A Study on the Effects of Covid-19 on Student’s Academic Achievement in Education in Pakistan

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ARTICLE DETAILS

ABSTRACT

As it is very bad situation of COVID-19 all over the world they closed their educational institute, same as in Pakistan it is advised to close their educational institute and isolate the students at their home. In Pakistan the educational institutes were closed in March 2021 this lockdown not only adversely affected the economy but also the educational activities were shut down which created a huge gap in students’ learning and knowledge all over the globe. This quantitative study was designed to walk around the impact of COVID-19 on the education of higher level students in the context of Pakistan. The five point Likert Scale questionnaire was provided to the learners enrolled in intermediate, undergraduate, graduate and postgraduate level. 50 respondents respond to the questionnaire. The data were analyzed through SPSS 23. The results of the findings revealed that learners are facing a lot of difficulty to grasp certain concepts during e-classes. The students lacked internet access along with not been given any prior guidance related to the usage of online source. The challenges concerning online classes at the same time are being faced by the teachers as well along with the students. It was also analyzed that although teachers are providing all the necessary resources and feedback to the students but still students have been going through difficulties in grasping the concept, gaining knowledge and communicating with their teachers online. Due to immense number of online classes teachers have a huge workload on their part.

1. Introduction

UNESCO (2020) has observed that “Most governments around the world have temporarily closed educational institutions in an attempt to contain the spread of the COVID-19 pandemic. These nationwide closures are impacting over 60% of the world’s student population. Several other countries have implemented localized closures impacting millions of additional learners.” Overall, close to 200 countries closed their schools in the spring, thereby interrupting the education of more than 1.5 billion young people.
The COVID-19 pandemic has created worldwide health crises as almost the entire world is now affected. Almost all aspects of our everyday lives have affected by this pandemic situation. This pandemic has a lot of social, economic, and psychological impacts on our lives with every day passed by. These effects have posted seen and unexpected challenges to our daily lives in political, cultural, and social implications. Same like other nations, Pakistan has also taken various restrictive measures to slow down the spread of and contain this pandemic at the local level. This includes lockdown, closing the industrial and educational institutions, and stay at home orders among others.

Wickramasinghe et al. (2020) This viral disease forced the population of the countries to stay at home until utmost necessary. This created a huge pause in the educational activities in almost of the countries. The students were instructed to use ICT and continue their erudition from online resources at home. Although it was not clear that to what extent online services will be effective including school children, who were unable to access them-be expected to slip academically behind other students? It was further supposed that the level of children's learning will also be influenced by the amount of internet-enabled devices which could be accessible at their homes, considering that their parents or siblings will also be at home. Moreover, the types of equipments they usually used for educational activities could be an influential factor in this regard. As compared to the native countries such as Canada, the internet users have been estimated to be near 35.32 million (data portal, 2020) whereas, Pakistan is known as the 10th largest internet using country with 76.38million users (data portal, 2020). However, the virtual teaching and learning was a big challenge for the teachers and students. With reference to the highlighted concerns all over the world, Pakistan has also been one of the COVID-19 targeted countries.

The Corona virus disease pandemic (COVID-19) impacted life across the world in the spring of 2020 (Center for Disease Control and Prevention, 2020) and it effected all the disciplines of life mostly our institutes of education. Businesses closed and society has limited to essential activities, such as grocery shopping and getting medical supplies, educational sectors were expected to continue functioning remotely Abbas, J.; Aqeel, M.; Abbas, J.; Shaher, B. Many schools had little notice in switching from in-person to fully online/remote, with some teachers having only a weekend to prepare entirely new lesson plans for teaching their students in a new format Herold, (2020).

