

ANALYZING CHALLENGES FACED BY LEARNERS IN THE ADOPTION OF ONLINE DEGREE PROGRAMS IN HIGHER EDUCATION INSTITUTES

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1. Introduction

Overview of Online Degree Programs in Higher Education

This era has witnessed a marked change as a result of the rapid growth of online degree programs. Online learning gives flexibility, accessibility, and opportunities for further education, hence very tempting to choose over the class environment. With the advancement of technology, educational institutions have been integrating online learning systems to cater to different student populations, such as professionals who are working, students from abroad, and people located in remote areas. Online degree programs are especially appreciated for their capacity to deliver tailored educational experiences, lower expenses, and fit into the diverse schedules of learners.

Importance of Analyzing Challenges Faced by Learners

While online education provides a host of advantages, learners experience significant challenges that jeopardize their academic success and overall fulfillment. Technical problems, a sense of disengagement, difficulty in mastering self-motivation, and limited availability of vital resources severely plague individuals who pursue online degrees. These challenges lead to lower retention levels, decreased learner's satisfaction, and inadequate skill attainment, thereby lowering the effectiveness of online education. Understanding these challenges will help higher learning institutions develop the necessary solutions to enhance programs quality and experience for their students. Additionally, managing these challenges will ensure long-term sustainability of online education programs.

Objectives and Scope of the Study

This study aims to analyse the challenges faced by learners in adopting online degree programs in higher education institutions.

2. Literature Review

Existing Studies on Online Education Adoption

Online education, as a focus area of interest has come upon the discussions in recent times due to technological advancements and increased need for flexible learning solutions. A lot of research has evaluated not only the effectiveness but also the accessibility of online education programs in higher education settings. For instance, a study from Allen and Seaman in 2017 discussed the rapid expansion of online courses across the U.S. highlighting its ability to open access to people who do not pursue the traditional avenue of education. Dhawan in 2020 further explained the importance of online studies during the period of the pandemic of COVID 19 that obliged the educational administrations worldwide to conduct classes in the online format. These results highlight the fact that though e-learning offers flexibility, scalability, and tailored learning experiences, adoption comes with a different set of challenges.

Challenges Highlighted in Previous Research

Even with its benefits, online learning has a host of challenges that it faces, both in terms of its implementation and effectiveness. Alqurashi (2019) noted technical issues, among which are intermittent internet connections and inadequate access to appropriate devices for learners. Likewise, Kuo et al. (2014) reported that learners often face challenges toward self-discipline and motivation in the online learning environment as in-person interaction is minimized and learners might feel isolated and disengaged. Martin et al. also emphasized the need for digital literacy skills due to evidence of low engagement from students who are not adequately trained in the usage of online tools (2020). Moreover, Sun and Rueda (2012) research showed that maintaining interaction and involvement in virtual classrooms remains a significant challenge.

Gaps in the Existing Literature

Although previous studies have offered important insight into the adoption and barriers of online learning, some areas remain under-explored. First, there is a lack of studies concerning the impact of socio-economic factors on the adoption of online degree programs, especially in developing countries. Second, despite the fact that most studies focus on technical challenges, there is a scarcity of the research that addresses the psychological and emotional challenges students face while pursuing online studies. Lastly, most existing studies often seem to overlook the importance of institutional support and policy interventions in mitigating these problems. For instance, the impact of tailored support services such as mentorship and online training programs on student outcomes is not adequately researched. Studying these unexplored territories may provide a richer insight into the challenges faced by the online learners in their effort to acquire online degrees.

By incorporating the evidence gathered from past research and identifying unexplored areas, this literature review serves as the basis for understanding the different difficulties learners encounter when they embrace online degree offerings from a higher learning institution.

