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### THE INFLUENCE OF COVID-19 ON STUDENTS' LEARNING IN PUBLIC UNIVERSITIES IN PAKISTAN

Zermina Tasleem<sup>1,\*</sup>, Zerish Tasleem<sup>2</sup>, Sohail Ayaz Muhammad<sup>3</sup> and Muhammad Hatim<sup>4</sup>

<sup>1</sup> Bhaududdin Zakariya University, Multan, Pakistan

<sup>2</sup> University of Management and Technology, Lahore, Pakistan

<sup>3</sup> Universiti Sains Malaysia

<sup>4</sup> School of Integrated Social Sciences, University of Lahore, Pakistan

#### ABSTRACT

The worldwide COVID-19 pandemic has had a substantial effect on different facets of human existence, with higher education in Pakistan being no exception. This study employs a qualitative research design, conducting 23 semi-structured interviews to explore the repercussions of the pandemic on students' learning. Thematic analysis of the qualitative data reveals that students faced challenges related to internet connectivity and technological resources during their learning experiences. The participants recommend the implementation of a practical online platform by the Ministry of Higher Education, emphasizing its necessity to be accessible and free even in areas with Limited internet connectivity. The study's findings offer valuable insights for leaders in higher education and educational administrators, guiding the evaluation and adoption of policies for emergency learning and teaching. Furthermore, lecturers can benefit from these findings to enhance their instructional strategies and design effective plans for teaching in challenging circumstances.

**Keywords:** COVID-19 pandemic; Ministry of Higher Education; Students' learning; Pakistan.

\* Email: [zerminatasleem@bzu.edu.pk](mailto:zerminatasleem@bzu.edu.pk)

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#### INTRODUCTION

In the initial months of 2020, the worldwide community was abruptly confronted by the COVID-19 pandemic, instigated by the SARS-CoV-2 virus, causing a nearly unprecedented disruption worldwide (Siddique et al., 2021). The onset of this novel coronavirus was initially observed in December 2019, in China, with subsequent transmissions to the Republic of Korea, Japan, and Thailand (where the initial confirmed cases emerged on January 20, 2020), and further spread to the United States, Vietnam, Singapore, Australia, Nepal, and various European countries (with the initial cases were reported in France on January 25, 2020, and subsequently in Italy, Finland, Germany, and other countries) (Akter et al., 2021; Peters et al., 2020; Van Damme et al., 2020). The virus also reached Malaysia, Canada, the Middle East, and several nations in the South-East Asia Region and Western Pacific Region. Its expansion continued to encompass Latin America, Africa, and Russia (Cheval et al., 2020). The World Health Organization (WHO) officially announced COVID-19 as a pandemic on March 11, 2020 [2]. (Abdoli et al., 2020). As of July 31, 2020, the virus had affected over 217 territories and countries, resulting in almost 17.1 million confirmed cases in addition to 668,073 deaths globally. The first COVID-19 case was reported in Pakistan on February 26, 2020. Subsequently, the country has witnessed over 623,135 confirmed cases, with 29,576 active cases and nearly 13,799 deaths as of March 20, 2021 (Aristovnik et al., 2020).

In addition to highlighting existing obstacles in the healthcare sector, the pandemic caused by the novel coronavirus (COVID-19) has introduced unforeseen disruptions across society and the economy, echoing the impact of historical pandemics such as the SARS, influenza A (H1N1), the Spanish flu, bubonic plague and Ebola (Allam & Jones, 2020). Over the past few centuries, pandemics have triggered substantial geopolitical and demographic shifts by influencing migration patterns, travel, urbanization, trade, and technology utilization. The COVID-19 infectious disease has permeated every aspect of individual life, affecting politics, education, research, business, worship, health, transportation, entertainment, economy, governance, sport, and social interactions (Rungcharoenkitkul, 2021). This global stressor has particularly affected the education sector, leading to significant changes in students' academic practices, social lives, personal finances, and emotional well-being (Roberts & Tehrani, 2020).

The outbreak prompted the Pakistani government to implement measures, including the closure of educational institutions, city lockdowns, and travel restrictions between cities. Subsequently, the Higher Education Commission mandated online classes for educational institutions, despite limited technological facilities and resources in comparison with other countries, impacting students' learning experiences (Khan, 2021; Noreen et al., 2020). Past studies primarily directed in numerous countries with more resources have explored medical issues, health services, general awareness regarding COVID-19, teaching methodologies, student satisfaction, and achievements during the pandemic. However, there is a notable gap in understanding the influence of the pandemic caused by the novel coronavirus (COVID-19) on the learning of students in public universities in Pakistan. This research seeks to fill this gap by examining the specific effects of the COVID-19 pandemic on the learning of students in public universities in Pakistan, contributing novel insights to the body of knowledge. The findings may inform the development of strategies and policies for emergency learning and teaching institutions, assisting educational managers in enhancing the quality of education in developing countries. Additionally, it can provide valuable guidance for lecturers to improve instructional methods and implement effective plans for teaching during emergencies like the COVID-19 situation.

