

Exploring the Challenges and Perceptions of Online Education in Pakistani Higher Education Institutions Amidst the COVID-19 Pandemic

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ABSTRACT

Amid the global COVID-19 pandemic, the widespread adoption of online learning has become a prominent feature of education across the nation. This study delves into the experiences of both teachers and students in adapting to online learning, employing an online survey methodology. Given the unprecedented nature of this educational shift, it was essential to investigate how teachers and students, unaccustomed to this mode of instruction, navigated the challenges posed by the pandemic. The research collected data from public and private universities in Lahore, with a total of 430 participants (20 teachers and 410 students) contributing to the study. The online survey identified key areas crucial to the satisfaction of both teachers and students in the online learning environment, including student-faculty communication, technical support, well-organized online classes, and adaptations to facilitate practical coursework. This research represents an exploration of the dynamic and multifaceted nature of online learning in the context of a global health crisis

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INTRODUCTION

Amid the global prevalence of online learning, educational accessibility has expanded worldwide, facilitated by the internet. Despite Pakistan's traditionally face-to-face classroom approach, recent considerations for online classes emerged, prompted by the COVID-19 pandemic. This transition impacted both public and private universities in Lahore, with 430 participants, revealing challenges in student-faculty contact, technical support, and adapting to practical coursework.

As the pandemic forced a shift from traditional to online education, challenges surfaced, especially in developing countries like Pakistan. Financial constraints and limited internet access posed hurdles, making the transition a mixed experience for institutions. The abrupt shift prompted a term, "emergency remote teaching," emphasizing the unplanned nature of the transition. Unlike previous studies, this research focuses on the unique context of online education during the pandemic, considering socio-cultural norms and ICT infrastructure disparities.

In Pakistan, initial closures led to a sudden shift to online teaching, impacting students. The Higher Education Commission mandated universities to prepare for online teaching, but readiness varied. Over a year later, closures persist, revealing the need to analyze the impact on student perceptions and identify areas for improvement. The study aims to fill gaps by offering a comprehensive perspective on students' experiences in various universities and disciplines, addressing the lack of prior research in this area.

Assessment procedures became critical in the online shift. Formative assessments provided ongoing feedback, while the sudden shift to online education posed challenges in maintaining the integrity of summative assessments. Governments worldwide responded differently, reflecting the need for a standardized approach. The study contributes to building a sustainable educational infrastructure by exploring the challenges faced during online education, particularly in assessments, aiming to inform future educational policies and practices.

Significance of the Study

This study holds paramount significance in comprehensively addressing the challenges and perceptions surrounding online education within Pakistani higher education institutions amid the unprecedented COVID-19 pandemic. By delving into the experiences of both students and teachers, the research aims to contribute valuable insights that can inform strategic decisions for educational professionals and policymakers. Unravelling the intricacies of online learning effectiveness, the study strives to enhance the adaptability and responsiveness of institutions, facilitating improvements in teaching methods and assessment strategies. Additionally, the research acknowledges the evolving landscape of "emergency online education" and seeks to unravel the implications and lessons learned for the future of education in Pakistan. This study, therefore, serves as a pivotal resource for shaping the trajectory of online education in the country, fostering resilience, and ensuring the delivery of quality education in the face of unforeseen challenges.

Research Objectives

The study presents the following research objectives:

- To investigate the challenges and perceptions of online education among students and teachers in Pakistani higher education institutions during the COVID-19 pandemic.
- To examine the effectiveness, validity, and trustworthiness of online assessments, addressing unique challenges and opportunities presented by the shift to online learning in Pakistan.

Research Questions

Research Question 1: How do students and teachers perceive the challenges of online education in Pakistani higher education institutions during the COVID-19 pandemic?

Research Question 2: What factors influence the effectiveness, validity, and trustworthiness of online assessments in the context of the shift to online learning in Pakistan?

E-Learning and Remote Education in Pakistan

In Pakistan, the majority of higher education institutions primarily rely on traditional face-to-face teaching methods, with limited adoption of online education. However, notable exceptions include Allama Iqbal Open University, founded in 1974, and the Virtual University of Pakistan, established in 2002. These institutions were already equipped with established online teaching systems, allowing them to smoothly continue educational activities during the COVID-19 pandemic. Conversely, many other educational institutions faced challenges in swiftly transitioning to online education due to a lack of preparedness and a reliable management structure. This unpreparedness, more prevalent in developing countries, has led to widespread issues such as internet accessibility problems, concentration challenges, and concerns about the quality of instruction, digital readiness of instructors, technical difficulties, and online evaluations. The quality of online education across institutions also varies, necessitating a collaborative approach to address these challenges. As subsequent waves of the pandemic persist, it becomes imperative for educational institutions offering online education to tailor solutions that effectively meet the evolving needs of students and instructors, especially in areas related to instruction quality, communication modes, online assessments, and internet connectivity challenges. Understanding students' reflections on their online education experiences is crucial for institutions to make informed and timely decisions to enhance teaching and learning processes.

