



Understanding the impact of COVID-19 Outbreak on Primary School-aged Children in Sindh: A Contextual Analysis of Post-Pandemic Education

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Abstract

COVID-19 has changed the way we lived, worked and learnt. It has adversely impacted everyone, especially the most vulnerable groups: people with disabilities, senior citizens and children. The negative effects on children's health, socio-psychological development, and intellectual advancement are regarded to be unprecedented in recent human history. This paper examines the educational system of Hyderabad, a city in Sindh, Pakistan during COVID-19 and it investigates the negative effects on children and their school learning. This study is interdisciplinary focusing on Applied Anthropology and Education policy and pedagogy. Mixed methods both qualitative as well as quantitative are used to collect and analyse the data. For qualitative data collection, ethnographic research methods such as participant observation, semi-structured interviews and case study are used. Surveys through digital sources such as email, WhatsApp, Facebook and SMS are implied to collect quantitative data. Ethnographic fieldwork was conducted in a Government Primary School (GPS), Hyderabad, Pakistan. The findings of the study reveal that post COVID-19 has impacted the school learning and experience of educational attainment in multiple ways to the primary school aged going children. Moreover, it has also revealed the uneven socio-economic opportunities for learning, and discloses the government's inability to reach out to the most vulnerable class of the society in the time of emergency.

Keywords: Applied Anthropology; COVID-19; Digital divide; Government school; Hyderabad; Pakistan.

1. Introduction

The World Health Organisation (WHO) declared the novel coronavirus (COVID-19) outbreak as a global pandemic on March 11, 2020. After the declaration, many countries announced emergencies and imposed lock downs to curtail human mobility and interaction with other humans and non-humans. Along with the lockdown measures, people were advised to strictly follow WHO guidelines

such as washing hands, maintaining social distancing, wearing masks, and avoiding crowds. If they feel flu, fever, cough and tiredness, they should disassociate themselves from other human beings, quarantine and seek medical help from professionals. These measures were taken to avoid virus spread and protect public health. The Ministry of Health, Government of Pakistan, confirmed its first case on February 26, 2020, in Karachi, Sindh province (Kakakhel et al. 2020). Later, Pakistan imposed a countrywide lockdown on March 24, 2020, and all the international and domestic flights were banned. All businesses, educational institutions were closed except medical, law enforcement and food-related services. Life stood still and uncertainty prevailed, causing a lot of fear, anxiety and hopelessness. Everything changed for everyone.

The novel coronavirus outbreak had particularly disturbed all levels of educational attainment from pre-primary to university and public to private institutions. The government of Pakistan, assessing the situation and widespread COVID-19, decided to close all educational institutions across Pakistan on March 16, 2020 (Jabeen 2020). 'Apart from the 19.1 million children already out of school and ongoing efforts to provide educational access for them, the educational institutions' closure due to COVID-19 has directly impacted 40 million school-going learners from pre-primary and primary to higher secondary levels (Government of Pakistan 2020, p. 4).' The closure of schools across Pakistan put children's education at risk because the government had not announced any specific plan, especially for primary school children. Unavailability of educational strategy and closure of schools deepened the children's learning loss. It further amplified 'the gap between the expected years of schooling and learning adjusted years of schooling and will potentially increase dropout rates and therefore the number of out of school children (Government of Pakistan 2020, p. 5).' Some parents sent their children to learn skills and start doing labour, while other parents asked their children to assist them in their work at shops and homes. In addition to child labour, other factors, for instance, patriarchy, posed challenges to girl students' right to education. Girls faced significant barriers in their lives compared to boys, such as discontinuity from their schooling, domestic abuse, extra household work, and early marriages.

