


Article

An Exploratory Study of the Obstacles for Achieving Quality in Distance Learning during the COVID-19 Pandemic

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Abstract: This study aims to reveal the obstacles to achieving quality in distance learning during the Coronavirus (COVID-19) pandemic and was based on a large sample of professors and students of universities in the Arab world (Algerian, Egyptian, Palestinian, and Iraqi). The primary aim of this research was to investigate the various ways in which students pursued their studies at home during the university suspension as a result of COVID-19. In this paper, the researchers use an exploratory descriptive approach through a questionnaire with a conveniently selected sample of 400 professors and student's returns out of 600 were distributed. The results indicate that the professors and students faced self-imposed obstacles, as well as pedagogical, technical, and financial or organizational obstacles. Recommendations are presented to overcome and understand these obstacles to benefit in the future during unexpected or similar problems.

Keywords: learning barriers obstacles; quality; distance learning; COVID-19 pandemic; questionnaire; professors and students

1. Introduction

Since the World Health Organization declared COVID-19 a pandemic, educators have been forced to shift to online teaching through e-learning systems [1,2]. Al-Araini [3] indicated that distance education is being rapidly adopted, unparalleled in the field of higher education all over the world, bypassing obstacles, problems, and difficulties. Today, higher education institutions face several demands imposed on them by successive scientific and technological developments.

These institutions, despite the limited capabilities and resources available to them, face an increasing demand for higher education and upgrade to the levels of efficiency, effectiveness, and quality, which is not limited to traditional teaching within the classroom.

Higher education institutions must take advantage of developments in communication technology and use them to provide their curricula to those who wish to continue their higher education anytime, anywhere [4]. Sabah [5] summarized the transformations that higher education should undertake to fit with scientific developments, the most prominent of which are the shift from rigidity to flexibility, from the minimum to mastery and quality, from ruminating on information to creativity and innovation, and from limited education to lifelong learning.

The social and technological developments have been accompanied by changes in the field of education, including higher education. Research in the field has documented adaptation and impacts of Information Communication Technologies (ICTs) in higher education over the past three decades,

as well as speculating on future trends. Of particular relevance to higher education institutions in the Arab world is how ICTs and other types of educational technologies may relate to the challenges of massification, since demographic pressures remain high in most Arab countries e.g., Algerian, Egyptian, Palestinian, and Iraqi.

In this regard, Al-Far has referred to future prospects and the form of educational institutions, whereby the role of the university professor at universities and other higher education institutions will diminish, with their role limited to counseling taking place at the level of the group or the individual. The students instead will spend time at the computer using the internet to obtain information from various universities [6].

Efforts and initiatives in the field of integrating technology in the university education and institutions, starting with management, acceptance, and registration processes, and transforming traditional distance education (messaging, radio, and television systems) into electronic or virtual learning on the internet, have led to the emergence of the phenomena of e-Universities and Virtual Universities [7].

To face these challenges and the increasing social demand for higher education, voices have emerged in the Arab world calling for the necessity of introducing methods of distance education and stimulating open education [8]. Distance education is an effective, targeted, and important means of obtaining knowledge and discoveries at the time of their occurrence, to keep pace with the changes of this age and keep pace with its developments at the same time. Societies that do not use the latest methods, capabilities, and methods of distance education have become underdeveloped, and it is difficult for them to coexist in the information era [9].

The philosophy of distance education is based on learner's independence theory, with the least necessary face-to-face interaction with the teacher, and the largest possible amount of individual learning materials, specially produced to simplify learning without contact with the teacher. These include a high degree of quality that is sent using media which permits both individual and group learning with as many learners as possible [10].

Distance education offers educational opportunities for those whose circumstances do not enable them to join formal university education, as teachers and learners are physically separated and interact through modern means of communication [11]. Amidst this deadly pandemic, online platforms, such as video conferencing, online discussions, and free lecture access, are needed.

Internet connections must be good, where instant feedback from students can be achieved and can be used as an alternative to face-to-face classes [12]. Adapting to an online teaching system under crisis is the biggest challenge for teaching and learning solutions that can be made by the institutions to help deal with the pandemic [13].