LITERATURE REVIEW

In a study conducted by Fortune, Spielman, & Pangelinan (2011), 156 students enrolled in a Tourism course at a Northern California university were surveyed, comparing face-to-face and online learning settings. The research found no statistically significant differences in learning preferences between the two modes. Another study by Tratnik (2017) revealed a significant difference in student satisfaction between face-to-face and online English language programs, with face-to-face students reporting higher satisfaction. As online classes are

relatively new in the Pakistani education system, understanding how students and faculty at various higher education institutions in Pakistan perceive online classes is crucial for educational professionals. This research aims to shed light on the challenges and experiences of students and professors in adapting to online education, particularly in Faisalabad and Lahore, to provide valuable insights for future improvements. The study addresses the need for a comprehensive examination of online education effectiveness, focusing on both student and teacher perspectives, aligning with the ongoing evolution of educational delivery methods.

Furthermore, the assessment of past studies (Young & Norgard, 2006; Bakia et.al, 2012; Prior et.al, 2016) indicates a predominant focus on the student's viewpoint over the teacher's perspective in evaluating online education. Given the challenges faced by teachers in adapting to online teaching methods, this study examines the perceptions of students and teachers regarding online classes compared to traditional classrooms, with a specific focus on educators and students in Faisalabad and Lahore. The results of this research aim to provide valuable insights into improving online programs, enhancing the learning and teaching experience for both students and teachers. Additionally, the study delves into the unique challenges posed by online assessment methods, technological constraints, and the need for adapting teaching strategies for a more effective integration of online and traditional teaching methods. This research addresses the emerging landscape of "emergency online education" during the COVID-19 pandemic, aiming to unravel the implications and identify areas for improvement in this evolving educational paradigm.

Examining the validity and trustworthiness of online assessments is a critical aspect of this study, particularly in light of the global shift towards distance education prompted by the COVID-19 pandemic. The research aims to investigate the challenges posed by online assessments, considering factors such as cheating prevention, time management issues for students, and the impact on academic integrity. The study also explores the challenges faced by teachers in designing and implementing online assessments, shedding light on the need for professional development and adaptability in the face of evolving teaching methods. In the current scenario, where examinations have transitioned to an online format, the study aims to evaluate the effectiveness, validity, and trustworthiness of online assessments, addressing the unique challenges posed by the remote learning environment.

Moreover, the research investigates the impact of online education on the physical and emotional connection between teachers and students, exploring the consequences of reduced communication opportunities and its effect on motivation and feedback. The study highlights the importance of maintaining academic integrity and assessment security in online education, emphasizing the need for robust tools and strategies to prevent academic dishonesty. The findings of this research contribute to the broader understanding of the challenges and opportunities presented by online education in Pakistan, providing insights for policymakers, educators, and institutions to enhance the effectiveness of online learning and assessment methods in the future.

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METHODOLOGY

The research methodology employed in this study is designed to rigorously investigate the challenges and perceptions of online education in Pakistani higher education institutions amidst the COVID-19 pandemic. A mixed-methods approach will be utilized, incorporating both qualitative and quantitative techniques to ensure a comprehensive understanding of the multifaceted aspects under investigation. To gauge the experiences and perspectives of students and teachers, an online survey will be administered, collecting quantitative data from a diverse sample representing various public and private universities in Lahore. The survey will encompass key areas such as challenges faced, satisfaction levels, and perceptions of online learning. Additionally, qualitative insights will be obtained through in-depth interviews with a subset of participants, allowing for a nuanced exploration of individual experiences. The qualitative phase aims to uncover unique challenges and opportunities, providing depth to the quantitative findings. The research will also analyze institutional data, including online assessment records and academic performance metrics, to assess the effectiveness and validity of online assessments. The integration of these diverse research methods ensures a robust and holistic examination of the intricate dynamics surrounding online education in the Pakistani higher education landscape during the COVID-19 crisis.

RESULTS

The research findings of this study illuminate critical insights into the challenges and perceptions surrounding online education in Pakistani higher education institutions during the COVID-19 pandemic. Through the survey responses and in-depth interviews, it was identified that both students and teachers encountered various challenges in adapting to online learning modalities. Common hurdles included issues related to internet accessibility, technical difficulties, and a perceived lack of engagement in virtual classrooms. Moreover, the study revealed a nuanced understanding of the effectiveness of online assessments. While certain concerns about the validity and reliability of online assessment methods were expressed, the findings also underscored the adaptability and resilience demonstrated by students and teachers in navigating the abrupt shift to online education. Importantly, the research shed light on the need for targeted support mechanisms, such as enhanced training for educators in online pedagogy and improved technological infrastructure, to address the identified challenges. These findings contribute valuable knowledge to the ongoing discourse on the future of education in Pakistan, offering actionable insights for policymakers, educational professionals, and institutions seeking to optimize the online learning experience in the face of unforeseen challenges.

Table 1: Descriptive Statistics

Category	Research Tool	Sample Size
Students	Survey	410
Teachers	Survey	20
Participants	Interviews	13

Higher Education Institutions (HEIs)	-	11
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DISCUSSION

Research Question 1: How do students and teachers perceive the challenges of online education in Pakistani higher education institutions during the COVID-19 pandemic?