For continuity of learning and mitigating school closure, the Ministry of Federal Education and Professional Training (MoFEPT) promoted the students based on the scorecards to the next class without examination. Since the educational institutes were closed, Pakistan's government asked schools, colleges, and universities to switch their teaching and learning online. MoFEPT started a 'Tele-school' educational television channel for grades 1-12. However, the teachers and students both faced difficulty during online teaching and learning, and many teachers were not trained, and mostly, students in rural areas did not have access to the internet and digital devices because of their inadequate resources and remote location (The Agha Khan University 2020). In such a challenging situation, the parents tried their best to provide their children with remote learning facilities even when they were fighting to make ends meet. After seven months of school closure, the Government officially announced to reopen educational institutions in September. It was in phases, after ensuring that the workers, staff and students followed all the precautions of COVID-19.

2. Context: Children and their Education during COVID-19 Pandemic

According to Synakh (2020), more than 1.6 billion students have been affected by school closures and only 6% of the world learners have been undisturbed, with only 1% unaffected in the poorest countries. Analysing the possible loss of learning due to COVID-19, Azevedo et al. (2020) have focused on the schooling and learning loss caused by the pandemic globally. According to their research, five months of school closures will cost a learning loss worth \$10 trillion, and there will be 0.3 and 0.9 years of loss to the education quality and schooling of children. Parents of school-going

children will also face an enormous financial loss due to the pandemic, which will ultimately impact children to quit schooling. Among students, girls, persons with a disability, and poor students will face challenges due to educational institutions' shutdowns.

Much like impacting children's learning, COVID-19 has enormously affected children's health as children from low and middle-income countries (LMIC) are increasingly at greater risk. Zar et al. (2020) argue that LMICs already have a weak health system and COVID-19 has further worsened children's health. The closure of health programs for children and delay in seeking childhood vaccination will result in severe illness. The increase in poverty and school closure will also affect a child's learning, mental health and wellbeing in LMICs.

In order to resolve such a learning crisis faced by many children across the globe, some people favour learning through ICT (information and communication technologies) but Brown (2020) explains that this is expensive and not all people have access to these technologies. Furthermore, he argues that humans need real-life interaction because online learning and interaction can cause two significant future risks: 1. lack of equitable access and 2. dehumanisation. Moreover, Kim et al. (2020) maintain that the biggest challenge was the lack of home learning material and lack of information on parenting skills such as positive discipline and psycho-social support for children. There was digital divide in that rural areas had less access to electricity and technologies as compared to urban areas. Urban families were more engaged in the educational activities of pre-primary children than rural. To understand the learning experiences during COVID-19 and to comprehend the impacts on students' learning and wellbeing, Bertling et al. (2020) argue that students require school support for remote learning during school closure and look for digital resources available for remote learning.

In addition to casting light on the silhouette of the digital divide, the pandemic worsened gendered differences in the education sector around the world. According to UN Girls' Education Initiative (2020), 130 million girls were already out of school before the pandemic. The disruption to education has placed girls at higher risk of falling behind in schools and permanently dropping out due to exclusion from distance learning opportunities. UNESCO has estimated that globally over 11 million girls and young women may not return to school in 2020 due to the pandemic's economic impact alone. The recent survey revealed that girls drop out due to COVID-19 and school shutdown. The survey claims that there are 62% of parents who are unable to bear the educational expenses. Early marriage of young girls is another significant reason causing 52% of girls to drop out of schools. Moreover, 41% quit schools due to early pregnancy. Compared to boys, girls go through emotional, financial, and socio-cultural issues that cause their discontinuity from schooling (Actionaid 2020). Malala Yousafzai – Noble prize laureate –said, 'cultural norms and poor infrastructure already had 130 million girls out of school, where we see economic and political disasters, girls and women are affected the most'. She encouraged students to get used to e-education and scientific facilities. Innovative technologies enable poor students to access education even if they live in remote areas. Further, she said, 'this pandemic has reminded us of how quickly we can transform the system of education' (Hathcock 2020).