## **LITERATURE REVIEW**

The literature review explores the effect of the pandemic caused by the novel coronavirus (COVID-19) on various features of society, focusing particularly on the repercussions within the educational sector. The pandemic, initiated by the SARS-CoV-2 virus, has been a worldwide crisis with far-reaching consequences, affecting health, the economy, and daily life (Onyeaka et al., 2021). Historical pandemics, such as the SARS, influenza A (H1N1), the Spanish flu, bubonic plague, and Ebola have historically triggered noteworthy shifts in demographic and geopolitical landscapes, influencing migration patterns, trade, urbanization, travel, as well as technology use (Brands & Gavin, 2020; Kaushik & Guleria, 2020; Srivastava & Agarwal, 2020).

The infectious nature of the COVID-19 disease has permeated every facet of human existence, disrupting business, economy, education, politics, transportation, research, health, entertainment, sports, worship, governance, and social interactions (Batool et al., 2022; Bhattacharya, 2020). The impact on education has been particularly noteworthy, leading to substantial changes in academic practices, including the shift to online tutorials and lectures, the closure of libraries, changed communication methods for educators and new assessment methods, administrative support, and variations in workloads and performance levels (Batool et al., 2022; Godber & Atkins, 2021; Sahni, 2020). Socially, students have faced challenges such as closed dorms, restricted travel, absence of social gatherings, and changes in their personal financial situations, including job loss among students and apprehensions regarding future education careers (Myers-Walls et al., 2011; Naidoo & Cartwright, 2022).

To curb the transmission of the virus, the Pakistani government implemented procedures such as the closure of educational institutions, city lockdowns, and travel bans between cities (Noreen et al., 2020).

Subsequently, the Higher Education Ministry mandated the shift to online programmes and classes, exposing the limitations of technological and resources facilities in comparison to other various territories and countries, thereby impacting students' learning experiences (Mueed et al., 2022).

While existing studies have predominantly focused on countries with more resources, addressing aspects such as medical issues, health services, knowledge to public about COVID-19, student satisfaction, methods of teaching, and achievements in the phase of the pandemic (Ilyas et al., 2020), there is a notable dearth of research specifically examining the influence of pandemic COVID-19 on studying and learning of students in public universities in Pakistan. This research objectives to bridge this gap by providing understandings into the unique challenges confronted by students in the Pakistani context, contributing valuable knowledge to the existing literature. The findings have the potential to inform the development of targeted strategies and policies for emergency learning and teaching situations, assisting educational managers in improving the quality of education, particularly in developing countries. Additionally, the study may offer guidance to lecturers seeking to enhance instructional methods and formulate effective plans for teaching during emergencies like the COVID-19 situation.

## **METHODOLOGY**

This research employed a qualitative approach involving interviews with 23 students enrolled in public universities in Punjab, Pakistan. Students were made aware of the research through Instructional sessions and details shared on pertinent module platforms. Participants were then selected from those who expressed interest, and semi-structured interviews were conducted to gather data. Semi-structured interviews, a widely utilized data collection method in qualitative study (Tasleem, Na'eim Ajis, & Abidin, 2020), were chosen to allow for an essential set of questions during affording students the flexibility to share their experiences openly. Owing to restrictions regarding pandemic, all the interviews were performed using the videoconferencing platform (Zoom™). Students had the option to participate through audio or video and all interviews were recorded in audio format and subsequently transcribed verbatim by a skilled transcriptionist. Thematic analysis was subsequently applied to extract themes from the recorded interviews. As thematic analysis provides a structured approach for identifying and interpreting patterns within qualitative data, enhancing the depth of understanding in research (Tasleem, 2021; Tasleem et al., 2022).

## **FINDING AND RESULTS**

The raw data revealed a consistent dissatisfaction among practically all participants engaged in online teaching and learning amid the COVID-19. Several challenges were highlighted, including unstable internet connections, electricity shortages, insufficient technological facilities, and financial restrictions, collectively exerting an unfavourable impact on their education and learning experiences. Participant 5, 3,7, 11, 17 described how lecturers posed questions for students to independently digest and answer, but the high cost of internet packages hindered her ability to adequately engage in lessons.

Participant 1,2, 8,9,17 residing in a district with poor learning conditions, criticized the efficacy of the e-learning introduced as online learning platform. They emphasized the lack of 3G coverage and the high expense of internet bundles, proposing the Higher Education Commission establish a free online platform compatible with weak internet connections, such as 2G.

