



Distance Learning in Higher Education During Covid-19

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Masalimova AR, Khvatova MA, Chikileva LS, Zvyagintseva EP, Stepanova VV and Melnik MV (2022) Distance Learning in Higher Education During Covid-19. Front. Educ. 7:822958. doi: 10.3389/feduc.2022.822958 COVID-19's pandemic has hastened the expansion of online learning across all levels of education. Countries have pushed to expand their use of distant education and make it mandatory in view of the danger of being unable to resume face-to-face education. The most frequently reported disadvantages are technological challenges and the resulting inability to open the system. Prior to the pandemic, interest in distance learning was burgeoning, as it was a unique style of instruction. The mini-review aims to ascertain students' attitudes about distant learning during COVID-19. To accomplish the objective, articles were retrieved from the ERIC database. We utilize the search phrases "Distance learning" AND "University" AND "COVID." We compiled a list of 139 articles. We chose papers with "full text" and "peer reviewed only" sections. Following the exclusion, 58 articles persisted. Then, using content analysis, publications relating to students' perspectives on distance learning were identified. There were 27 articles in the final list. Students' perspectives on distant education are classified into four categories: perception and attitudes, advantages of distance learning, disadvantages of distance learning, and challenges for distance learning. In all studies, due of pandemic constraints, online data gathering methods were selected. Surveys and questionnaires were utilized as data collection tools. When students are asked to compare face-toface and online learning techniques, they assert that online learning has the potential to compensate for any limitations caused by pandemic conditions. Students' perspectives and degrees of satisfaction range widely, from good to negative. Distance learning is advantageous since it allows for learning at any time and from any location. Distance education benefits both accomplishment and learning. Staying at home is safer and less stressful for students during pandemics. Distance education contributes to a variety of physical and psychological health concerns, including fear, anxiety, stress, and attention problems. Many schools lack enough infrastructure as a result of the pandemic's rapid transition to online schooling. Future researchers can study what kind of online education methods could be used to eliminate student concerns.

Keywords: ICT, distance learning, COVID-19, higher education, online learning

1

INTRODUCTION

The pandemic of COVID-19 has accelerated the spread of online learning at all stages of education, from kindergarten to higher education. Prior to the epidemic, several colleges offered online education. However, as a result of the epidemic, several governments discontinued face-to-face schooling in favor of compulsory distance education.

The COVID-19 problem had a detrimental effect on the world's educational system. As a result, educational institutions around the world developed a new technique for delivering instructional programs (Graham et al., 2020; Akhmadieva et al., 2021; Gaba et al., 2021; Insorio and Macandog, 2022; Tal et al., 2022). Distance education has been the sole choice in the majority of countries throughout this period, and these countries have sought to increase their use of distance education and make it mandatory in light of the risk of not being able to restart face-to-face schooling (Falode et al., 2021; Valeeva and Kalimullin, 2021; Zagkos et al., 2022).

What Is Distance Learning

Britannica defines distance learning as "form of education in which the main elements include physical separation of teachers and students during instruction and the use of various technologies to facilitate student-teacher and studentstudent communication" (Simonson and Berg, 2016). The subject of distant learning has been studied extensively in the fields of pedagogics and psychology for quite some time (Palatovska et al., 2021).

The primary distinction is that early in the history of distant education, the majority of interactions between professors and students were asynchronous. With the advent of the Internet, synchronous work prospects expanded to include anything from chat rooms to videoconferencing services. Additionally, asynchronous material exchange was substantially relocated to digital settings and communication channels (Virtič et al., 2021).

Distance learning is a fundamentally different way to communication as well as a different learning framework. An instructor may not meet with pupils in live broadcasts at all in distance learning, but merely follow them in a chat if required (Bozkurt and Sharma, 2020). Audio podcasts, films, numerous simulators, and online quizzes are just a few of the technological tools available for distance learning. The major aspect of distance learning, on the other hand, is the detailed tracking of a student's performance, which helps to develop his or her own trajectory. While online learning attempts to replicate classroom learning methods, distant learning employs a computer game format, with new levels available only after the previous ones have been completed (Bakhov et al., 2021).