3. Methodology

The authors used mixed methods for this study by employing qualitative as well as quantitative protocols. The researchers conducted 05 in-depth interviews, 05 un-structured interviews, 02 Focus Group Discussions (FGDs) and participated in school life while engaging with teachers and students. Online survey through google forms was designed and sent through social media, SMS and emails. The online survey helped in getting more comprehensive views of the implications of COVID-19 on

school learning. Sampling – convenience, voluntary, purposive and snowball – was used during data collection. Written and verbal consent was sought from the parents and teachers to collect information from them and their children.

To measure the learning loss of the students, the methodology was designed by following and getting inspiration from the Annual Status of Education Report (ASER Pakistan 2020, p. 54-7). The test was based on a simple equation, reading and (writing skills) to see if the children have competencies as per their grade/level. The second author administered the tests to measure the learning loss in classes with children of various grades at the Government Primary School, Hyderabad, Pakistan. The test was designed to evaluate the reading competencies of English/Urdu subjects and assess basic mathematics. The second author randomly selected 2-4 children from each grade and then asked them to read some simple words of English and Urdu from their textbook and read easy numbers, and do subtractions and additions according to their syllabus. When they could not read the words properly and solve the mathematical problems, the second author marked them score with the learning level i.e. 1-5. If they could read and solve problems, they were marked accordingly i.e., 1-5 words level and addition/subtraction level. The ASER methodology helped this study to assess the children's reading and basic arithmetic competencies and understand the learning loss.

The ethnographic research was conducted in a School Education and Literacy Department, Government of Sindh supported Government Primary School (GPS)¹. The school is located in the busy neighbourhood of an urban area of Hyderabad. Hyderabad is the second-largest city after Karachi of Sindh Province in Pakistan with a population of 2.2 million (Government of Pakistan 2018). The GPS offered admissions to the boys as well as girls. The total number of staff was 15 at the GPS, while 12 were teachers and 3 were peons. All the teachers were females. The teachers had varying qualifications like Bachelor of Science (BS), Bachelor of Education (B. ED), Masters of Arts (M.A) and Masters of Education (M.ED). The Government of Sindh recently launched Early Child Education (ECE) and GPS was among very few schools to offer admission in ECE. The school's medium of instruction was English and subjects like the Sindhi Language and the Urdu Language were taught along with Mathematics, Science, Social Studies, Islamiyat (study of Islam) and Drawing. Sindh Text Book Board (STBB) publishes the books of these subjects. There were 229 students enrolled in the school (see table No. 01).

Grade	No. of students	Boys	Girls
ECE	35	20	15
Grade 1	45	24	21
Grade 2	42	19	23
Grade 3	41	13	28
Grade 4	36	18	18
Grade 5	36	22	14
Total	235	116	119

Table No. 01

¹ A generic name is used in order to protect the privacy and identity of teachers and students of the school.

4. Results and Discussions

Educational disruption like sudden school closure, cancellation of exams and transition of a physical classroom to an online classroom has impacted on children's learning. Shah et al. (2020) argue that 'this unprecedented situation changed how they typically grow, learn, play, behave and interact' with their social environment. Children construct their world when they are among their friends and age groups but the imposition of lockdown and schools' closure have socially alienated and isolated them. They used to go to school and enjoyed their time. School is the heart of children's social interaction, intellectual development and knowledge production. When schools were closed, many children missed social contact that is essential to learning and development. During our fieldwork, we asked children about their experience of school closure. A boy from grade 3 said, "I was really sad and exhausted at home because I missed my school friends so much. I just wanted to come to school and meet my friends but, in the news, they said that school would remain closed and I was so worried about what will happen if schools will remain close. It was difficult for me to stay at home and live with my siblings because we fought a lot. Our parents were also stressed because of us." In an online survey, a respondent commented that "children were upset and were missing their co-curricular activities. They were feeling isolated." 14.5% of respondents during our online survey think that COVID-19 has caused significant disruptions to children's schooling and social interaction. Children learn the basics of life during their childhood and this can have life-long effects on the children.