The Palestinians were the first to establish a university for distance education in the Arab world, Al-Quds Open University. Other Arab initiatives were subsequently announced, including the Open University in Tripoli in Libya, which has many branches in Libyan cities; the University of Continuing Training in Algeria; and the virtual university in Syria. In addition to Egypt's experience in using distance education to train teachers during service, there are preliminary projects for distance education in Yemen, Morocco, Lebanon, and other Arab countries [8].

Some believe that new technologies in developing countries will remain far from the target groups in distance education for many years [14]. Today, with the emergence of the COVID-19 pandemic, governments have been forced to close educational institutions, depriving 89% of learners (i.e., more than 1.5 billion people) in 188 countries from accessing educational institutions [15]. Arab universities are endeavoring to revive the distance education system to continue to provide educational activities for students.

This sudden shift to distance education in an emergency has led to shock and tension among students and faculty members, whether on a personal or professional level, as the process requires extra efforts, in addition to several unusual obstacles for schools and universities such as a lack of time, poor infrastructure, and inadequate digital content [16]. Reliability and the sufficient availability of

technology infrastructure, such as learning tools and digital learning resources in the form of online courses, e-books, and e-notes, are of utmost importance in such a critical situation [17].

Many important parameters that must be considered in adapting to e-learning are instruction, content, motivation, relationships, and mental health, which the educator and the receiver must keep in mind while participating in the system [18]. George [19] in his recent research was concerned about student feedback on distance learning and highlighted the key benefits gained by students for learning during the COVID-19 pandemic. The teaching system in this study was feasible and can be adopted for the lecturing even if not in a pandemic.

Girik [20] investigated perceptions of online learning during the COVID-19 pandemic and the implementation of an online learning system, in which the learners wanted material and assignments to be preceded by explanations, and recommended the use of special media such as Voice Note. His study not only reported that online learning is suitable during the COVID-19 pandemic, but also shed light on the issues of availability of internet access (free), financial issues, and other online learning applications [20].

1.1. Objectives

The present study aims to explore the obstacles to distance learning, from the specific point of view of professors and students in some Arab universities, to benefit those involved in the educational process in the prevention of these obstacles and the success of the distance learning process. Also, to raise questions about the obstacles to achieving high quality in distance learning from the point of view of faculty members of some Arab universities and their students.

This study seeks to:

1. Explore the obstacles faced by Arab university professors and students in achieving quality in distance learning during the COVID-19 pandemic, and understand how these obstacles can be limited from their point of view.
2. Classification and arrangement of these obstacles.
3. Determining the differences in the identified obstacles to achieving quality in distance learning during the COVID-19 pandemic between teachers and students.
4. Presenting some suggestions to overcome these obstacles.

1.2. The Major Questions of This Study

This study's importance stems from the fact that most universities (e.g., Arab universities) have adopted a system of distance education as an alternative to traditional education during the ongoing COVID-19 pandemic, to enable them to complete the lessons and educational activities remaining until the end of the academic year. This situation needs to be investigated to help universities diagnose their status, learn about the difficulties and obstacles that have prevented their success, and find possible solutions to reduce these obstacles.

The main research questions are as follows:

1. What are the obstacles to achieving quality in distance learning during the COVID-19 pandemic from the viewpoint of university professors and their students?
2. In their view, what is the arrangement of these obstacles?
3. Do the obstacles mentioned to achieving quality in distance learning in light of the COVID-19 pandemic differ between teachers and students?

1.3. Importance of This Study

This study seeks to diagnose the reality of distance learning in Arab universities during the COVID-19 pandemic, relying on the opinions of university faculty members and students, as distance learning is a recent trend in many universities. It also reflects the importance of modern technology

and its use in Arab universities that have adopted the system of distance learning to provide university education to the largest number of beneficiaries. The final stage is to come up with results that may help to improve the current use and development of distance education in the Arab region and elsewhere.

1.4. *The Limitation of the Study*

A large sample was collected after the distribution of questionnaires among a convenient selection of professors and students from different universities as described below:

- Regions: The study included Algerian, Egyptian, Palestinian, and Iraqi universities.
- Period: The study was conducted during April and May 2020.
- Samples: The study included university professors and students.

