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The Digital Transformation Effects in Distance Education in Light of the Epidemics (COVID-19) in Egypt

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Abstract:

On the relatively rare occasions when disaster forces schools and universities to close for a prolonged period of time, e-learning has helped fill the gap in instruction. In this paper, we study the role of digital transformation in e-learning systems in light of the global conditions resulting from the epidemics (COVID-19) in Egypt. Therefore, we focus on the importance of distance education at several factors, trying to assess the staff's response and students to new education methods and assess the distance education experience in Egyptian universities. Where the study set that various staff excited to utilize this method, unlike some of the students, who did not to accept because of their knowledge lacking.

Keywords: Distance Education, COVID-19, Digital transformation.

1 Introduction

Humanity knew the end of the twentieth century, and the beginning of the twenty-first as a huge revolution in the field of modern information and communication technology, which leads to a different world in terms of data, tools, text, voice, and image being transferred and dealt with via the Internet world, which creates a new world through which it can form educational environments and promote creativity in it [1]. Which made the current era characterized by amazing developments in information and communications technology field, which contributed to establishing new milestones. Modern information systems in the digital age shadow are analytical and diagnostic systems, that give broad capabilities for flexible and effective analysis, planning, and effective response to the changes surrounding the work environment. The changes are taking place in the work environment and qualify them to be more able to create and invest opportunities [2]. Educational institutions do not live alone from these global variables, especially higher education institutions where the future of universities today is related to these rapid developments in the field of knowledge and technology and the accompanying infinite flow of visions, trends, goals and ideologies, the reality and nature of the challenges facing universities imposed many important transformations in University education systems, so any development depends on the university's ability to realize the importance of change and monitor its impacts in long and short term, and this requires the formation of highly qualified human resources as an important component of survival in the digital age[3], so it has become imperative for it. A striving to participate in making this future and defining its roles in preparing human wealth and building individuals with competence and excellence to deal with the challenges of the third millennium [4].

Since the launch of the distance education [5, 6] program, many difficulties and obstacles that may face its spread and effectiveness have started to appear: Are all students equipped with enough electronic devices (computers, tablets, smartphones) to rely on them in distance education? Do all students have a sufficiently strong internet connection that enables them to access and benefit from the lessons and programs broadcast on digital distance education channels? Do all students in villages and remote areas have access to strong internet coverage and before we talk about it, do you already own these digital devices? Has a technological infrastructure been provided

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in all universities and educational institutions that will allow the launch of a platform network for video lectures and digital education?

Have faculty members, students, and students' families been trained and trained in distance education techniques [7, 8] and programs: for example, how to use (for faculty members), how to benefit (students)? The sudden problems and challenges posed by the Corona virus did not allow countries and governments to put in place an effective emergency program to face all of the economic, social, health and educational disasters, and therefore these sudden epidemiological conditions impose on the country the launch of the distance education system, a digital educational system that may need a short period of time to adapt the university society and its partners with this new education style, from professors, students, parents and management alike, and this exceptional circumstance needs to provide many things and digital work environments that allow students to resume lessons remotely inside home and between family members.

Anyone following this digital transformation asks: Can the educational process be controlled at home? What is the picture of the university inside the house? Resorting to distance education and digital education curriculum (means staying at home to study and do homework, and this is undoubtedly a very big and thorny subject, especially if we look at the age groups and levels of study, and this means that the great burden will fall on the faculty members on the one hand to find the most appropriate way to communicate information for students to understand and on the other hand the role of students' parents in monitoring their children and guiding and following them during this process. Will the students seriously deal with this new style of distance education? But in light of the current and sudden conditions, and the prevention of the virus,

Should we be cautious about that? How will we be cautious? Everyone looks at this digital education with fascination as if it was a magic solution for traditional education while it goes without the teacher, while it is one of the integrated education system elements. There is no conclusive scientific evidence that prefers this distance education to traditional education, even at the level of follow-up and attendance. Distance education also suffers from higher interruption rates than traditional education means (due to the absence of an electronic educational authority that follows and controls this), and the social conditions of the majority of learners prevent them from having on the electronic devices and media that use distance learning. Accordingly, it is necessary to have many conditions for effective and widespread use of this education after enabling all users with electronic equipment and effective training while developing their programs and benefiting from their software. Distance education is more complicated than traditional education because it needs modern electronic information systems and equipment and needs technical systems to ensure their maintenance, and "electronic" management with flexible and open authority is the opposite of traditional university management that tends to stagnate and implement central orders.

