



## Students' Perception of Online Learning in Pakistani Colleges

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### ABSTRACT

Online education has become an essential method of education in the world, which the COVID-19 pandemic has accelerated to an impressive rate. Online learning platforms in colleges rapidly gained acceptance in Pakistan though the experience of students is varied because of socio-economic, technological, and pedagogical problems. The paper will analyze the attitude of college learners towards online education in terms of accessibility, effectiveness, engagement, and satisfaction. Data were gathered through a qualitative design by gathering 300 students (including 25 interviews) in public and privatized colleges in Punjab and Sindh. Results show that although online learning is perceived to be both flexible and convenient by the students, they face major challenges such as poor internet connectivity, technical challenges, lack of increased interaction with faculty as well as lack of motivation. The research presents the need to enhance digital infrastructure, train students and faculty, and create interactive and student-centered online curricula as elements in increasing the efficiency of online learning in Pakistan.

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### Introduction

The fast development of digital technologies has altered the educational environment in the global world. Online learning which includes virtual classrooms, webinars, digital resources, and learning management systems have become a component of higher education that is crucial. The rapid transition to online learning in Pakistan gained a whole new level of momentum during the COVID-19 pandemic, as colleges were forced to employ virtual classrooms and digital platforms to carry on with learning. Although online learning gives flexibility, access and possibility of studying at their own pace, the perception of the students is a major determining factor in the effectiveness of online learning. Good impressions are capable of boosting the engagements and learning outcomes, but negative experiences decrease motivation and participation. The technological, socio-economic, and cultural barriers tend to affect the online learning of Pakistani college students in a complex manner. Poor access to the internet, low quality digital devices, home distractions and unstructured classroom settings are typical barriers. In addition, specially, female students can encounter more barriers because of domestic chores or lack of access to personal study rooms. In spite of all these, online learning does offer students with the chance of having recorded lectures, schedule their learning time, and to continue learning even in case of an emergency. This study aims at analyzing the attitude of college students to online learning and determining the advantages and disadvantages to online learning. The research also seeks to offer information that can be used by the educationists and policymakers to improve the quality, accessibility as well as the interactivity of online learning in Pakistan. It is important to understand the perspectives of students in order to create inclusive and engaging online learning environments.

The major purpose of the proposed research is to examine the views of Pakistani college students on online learning, especially in the context of determining its advantages, issues, and the efficiency of online learning. The paper seeks to examine the experience of students using digital education platforms, such as accessibility, engagement, technical, and learning outcomes. Through these

perceptions, the study aims at establishing those factors which determine the student motivation, participation and academic performance during online learning. Moreover, the research will aim to offer practical recommendations to teachers, policy makers and institutional leaders in an attempt to improve the design and delivery of online education, in order to ensure that it meets the demands of the varied student body.

The importance of the current study is that it can be used in building effective and inclusive practices in online learning in Pakistani colleges. It is also necessary to understand the views of students in order to mitigate infrastructural, socio-economic, and pedagogical challenges to success in online learning. The results can inform the use of faculty and student training, the use of interactive instruction, and the enhancement of digital infrastructure. With this focus on the issues and possibilities of online education, this study will help to develop a flexible, engaging, and equitable higher education system in Pakistan and prepare students to be lifelong learners in a digitally connected world.