4.1 Learning Loss

Learning loss refers to any specific or general loss of knowledge and skills or reversals in academic progress, most commonly due to extended gaps or discontinuities in students' education (Huong and Jatturas 2020; Ullah and Ali 2021). Education disruptions of children resulted in a learning loss. During the interaction with the children in the GPS, we observed that children found it challenging to read simple text. Many times, they did not respond and remained silent. They were confused and nervous because they had forgotten their previous learning. When learning new lessons after the school reopened, they were less active and less responsive during the classwork. The teachers often complained that the children are returning to school as if they had not learnt anything in the past. It was difficult for children to hold a pencil again after so many months of the school's closure. They did not remember the basics of writing.

In interviews, we asked teachers and students about their learning loss. A teacher said, "Children responded to the questions and they actively participated in the class learning and discussion before the COVID-19. Now, I am confused to see children of grade 5 responding to simple questions like they are in grade 2. It is alarming. I had to teach them as if they were in grade 2. I am concerned about the children's learning loss and I don't know what the situation of the children of grade 2 or 3 is." Many teachers were disappointed due to the children's language loss and they believe that children were neglected by all stakeholders, including government, parents, civil society, and teachers. There was no alternative mechanism that could provide these children education during school closure. The teachers were under pressure because they worked tirelessly by revising the previous work and teaching them their current syllabus. In our online survey, 50% of respondents agree that there had been learning loss. Some of the parents submitted their concerns in the following way:

"Children's learning loss is the major effect of COVID-19." "Children have been lazy, dull and sleepy. They are unable to focus on their studies." "Children's interest in studies has decreased a lot." "School closure for many months has impacted children, especially children who have lost the enthusiasm in their studies. They don't feel schooling in the

same way. The teacher complained to my son for not communicating and participating in-class activities.”

The method we used to test children's learning loss helped gain insights into the children's knowledge. According to the ASER guidelines, we have to ask children to read letters, words and sentences of English and Urdu subjects because reading is more important and easier than writing. Based on their grade rank, the students are expected to show their reading competencies according to their grade level. During the test, children were very slow in recognising simple letters and were struggling to spell a word. Reading a complete sentence was not easy for them. They were also weak in writing; even when the children were copying from the blackboard, they wrote incorrect words and wrote incomplete sentences. Recognition of numbers was problematic for the grade 1-3 children and many children in grades 4-5 could not write and recognise numbers above 100. They were finding difficulty and they were taking time to remember. In solving simple addition/subtraction problems, i.e., $3+7=.....?$ only a few children could solve such sums. Overall, the test exercise to assess learning loss proved that school closures due to COVID-19 resulted in a loss of 2 to 3 years of learning and grade 5 students could not solve grade 2 additions and subtractions. Grade 4 students were unable to read and write simple words and sentences of grades 1 and 2.

In addition to loss of learning, loss of interest in studies was another effect of the COVID-19-induced lockdown, and this is now discussed.

4.2 Loss of Interest in Studies

The first three months of school closure were difficult for everyone because there was the uncertainty of life. There was much fear and everyone was struggling to cope with the new normal. Children and their parents were isolated in their homes, as children were unsure about their schools, examinations, and learning. Many parents complained that there was no guidance from the government and schools. Since parents struggled and found it difficult to teach their children at home. In an interview, a mother said:

“I had a tough time dealing with my children because I was worried if they didn't continue their studies then it will be their loss, but I also couldn't send them to tuition centre because of lockdowns and fear of COVID-19, so I decided to teach them at home. It was difficult to find time to teach them due to overwhelming domestic work. Somehow, I managed times but the children's response was not encouraging. They had excuses like schools are closed, so why study. I tried to become strict, but they were very stubborn. I pray for things to get normal because I was exhausted with the lockdown and school closure situation.”

Our survey shows that 16.4% of respondents think that children lost their interest in studies due to school closure. The adoption of online classes also confused them with learning as children needed guidance from teachers for little things; but in online classes, they were distracted and could not concentrate on learning because they were missing out on the physical class environment. On this issue, a respondent commented that "kids need a proper social and educating system in schools. Without these, children won't be able to learn and focus on their education”.

