ORIGINAL ARTICLE

Students' Lived Experience of Online Education Challenges in the Covid-19 Era

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ABSTRACT

The present study examines students' lived experience of the online education challenges in the Covid-19 era. The method is qualitative and field. The qualitative method used in the present study was Phenomenology. Participants included online learning students. Participants were sampled using purposive sampling with homogeneous sampling and a maximum diversity approach. This problem is continued until the theoretical saturation is reached. Finally, 14 interviews are conducted. The data collection tool is a semi-structured interview. Thematic analysis is used to analyze the data. The results showed that there are 5 main themes and 33 sub-themes. The results show that the online education challenges in the Covid-19 era included technical, managerial, Essential, cultural, and human challenges. In other words, paying attention to the identified challenges can pave the way for improving the online education situation in the Covid-19 era.

Keywords: schools, Covid-19, online education.

INTRODUCTION

The Covid-19 outbreak was reported on December 31, 2019, in Wuhan, China. The World Health Organization (WHO) called the virus the Covid-19 in 2020, which is similar to the SARS virus (between 2003 and 2002, leaving about 8,000 infections and 800 deaths) and the MERS virus (reported in 2012, causing about 2,500 infections and 800 deaths) (Cascella et al., 2020). The widespread virus has caused significant concerns worldwide (Wang et al., 2020, Dana et al. 2021). The high growth potential of this virus made it a pandemic and posed a severe threat to public health. Many countries have been infected, and the virus is spreading every day in many countries, regions, and cities (Ahani and Nilashi, 2020; Zhu and Liu, 2020).

Owing to economic, social, occupational, and psychological problems, the Covid-19 outbreak has disrupted people's lives. While disturbing industries, the virus has faced the world with significant economic, political, social, and cultural challenges (Rani, 2020). Although the problems caused by this virus are essential, the lack of proper information, training, and empowerment of people to deal with this virus has caused more human problems. Various organizations have pioneered in this field and, with proper and regular training and information, have been able to properly empower their audiences to deal with the virus (Michelsen et al., 2020). According to the World Health Organization, compliance with hygiene issues and some principles can play an essential role in reducing the risk of contracting the virus. On the other hand, empowering and increasing individuals' knowledge is a good solution in the current situation (Cascella et al., 2020).

Education is one of the areas affected by this virus. The spread of Covid-19 has made traditional and face-to-face training online (Ahmad et al., 2020; Qazi al., 2020; Dhawan, 2020). Online education is one of the fundamental changes in response to the outbreak of Covid-19 (Chen et al., 2020). The spread of online education has emerged as a compulsory activity in

most countries globally, and it is still ongoing (Bao, 2020). Online education has drastically reduced students' risks in the face of Covid-19 outbreaks (Ali, 2020). Covid-19 is transforming society in various areas, often creating social and economic inequalities (Rajab et al., 2020). To prevent the spread of the Covid-19, governments worldwide have suspended in-school education, affecting 95% of the world's student population. This issue can be named the most considerable disorder in the educational system in human history (Liquori and Winkler, 2020). The spread of Covid-19 was a new challenge in education that could create significant problems in this field (Chen et al., 2020). Although online education was considered necessary in the Covid-19 era, global investment in online education in 2019 reached \$ 18.66 billion, projected to reach \$ 350 billion by 2025 (Adnan And Anwar, 2020).

The Covid-19 has spread widely, Even though online education has been encouraged for many years (Mishra et al., 2020; Paudel, 2021). Students at all levels (college, high school, and elementary school) could not attend school during the Covid-19 era. Most schools have adopted online education to keep learning (Doyumgaç et al., 2021). Schools are an essential part of the infrastructure of communities whose environment for students to learn must be safe and supportive. Reports suggest that limited face-to-face education during the pandemic may negatively impact children's learning and the mental health of parents and children (Loki, 2021).

With the outbreak of the Covid-19 on the planet, human beings faced many restrictions, including holding meetings, especially those related to educational matters such as the classroom. This problem in Iran was one of the most critical problems and challenges facing the country's education system that teachers and university professors solved in cyberspace. They were able to turn this educational problem into an opportunity to provide materials to their students. (Karimizadeh et al., 2020). Although online education has been identified as an important issue

during the Covid-19 outbreak; However, comprehensive research, especially in Iran, has not examined the challenges of the Covid-19 outbreak. The research gap in this regard has led to no solutions to improve online education in Iran, especially in schools. On the other hand, the lack of comprehensive research in this regard has made the challenges in online education in the Covid-19 era in Iranian schools unclear. With this in mind, the study examines students' lived experience of the online education challenges in the Covid-19 era and seeks to answer the question: what are the online education challenges in the Covid-19 era?