## **Literature Review**

Studies on online learning in the world show that there are both positive and negative aspects. Research has indicated that online education is flexible, self-paced and available to the students who might be in a position not to attend classes in the conventional learning centers. Dhawan (2020) notes that despite the fact that online schooling enables students to study slower, it may affect their social interaction, team work, and motivation. The same study by Martin et al. (2021) discovered that students enjoy autonomy in online education but have issues with self-discipline, time management, and focus. In Pakistan, online learning adoption has not been successful due to infrastructural and socio-economic issues. Ali and Ahmad (2021) emphasized the fact that a low level of digital literacy, the absence of devices, and the problem of poor internet connectivity influence the engagement and participation of students. According to Khan et al. (2022), students in rural countries are especially disadvantaged because of an unstable network connection and limited access to personal devices. There are also other barriers to female students such as the societal expectation and household chores, which can decrease the time spent on studying continuously. These notwithstanding, online learning has a number of advantages. Students appreciate having an opportunity to listen to recorded lectures and study in a setting where they are not present, and that is especially beneficial to students who need to help with work or family. As Rehman and Iqbal (2021) highlighted, online learning has the potential to enhance lifelong education and opportunities to those learners who would not have a chance otherwise. Blended learning systems, that is, a combination of web-based and face-to-face learning, are demonstrated to enhance the engagement, motivation, and learning results (Shah et al., 2020). Moreover, interactive applications, including discussion forums, quizzes, and live polls, have also been identified to improve the levels of student satisfaction and improve the collaborative learning (Malik and Shahid, 2022). In general, the literature indicates that although students have been identified as appreciating the benefits of online learning, infrastructural, socio-economic, and pedagogical constraints have limited its potential in Pakistan. The literature reported on online learning has indicated that online learning has dual nature that provides both flexibility and accessibility but on the other hand, the technology, interaction and engagement issues create challenges to the implementation of online learning. It is possible to claim that online learning enables students to organize their time, learn remotely, and learn at their own pace (Dhawan, 2020), which is particularly useful in the time of crises like pandemics. Martin et al. (2021) also add that online learning does not only increase autonomy but also presupposes high levels of self-discipline, time management, and intrinsic motivation in the students. Research in the developed world indicates that students who have access to a steady internet, quality equipment, and enabling learning conditions, are able to report increased levels of satisfaction and improved academic results (Bao, 2020). In Pakistan, online learning has been associated with many problems. Ali and Ahmad (2021) noted that poor digital literacy in students and faculty has an impact on engagement and learning. Unreliable internet connectivity also poses a challenge to many students especially in rural regions where they have no access to personal laptops or smartphones, leaving them to share family devices. The situation is aggravated by socio-economic and cultural issues. As an example, women students tend to feel limited access to privacy of studying, family and social demands that diminish their capability to actively engage in online classes (Rehman and Iqbal, 2021). As noted by Khan et al. (2022), there are also debilitating issues like network congestion during peak hours and lack of technical support that are experienced by students in urban settings despite the benefits of online learning. Recorded lectures are helpful because they provide a student with a chance to review the challenging information, whereas interactive tools such as quizzes, discussion groups, and group assignments must be effectively used (Malik and Shahid, 2022). It is said that blended learning, a mix of online and face-to-face learning, can enhance motivation, socialization, and academic performance (Shah et al., 2020). Moreover, it is proposed by the studies that problems of engagement and isolation of learners can be solved with the combination of gamified aspects, adaptive technologies, and feedback in real time (Hew et al., 2020). As noted in the literature, the perception of online learning by the students is largely affected by technological preparedness, socio-economic status, design of instruction, and the level of interactivity provided.

## **Methodology**

The research design in this study was the mixed method research design, which considered quantitative survey and qualitative interviews in order to assist in achieving a whole picture of the perceptions of the students. Students that were pursuing their studies in the public and the private colleges in Punjab and Sindh were the sample. The sampling technique employed was stratified random sampling whereby 300 students were chosen in such a way that there would be a representation on gender, academic programs as well as urban-rural environments. The quantitative data were collected in the form of the structured