The loss of interest resulted in lower achievements of the students, and this is now be discussed in the next section.

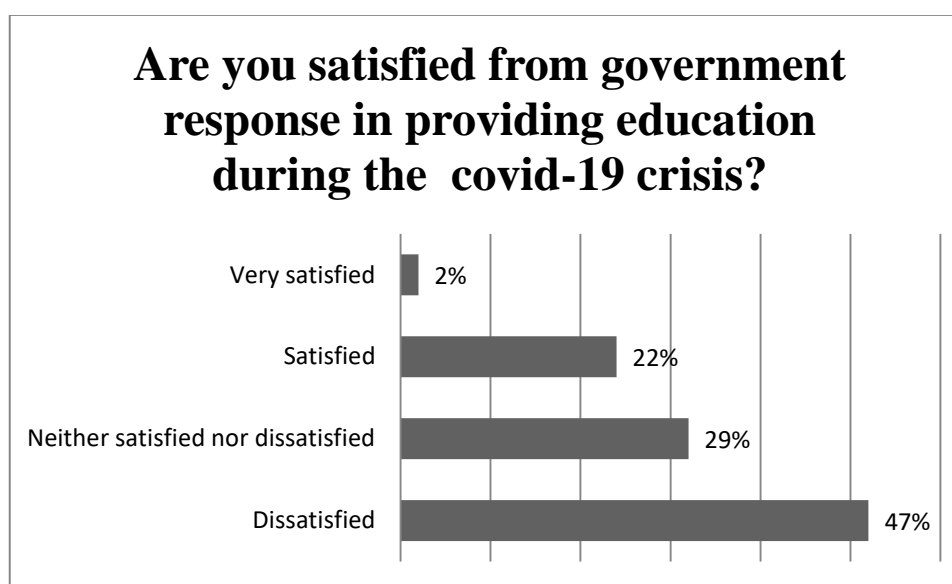
4.3 Lower Achievements

Children's achievements have also been affected by these educational disruptions. After school reopened, children were receiving 50% fewer in-class activities. Because of learning losses, students