Remote learning most often consisted of fully online instruction, using video conferencing platforms, such as Zoom or Google Meets, and learning management systems, such as Google Classroom, Canvas, or SeeSaw, to post assignments and video lectures (Lieberman, 2020). Many teachers had never taught online, and had never used the platforms and systems necessary to teach online successfully (Herold, 2020). Various steps taken by Pakistan to contain the spread of the COVID-19 pandemic have effects on the prevailing education divide as these also included the prolonged closure of education institutions. The education sector is badly shaken in the wake of this pandemic as nationwide closures have impacted 89% of the world's student population. Like education institutions of developed countries, the educational institutes in Pakistan have also adopted the strategy of making use of digital platforms to engage students and to cope with evolving situations. However, no previous study has addressed the issue of the education divide for the COVID-19 pandemic. This study aimed to fill this gap by exploring the impacts of the COVID-19 pandemic on the prevailing education divide in Pakistan.

2. Objectives of the study

- To assess students perception of studying online during COVID-19
- To assess the performance of the students’ online learning.

3. Research Questions

1. What is the impact of COVID-19 on education?
2. What are the perspectives of students regarding online classes?

4. Literature Review

In Pakistan, 1st case of COVID was diagnosed in the month of February 2020 and in the beginning of March over 300,000 educational institutes including schools, colleges and universities had been closed so that the children and
students could be protected from the inflammation (Mehreen Zahra-Malik, 2020). Only leading schools were able to make digital connection with students to maintain their learning through multiple applications. But majority of the students all over Pakistan were unable to continue their learning practice through smart phones or internet. It was statistically calculated that 22.8 million over 70 million are non-schoolers. Umbreen Arif, an educational advisor in central of Pakistan anticipated that due to this closure 50 million students in different institutes are at risk of falling behind in education. Moreover, according to Pakistan Telecommunications Authority (Pta gov, 2020) only one million school going children have regular access to the digital devices or bandwidth. Although, public sector launched just two weeks after schools were closed on 13th April. This channel was operated by state-owned PTV House and about 54 million people were their viewers. It broadcasted programming for grades 1-12 without any charge from four Pakistani ed-tech organizations i.e. SABAQ, Orenda Project, Knowledge Platform and Sabaq Foundation (Youusafzai, 2020). Additionally, a text message system with 250,000 users was added at the end of May to enable parents and students to communicate with devoted teachers (Malik, 2020).

On 18 March 2020, the UN Educational, Scientific and Cultural Organization reported that 107 countries had adopted national school closures due to COVID-19, affecting 862 million children and young adults, nearly half of the world's student population (UNESCO, 2020) and this condition has quickly worsened from 29 countries with national school closures within a week. This step was taken to reduce social gatherings and contacts among students to avoid impact of pandemic. Hence, the flow of education was interrupted (Jackson, Vynnycky & Mangtani, 2016). A detailed review provided the evidences of reduced transmission of virus due to the schools closure (Cowling, Ali & Ng, 2020). The same action was taken by rest of the countries around the world based on the certain theoretical reasons such as children contribute more to influenza exposure than adults due to low levels of tolerance which elevated the levels of transmission attributable to symptomatic illness (Wallinga, Teunis & Kretzschmar, 2006). However, the number of cases of children in the COVID-19 pandemic so far tends to be much smaller than predicted in their age, although data for this is inconsistent and some reports indicate that children may be as likely to be affected as adults but remain mostly asymptomatic or have a moderate sort of illness (Shen, Yang & Wang, 2020). Evidence of COVID-19 dissemination by child-child interaction or through school is not yet clear, although family contact plays an important role in the outbreak. Education has been the pillar of every nation's progress; hence, its preservation is of utmost importance to the growth and progress of all nations. It increases the competitiveness and efficiency of individuals and thereby creates a professional population capable of moving the country towards sustainable economic growth (Khan & Mahmood, 1997). This was researched that educational institutions in Pakistan have faced a variety of difficulties in teaching/learning, Facilities and Services, Recruitment of Teachers / Recruitment of Students, Institutional Organization, Parental Participation and Political Pressure resulting from rapid technical breakthroughs, growing demand, rising need for consistency, diffusion of expertise, competition, evolving nature of funding systems and globalisation (Asaari, 2012; Mansoor & Akhtar, 2015). While dealing with the multiple problems, the pandemic of Coronavirus also affected the educational system of Pakistan. This wave of virus contributed to the school closure and schools, colleges, universities all educational institutes shut down for the protection of students.