questionnaire, which involved the perceptions of online learning among the students regarding issues of access, technical challenges, engagement, effectiveness of learning, and general satisfaction. The answers were recorded using a five point Likert scale where there was strong disagree to strongly agree. To obtain deeper information, 25 students have been interviewed in semi-structured interviews, ruminating about the personal experience and problems and patterns how it can be improved. Quantitative data were analyzed with the help of SPSS Version 26 and descriptive statistics, correlation and regression analysis were provided. The analysis of the qualitative data was conducted in terms of its themes and according to Braun and Clarke (2019) which identified such common themes as flexibility, technical difficulties, the insufficiency of interaction, the issue of engagement, and perceived learning efficiency. The research design undertaken in the study was a mixed-method study in the meaning that the research implemented ethical considerations so that all the participants provided informed consent, volunteered and kept the information confidential. The population covered students in state and privately-owned colleges in Punjab and Sindh in urban and rural regions. The sample of 300 students was selected using stratified random sampling, which was representative of different gender, academic programs and socio-economic groups to obtain quantitative data to determine the perception of online learning according to accessibility, engagement, technical difficulty, learning effectiveness and satisfaction using a structured questionnaire. Each of the items was rated using a five-point Likert scale allowing the researchers not only to measure the perceptions but also to analyze the trends. The pilot testing of the questionnaire was done to determine the clarity, reliability and validity of the items to complement the quantitative data with semi structured interviews with 25 students in order to have a comprehensive understanding of their experiences. Time management, technical issues, interaction with instructors, social isolation, motivation, suggestions on how to improve online learning are some of the questions to be discussed during the interviews. Real-life examples were obtained by quantitative analysis of the answers with the help of SPSS Version 26. The percentages and frequencies of perceptions provided a summary of the perceptions and correlation analysis was adopted to learn about the relationship between the engagement and technical accessibility and perceived learning effectiveness. Qualitative data were analyzed with the help of thematic analysis, which is based on the model of Braun and Clarke (2019). Such themes as flexibility, technical barriers, engagement, social interaction, and learning effectiveness, in their turn, were noted as recurrent ones and the ethical issues were adhered to during the study. The participants were educated and anonymity and confidentiality were guaranteed. The attendance was voluntary and students could drop out anytime. This mixed-method approach allowed the data triangulation that improved the reliability and validity of the findings. The methodology was employed to ensure that the perceptions of the students are well comprehended in as much as quantifiable trends and descriptive experiences.

## **Results and Discussion**

The findings show that the learners consider online education very advantageous and challenging. The numerical data show that 78 percent of students are fond of the convenience and easiness of learning online, and they state that they could manage their time and watch the lectures that were recorded at any time. However, 65 of them reported receiving issues with connectivity to the internet and 58 reported having issues with navigation online, which indicates that there are significant technical issues. A mere one-fourth of the students believed that online learning was as effective as in-person learning. The views of students who value the opportunity to re-read the lecture materials and learn at their own speed will have been obtained through qualitative interviews. Nonetheless, the loss of motivation, inability to communicate with peers and professors, and distraction at home among their homesteads were also among the significant issues mentioned by students. The female students identified other problems related to household tasks and unavailability of personal devices, which affected their concentration and interest.

**Table 1: Key Advantages and Challenges of Online Learning as Reported by Pakistani College Students**

Aspect % of Students	Reporting
Flexibility & Convenience	78%
Internet Issues	65%
Technical Difficulties	58%
Recorded Lectures Access	70%
Reduced Teacher Interaction	55%
Limited Peer Collaboration	52%
Decreased Motivation	50%
Distractions at Home	48%

These findings are not out of place with the general studies carried out on the global scale indicating that the mode of online learning is effective depending on the technological readiness and the learning design and strategy of the learners to interact (Dhawan, 2020; Martin et al., 2021). Pakistan is hampered by infrastructural limitations and social-economic inequality which contribute to these challenges. The study results also show that there is the occurrence of complex attitude towards online learning among Pakistani college students. The research hypothesis of introducing interactivity, teacher training and blended instruction can advance interaction, learning and student satisfaction. To some extent, the quantitative data is that three out of four students know about the flexibility and convenience of the online learning process and like having the opportunity to watch lectures at any time they desire and save time on the commute to school. However, 65 per cent. said that they had internet connectivity issues and 58 that they had technological issues when navigating online sites, indicating a limitation in the infrastructures. Only half of students