In recent years, increased attention has been placed on eLearning in educational institutions because to the numerous benefits that have been discovered via study. These advantages include the absence of physical and temporal limits, the ease of accessing material and scheduling flexibility, as well as the cost-effectiveness of the solution. A number of other studies have demonstrated that eLearning is beneficial to both student gains and student performance. However, in order to achieve the optimum results from eLearning, students must be actively participating in the learning process — a notion that is commonly referred to as active learning — throughout the whole process (Aldossary, 2021; Altun et al., 2021).

The most commonly mentioned negatives include technological difficulties and the inability to open the system as a result, low teaching quality, inability to teach applicable disciplines, and a lack of courses, contact, communication, and internet (Altun et al., 2021). Also, misuse of technology, adaptation of successful technology-based training to effective teaching methods, and bad practices in managing the assessment and evaluation process of learning are all downsides of distance learning (Debeş, 2021).

Distance Learning in a Pandemic Context

The epidemic forced schools, colleges, and institutions throughout the world to close their doors so that students might practice social isolation (Toquero, 2020). Prior to the pandemic, demand for distance learning was nascent, as it was a novel mode of education, the benefits and quality of which were difficult to judge due to a dearth of statistics. But, in 2020, humanity faced a coronavirus pandemic, which accelerated the shift to distant learning to the point that it became the only viable mode of education and communication (Viktoria and Aida, 2020). Due to the advancements in digital technology, educators and lecturers have been obliged to use E-learning platforms (Benadla and Hadji, 2021).

In remote education settings for higher education, activities are often divided into synchronous course sessions and asynchronous activities and tasks. In synchronous courses, learners participate in interactive and targeted experiences that help them develop a fundamental grasp of technology-enhanced education, course design, and successful online instruction. Asynchronous activities and tasks, on the other hand, include tests, group work assignments, group discussion, feedback, and projects. Additionally, asynchronous activities and tasks are carried out via interactive video-based activities, facilitator meetings, live webinars, and keynote speakers (Debeş, 2021).

According to Lamanauskas and Makarskaitė-Petkevičienė (2021), ICT should be attractive for learners. Additionally, student satisfaction with ODL has a statistically significant effect on their future choices for online learning (Virtič et al., 2021). According to Avsheniuk et al. (2021), the majority of research is undertaken to categorize students' views and attitudes about online learning during the COVID-19 epidemic are uncommon and few. There is presently a dearth of research on the impact on students when schools are forced to close abruptly and indefinitely and transition to online learning communities (Unger and Meiran, 2020). So that, the mini-review is aimed to examining the students' views on using distance learning during COVID-19.

TABLE 1 Countries and data collection tools

Author(s)	Countries	Data collection tools
Abrosimova, 2020	Russia	Questionnaire
Adnan and Anwar, 2020	Pakistan	Survey
Akcil and Bastas, 2021	Cyprus	Attitudes Scale
Aldossary, 2021	Saudi Arabia	Questionnaire
Altun et al., 2021	Turkey	Evaluation form
Avsheniuk et al., 2021	Ukraine	Questionnaire
Bakhov et al., 2021	Ukraine	Survey
Beltekin and Kuyulu, 2020	Turkey	Survey
Benadla and Hadji, 2021	Algeria	Questionnaire
Bozavlı, 2021	Turkey	Questionnaire
Didenko et al., 2021	Ukraine	Questionnaire
Glebov et al., 2021	Russia	Survey
Gonçalves et al., 2020	Portugal	Survey
Kaisar and Chowdhury, 2020	Bangladesh	Survey
Lamanauskas and Makarskaitė-Petkevičienė, 2021	Lithuania	Open questions
Lassoued et al., 2020	Algerian, Egyptian, Palestinian, Iraqi	Questionnaire
Lin and Gao, 2020	China	Survey
Martha et al., 2021	Indonesia	Questionnaire
Mathew and Chung, 2020	Malaysia	Questionnaire
Nenakhova, 2021	Russia	Questionnaire, interviev
Önöral and	Cyprus	Yes-No questions
Kurtulmus-Yilmaz, 2020		
Şahin, 2021	Turkey	Interview
Taşkaya, 2021	Turkey	Questionnaire
Todri et al., 2021	Albanians, Italians, Moroccans, Algerians North African	Survey
Unger and Meiran, 2020	United States	Survey
Viktoria and Aida, 2020	Japanese, Russian	Survey
Yurdal et al., 2021	Turkey	Survey

In order to perform the aim, the articles were searched through ERIC database. We use "Distance learning" AND "University" AND "COVID" as search terms. We obtained 139 articles. We selected "full text" and "Peer reviewed only" articles. After the exclusion, 58 articles endured. Then content analyses were used to determine articles related to students' voices about distance learning. In the final list, there were 27 articles (**Table 1**).