METHODOLOGY

The study method was qualitative and field. The qualitative method used in the study was Phenomenology. Phenomenology studies the lived experiences of individuals, and it is believed that there are essences that can be understood and studied in these experiences. Participants included online courses students. Participants were sampled using purposive sampling with homogeneous sampling and a maximum diversity approach. This issue was continued until the theoretical saturation. Finally, 14 interviews were conducted in this regard.

The data collection tool was a semi-structured interview. Semi-structured interviews are one of the most common types of interviews used in qualitative research. This interview is placed between two structured and unstructured and sometimes called indepth interviews, where all respondents are asked the same questions, but they are free to give their answers in any way they wish. In this case, the researcher is responsible for encoding the answers and classifying them. Credibility, transferability, and Conformability were used to check the validity. For this purpose, the researcher used the approval of the research process by eight experts to check the credibility and used two coders to code several interview samples to ensure the same point of view of the coders. Also, three nonparticipant experts were consulted about the research findings to evaluate the transferability of the opinions. Also, all interviews were recorded and reviewed at the required times to check the Conformability. Specialized committees were used to evaluate the reliability. Thus, the members of this specialized committee were used for parallel coding of some interviews. Thematic analysis was used to analyze qualitative data, the most efficient qualitative data analysis method, especially in phenomenology research. The main and sub-themes of the research objectives were identified.

RESULTS

In this research, 5 main themes and 33 sub-themes were extracted, and explanations were provided.

The first main theme: Technical Challenges: Technical challenges address weaknesses in infrastructure, technology as well as equipment. These challenges include inadequate system design, information and communication technology weakness, demanding access to educational systems, insecurity of educational systems, hardware problems, power

outages, slow internet speed, and unequal internet access. Participant No. 2: "During the training, there were many power outages, and I was always worried about it. Participant No. 5:" I did not have the necessary facilities to attend my online classes. "Participant No. 1:" Systems design was complex. It could have been designed better and simpler so that we could use it without any difficulty. I don't think the system was designed for my age. "Participant 11:" The internet was very slow, and it kicked me out of the system. The internet speed of our region is a problem. I missed a lot of essential topics because of this problem." Figure 1 shows the identified technical challenges.

Technical Challenges

Inadequate System
Design, Weakness in
Information and
Communication
Technology, Demanding
Access to Educational
Systems, Insecurity of
Educational Systems,
Hardware Problems,
Power Outages, Slow
Internet Speed Unequal
Internet Access

Fig 1. Online education technical challenges

The second main theme: human challenges: Human challenges are related to human resources to use online education systems. These challenges include lack of talented human resources, reduced student motivation, reduced teacher commitment, technology literacy, lack of training courses, and inappropriate content creation of teachers. Participant No. 5: "What is expected of me when my teacher has difficulty entering the classroom?" Participant No. 10: "I do not have the motivation to attend online classes. At first, it was good, and I was motivated, and I feel happy that it has become easier for me to go to school, but then I was no longer interested in online classes." Participant No. 2: " correctly and practically, we were not told once how to attend and exit the class. It was true that a few helpful files were specified, but we did not see a complete and comprehensive tutorial." Figure 2 shows identified human challenges.

Human Challenges

Lack of Talented
Human Resources,
Reduced Student
Motivation, Reduced
Teacher Commitment,
Low Technology
Literacy of Teachers,
Lack of Training
Courses,
Inappropriate Content
Creation of Teachers

Fig 2. Online education human challenges

The third main theme: managerial challenges: Managerial challenges address the lack of proper and equitable distribution of resources, infrastructure, and technology. These challenges include lack of justice in the distribution of resources, lack of oversight of the online education process, and lack of public access to education systems. Participant No. 12: "When I see that my relatives in another city have more opportunities to use the education system, well, I'm upset. I think there is a big difference in using online classes in different regions and cities." Participant No. 7: " many times I did not have access to the system and classes and I could not participate and no one was following my work. Of course, some of my friends used these systems and classes at the same time." Figure 3; Shows identified Managerial challenges.

Managerial Challenges

Lack of Justice in the Distribution of Resources, Lack of Oversight of the Online Education Process, and Lack of Public Access to Education Systems

Fig 3. Online education managerial challenges

The fourth main theme: Essential Challenges: These essential challenges address problems with the online training courses themselves. These challenges include unattractive systems, differences in teachers' teaching methods, lack of accurate evaluation, lack of competitiveness in online education, demanding learning, negative publicity about educational systems, lack of two-way communication, lack of coverage of subjects, lack of suitable content, and uncertain classroom privacy. Participant No. 9: "I have no motivation to compete with my other friends in the classroom. When I was present in the physical classroom, there was competition, and I was more hesitant. But now I see that there is no competition at all that I want to increase my efforts." Participant No. 4: "I still do not understand the framework and standards of the class. I did not feel the class in the true sense." Participant No. 7: "Online classes were not appealing to me. Schools provided no good entertainment during online classes." Figure 4; Shows identified Essential challenges.