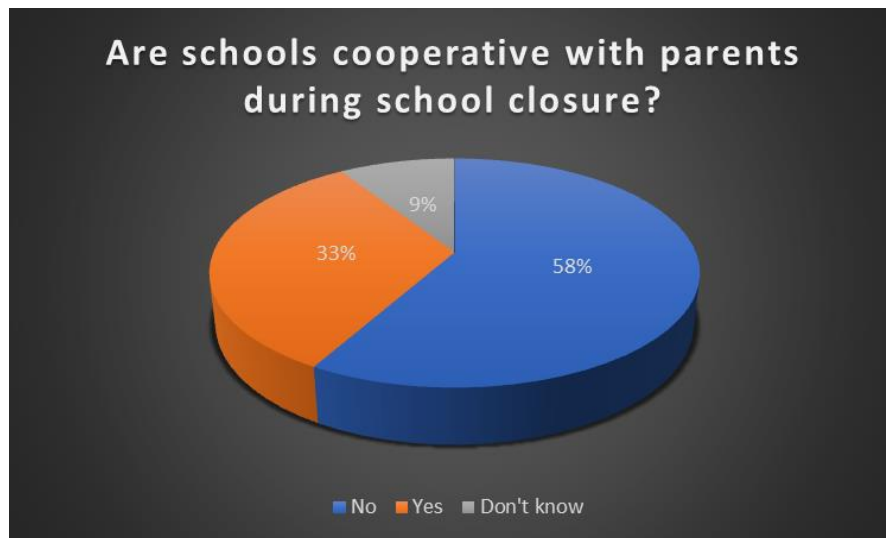
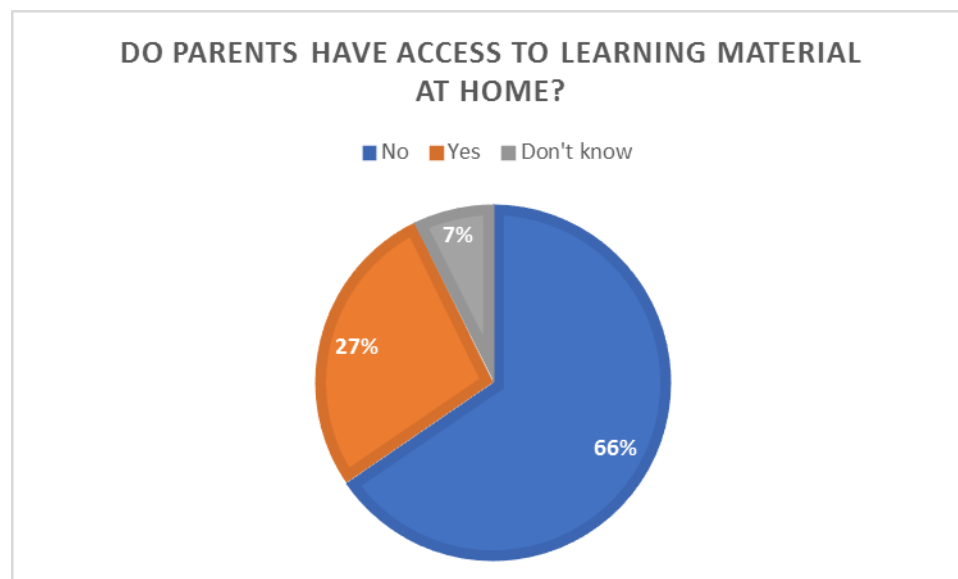
were struggling to comprehend their school work. It was worse for those already poor in their studies. Usually, a class had three types of students: those who were doing well in the class, those who received average marks and those who were poor in studies. Because of COVID-19, children lost their passion for competition because they were all automatically promoted following the decision of Government of Sindh. They did not learn anything for several months. They were not putting any effort into learning. Our online survey data shows that 52.7% of children return to school with lower achievements after COVID-19 and school closure.

4.4 Insufficient Academic Support for Children during School Closure:

Many parents said that government school teachers did not contact them about their children during COVID-19. 'There was no policy, no mechanism and even no interaction of government school teachers with school children' said by a father during an interview. For many months, there was no schooling and consequentially no education. Many children get an education in government schools because their parents cannot afford to send them to private schools. Many parents wanted to teach their children in their home but they did not have the learning material. We noticed that children faced substantial learning loss in government school than a private school where there was some online education. In our online survey, we asked respondents if they were satisfied with the government's response during the closure of schools. Only 2% were very satisfied and 22% satisfied only, whereas 47% were not satisfied and 29% were neither satisfied nor dissatisfied (See graph No. 01 for details). In response to the question, if the school was cooperative during COVID-19, 58% said that the school was not cooperative compared to 33% who agreed that the schools were cooperative. Only 2% did not know if the schools were cooperative or not (See table No. 02 for details). When asked about the access to the learning material for children during school closures, 66% did not have access to learning material they can use to teach their children in their home. In contrast, only 22% had access to the learning material (See table No. 03 for details). During interviews with the students, they said that their parents were daily wage workers whose daily income became the means of survival. Lockdown hit them hard and many of the parents were unable to provide basic necessities to children. Many children quit schooling because their families were in debt and these children had to work to earn some money and help their parents.