2. Theoretical Framework and Exploratory Procedures

2.1. *Distance Learning*

2.1.1. The Concept of Distance Learning

During the COVID-19 pandemic, online education has increased and now makes up a much larger percentage at many universities in China, including overnight shifts of normal classrooms into e-classrooms and adapting to the changing situation [21]. Distance education is an approach to education, not an educational philosophy. That is, students can learn according to what their time allows and in the place that they choose (at home, in the workplace, or in an educational center), and without direct contact with the professor. Hence, technology is an important element in distance education [13].

Distance learning is defined by Holmberg [22] as “a term that includes all methods of study and all levels of education that do not enjoy direct and continuous supervision by teachers attend with their students in traditional classrooms, but the education process is subject to planning, organization, and directed by an educational institution and teachers” [23]. Distance learning is interactive learning between a teacher and a student that takes place outside the walls of the educational institution, so that information and knowledge from its sources reaches the student through technical means and electronic media.

The American Association for Distance Learning (USDLA) defines distance learning as “the process of acquiring knowledge and skills through a variety of media for the transfer of education and information, including all types of technology and various forms of education level for distance learning” [24].

Accordingly, distance learning is an educational situation that requires communication between the teacher and the student through multiple media, like publications, and educational media via modern audio-visual communication technologies. Online learning also can be defined as learning experiences in synchronous or asynchronous environments through different devices and instruments (e.g., mobile phones, tablets, laptops). With internet access, students can be anywhere while they learn and interact with instructors and share their ideas with colleagues [25].

Quality in distance learning is a set of procedures and guidelines established by an educational institution to guide it to manage the organization of its work and providing its services. It requires producing various educational materials, the use of multiple media and activities related to the needs of students, and assessing the needs of the labor market in a way that is compatible with the outputs of the educational process [26].

Obstacles to achieving quality in distance learning are some of the factors that prevent the achievement of quality in the educational learning process according to the distance learning system during the COVID-19 pandemic, which is defined by the professors and students of some Arab universities.

2.1.2. The Distance Learning System

Although focus today lies on distance learning in higher education enabled by the present digital technologies, considering earlier forms of distance learning provides perspectives both on the historical rationales of such education, and suggestions on alternative forms.

Distance learning was historically largely organized to address the needs of adult learners who could not take years away from their professional lives for full time studies at a university. The cost of education was significant for such learners, and for adult learners with families, moving to another town was not always an option. Other reasons for distance education were the need to serve distant rural locations, and in other cases this format was motivated by colonial projects, aiming to gain influence over populations across the world.

The beginning of distance learning as a form of continuous higher education was established in the mid-nineteenth century. A royal agreement for the examination of students studying by correspondence at the University of London was issued in 1896, and in 1858 the university granted degrees to students without the need to attend, followed by other universities. St Andrews University in Scotland had more than a hundred centers around the world in 1877–1931, such as in China and Kenya. The University of South Africa was the first university to introduce an entire distance education system in 1946, and the French National Distance Learning Center (CNED) was established in 1939 [27].

Forms of distance education have become more varied with modern-day technological developments, starting with education by correspondence; then education on radio and television; the use of audio and audiovisual media; the use of the educational phone, interactive video, and the educational computer; to the internet and the progress achieved in the field of education from a distance. The introduction of digital libraries and information systems helped the development of education from its collective form (within the classroom) to the individualization of education and has highlighted the importance of distance learning.

2.1.3. Characteristics of the Distance Learning System

According to Jawda et al. [7], distance learning is considered as a new method of education for so many people, as it adopts methods that are different from those used in the traditional education system. There are many methods used to convey information to learners, instead of relying on one source, as is the case in traditional education e.g., flexibility in acceptance and learning, as the learner can receive his education at anytime, anywhere and expenditure savings, as this type of education is less expensive than other education systems [7].

Among the major disadvantages of ICT-mediated distance learning is about distance learning system that lacks direct interaction and communication between the teacher and the learner, which is currently deficient in providing humanitarian and social expression, and it is unable to provide real expression. The flexibility shown by this system and its acceptance of low grades as a basis in the system is a weak point when compared to the traditional system [7].