The Fifth main theme: Cultural challenges: Cultural issues are of great importance for promoting the interest and commitment of students and teachers to online education. Today, the lack of cultural aspects has created cultural challenges for online education. These challenges include lack of belief in online

education, fear of using the system, the conflict between students and teachers, low concentration, mental confusion of students and teachers, and lack of a culture of using educational systems. Participant No. 12: "I'm not used to online courses. Because we've always been in the classroom; I'm not used to these systems and classes yet." Participant No. 5: "I'm still scared of online classes. I'm all stressed that the system and the class become terminated." Participant No. 11: "I do not have enough focus to attend online classes." Figure 5; Shows identified cultural challenges.

Essential Challenges

Unattractive Systems,
Differences in Teachers'
Teaching Methods, Lack of
Accurate Evaluation, Lack of
Competitiveness in Online
Education, Demanding
Learning, Negative Publicity
about Educational Systems,
Lack of Two-Way
Communication, Lack of
Coverage of Subjects, Lack
of Suitable Content,
Uncertain Classroom Privacy

Fig 5. Online education Essential challenges

Cultural Challenges

Disbelief in Online
Education, Fear of
Using the System,
Conflict Between
Students and Teachers,
Low Concentration of
Students, Mental
Confusion of Students
and Teachers and Lack
of Culture of Using
Educational Systems

Fig 6. Online education cultural challenges

DISCUSSION AND CONCLUSION

Due to respiratory disease caused by Covid-19, Many countries have suspended all types of face-to-face activities, including face-to-face training. Covid-19 has forced many changes in most areas of life to meet responses to pandemic control measures, and the education sector was no exception. In many countries, colleges, high schools, and elementary schools have adopted online education strategies during the pandemic. As a result, teachers and students were forced to change their teaching methods quickly,

regardless of whether they were experienced and ready in online education, leading to online education. The study examined students 'lived experience of the online education challenges during the Covid-19 era and sought to identify the online education challenges according to students' opinions and views in this regard.

In this research, 5 main themes (technical challenges, managerial challenges, Essential challenges, human challenges, and cultural challenges) and 33 sub-themes were extracted. Technical challenges include inadequate system design, information and communication technology weakness, demanding access to educational systems, insecurity of educational systems, hardware problems, power outages, slow internet speed, and unequal internet access. Human challenges include lack of talented human resources, reduced student motivation, reduced teacher commitment, low technology literacy, lack of training courses, and inappropriate content creation of teachers. On the other hand, managerial challenges include a lack of justice in distributing resources, a lack of oversight of the online education process, and a lack of public access to education systems. Also, essential challenges include unattractive systems, differences in teachers' teaching methods, lack of accurate evaluation, lack of competitiveness in online education, demanding learning, negative publicity educational systems, lack of two-way communication. lack of coverage of subjects, lack of suitable content and uncertain classroom privacy. Finally, cultural challenges include disbelief in online education, fear of using the system, the conflict between students and teachers, low concentration of students, mental confusion of students and teachers, and lack of a culture of using educational systems.

Watermeyer et al. (2020) noted that online education had disrupted performance, educational roles, and personal life. Loima (2020) also examines the policies and arguments of online education in Sweden and Finland during the Covid-19 era; They found that Swedish and Finnish politics partially concealed instructions and information about the effectiveness of online courses, but evidence showed that these courses were successful. Studies and online education models have been promoted in academic settings for years (Sun and Chen, 2016, Dana et al. 2019). Before the Covid-19, Most of these studies focused on universities, while teachers and students in primary and secondary schools did not have enough information about online education and did not even experience it (Listari and Dhawan, 2020). Taiwan, for example, has been promoting digital certification for vears and universities also support teachers in recording e-learning materials. Thus, university professors have more experience in online education (Mishra et al., 2020; Paudel, 2021).

However, online education plays only a complementary role in primary and secondary schools. The education model before the pandemic is for students to go to class. Thus, teachers in primary and secondary schools do not have enough experience to turn to online education (Lockee, 2021). This has

created challenges in this regard. It seems that the management of the identified challenges has a vital role in improving online education in Iranian schools. According to the present study results, it is suggested that the situation of online education in Iranian schools may be enhanced by creating evaluation and monitoring systems for online training courses. Also, according to the present study results, it is suggested to create guidelines and management and curriculum standards and provide conditions for training courses to achieve these standards and conditions.

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