In this paper, the reader will get familiar with the e-learning importance during rare diseases. In Egypt, the distance education is one of the most important and urgent issues at the present time, especially in the shadow of the Corona pandemic (COVID-19). Despite the progress of some major countries that have the latest technology, this disease is spreading very quickly, without a precise cause. The severity and duration of each pandemic stage may vary looking at the characteristics of the virus and therefore the public health response. It has since the community, private sector and family level are working to decrease COVID-19's effect on each country's economy and their health. In different fields, all countries have tended to use distance education. The Egyptian university did not take specific totality steps, but only random steps to overcome the current crisis. Which the lack of internet service and internet speed is one of the biggest obstacles to the distance education success in Egypt.

The rest of the paper is organized as follows: In Section 2, The Corona vires (COVID-19) is discussed. We presented the role of E-learning in light of the global crises caused by new viruses in Section 3. The statistical analysis is discussed in Section 4 while conclusions are given in Section 5.

2 COVID-19

In December 2019 in Wuhan the disease was first identified, has since spread globally, resulting in the ongoing 2019–20 coronavirus [9, 10]. Different symptoms [11, 12, 13] include fever, cough, shortness of breath, fatigue, muscle pain, diarrhea, sore throat, loss of smell and abdominal pain [14]. Whereas the bulk of cases lead to gentle symptoms, some get to pneumonia and multi-organ failure [15]. On 6 April 2020, more than 200 countries and territories have reported more than 5,280,000 cases [16] have recovered and more than 70,400 deaths [17]. With the increasing numbers of new infections in the Corona virus worldwide, especially in the United States recently, doctors and epidemiologists are trying to predict the causes and future of the virus. Currently, the number of injuries is already tens of thousands and is increasing every day. When different countries are early diagnosing more cases, this will lower mortality rates than others. Artificial intelligence has the potential to assist us tackle the pressing problems raised by the COVID-19 pandemic. It may be defined as machine learning, computer vision applications and natural language processing to teach computers to use big data-based models for pattern recognition, explanation, and prediction for present purposes. These functions can be useful to diagnose,

predict, and treat COVID-19 infections. Quick and correct identification diagnosis of COVID-19 can save lives, limit the disease spread. AI can provide helpful input during this regard, particular with an image based medical diagnosis. As a recent review of AI applications against COVID-19 by researchers, studies have shown that AI may be as accurate as humans, will save radiologists' time, and perform more quickly diagnosis and cheaper than with customary tests for COVID-19. Each X-rays and Computed Tomography (CT) scans may be used [18, 19]. In ref. [18] used deep learning to diagnose COVID-19 using X-ray pictures. In ref. [17] presented method to use mobile phones to scan CT images.

3 The Role of E-learning Systems in light of Rare Diseases

The world countries were surprised by the serious and crucial challenges that Corona's disease opened to their societies and their economic, health and educational systems, where everything is broken «until further notice» and the first affected education sector that - issued against him - to stop the study and residence of students in their homes on the basis that the lectures are compensated by "digital" lectures. Just as the new Corona epidemic "Covid-19" swept the barriers of time and space [19], the calls for "distance learning" - which accompanied the virus spread - came to sweep the space and time barriers as well. "The spread of the virus has set a record for children and youth who have stopped going to school or university, and the education of more than 500 million other children and young adults will be disrupted," according to the organization. This digital education system is not new in many developed and developing countries, but the Corona virus has precipitated its emergence and pushed it to the front of pre-prepared to provide the necessary conditions for its installation and consolidation in university and pre-university education, which has created widespread controversy for the educational and student families alike. With all its audio-visual resources, illustrations and animations, distance education was transformed from "indoctrination" to "interactive" mode with auditory and visual effects, making the "rigid" educational process a more attractive process, and helps students to access content without stopping at the thresholds of the scent of books papers. UNESCO notes that the educational resources wealth introduces novel based on higher education methods and institutions, since include the development of innovative anti-educational, educational programs, educational paths and higher education systems, all of which can be facilitated by the internet, distance education and short skill based. The organization has developed a set of programs that help with distance learning, including the "Black Board" application, which is an application that depends on designing decisions, assignments, tests and electronically correcting them, and communicating with students through a virtual environment and downloaded applications via smart phones courses [20].

Moreover, the "Edmodo" platform [21] is a free social platform which provides students and teachers a safe and secure environment for cooperation, exchange of educational content and its digital applications, in addition to grades, homework and discussions. "Edraak" platform, which is concerned with teaching arabic online via google classroom, which facilitates communication between teachers and students, whether inside or outside the school, and some Egyptian colleges including the faculty of pharmacy at Cairo university - have sought to provide participation (free) for all of its students as a method of distance learning, the SiSu (swinging) application and a digital application that helps students document what they learn in school and share it with teachers, parents, classmates, and even the world. The Mindspark application, which relies on an adaptive educational system online, it helps students practice and learn mathematics.