Sintema (2020) conducted mixed method research in Zambia to explore the impact of COVID-19 on students' performance in. He conducted survey on Grade 12 national examinations 2020 focusing on mathematics, science and design and technology subjects. Next on, teachers and head of the Department were interviewed through semi-structure interview. The hypotheses were tested and negative impact of COVID-19 on the performance of students was found. Furthermore, findings of this study have shown that there is likely to be a decrease in the pass percentage of secondary school students in this year's national exams if the COVID-19 outbreak is not managed in the shortest period practicable provided that the academic calendar of schools has been suddenly disrupted by the early untimely closing of all schools in the region.

Likewise, Owusu-Fordjour, Koomson and Hanson (2020) conducted the descriptive research to discuss the possible effect of school closing on school children's learning and academic achievement in Ghana. The questionnaire based on 11 items Likert-scale was administered on 214 tertiary level students. The findings revealed that students are thus
unable to learn adequately from home, rendering the online learning system very unreliable. Additionally, parents are not unable to support their children in how to use the online learning network, nor can they completely track the learning of their children at home without any problems. It was concluded that COVID-19 had a negative impact on students learning as majority of the learners were not able to learn by themselves. Moreover, majority of the students had limited internet access and technological awareness.

5. Methodology
Quantitative research approach was implemented in this study. Descriptive survey design was selected to collected data from the students of Lahore, which is a metropolitan city of Pakistan and consists of 13,095,000 populations currently (United Nations, 2021). The online google survey was utilized to gather data from the students of intermediate college and tertiary level institutions since the pandemic situation did not allow the researcher to collect the data personally. The research was delimited to Lahore Pakistan.

6. Sample Size and Sampling Technique
Stratified random sampling technique was employed for this study. In this sampling process, the population is divided into homogenous groups and each group containing subjects with similar attributes (Acharya, Prakash, Saxena, & Nigam, 2013). In present study the population is divided into four strata according to level of students’ i.e. Intermediate students, students of Bachelors, Students of Masters and students of M. Phil./M.S Total 50 students of various levels were sampled for the current study.

7. Research Instrument
A close-ended questionnaire was used as a research instrument to collect data for the research study. According to Creswell (2014), closed questions are quickly compiled and go straight to the code, and do not unnecessarily discriminate based on how clearly respondents express themselves. The five likert-type scale (symmetric) questionnaire ranged from “Strongly agree” (SA), “Agree” (A), Neutral (N)“Disagree” (D) to “Strongly Disagree” (SD) was designed as it is the widely used technique for descriptive survey researchers (Boone & Boone, 2012 ; Joshi, Kale, Chandel & Pal, 2015). The questionnaire comprised of two parts. Part A was based on demography of participants and Part B was based on 11 close-ended questions.

8. Data Collection and Data Analysis Procedure
Google form was used to design the questionnaire for online data collection and it was administered through social media platform i.e. WhatsApp to get the responses from the specific target group. The data were analyzed quantitatively and descriptive statistical analysis was done. Sekaran (2003) described that descriptive statistics is the phenomena of interest and is utilized for data analysis by classification and summarization of numerical data. It also includes frequency usage, diffusion of dependent and independent variable, measures of central tendency, variability and to obtain a more factual data. The data were analyzed using SPSS version23.0.

9. Result
The demographic table shows the variations of different variables such as; gender, age,

| Characteristic | f  | %  |
|---------------|----|----|
| Gender        |    |    |
| Male          | 20 | 40%|
| Female        | 30 | 60%|
| Age           |    |    |
| 15-20         | 15 | 30%|
| 21-25         | 11 | 22%|
| 26-30         | 5  | 10%|
| 31-35         | 9  | 18%|
Socioeconomic status, family system etc. The total sample size was 50 participants with majority females comprising 60% of the sample size. Participants were majorly enrolled in undergraduate (72%) and not employed (28%).