Moreover, Jawida et al. [28] added several obstacles that hinder distance learning e.g., staffing shortages and the need for training in the use of the internet by teachers and students and lack of technological infrastructure at universities. Other important points are those related to students where they are living such as the need for access to the safe internet and high-quality-speed internet and specifications, which leads to quickly access data and information. Hence, this leads to secure exchange between the network user and internet service provider specifically during electronic exams (online exam or test) [28].

2.2. Corona Virus Pandemic

2.2.1. Coronavirus

Coronaviruses are a wide range of viruses that may cause disease in animals and humans. It is known that a number of coronaviruses cause human respiratory diseases, the severity of which ranges

from common colds to more severe diseases, especially such as the Middle East Respiratory Syndrome (MERS), and Severe Acute Respiratory Syndrome (SARS), and the newly discovered Coronavirus causes Covid-19 disease [1].

COVID-19 pandemic is a severe acute respiratory syndrome caused by a coronavirus (SARS-CoV-2). In March 2020, the World Health Organization announced that it had categorized COVID-19 as a pandemic [1,29]. COVID-19 is an ongoing global pandemic, discovered during December 2019 in the Chinese city Wuhan.

2.2.2. Corona Disease (Covid-19)

Covid-19 is an infectious disease caused by the last virus that was discovered from the Coronavirus, and there was no knowledge of this new virus and its disease before its outbreak in Wuhan, China, in December 2019, and Covid-19 had mutated now into a pandemic affecting many countries of the world [1].

2.3. Research Approach

This is an exploratory descriptive study that tries to explore a phenomenon in reality and visualize it as it is. The study population was determined by professors and students of some universities from Arab countries (e.g., Algeria, Egypt, Palestine, and Iraq). As seen in (Table 1), it has been sent about 600 questionnaires, a return consisting of 400 professors and students from the total distributed questionnaires that were conveniently selected. The questionnaire was sent to professors and students mostly by email as an online survey method and some of them were personally contacted because they are from the same universities of the authors working place. The high differences between professors and students are because there was a weakness in the response to the measurement tool by faculty members.

Table 1. Distribution of the targeted groups in this study.

| Targeted Groups | Total Number | Percentage (%) |
|-----------------------|--------------|----------------|
| University professors | 100 | 25 |
| University students | 300 | 75 |
| Total | 400 | 100 |

2.4. Study Tool

To find the obstacles to achieving quality in distance learning during the COVID-19 pandemic, the researchers posed an open question to professors and university students, according to which they identified these obstacles. Since the study is exploratory and aimed at identifying constraints, the responses were subject to statistical processing. In the context of preparing a study on “Quality of distance education under the Corona pandemic,” please kindly answer the following questions, e.g., in your opinion, what are the obstacles preventing achieving the quality of distance education?

3. Data Collections and Results

3.1. Obstacles Category

The barriers and obstacles to achieving the quality of distance learning under the COVID-19 pandemic, according to the sample, can be categorized into four different groups as shown in (Table 2). The numbers in the column under professor’s repetition are the amount of the times for the obstacles that were selected by professors out of total 100 and the next column is the same way for student’s selection but out of 300. Overall repetition column is the total number of selection for each obstacle from professors and students together followed by their percentages over total number.

Table 2. Obstacles to achieving the quality of distance learning under the Corona pandemic.