Participant 3,14,22, 23,7 encountered difficulties accessing technological resources, lacking a personal computer due to financial constraints. This limitation negatively impacted her learning outcomes. Participant 4,6,17,19 reported that although lecturers used social media for communication, the seriousness of learning and teaching diminished. they suggested that learning should persist under all circumstances and revealed the psychological effect of Pandemic COVID-19 on his educational performance.

Furthermore, Participant 5,13,15,19 expressed dissatisfaction with the quality of teaching and learning, attributing it to the disruption of concentration caused by COVID-19 and prolonged university closures. While acknowledging both favourable and unfavourable effects of the pandemic on learning, they emphasized the disproportionately adverse effects.

Participant 6,11, 8,20, 21 believed that learning during COVID-19 was insufficient, resorting to self-study at home. they observed a community tendency where students do not excel without sufficient guidance from lecturers, negatively affecting their learning outcomes. In summary, the participants universally expressed dissatisfaction with online teaching and learning, citing challenges related to internet connectivity and technological facilities, ultimately impeding their learning outcomes.

Furthermore, the identified themes provide a comprehensive overview of participants' experiences, challenges faced, and suggested solutions during the COVID-19 pandemic in the context of teaching and learning at public universities in Pakistan.

### **Participants' Teaching Experiences During COVID-19**

In the realm of teaching during COVID-19, participants shared diverse experiences, with lecturers creating chat groups and sharing materials, though challenges persisted. For instance, Participant 2, residing in a district, struggled with consistent access to lectures, emphasizing the challenges associated with internet connectivity. Others pointed out the ineffectiveness of online lectures due to a lack of smartphones and computers, while Participant 4 highlighted communication through WhatsApp and messenger as a prevalent practice. Participant 5 expressed dissatisfaction with the hiatus in lectures for months, indicating the disruptions caused by the pandemic. Moreover, Participant 6 emphasized social media communication but noted the absence of lecturer seriousness.

### **Participants' Learning Experiences During COVID-19**

Participants' experiences of learning during COVID-19 revealed additional complexities. The discontinuation of online lectures due to limited internet access, technological issues affecting the effectiveness of online learning, and reliance on mobile calls for assignments were common challenges. The negative impact on learning outcomes was attributed to lecturers' perceived lack of seriousness, further exacerbated by the absence of academic pressure.

### **Challenges**

Challenges outlined by participants encompassed electricity and internet issues, financial constraints hindering access to technology, and university closures disrupting regular classes. These challenges underscore the multifaceted nature of the obstacles faced by students during the pandemic.

### **Suggestions/Solutions**

In addressing these difficulties, participants put forth valuable suggestions and solutions. These recommendations encompassed the development of efficient software by the Ministry of Higher Education, the provision of free software compatible with slow internet to ensure widespread access, the enforcement of policies to assist financially disadvantaged students, and the establishment of an easily accessible online learning platform. The significance of ongoing teaching and learning, coupled with support for faculty, was underscored. A prevalent suggestion that emerged was the creation of a user-friendly and cost-free online platform to alleviate the challenges presented by the pandemic.

### **The Influence of the COVID-19 Pandemic on Students' Educational Experience**

The effect of COVID-19 pandemic on students' learning was a nuanced blend of positive and negative outcomes. Participants acknowledged the disruptive negative effects, such as postponed graduation, job loss, psychological stress, and concerns about future prospects. However, some identified positive aspects, including the introduction to online learning. Overall, the pandemic's influence on students' learning experiences was

complex and varied, emphasizing the need for adaptive strategies and comprehensive support systems in higher education settings during unprecedented challenges like those posed by COVID-19.

## **Discussion**

The pandemic COVID-19 has exerted a substantial influence on diverse aspects of human life, and the realm of higher education for students is no exception. The influence of the pandemic on learning of students learning varies between countries with inadequate resources and those with more robust infrastructures. This research sought to explore the precise ramifications of the COVID-19 on learning of students within the Institution of higher education context in Pakistan. The results indicated that a significant portion of students encountered challenges in accessing efficacious and consistent online learning and teaching throughout the COVID-19 pandemic, primarily due to inadequate resources and facilities. These limitations served as noteworthy impediments to students' active engagement in higher education learning.

This study's findings align with the research Bariham et al. (2021) and past research by Rahman (2021), which reported ineffective learning challenges and experiences in learning and teaching activities throughout the COVID-19 pandemic due to a deprivation of sufficient resources hindering student education and learning. Though, it contrasts with outcomes from studies by Godber and Atkins (2021), which indicated that students found online learning satisfactory as it demonstrated effectiveness amid the pandemic.

The study indicates that the success of online learning and teaching is contingent upon all students having equitable access to lectures and facilities (Jung et al., 2021). For instance, the absence of facilities for online learning resulted in the cessation of students' higher education learning.