In the study, a qualitative approach and content analyses were preferred. Firstly, the findings related to students' attitudes and opinions on distance learning were determined. The research team read selected sections independently. Researchers have come to a consensus on the themes of perception and attitudes, advantages of distance learning, disadvantages of distance learning, and challenges for distance learning. It was decided which study would be included in which theme/s. Finally, the findings were synthesized under themes.

Only 3 studies (Lassoued et al., 2020; Viktoria and Aida, 2020; Todri et al., 2021) were conducted to cover more than

one country. Other studies include only one country. Surveys and questionnaires were mostly used as measurement tools in the study. Due to pandemic restrictions, online data collection approaches were preferred in the data collection process.

Students' views on distance learning are grouped under four themes. These themes are perception and attitudes, advantages of distance learning, disadvantages of distance learning, and challenges for distance learning.

Perception and Attitudes Toward Distance Learning

Students' attitudes toward distance learning differ according to the studies. In some studies (Mathew and Chung, 2020; Avsheniuk et al., 2021), it is stated that especially the students' attitudes are positive, while in some studies (Bozavh, 2021; Yurdal et al., 2021) it is clearly stated that their attitudes are negative. In addition, there are also studies (Akcil and Bastas, 2021) that indicate that students' attitudes are at a moderate level. The transition to distance learning has been a source of anxiety for some students (Unger and Meiran, 2020).

When the students' satisfaction levels are analyzed, it is obvious from the research (Gonçalves et al., 2020; Avsheniuk et al., 2021; Bakhov et al., 2021; Glebov et al., 2021; Todri et al., 2021) that the students' satisfaction levels are high. In some studies, it is pronounced that the general satisfaction level of the participants is moderate (Viktoria and Aida, 2020; Aldossary, 2021; Didenko et al., 2021) and low (Taşkaya, 2021).

When students compare face-to-face and online learning methods, they state that online learning has opportunities to compensate for their deficiencies due to the pandemic conditions (Abrosimova, 2020) and but they prefer face-to-face learning (Gonçalves et al., 2020; Kaisar and Chowdhury, 2020; Bakhov et al., 2021). Distance learning is not sufficiently motivating (Altun et al., 2021; Bozavlı, 2021), effective (Beltekin and Kuyulu, 2020; Bozavlı, 2021), and does not have a contribution to students' knowledge (Taşkaya, 2021). Distance education cannot be used in place of face-to-face instruction (Aldossary, 2021; Altun et al., 2021).

Advantages of Distance Learning

It is mostly cited advantages that distance learning has a positive effect on achievement and learning (Gonçalves et al., 2020; Lin and Gao, 2020; Aldossary, 2021; Altun et al., 2021; Şahin, 2021). In addition, in distance learning, students can have more resources and reuse resources such as re-watching video (Önöral and Kurtulmus-Yilmaz, 2020; Lamanauskas and Makarskaitė-Petkevičienė, 2021; Martha et al., 2021).

Distance learning for the reason any time and everywhere learning (Adnan and Anwar, 2020; Lamanauskas and Makarskaitė-Petkevičienė, 2021; Todri et al., 2021). There is no need to spend money on transportation to and from the institution (Lamanauskas and Makarskaitė-Petkevičienė, 2021; Nenakhova, 2021). Also, staying at home is safe during pandemics and less stressful for students (Lamanauskas and Makarskaitė-Petkevičienė, 2021).

Challenges and Disadvantages of Distance Learning

Distance learning cannot guarantee effective learning, the persistence of learning, or success (Altun et al., 2021; Benadla and Hadji, 2021). Students state that they have more works, tasks, and study loads in the distance learning process (Mathew and Chung, 2020; Bakhov et al., 2021; Didenko et al., 2021; Nenakhova, 2021). Group working and socialization difficulties are experienced in distance learning (Adnan and Anwar, 2020; Bozavlı, 2021; Lamanauskas and Makarskaité-Petkevičienė, 2021). The absence of communication and face-to-face interaction is seen a disadvantage (Didenko et al., 2021; Nenakhova, 2021).