3. Methodology

The current research incorporates a mixed-methods approach for studying in detail the problems experienced by students in a change to degree online courses. In adopting this mixed-methods approach, capturing wide-ranging experience on the part of the students would ensure results well-grounded and representative of a wide number of views. The quantitative part utilizes survey forms with questionnaire sets to identify prevailing trends. It is applied in gathering in-depth understanding of personal experiences through in-depth interviews and contextual details as well. The tools for data collection are a combination of surveys and semi-structured interviews. For the surveys, closed-ended questions were used to achieve quantitative responses to issues such as difficulty in use by technology, time pressures, and overall engagement or participation levels. All the surveys were conducted online; this makes it easy to collect data from people of wide age ranges. Semi-structured interviews were also conducted with a selected group of participants to provide an in-depth insight into their experiences, focusing on particular difficulties and approaches they adopted in the context of online learning. This combination of tools helped achieve data triangulation, which enhances the validity of the findings. Purposive sampling and stratified random sampling were both used for sampling. The technique of purposeful sampling selected individuals who, because of the study, had relevance for inclusion in it; some who were currently in the online degree programmes. In that regard, a stratified random sampling strategy ensured representation with all participants differentiated in terms of their age, gender, socio-economic status, and geographical location. The demographics of participants included 150 respondents to the surveys and 20 individuals for the interviews, drawn from both urban and rural locations, which ensured a diverse representation of learner experiences. This sampling framework facilitated a well-rounded and comprehensive analysis of the challenges faced by learners.

4. Data Analysis

This section discusses the challenges learners face as they transition into online degree programs. The research used data obtained from both surveys and interviews. Assessments of both qualitative and quantitative information are included and displayed through tables, graphs, and thematic explorations.

a) Survey Data Analysis

A survey was conducted among 150 participants. These were online degree students, both urban and rural areas, who were required to assess challenges they are likely to face when adopting the online learning modality using a Likert scale from 1 (Strongly Disagree) to 5 (Strongly Agree). Some of the assessed challenges are about technology, personal motivation, interaction levels and involvement, availability of resources, effective time management, and technological skills.

Table 1: Frequency Distribution of Challenges Faced by Learners (Survey Responses)

Challenge Category	Mean Score	Standard Deviation	% of Respondents (Agree/Strongly Agree)
Technical Issues	4.1	0.9	75%
Self-Motivation and Discipline	3.8	1.1	70%
Interaction and Engagement	3.5	1.2	65%
Access to Resources	3.7	1.0	68%
Time Management	4.0	1.0	72%
Technical Proficiency	3.6	1.0	66%

Interpretation of Survey Results:

- The most significant challenge that was identified is Technical Issues, which received a 75% agreement rate, showing that the primary challenges are the lack of reliable internet access and insufficient hardware.
- Another key challenge is Time Management, where 72% of students agreed to it, especially those trying to balance their employment with their schoolwork.
- Self-Motivation and Discipline was the most influential factor on learner participation and progression, with 70% agreement.
- Interaction and Engagement, supported by a 65% agreement, along with Technical Proficiency, which received a 66% agreement, were also important factors but ranked lower in significance relative to the other challenges.

b) Interview Data Analysis

The qualitative insights obtained from 20 in-depth interviews revealed further understanding of the challenges faced by students. Thematic analysis revealed recurring themes, which led to the identification of these categories:

- Lack of Personal Involvement: Most participants felt isolated in online classes, which negatively affected their motivation and overall satisfaction with learning.
- Limited Infrastructure and Resource Availability: Students from rural regions highlighted the disparity in access to essential technology and materials required for online education.
- Psychological and Emotive Problems The presence of stress conditions and feelings of loneliness surfaced as some significant challenges, especially for the learners with family commitments.

Table 2: Thematic Analysis of Interview Responses

Theme	Frequency of Occurrence	Key Insights
Lack of Personal Interaction	15	“I miss face-to-face interactions with my peers and professors.”
Infrastructure and Resource Scarcity	12	“The internet connection here is so unstable, I miss lectures often.”
Mental and Emotional Challenges	10	“Balancing family responsibilities with online learning is stressful.”
Lack of Support/Guidance	8	“I wish there were more one-on-one support from instructors.”

Interpretation of Interview Results:

- The most commonly cited reason for concern was a lack of face-to-face contact, with students arguing for the need to provide more opportunities for interaction.
- The lack of infrastructure and resources was an issue for rural students, which was consistent with the technical issues the survey revealed.
- Mental and emotional challenges while dealing with other responsibilities were common points learners made while highlighting the need for better support systems.

c) Comparison of Urban vs. Rural Learners

An analysis was carried out on the data to identify the differences in the challenges faced by learners from urban backgrounds and those from rural backgrounds. The following table shows a comparison of the average scores for each group regarding different challenges.