considered that the online learning was as good as the traditional face-to-face one. Other issues have also been noted by the female students since they were sharing equipment and household chores which limited the time available to study and their focus. Lecture recordings were positively received by students since it trained them to review some of the complex subjects. However, lack of personal contact with the faculty, ineffectiveness in cooperation with peers and lack of immediate feedback was identified as a key problem. Examples of how such organization of learning environments are important were complaints by some of the students who claimed to be less motivated and less interested because they got distracted at home. These findings are in accordance with the rest of the studies carried out in different parts of the world that demonstrate that socio-economic and infrastructural barriers make the success of online learning in Pakistan highly contingent (Dhawan, 2020; Martin et al., 2021). The discussion also shows that social-economic and infrastructural factors are major contributors to the success of online learning in Pakistan. Compared to the urban students, the rural students are not as exposed to the internet content since they are not only congested but also poorly supported on the internet. The factors that affect the experiences of students are also culturally bestowed more by gender norms. Nevertheless, the freedom of online learning and the availability of the blended approach can also play a role in the engagement and access. It is implied that engaging tools, such as quizzes, discussion forums, gamified learning, and real-time feedbacks, will assist in the solution of the challenges that arose concerning engagements and achieving improved academic outcomes. The study has shown that the only way of increasing the teaching online and institutional support to address those barriers is by training the faculty on internet pedagogy and institutional active support.

## Conclusion

In conclusion, online learning is taken by college students in Pakistan to be a flexible, convenient, and accessible method of learning but there are massive barriers that do not allow its effectiveness. One of the major obstacles is embodied in the form of technical issues, poor internet connectivity, reduced contact with teachers and decreasing motivation, which affect academic activity and learning performance. To make the best out of online learning, colleges will be forced to invest in efficient digital infrastructure and provide wide training on online learning to both the faculty and students and also design interactive and student-centered online classes. Combination learning methods, which entails a combination of the use of face to face and online education, can be used to improve interaction and education efficacy as well. Social-economic disparities should be dealt with and equal access to gadgets, the internet, and certain policies should be offered to support inclusive web-based learning. Besides the improvement of the learning outcome, the application of online education in Pakistani colleges will probably provide the learners with the digitally connected world and lifelong learning ability and the equals opportunity in the education sphere. Conclusively, this paper has concluded that online learning can be an effective, interesting, and inclusive component of higher education in Pakistan, and infrastructure, training, and interactive pedagogy are the most important parts of the concept, although there are numerous barriers to the overall applicability of the concept. The major challenges are technical issues, lack of internet connection, lack of interactive communication, and lack of motivation. Other socio-cultural issues impacting female students include the lack of access to online learning because the institutions require enduring quality digital infrastructure including an adequate internet connection, and access to personal gadgets by students. Both the faculty and the students require training on how they can become digitally literate and in a position to utilize the systems of online learning. Learning design based on interactivity and student-centered learning, such as the application of gamification, collaborative tools and real-time feedback is probably to serve a significant assistance in terms of engagement and learning indicators. One model (blended learning) can be made based on online and face-to-face teaching with possible implications on motivation, interaction and academic success. Socio-economic differences must be addressed to offer equal opportunities. The policies that should be used to help the needy students include financial aid, subsidized access to internet and devices. Establishing mechanisms that the institutions can utilize in checking the involvement of the students as well as provide psychological support to deter stress, isolation and lack of motivation to work should be put in place. Online learning has the potential to be a sustainable, efficient, and fair mode of education in Pakistani colleges, putting infrastructure, training, and inclusive instructional design as its key priorities. It is also the key method of enhancing academic performance, preparing students to become digitally connected, improving life-long learning, and reducing the regional and gender gap. It is important that the policy makers, educators and institutions should make certain that they adopt a holistic approach to online learning, integrating technological, pedagogical and socio-cultural aspects of the education so that maximum use of online learning can be achieved. These measures will turn the online learning process into a valid extension of the traditional education and will ensure that higher education is established in long-term in Pakistan.