| Items | SA | A | N | D | SD |
|-------|----|---|---|---|----|
| Perspective of students themselves | | | | | |
| I am competent to gain knowledge of effectively from home. | 8 | 10 | 15 | 11 | 6 |
| Learning alone makes it hard for me to understand certain concepts | 14 | 16 | 7 | 10 | 3 |
| I have speedily and simple access to internet in my area Which help me to learn online on my phone/laptop | 11 | 7 | 6 | 15 | 11 |
| I have better IT skill to access different online learning platform | 8 | 13 | 13 | 10 | 6 |
| Online learning system is very effective and helps a lot of students | 5 | 11 | 12 | 16 | 6 |
| If working, I face difficulty managing my job and online classes side by side | 9 | 9 | 15 | 7 | 10 |
| I really like the idea of online classes as high quality learning does not require face-to-face interaction | 4 | 10 | 5 | 14 | 17 |
| Perspective of students towards parents | | | | | |
| My parents can teach me how to learn online using internet at home | 3 | 7 | 13 | 12 | 15 |
| My parents supervise my learning at home without any difficulty | 3 | 7 | 8 | 13 | 19 |
| My parents are able to clear my concepts which are not clear during online sessions | 1 | 4 | 9 | 17 | 19 |
| There is no interruption of family members or background noises during class | 8 | 9 | 12 | 6 | 15 |

SA=strongly agree, A=agree, N=not decided, D=disagree, SD=strongly disagree.

Table 2 depicts the frequency of responses collected through the survey questionnaire. The perspective of students was divided into three categories; student’s own perspective towards themselves and perspective towards parents. Items were divided according to these three categories. First category comprises of 7 items, perspective towards teachers comprises of 7 items and last category of parents includes 4 items.

Perspective of students towards themselves includes their learning, access to internet for online classes, their IT skills and their overall attitude towards online classes during COVID-19 pandemic. Results depict that the majority students face a lot of difficulty learning alone as compared to being in class. Mostly participants strongly agree (15%) and agree (4%) where they were asked if they faced difficulty in understanding certain concepts. Moreover, majority participants face difficulty learning due to lack of access of internet in their area. Students strongly disagree (11%) and disagree (7%) out of the 5 options when they were asked if they have quick and easy access to internet. A few
students agree (5%) with online learning being effective. Not only this, those who are employed face difficulty managing their work and classes side by side (9%). Results also depicted that majority participants do not like the idea of online classes, they strongly disagree (17%) and disagree (14%) on the item where they were asked if they think that good quality learning does not required in-person interaction.

Besides, perspectives of students towards parents include 4 items. It includes the parental supervision during the COVID 19 online learning. Results depicted that students strongly disagree (15%) and disagree (12%) related to their parents teaching about the usage of online learning. Not only this, student’s learning was also not supervised (19%) by their parents at home. Additionally, majority participants disagree (17%) and strongly disagree (19%) on the third item where they were asked if parents can clear their concepts of online lectures. There were diverse responses on student’s disruptions related to background noises or family interruptions but majorly students strongly disagree (15%) on absence of background disruptions which could hinder online learning.

10. Conclusions
The COVID-19 pandemic has not only affected students across Pakistan but all over the world. Online learning platforms have been in current use all over the world and the perception of students might differ from person to person and based on the city of residence. This study highlights the perspective of Pakistani students towards online learning and it can be concluded that student’s in Pakistan have been facing a lot of issues in context of e-classes. Online classes have been ineffective for majority of students majorly because they feel uncomfortable learning in isolation and because our country goes through a lot of connectivity issues, which creates a big hurdle when attending online classes.

However, these results also align with the results of current studies but due to cultural and social differences; a few results vary. The study does not only confine to students perception of learning but also how they perceive parental and guardian support in the context of learning supervision. It has also observed by going through literature that it is not only students who are affected but also the faculty and the whole educational system.

This study has provided us with a lot of valuable results which could be used for further research purposes but at the same time, it could have yielded more authentic and generalizable results if it was conducted on a larger scale, with different fields and universities all over Pakistan. More extensive research could have led to more in-depth answers of our questions, highlighting the perspective of students as well of parents and teachers in more detail.

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