It is difficult to keep attention on the computer screen for a long time, so distance-learning negatively affects concentration (Bakhov et al., 2021; Lamanauskas and Makarskaitė-Petkevičienė, 2021). In addition, distance education prompts some physical and psychological health problems (Kaisar and Chowdhury, 2020; Taşkaya, 2021).

Devices and internet connection, technical problems are mainly stated as challenges for distance learning (Abrosimova, 2020; Adnan and Anwar, 2020; Mathew and Chung, 2020; Bakhov et al., 2021; Benadla and Hadji, 2021; Didenko et al., 2021; Lamanauskas and Makarskaitè-Petkevičienė, 2021; Nenakhova, 2021; Taşkaya, 2021; Şahin, 2021). In addition, some students have difficulties in finding a quiet and suitable environment where they can follow distance education courses (Taşkaya, 2021). It is a disadvantage that students have not the knowledge and skills to use the technological tools used in distance education (Lassoued et al., 2020; Bakhov et al., 2021; Didenko et al., 2021).

DISCUSSION

The purpose of this study is to ascertain university students' perceptions about distant education during COVID-19. The study's findings are intended to give context for developers of distant curriculum and higher education institutions.

According to Toquero (2020), academic institutions have an increased need to enhance their curricula, and the incorporation of innovative teaching methods and tactics should be a priority. COVID-19's lockout has shown the reality of higher education's current state: Progressive universities operating in the twenty-first century did not appear to be prepared to implement digital teaching and learning tools; existing online learning platforms were not universal solutions; teaching staff were not prepared to teach remotely; their understanding of online teaching was sometimes limited to sending handbooks, slides, sample tasks, and assignments to students via email and setting deadlines for submission of completed tasks (Didenko et al., 2021).

It is a key factor that student satisfaction to identify the influencers that emerged in online higher education settings (Parahoo et al., 2016). Also, there was a significant positive relationship between online learning, social presence and satisfaction with online courses (Stankovska et al., 2021). According to the findings, the attitudes and satisfaction levels of

the students differ according to the studies and vary in a wide range from positive to negative attitudes.

According to the study's findings, students responded that while online learning is beneficial for compensating for deficiencies during the pandemic, they would prefer face-to-face education in the future. This is a significant outcome for institutions. It is not desirable for all students to take their courses entirely online. According to Samat et al. (2020), the one-size-fits-all approach to ODL implementation is inapplicable since it not only impedes the flow of information delivery inside the virtual classroom, but it also has an impact on psychological well-being because users are prone to become disturbed.

In distance learning, students can have more resources and reuse resources such as re-watching videos. So, distance learning has a positive effect on achievement and learning. Alghamdi (2021) stated that over the last two decades, research on the influence of technology on students' academic success has revealed a range of good and negative impacts and relationships, as well as zero effects and relationship.

The result also shows that distance education prompts some physical and psychological health problems. Due to the difficulty of maintaining focus on a computer screen for an extended period of time, remote education has a detrimental effect on concentration. There is some evidence that students are fearful of online learning in compared to more traditional, or in-person, in-class learning environments, as well as media representations of emergencies (Müller-Seitz and Macpherson, 2014).

Unsatisfactory equipment and internet connection, technical difficulties, and a lack of expertise about remote learning technology are frequently cited as distance learning issues. Due to the pandemic's quick move to online education, many schools have an insufficient infrastructure. Infrastructure deficiency is more evident in fields that require laboratory work such as engineering (Andrzej, 2020) and medicine (Yurdal et al., 2021).

Conclusion and Recommendation

To sum up, students' opinions and levels of satisfaction vary significantly, ranging from positive to negative. Distance learning for the reason any time and everywhere learning. Distance learning has a positive effect on achievement and learning. Staying at home is safe during pandemics and less stressful for students. Distance education prompts some physical and psychological health problems such as fear, anxiety, stress, and losing concentration. Due to the pandemic's quick move to online education, many schools have an insufficient infrastructure. Future researchers can investigate what distance education models can be that will eliminate the complaints of students. Students' positive attitudes and levels of satisfaction with their distant education programs have an impact on their ability to profit from the program. Consequently, schools wishing to implement distant education should begin by developing a structure, content, and pedagogical approach that would improve the satisfaction of their students. According to the findings of the study, there is no universally applicable magic formula since student satisfaction differs depending on the country, course content, and external factors.

AUTHOR CONTRIBUTIONS

All authors listed have made a substantial, direct, and intellectual contribution to the work, and approved it for publication.

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