Table 3: Comparison of Challenges Faced by Urban vs. Rural Learners

Challenge Category	Urban Learners (Mean)	Rural Learners (Mean)
Technical Issues	3.9	4.5
Self-Motivation and Discipline	3.7	3.9
Interaction and Engagement	3.5	3.7
Access to Resources	3.6	4.0
Time Management	3.9	4.2
Technical Proficiency	3.5	3.8

Interpretation of Urban vs. Rural Learners:

- Rural students faced significantly more problems, scoring a 4.5; this is most probably because it lacks a stable, steady internet base and modern techno devices.
- For resource access inequality, the means score was as high as 4.0 indicating a digital difference between the numbers of urban student population and its rural counterpart.
- Time management was one of the significant issues facing rural learners, probably due to increased responsibilities brought about by family and job commitments.

Analysis of the data depicts the various intricate problems that face the learner while taking an online degree program. Among the top issues include technical challenges, self-control, inadequate social interaction, and proper time management. Learners from rural areas have deeper infrastructural barriers, while learners in cities usually have more engagement and motivation problems.

Findings from both the quantitative and qualitative analyses suggest that certain interventions are necessary to be addressed. Such interventions may include the improvement of infrastructure in rural settings, strengthening support systems for learners, and initiatives to increase interaction and participation in virtual learning environments.

5. Findings and Discussion

This section details the findings of the study related to the barriers that students face in using online degree programs. The analysis uses survey responses, interview insights, and a comparison between urban and rural demographics. The findings are used in conjunction with existing literature to better understand the challenges and how they impact online education. Survey results indicated that students experience a variety of difficulties with online degree adoption, with **technical challenges** being the most significant, followed by issues related to **time management, self-motivation, engagement, resource accessibility, and proficiency with technology**. Specifically, 75% of participants reported facing technical hurdles, which corresponds with Alqurashi's (2019) identification of unreliable internet and insufficient devices as primary obstacles in online learning. This is in agreement with the perspective that technical infrastructure remains a relevant issue, particularly in less developed regions and non-traditional students (Czerniewicz et al., 2020). In addition, the questionnaire identified that 70% of students struggle to self-motivate and be disciplined as well, aligned with Deci and Ryan's (1985) Self-Determination Theory, suggesting that intrinsic motivation is a very important factor for effective learning. The absence of a formal classroom environment often leads to procrastination and disengagement, a phenomenon Kuo et al. (2014) also attest to. The problem of time management, as identified by 72% of the respondents, is consistent with Kahu's (2013) findings on the pressure of juggling academic expectations with work and family responsibilities, which is one of the significant stressors for online students, particularly those who are working.

Qualitative interviews gave a deeper view of the experience of learners, uncovering psychological, emotional, and infrastructural problems that the surveys did not pick up. In the interviews, the most repeated theme was that of personal interactions, with 15 participants claiming to feel lonely. This goes in line with Hrastinski's (2009) conclusion that online educational environments lacking interaction usually lead to disengagement and reduced satisfaction. Many learners expressed a desire for increased face-to-face interaction to help build community and make learning experiences more engaging. Twelve respondents commented on infrastructure, specifically in the rural areas that have limited Internet connectivity and fewer available devices. According to Al-Fraihat et al. (2020), inadequate access to technology is the biggest barrier against online learning attempts. Beyond logistical concerns, many students report experiencing stress and anxiety and feelings of alienation from peers and instructors. Martin et al. (2020) have found similar evidence: many learners experience emotional distress in the context of online learning as a result of a lack of social support and the psychological pressures associated with balancing work and family and school responsibilities.

The analysis of urban and rural students indicated considerable discrepancies in the challenges faced by these two groups. Rural students reported greater technical challenges, with an average score of 4.5, while urban students scored 3.9 on average. This is supported by the research conducted by Czerniewicz et al. (2020), which established that the people in rural areas and disadvantaged districts commonly don't have the needed infrastructure to support effective online learning, for instance, the availability of stable internet connection and suitable devices. These findings find its explanation in the concept of digital divide by Van Deursen and Van Dijk (2014) what does not allow equal access to online learning resources. Furthermore, rural students indicated greater difficulties in accessing digital content, with an average score of 4.0. This corresponds with the work of Alqurashi (2019) and Sun and Rueda (2012), who remarked that learners in remote locations often encounter obstacles in obtaining quality educational materials and technical assistance. Such inequalities magnify the difficulties associated with online education in these areas.