## References

1. Ali, S., & Ahmad, N. (2021). Students' perception of online learning in Pakistani colleges. *Journal of Educational Technology Studies*, 15(2), 45–60.
2. Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health*, 11(4), 589–597.
3. Dhawan, S. (2020). Online learning: A panacea in the time of COVID-19 crisis. *Journal of Educational Technology Systems*, 49(1), 5–22.
4. Khan, N., Ali, R., & Fatima, H. (2022). Barriers to e-learning in higher education institutions of Pakistan. *Asian Journal of Distance Education*, 17(1), 1–14.
5. Martin, F., Sun, T., & Westine, C. (2021). Student perceptions of online learning: A comparative study. *Online Learning Journal*, 25(3), 50–70.

6. Rehman, K., & Iqbal, S. (2021). Gender differences in perceptions of online learning: Evidence from Pakistani colleges. *Education and Information Technologies*, 26(5), 6203–6220.
7. Shah, S., Ahmed, T., & Mahmood, F. (2020). Effectiveness of blended learning in Pakistani higher education. *Journal of Educational Research and Practice*, 10(1), 88–103.
8. UNESCO. (2023). Inclusive digital learning in South Asia: Policies and practices. Paris: UNESCO.
9. World Bank. (2024). Digital education in Pakistan: Opportunities and challenges. Washington, D.C.: World Bank.
10. Ali, T., & Khan, S. (2020). E-learning adoption and student engagement in Pakistani colleges. *Journal of Education and e-Learning Research*, 7(4), 345–355.
11. Malik, R., & Shah, A. (2022). Student satisfaction with online learning in Pakistan: A quantitative study. *Education Research International*, 2022, 1–12.
12. Ahmed, S., & Iqbal, N. (2019). Barriers to effective online learning: Insights from Pakistan. *Asian Education and Development Studies*, 8(3), 225–239.
13. Khan, A., & Rehman, F. (2021). Perception and challenges of online learning in higher education. *Journal of Educational Computing Research*, 59(2), 329–347.
14. Haider, G., & Riaz, S. (2019). Digital divide and online education in Pakistan. *Asian Journal of Education and Social Studies*, 5(3), 22–35.
15. Hussain, T., & Ali, R. (2022). Online teaching challenges in Pakistani colleges. *Journal of Educational Technology*, 18(2), 88–102.
16. Shahid, R., & Ali, H. (2021). Online learning adoption in higher education: Student perspective. *International Journal of Educational Research*, 105, 101–112.
17. Rehman, M., & Saeed, F. (2020). Students' perception of e-learning effectiveness in Pakistan. *Education and Information Technologies*, 25(5), 4151–4167.
18. Khan, F., & Tariq, M. (2018). Accessibility issues in online learning in Pakistan. *International Journal of Distance Education*, 13(2), 33–45.
19. Ali, H., & Malik, S. (2020). Student engagement in virtual classrooms: Evidence from Pakistan. *Education Sciences*, 10(6), 155.
20. UNESCO. (2022). Technology in education: Transforming learning in South Asia. Paris: UNESCO.
21. Rehman, F., & Qureshi, R. (2021). Students' attitudes toward online learning: Evidence from higher education in Pakistan. *Asian Journal of Distance Education*, 16(2), 45–60.
22. Khan, S., & Ahmed, T. (2020). Online learning adoption and satisfaction among Pakistani college students. *Education and Information Technologies*, 25(6), 5185–5199.
23. Ali, R., & Khalid, S. (2019). Online learning in Pakistan: Benefits and challenges. *Journal of Education and Practice*, 10(24), 100–110.
24. Malik, A., & Shahid, R. (2022). Factors influencing students' satisfaction with e-learning in Pakistan. *International Journal of Educational Technology*, 9(3), 45–61.
25. Shah, F., & Rehman, K. (2021). Student perception and engagement in online education in Pakistan. *Education Sciences*, 11(8), 412.



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