, they did not find it exceptionally exciting or helpful; neither did it adversely affect their academic learning. Although they believed that with improved services and infrastructure, their academic achievements could have been much better.

P4 and P7 were not satisfied with the quality of education during Covid-19 and desperately wanted to go back to face-to-face classes. Although, they believed that with proper services and infrastructure, online education could help them in their academic learning.

***Students' opinions about the continuation of online education***

Finally, the students were asked if online education should be continued after the Covid-19-induced homeschooling or if they would like to go back to face-to-face classes.

Six of them (P1, P2, P3, P4, P7, P8) preferred face-to-face classes as in face-to-face classes, they did not have to worry about internet, connectivity, or electricity issues. They also missed meeting their friends and teachers in person.

P5, on the other hand, liked the online mode and wanted to continue with it. She liked the ease and comfort of online classes as she could attend them with a few clicks. Contrary to all others, P6 wanted a "middle ground" as it could bring the benefits of both online and face-to-face classes. She liked online education as it helped her in "learning about apps I didn't even know existed"; and face-to-face as she "can see [her] friends in school and can discuss things with the teachers".

Students were then specifically asked about blended learning, explaining the concept to them. They were asked if they would like to use elements of online education in their regular face-to-face classes. The answer to this question was an overwhelming yes. All the students believed that it could improve their teaching experience and academic achievement. P6 who had already suggested a "middle ground" said that it would also prepare them for any new wave of Covid-19, or crisis like that. P2 and P3 said that they can get the e-contents and videos online, learn the topic, and then discuss them in the classroom with the teachers. It was interesting as the students were suggesting the flipped classroom model without knowing the term. They believed that it would bring back the excitement of meeting their friends and teaching on daily basis, discussing the topics and issues with them in person; and at the same time, enjoying the innovative and entertaining world of online learning.

**Discussion and conclusion**

This study investigated the perceptions and experiences of Pakistani private school students about online education during Covid-19. Although there have been quite a few studies investigating the impact of Covid-19 on Pakistani school education (Geven & Hasan, 2020; Ullah & Ali, 2022), none was exclusively carried out about primary school students; consequently, this study fills this research gap.

The study finds that the students used WhatsApp, Google Classroom, Google Meet, and YouTube videos for online learning during Covid-19. Some specialized software and platforms like Jamboard and Koobits were also used. The previous studies also found that such software and platforms were commonly used for online learning during Covid-19 (Fahmalatif et al., 2021; Malik et al., 2022). The students used smartphones and laptops for this purpose. Some teachers also used flipped classroom technique which has proven to be highly effective (Akçayır & Akçayır, 2018).

Online education brings with it many benefits and challenges. The students mostly appreciated the flexibility, focus on self-learning, opportunities to learn multiple software and platforms, and comfort of staying at home. Flexibility and self-learning have been reported as two of the most important strengths of online education (Noreen & Malik, 2020). However, they also pointed out some of the issues that online education brought with it, mostly interruptions in the classes due to internet and electricity issues, and the problems arising from the use of multiple software and platforms. Online education in developing countries is often marred by issues of access, expertise, quality of services, and infrastructure (Noor et al., 2020). Although the students belong to well-off

families, prevailing internet services and electricity issues in the country affected the effectiveness of online education.

Despite their positive perceptions and experiences about online education, some of them pointed out how connectivity and infrastructure issues dampened their positivity and passion about it, something which has been repeatedly mentioned by previous studies (Geven & Hasan, 2020; Mustafa, 2020; Malik et al., 2022). Some of them also pointed out that in purely online classes, they could not socialize with their friends and enjoy face-to-face interactions with their fellows and teachers. Putri et al. (2020) also pointed out that online education during Covid-19 had deprived students of the socialization process that normally takes place at schools. Some of them also pointed toward the health issues caused by the excessive use of computers and mobile phones. In their study, Malik and Azmat (2022) also pointed out various health issues caused by the excessive use of computers and internet.

Their opinions regarding the quality of education during Covid-19 were divided as some believed that it was relatively good, while others thought that they could not study to their full potential due to some of the technological issues. Previous studies also indicated that primary school students suffered during the pandemic due to similar issues (Putri et al., 2020; Blackman, 2022).

However, as compared to the other studies in Pakistan (Geven & Hasan, 2020; Ullah & Ali, 2022), a higher ratio of students were at least satisfied with the education process during Covid-19. It is not unusual as the students came from well-off families which already employed digital and online tools and devices for communication and other purposes. As a result, these findings should be read with caution as the same may not be said about the overwhelming majority of the students who do not enjoy such privileges and luxuries. In their study, Ullah and Ali (2022) also indicated that students from privileged classes were relatively less concerned about online education during Covid-19.

It also shows that macro and micro-level patterns are similar. Students from well-off and advanced families show a higher level of satisfaction about the quality of education during Covid-19 the same way as students from developed countries with higher GDP generally have a higher level of satisfaction about the quality of education during the pandemic (Tadesse & Muluye, 2020).

When it came to continuing online education after Covid-19, they did not want it as the only mode of education. Instead, they wanted to blend it with the traditional mode to maximize the effectiveness of the teaching-learning process. Many studies have also pointed out that blended learning is the most effective way to deliver education as it combines the benefits of both traditional and online education systems (Malik & Riasat, 2022).

### **Recommendations**

The study recommends online education to be continued even after Covid-19 for the teaching-learning process but through a blended mode. It would not only enrich the students' learning experiences and make them independent learners but also prepare them for the challenges of a technology-infused world.

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