The challenge of managing time effectively was also significantly greater for rural students, who scored 4.2 on this scale, meaning that they face more stressors in addition to family obligations and less support from the external environment. This is consistent with the findings of Kahu (2013), which emphasized the importance of time management for students balancing their many responsibilities, such as academic and personal commitments. Both urban and rural learners indicated problems with self-discipline and motivation, but rural students performed slightly better than their counterparts in urban areas, scoring 3.9 compared to 3.7. This could be attributed to the added distractions and responsibilities that rural learners face, especially the scarcity of academic support systems, according to Kuo et al. (2014).

6. Conclusion

This study emphasizes the complexity of problems that students face in trying to adopt online degree programs. These include technical breakdowns, self-motivation, effective time management, limited socialization, and insufficient access to learning resources. Self-report data from the questionnaire revealed that the highest number of technical problems occurs, especially for students in rural settings, which forms part of the findings by Alqurashi in 2019 and Czerniewicz et al. in 2020. Another key barrier recognized was self-motivation and self-discipline; this resonates with the Self-Determination Theory advanced by Deci and Ryan in 1985 and the views of Kuo et al. in 2014. Interviews also shed light on emotional and psychological issues, such as loneliness and pressure, which are barriers to learner engagement and satisfaction, in accordance with Hrastinski (2009) and Martin et al. (2020). The analysis contrasted the experiences of urban and rural learners, with a focus on the problems of the digital divide and challenges in time management, thus affirming the findings of Van Deursen & Van Dijk (2014) and Kahu (2013). To mitigate these obstacles, higher education institutions must prioritize the improvement of infrastructure, promotion of learner engagement, and establishment of personalized support systems to improve the online educational experience. This approach will help ensure that online learning is accessible and effective for all students, regardless of their geographical circumstances or economic background.

7. Future Directions

Future studies on the adoption of online degree programs should focus more on the examination of several factors that influence student performance, with an emphasis on socio-economic factors and how they impact access and participation. For instance, studies may examine the degree to which financial constraints and family responsibilities, especially in developing countries, prevent students from fully participating in online learning (Dhawan, 2020). Further, it would be beneficial to research how the integration of the latest technologies, like artificial intelligence and virtual reality, can increase student engagement and help solve the problems identified in this research, specifically in terms of interaction and engagement (Singh & Thurman, 2019).

Additional need includes longitudinal research studying learners' experience and outcome through a significant time span, enabling a deeper perspective on the sustained impacts of e-learning and on how the issues confronting learners are different at varied stages.

For example, further studies may examine the importance of institutional support structures, such as mentorship programs and training in digital literacy, to overcome challenges and increase student retention (Parkes et al., 2014). By examining which of these institutional interventions are more or less effective, scholars can create implementable suggestions for those who seek to improve their online educational delivery. Lastly, there is scope to expand this research to include the perspectives of instructors and employers, as their input is essential in defining the success of online degree programs and the broader context of online education adoption.

8. Limitations

This research offers vital perspectives on the challenges faced by students in online degree programs but has some limits that must be recognized. To begin with, there is a possibility that the sample is not adequately reflective of the scope of learners from various geographical and socio-economic backgrounds, especially in developing nations, due to only 150 people surveyed and 20 people interviewed. Because the

location of the study is urban and rural areas in India, the applicability of the findings may not be verified in other parts of the world. More extensive investigations might consider a varied sample in order to make the results relevant to a larger breadth of learner demographics. There are potential biases related to social desirability or memory recall, which have been mentioned by Krosnick and Presser in 2010. The influence of these biases may be minimized if the study includes objective data sources such as academic success metrics or institutional records together with the self-reported data.

Third, even though the design was a mixed-methods approach by combining surveys and interviews-a comprehensive view-the study may not capture learners' experiences in a very detailed and intricate way. Other studies could be of ethnographic type: participant observation or case studies can be used to gain deeper insight into what goes on in the learning processes of learners in online education environments.

Finally, even though this study focused on the barrier areas alone, it did not discuss strategies or coping mechanisms used by learners to overcome these challenges. Investigating these adaptive mechanisms may be able to shed light on real effective practices and strategies that improve the online learning experience. Addressing these gaps in future studies would complete the perspective of the landscape of online education.

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