The qualitative aspect of the study further revealed widespread dissatisfaction among students with online teaching and learning throughout the COVID-19 pandemic. Participants draw attention to issues with the Internet and technological facilities, including instances where the 3G network was unavailable in certain districts, hindering participation in lectures that required a 2G Internet connection. Participants also emphasized the high cost of Internet bundles, financial difficulties in purchasing them, and the instability of mobile company internet connections, all contributing to an unsatisfactory online learning experience. Suggestions was put forth for the Higher Education Commission to reconsider policies and implement an online platform designed for the Pakistani context, such as a cost-free learning management system compatible with slower Internet connections.

The outcomes of this study revealed a substantial adverse effect of the COVID-19 on learning of students within the institutes of higher education. Nearly 80% of respondents expressed that the subsequent lockdown and virus outbreak had a profound impact on their learning experiences. Contributors identified diverse facets of their education influenced by the pandemic, encompassing learning quality, subject knowledge, class projects, goals, study duration educational activities, motivation, opportunities, performance, and assignment loads. These findings align with conclusions from earlier studies by Peters et al. (2020), highlighting a negative influence on students' learning. Yusuf (2021) argued that the anxiety induced by the pandemic had detrimental effects on students' learning outcomes and academic achievements, recommending that educational institutions offer counseling and psychological services to assist students throughout their higher education endeavors.

The study delved deeper into the demographic factors influencing the responses. While gender did not yield a substantial impact, a limited ratio of female students encountered limited gain access to internet connections associated with their male counterparts. However, the respondents' age and class exhibited an influence on their responses. A considerable association was identified between learning and teaching and the influence of the COVID-19 pandemic on the learning of students in higher educational institutions in Pakistan. Students' perspectives on online teaching as well as learning in the COVID-19 pandemic were linked to its repercussions on their educational experiences. Orlov et al. (2021) proposed that inadequate

facilities in online learning activities might result in adverse effects and lower grades on academic success, underscoring the importance of universities providing ample means for online learning as well as teaching.

Qualitative outcomes similarly showed a nuanced perspective on the effect of the COVID-19 pandemic on the learning of students. Participants acknowledged both favorable and unfavorable effects, with online learning providing a new opportunity for knowledge acquisition. However, the pandemic's adverse effects included postponed graduations, job losses, financial difficulties, and overall negative repercussions on their learning. These findings align with studies by Tzeng et al. (2021) and Baber (2020) emphasizing the dual effect of the COVID-19 pandemic on the learning of students.

## **CONCLUSIONS**

The COVID-19 pandemic stands as a global crisis necessitating international collaboration and coordination to mitigate its far-reaching effects. This viral outbreak has fundamentally altered lifestyles worldwide, prompting the World Health Organization (WHO) to declare it a global pandemic in March 2020, leading to transformative shifts in education. Consequently, the realm of teaching and learning has undergone significant paradigm variations and shifts during the era of the Coronavirus. Such alterations have posed considerable obstacles to the learning of students in universities, with the Pakistan context experiencing particularly pronounced negative impacts. Limited resources and unstable teaching and learning activities have contributed to this heightened vulnerability.

Within the Pakistan context, students encountered various challenges, including unreliable internet, a dearth of inadequate resources, lack of awareness, technological facilities, exorbitant internet costs, linguistic skill gaps, and inconsistent power supply, all acting as major impediments to learning and teaching during the pandemic. These challenges have reverberated throughout higher education, affecting educational institutions, instructors, students, and additional stakeholders. Pakistan has borne the brunt of the COVID-19 pandemic's effects on learning and teaching, exacerbated by the absence of well-equipped facilities in addition to systematic policies for managing and controlling online education compared to other countries.

In light of the findings, administrators in education and leaders in higher education are urged to amend and revise policies, considering all facets of teaching and learning, particularly in emergency situations. Recognizing that different regions may encounter unique challenges in teaching and learning, it is imperative to tailor policies accordingly. For instance, the dramatic changes experienced by students at Takhar University during the COVID-19 pandemic emphasize the need for educational leaders and managers to integrate emerging technologies while also acknowledging the importance of flexible methodologies and fostering student creativity and involvement in post-secondary education.

This study proposes a number of implications. Firstly, the policies as well as platforms for online learning in the different institutions of higher education in Pakistan demand thorough valuation and modification, given the numerous challenges encountered during the time period of COVID-19. Future research endeavors could involve comparing findings from this study with others, providing a basis for suggesting improvement policies at both university and school levels. Subsequent investigation may delve into the influence of the COVID-19 pandemic on the learning of students at the school level, exploring the practices of learning and teaching in a school context during the pandemic.

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