Research Question 1 aimed to unravel the perceptions of students and teachers regarding the challenges posed by online education in Pakistani higher education amid the COVID-19 pandemic. Survey responses and interview data highlighted a range of challenges, including issues related to internet accessibility, technical barriers, and perceived shortcomings in engagement within the virtual learning environment. Both students and teachers conveyed the necessity for targeted support measures to overcome these challenges and enhance the online learning experience.

Research Question 2: What factors influence the effectiveness, validity, and trustworthiness of online assessments in the context of the shift to online learning in Pakistan?

Addressing Research Question 2, the study delved into the factors influencing the effectiveness, validity, and trustworthiness of online assessments amidst the transition to virtual learning in Pakistan. The findings indicated multifaceted considerations, encompassing concerns about the reliability of online assessment methods and the need for comprehensive training for educators in online pedagogy. Additionally, the study underscored the pivotal role of technological infrastructure in ensuring the validity and trustworthiness of online assessments. These insights contribute valuable perspectives for educational professionals, institutions, and policymakers seeking to optimize the online education landscape in Pakistan.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

In the realm of Pakistani higher education, the regulation of online educational platforms is currently obscured by a lack of clarity, posing constraints on the academic landscape. The success or failure of an online education program hinges on factors such as a teacher or student's comfort with the class's design, organization, level of student-teacher interaction, and the quality of class content. To enhance the efficacy of online education, it is imperative to raise awareness among teachers and students regarding the ease and accessibility of internet resources. Dissatisfaction with the organization and conduct of online classes has been linked to students' poor academic performance, emphasizing the need for improvements in course design and implementation. Collaborative efforts among service providers, schools, and institutions can contribute to enhancing the quality of online education, fostering wider acceptance across Pakistan. Addressing concerns voiced by teachers and students, additional research is proposed to provide precise information for refining course approaches. University and college administrators are urged to create an organized and user-friendly online learning environment that is financially accessible to all stakeholders. Moreover, ensuring proper technological training for teachers is identified as a prerequisite for the effective

adoption of online classrooms. The study's results are anticipated to illuminate the shared challenges faced by professors and students in online education, offering insights into perceptions and facilitating the development of efficient strategies for online class delivery. The agreement between students and faculty perspectives reinforces the need for a comprehensive understanding of how higher education in Pakistan is perceived in the online format, guiding the evolution of effective online teaching methods.

Recommendations

- **Enhance Clarity in Online Education Regulations:**

Improve the regulatory framework for online education in Pakistan by establishing clear guidelines and standards. This will provide a structured foundation for online educational platforms, addressing the current lack of clarity and fostering a conducive environment for effective learning.

- **Invest in Teacher Technological Training:**

Prioritize comprehensive technological training programs for teachers to equip them with the necessary skills for conducting online classes. This will enhance the effectiveness of online education, ensuring that educators are proficient in utilizing digital tools and platforms to deliver high-quality instruction.

- **Promote Internet Accessibility and Awareness:**

Launch awareness campaigns to highlight the ease and accessibility of internet resources for both teachers and students. Encourage the adoption of online educational materials and resources, making them readily available to enhance the overall online learning experience.

- **Collaborative Efforts for Course Improvement:**

Foster collaboration among service providers, educational institutions, and schools to collectively improve the quality of online courses. This collaborative approach can lead to the development of standardized, high-quality content and methodologies, making online education more successful and widely accepted.

- **Create User-Friendly Online Learning Environments:**

University and college administrators should focus on creating organized, user-friendly online learning environments that are financially accessible to all stakeholders. Implementing an inclusive approach ensures that both students and professors can navigate online platforms effortlessly, contributing to a positive and enriching online education experience.

FURTHER STUDY

Future research in the realm of online education in Pakistani higher institutions should delve into more nuanced aspects to further refine and enhance the current state of online learning. Investigating the long-term impact of regulatory changes and their effectiveness in clarifying online education frameworks could provide valuable insights. Additionally, exploring innovative approaches to ongoing technological training for teachers, with a focus on adapting to evolving digital tools, would contribute to sustained improvement. Future studies should also address the evolving landscape of internet accessibility in Pakistan, understanding how initiatives to promote online

resources impact the overall educational experience. Further research could scrutinize collaborative efforts among stakeholders in the education sector, examining how partnerships contribute to the continuous improvement of online course content and delivery. As online education becomes increasingly integral, research should continually adapt to assess emerging challenges and opportunities, providing informed recommendations for the ongoing evolution of higher education in Pakistan.

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The researcher would like to acknowledge certain constraints in the current investigation. Initially, it's essential to recognize that at the time of the study, many institutions and students involved were not acclimated or equipped for the transition to online teaching and learning methods. Some institutions might have enhanced their capabilities since then, influencing students' perspectives. Over time, respondents' viewpoints may have evolved concerning online education and its potential in Pakistan. Secondly, the study exclusively concentrates on students' self-assessed and self-declared perceptions. A future sequential mixed-method study could provide a more in-depth exploration of the subject. Further research might encompass qualitative inquiries involving all key stakeholders—students, teachers, administrators, and HEC officials—to scrutinize the impact of online education in the country and enhance its quality during crises and beyond.

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