4 Statistical analysis

The study in this research is limited to distance education in Egyptian universities, as the research was based on the study of two questionnaires, one of which is directed to staff and the other for students in Egyptian universities. The sample of the field study was chosen randomly from the study community, represented by the staff and students in Egyptian universities, and members were not separated in terms of their affiliation with theoretical or practical colleges because the aim of the study is limited to the extent to which universities provide the ingredients for developing academic human resources for distance learning in universities in the digital age and under epidemics.

The data was cleared, and the statistical treatment was performed. The special frequencies were calculated for each of the items, then the frequency percentages ratios were calculated where percentages are more expressive than raw numbers. On the applied side, we relied on distributing a questionnaire to a sample of university professors to know their point of view regarding the advantages and disadvantages of distance education and we relied on distributing another questionnaire to a sample of students in order to know their opinion on the distance education use advantages/disadvantages, the quality of education through different parameters as (ease of communication and providing information, shortening time and cost, developing the capabilities of using computer technology and the internet).

The results of the field study were analyzed using frequency and percentages as follows:

The first axis: staff

A breakdown of the sample constituents is provided below with respect to gender, Degree and specification.

Gender: The sample included 57.4% male staff and 42.6% female staff as shown in figure 1.

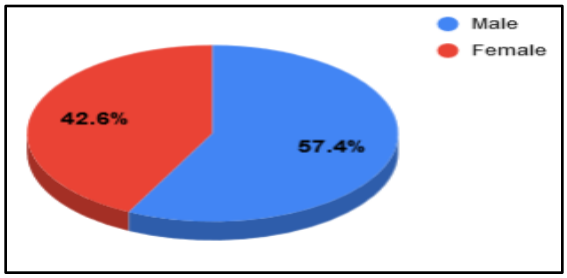


Figure1 .Gender

Degree: The first questionnaire sample included staff with different degree like as lecture, assistant professor, demonstrator, professor, assistant lecture and other. Figure 2 shows all specialties in the whole sample.

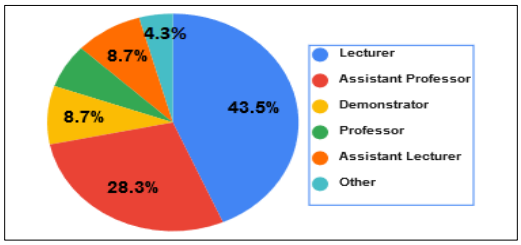


Figure 2. Degree

Specification: The first questionnaire sample included professors from different disciplines like as science, commerce, computer science, law, languages, literature, pharmacy and other, as shown in figure 3.

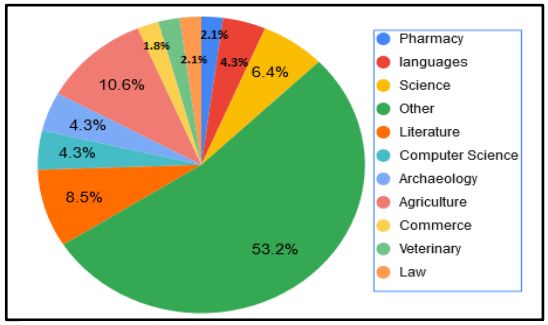


Figure 3. Specification

The following factors are quantitative illustration of the results

Factor 1: The skills that student need for distance education

The questionnaire began by asking staff about their opinion on the skills that student need for distance education, 66% said they believed that intermediate skills it's enough to e-learning. The percentage of staff responses to factor 1 is shown in figure 4.

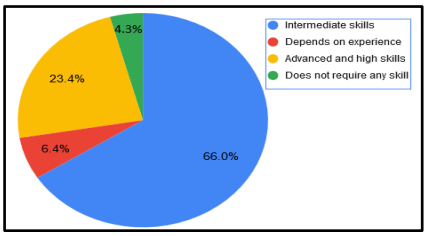


Figure 4. The level of skills the students need to use the techniques of distance education methods.

Factor 2: The distance education effects on the educational process success

This factor measures the student's situation from distance education. 6.4% from the sample said that the e-elearning is helpless to success the education process, as shown in figure 5. Near the half 48.9% showed the distance education is somewhat well.

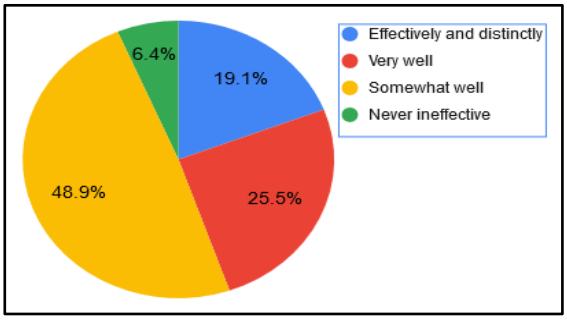


Figure 5. The distance education effect on success of the education process

Factor 3: Method of distance education

The direct communication is most effective method (44.7%) used in distance education through zoom and video conference. The percentage of staff responses to factor 1 are shown in figure 6.