Graph. 01

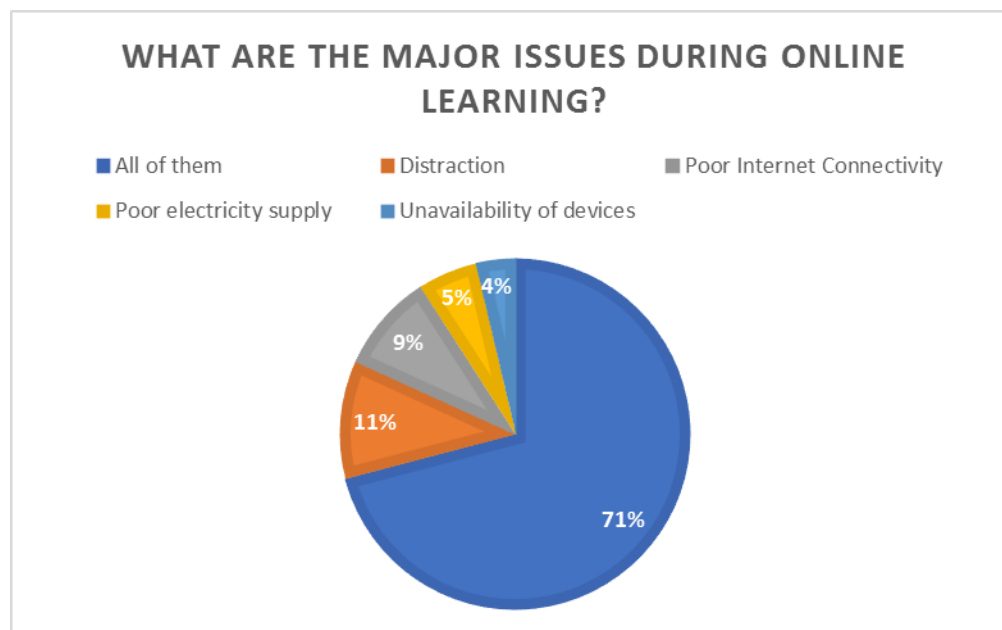
**Graph. 02****Graph. 03**

4.5 Unawareness of Government Initiatives

The government of Pakistan put in place some initiatives to mitigate the impact of COVID-19 on children's education. 'Tele-school' – an educational channel was launched in March 2020 through Pakistan Television (PTV). The government also launched android applications such as 'SABAQ' and 'Taleemabad.' The authors of this article watched the Tele-school and used the applications. Overall, the content was good and easy to understand but there was an issue less to do with the content but the awareness of these government initiatives. During our fieldwork, the government school, most of the staff members were unaware of the Tele-School, SABAQ and Taleemabad. They said, 'we don't know about any educational TV channel transmitted on PTV, neither do we know about these android applications. We are hearing from you for the first time.'

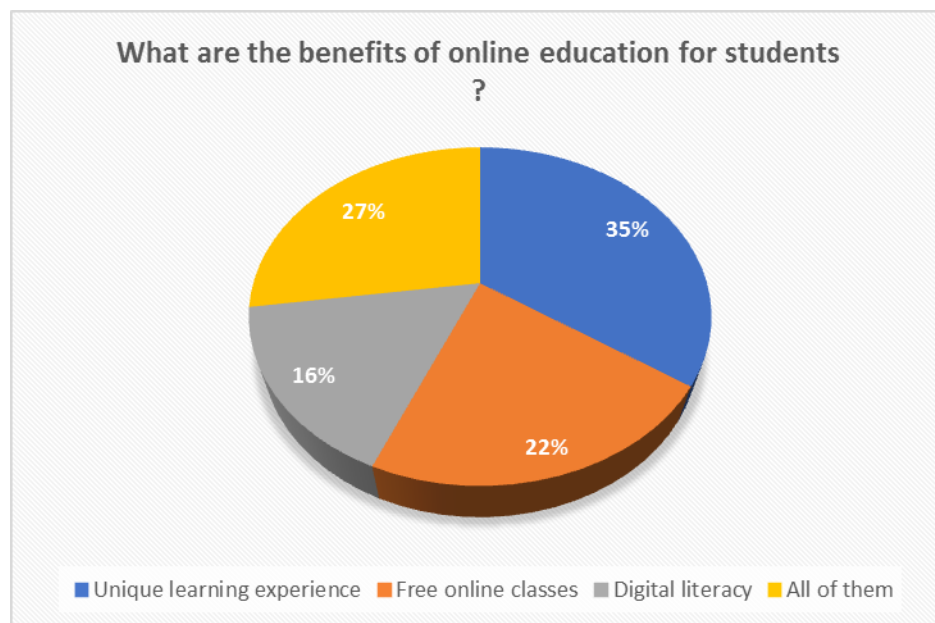
However, a few teachers said they knew about these programs and applications, but children do not take interest in such programs and applications. More importantly, teachers and children in government primary schools were unprepared and had never experienced online learning. Online learning was an alien concept to many teachers we interacted with and had a chance to discuss online teaching and learning nuances. Parents were economically very poor. Many parents expressed that they find it challenging to afford a meal three times a day. Buying a digital device for their children was very difficult. The digital divide and access to the resources and means of technology are not the same for everyone in developing countries (Watts 2020). There is inequality everywhere, but developed countries were better compared to the poor or developing countries. It was a challenge because only 1 million children had access to digital devices in Pakistan (Malik 2020). Multidimensional inequalities emerged after the digital inclusion of the education system. Many people did not have access to the internet due to their remote location; the size of the family size is bigger, so expenditure is large. Girls were discriminated against due to their gender (Channa 2022). In short, Pakistanis faced many challenges in shifting to an online education system.