| Obstacles Category (Groups) | Obstacles | Professors Repetition (n = 100) | Students Repetition (n = 300) | Overall Repetition (n = 400) | Overall Percentage (%) |
|---|---|---------------------------------|-------------------------------|------------------------------|------------------------|
| Personal obstacles (self-imposed obstacles) | 1-The weak motivation of students to distance learning. | 65 | 112 | 177 | 44.3 |
| | 2-The difficulty of students' understanding of some subjects in the absence of classroom interaction. | 60 | 175 | 235 | 58.8 |
| | 3-Get used to face-to-face learning. | 61 | 95 | 156 | 39 |
| | 4-Some professors are not convinced of the usefulness of distance learning. | 20 | 39 | 59 | 14.8 |
| | 5-Lack of willingness to implement the distance learning system. | 69 | 105 | 174 | 43.5 |
| Pedagogical obstacles | 1-Difficulty learning some applied courses and remotely oriented work. | 18 | 47 | 65 | 16.3 |
| | 2-The lack of clarity of the methods of remote evaluation. | 47 | 48 | 95 | 23.8 |
| | 3-Lack of preparing the university community (administration, professors, etc.) to deal with distance learning. | 64 | 0 | 64 | 16 |
| Technical obstacles | 1-Weak internet flow (speed). | 80 | 156 | 236 | 59 |
| | 2-Security and confidentiality of data and information. | 66 | 63 | 129 | 32.3 |
| Financial and organizational obstacles | 1-The lack of capabilities to communicate remotely (devices, internet, Apps, etc.). | 82 | 155 | 237 | 59.3 |
| | 2-Lack of training in the use of technology. | 71 | 69 | 140 | 35 |
| | 3-Multiple electronic media and the absence of uniform controls between all. | 52 | 42 | 94 | 23.5 |
| | 4-The home environment is not suitable for distance learning. | 46 | 60 | 106 | 26.5 |

An example, the university professors and their students attributed the obstacles to achieving quality in distance learning during the COVID-19 pandemic to the weak motivation of students to distance learning (44.3%), the difficulty of their understanding of some subjects in the absence of class interaction (58.8%), students being more familiar with face-to-face learning (39%), some professors not being convinced of the feasibility of distance learning (14.8%), and everyone is not ready to implement the distance learning system (43.5%). In general, we can observe that the total responses from both sides were much below than 50% (11 out of 14 obstacles) while just three obstacles were above 50%, which means it is a good and positive response for all obstacles.

3.2. Obstacles Arrangement (Ordering)

In Table 3 are the lists of the obstacles according to their percentage value from the exploratory study standing for both professor's and student's overall percentage from 1 to 14 and breakdown percentage showing the similarities and differences between their selection including percentage and order for each obstacle. Also, this has been made to find the breakpoint between the selection of professor's and student's interest. The member's overall percentage of the sample stated that the lack of capabilities to communicate remotely (such as devices, internet, and applications) is one of the biggest obstacles to preventing the achievement of quality in distance learning comes first and the same concern for the professors but different level for the students. In the difficulty of students' understanding of some subjects in the absence of classroom interaction you can see a large gap as breakdown percentage. But in general, from order 9 to 14 you can observe no big difference between professor's and student's overall percentage and breakdown percentage.

Table 3. Arranging obstacles to achieving the quality of distance learning during the COVID-19 pandemic.

| Type of Obstacles | Overall Percentage and Arrangement | | Breakdown Percentage and Arrangement | | | |
|---|------------------------------------|-------------------|--------------------------------------|-------|------------------|-------|
| | (%) (n = 400) | Obstacle Order | Professors | | Students | |
| | | | (%) (n = 100) | Order | (%) (n = 300) | Order |
| The lack of capabilities to communicate remotely (devices, internet, Apps, etc.). | 56.3 | 1 | 82 | 1 | 51.7 | 3 |
| Weak internet flow (speed). | 59 | 2 | 80 | 2 | 52 | 2 |
| The difficulty of students' understanding of some subjects in the absence of classroom interaction. | 58.8 | 3 | 60 | 9 | 58.3 | 1 |
| The weak motivation of students for distance learning. | 44.3 | 4 | 65 | 6 | 37.3 | 4 |
| Lack of willingness to implement the distance learning system. | 43.5 | 5 | 69 | 4 | 35 | 5 |
| Get used to face-to-face learning. | 39 | 6 | 61 | 8 | 31.7 | 6 |
| Lack of training in the use of technology. | 35 | 7 | 71 | 3 | 23 | 7 |
| Security and confidentiality of data and information | 32.3 | 8 | 66 | 5 | 21 | 8 |
| The home environment is not suitable for distance learning. | 26.5 | 9 | 46 | 12 | 20 | 9 |
| The lack of clarity of the methods of remote evaluation. | 23.8 | 10 | 47 | 11 | 16 | 10 |
| Multiple electronic media and the absence of uniform controls between all. | 23.5 | 11 | 52 | 10 | 14 | 12 |
| Difficulty learning some applied courses and remotely oriented work. | 16.3 | 12 | 18 | 14 | 15.7 | 11 |
| Lack of preparing the university community (administration, professors, etc.) to deal with distance learning. | 16 | 13 | 64 | 7 | 0 | 14 |
| Some professors are not convinced of the usefulness of distance learning. | 14.8 | 14 | 20 | 13 | 13 | 13 |