We found that parents were not in favour of online classes. During an informal chat with the parents, they said, 'there is no benefit in online classes; children don't learn anything during the online class. Children shouldn't waste their time on the online class'. Teachers also said, 'online teaching is not helpful for children because children were distracted due to many reasons in the home. Teachers couldn't engage them in online classes because many children lived in a single room with their family. They always talked and made noise.' Children said that 'we couldn't understand what teachers were saying. It was difficult to study through smartphones.' In our online survey, we asked about the issue of online classes. The majority of the respondents identified unavailability of digital devices, distraction due to domestic chores, poor network connectivity, and poor electricity supply as major problems faced during the online classes Graph No. 04 shows the result of responses during our online survey regarding the major issues during online learning (See Graph No. 04).



Graph No. 04

Though there were many problems regarding online classes, there were some benefits as well. In other words, along with challenges, emergencies bring opportunities as well. During our online survey, 35% of respondents admitted that the online learning experience was unique and beneficial. 22% think that free online classes were also helpful for children and 16% believe digital literacy allows students to continue their education, whereas 27% of respondents said they agreed with online learning benefits (See Graph No. 05 for details). Thus, if the government had invested in promoting online learning and branded and mobilised and informed the public about the Tele-school, SABAQ and Taleemabad, the teachers and parents would have been aware of these free resources.



Graph No. 05

5. Conclusion

This research aimed to identify the impacts of post COVID-19 on primary school children and its consequences on their schooling and learning. Based on qualitative and quantitative analysis of teachers, parents, and children's responses, it can be concluded that children faced significant learning loss. The results indicate that children became slow learners, inactive and unreasonable during the learning in the school. Our online survey shows that the implication of post COVID-19 resulted in 50% learning loss, 52.7% in low academic achievements and 25% high rate in dropout of children. Effects on children's learning are educational disruptions, lack of freedom, loss of interest, disturbed mental health and uncertainty about the future. The insufficient school support and reduced awareness of government mitigation strategies for children have also affected children's learning. Besides learning loss faced by children, social problems such as child labour and child abuse increased due to COVID-19. Poverty and financial crisis led children into these social problems. The digital inclusion and distance learning during COVID-19 highlighted the inequalities in the education system and challenges children from illiterate and low-income families faced. Parents could not support their children's online learning because of a lack of resources, poor digital skills, and little government support. It resulted in children's learning gap. After COVID-19 school closure and school reopening, children struggled with reading and writing and basic learning competencies. Students' unresponsive behaviour in the classroom during the learning hours of schooling was problematic for

teachers. Furthermore, teachers were burdened by the workload due to school closure. During fieldwork, our learning crisis test revealed that children lost 2-3 learning years due to COVID-19, school closure, and poor government response in looking after the welfare of government school children.

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