4. Discussion

E-learning users face many technical difficulties that hinder the teaching and learning system, such as time and location flexibility, students and learners being dissimilar, e-learning not feeling comfortable, increased frustration and confusion, and inadequate technological compatibility [30]. Institutions and organizations should prepare contingency plans to deal with challenges such as pandemics and natural disasters [31]. According to George [32], whether or not there is a crisis, learners need the opportunity to use email-based consultations to approach the course lecturer, as these are the most utilized type of consultation when compared with tutorials (in class) and office-based consultation.

Overall, it was indicated that students' performance was better in classroom-based teaching methodology. However, the above comment from George [33] for online learning only benefits courses with practical components with courses such as English Language and History. COVID-19 has created a problem that has impacted human life and could lead to the global economy shrinking if the restriction of economic activity is extended without an adequate fiscal response [20,34].

In the results of this study, the obstacles to achieving quality in distance learning during the COVID-19 pandemic were limited to four categories, which we explain according to the viewpoint of the individuals of the study sample as follows:

4.1. Personal Obstacles (Self-Imposed Obstacles)

The members of the sample indicated the weak motivation of students to distance learning and the difficulties of their understanding of some subjects in the absence of classroom interaction and direct

(traditional) learning, which indicates their rejection of the distance learning system. Their resistance to it indicates their lack of information and a lack of awareness of its importance in higher education.

E-University courses are implemented in a lecture style, and they are not diversified by modern teaching methods that encourage direct interaction and visual communication between the professors and students. The members of the sample also indicated that some professors are not convinced of the usefulness of distance learning, which is consistent with Alumari et al. [35] regarding the negative perception of some of the faculty members toward e-learning. Some teachers may feel the interest in e-learning frustrated by their belief that it is not important and that it has no value.

This is also in agreement with what is indicated by Hamdan [36] about the lack of sufficient conviction among teachers and students of the importance of distance learning and its multiple advantages. It is supported by the results from Salem [37], who suggested that teachers fear their role in the educational process being reduced, limiting them to becoming educational software designers and educational technology specialists [37]. The lack of willingness of both professors and students to implement distance learning under these circumstances, which confirms their habituation to traditional education learning, means distance education will continue to face resistance. This requires spreading awareness, encouragement, and firmness to accept this change.

4.2. Pedagogical Obstacles

Both professors and students indicated the difficulty of learning some applied courses and directed work remotely, the necessity of the presence of both the professor and the student and direct interaction between them, provided that the professor clarifies and explains this type of course. The lack of clarity in the evaluation methods leads to everyone expecting difficulties in the evaluation of electronic exams.

Furthermore, it is difficult to achieve some pedagogical activities, such as conducting tests, within the e-learning environment, in addition to the difficulty of obtaining feedback for identifying the weaknesses and strengths of students. This may be due to the lack of modern means of communication between students and teachers, especially e-mail and social networks [38]. The failure of the university community (such as the administration and professors) to deal with distance learning, such as by training and preparing electronic courses in advance, the use of modern presentation programs, and other logistical capabilities, have prevented the achievement of quality in distance learning during the COVID-19 pandemic.

4.3. Technical Obstacles

Professors and students indicated that one of the obstacles to achieving quality in distance learning during the COVID-19 pandemic was the weak internet speed in many remote areas, and the consequent interruptions in broadcasting and the impediment to following lessons.

There are also issues with the security and confidentiality of data and information, and protection against piracy on internet sites, which affects the courses and exams and their results, and this is confirmed by the literature [28]. During the performance of electronic exams, the professor cannot guarantee that the student is not trying to cheat, and the professor cannot guarantee that the one who takes the exam is the student himself and not someone else.

4.4. Financial and Organizational Obstacles

A large number of professors and students pointed out the lack of capabilities to communicate remotely, which is consistent with the findings of a previous study about the difficulty of obtaining computers by some students [35]. Also, Alumari et al. [35] indicated the difficulty of dealing with non-cooperative and untrained learners during self-learning and the difficulty of making sure students can master the use of a computer in the absence of computer-trained instructors. The teachers and their students also pointed to the phenomenon of electronic multimedia, and the absence of uniform controls among all professors, which was caused by the new medium and educational strategy. This led to confusion in receiving information, students' difficulty in understanding the lessons. It was clear from

their responses that the home environment is not suitable for distance learning, due to the chaos of children, the narrowness of the house, and the presence of a significant number of learners in the same family with only one computer. All these obstacles prevent the achievement of quality learning from a distance during the COVID-19 pandemic.

4.5. Obstacles Comparisons

Recalling (Tables 2 and 3), both presented a comparison of the answers of professors and students. The differences in the obstacles to achieving quality in distance learning during the COVID-19 pandemic are as follows: 82% of teachers attributed to the lack of capabilities to communicate remotely (devices, internet, applications, etc.), and 80% to weak internet speeds. This compares to 51.7% and 52% of students, respectively. This difference may be because the professors better understand the conditions of their students, particularly the low standard of living in villages and remote areas.

Another observed large difference is that about 71% of teachers attributed the obstacles to achieving quality in distance learning during the COVID-19 pandemic to the lack of prior training in the use of technology, and 66% to the security and confidentiality of data and information. This is much higher than the percentage of students (23% and 21%, respectively). The difference in ratios between the two may be because the teachers were more critical in declaring their weakness in the use of information technology and dealing with applications to give lectures to their students. The lack of a culture of distance learning in Arab societies has made the educational-learning process insecure.

This difference may be because teachers have become accustomed to traditional teaching and have favored it for many years without thinking about diversifying by introducing new methods of e-Learning. The discrepancy between the ratios between the two samples may be due to significant delays in the enrollment of the students in distance education programs, especially those directly broadcast on the internet, and the frequent preoccupation of students and their intensive questioning about how to evaluate them from a distance.

We find that 52% of the teachers considered the multiplicity of electronic media and the absence of uniform controls to be an obstacle compared to 14% for students. The difference in ratios between the two samples may be because the professors differed among themselves in the use of electronic media (platforms, YouTube, television, radio, etc.), which posed difficulties for students.

Finally, about 20% of the professors stated that they were not convinced of the feasibility of distance learning compared to 13% of the students who reported the same answer. The difference in the proportions between the two samples may be because the professors and the university administration did not work on preparing e-courses in anticipation of this unexpected crisis. Their dependence on traditional education requires the presence of the professor in the classroom without the need to provide students with complementary electronic material.

5. Conclusions

Referring to the current situation of the Arab universities, it has combined old and modern forms of distance education, e.g., Algerian, Egyptian, and Palestinian universities that have provided lessons on radio and television. Most Arab universities have used the internet to provide lessons via various educational platforms (such as the Moodle platform adopted by most Algerian universities), or to use social networking sites (such as Facebook and YouTube) to explain the lessons after sending electronic publications through university websites.

Distance learning has become an urgent necessity for higher education institutions, imposed by the nature of emergency conditions in which we live. It is in fact in response to the calling for a modern education system that integrates technology and creates flexibility in the learning environment, to achieve educational security and improve university outcomes. From this study, some suggestions for achieving quality in distance learning for the study area and other areas are proposed as follows:

1. Providing better university infrastructure, by providing computer labs in colleges, and hiring technical supervisors who instruct professors and students on the optimal use of technology, the internet, and various e-learning applications.
2. Preparing electronic courses with a high level of quality, and placing them on university websites for public benefit.
3. Providing continuous training and education opportunities for faculty members in the field of distance education and its requirements, and the new roles that professors and students should take.
4. Diversify distance learning activities to stimulate student motivation and motivate them for self-learning.
5. Coordination of Arab efforts in the field of developing distance education, especially concerning electronic university curricula and remote testing, while respecting overall quality standards.
6. Providing internet access for all students in rural and remote areas.

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