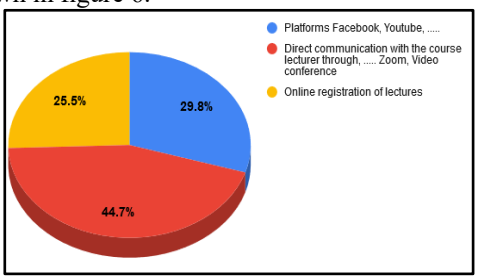


Figure 6. The most effective method used in distance education

Factor 4: The use of distance education before

59.6% they used e-learning before, the remaining 40.4% of the sample said they not used e-learning before as shown in figure 7.

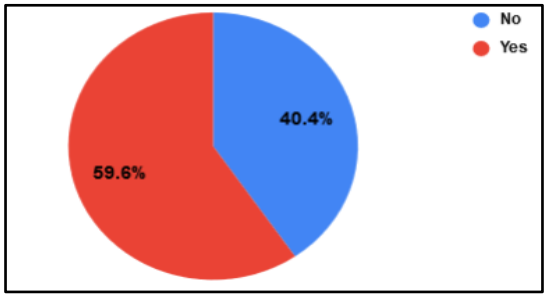


Figure 7. Experience of e-learning

Factor 5: Converting traditional method of education to e-learning

Through the staff experience in the university environment, do the staff think that undergraduate students are able to move from the traditional method of education to the method of distance education 23.4% said yes but with minimal benefit, 21.3% said some of the students pass but with difficulty and 40.4% said no because not suitable for all categories as shown in figure 8.

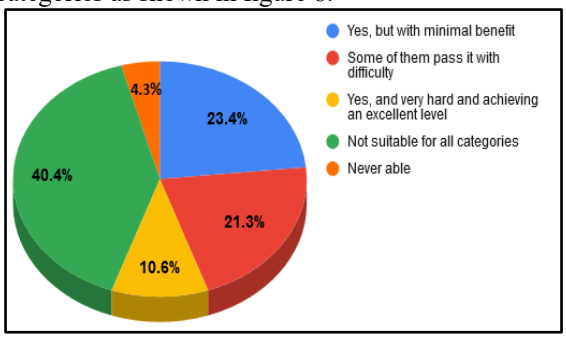


Figure 8. Converting traditional method of education to e-learning

Factor 6: The transmitted way of the distance educational content

From figure 9, the staff choice various ways of transmitting the distance educational content, 65% choice university site, 50% choice WhatsApp and 25% choice platforms. The percentage of staff responses to factor 1 are shown in figure 9.

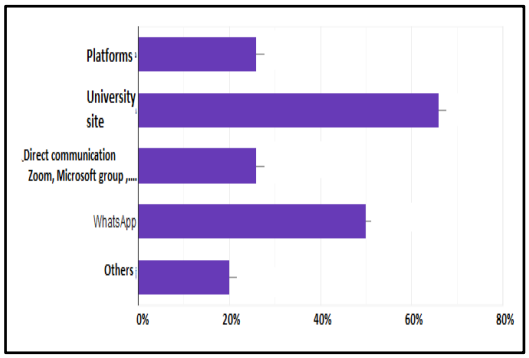


Figure 9. The transmitted way of the distance educational content

Factor 7: E-learning tools

How technology is being used by students is answered in factor 7. Which the percentage of laptop use is 70%, 60% said for smart phone and 30% said for personal computer with camera as shown in figure 10.

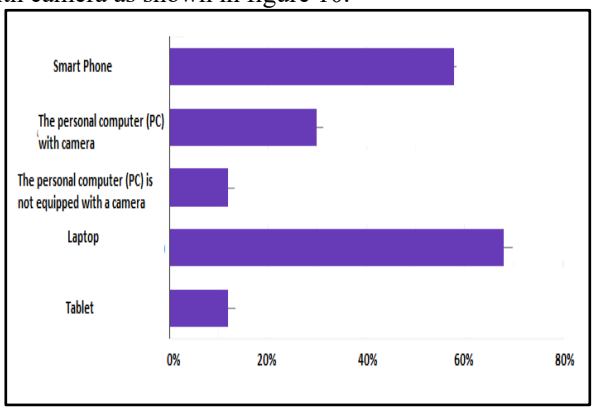


Figure 10. The tools of distance learning experience

Factor 8: Distance education preferences

Figure 11 is declared the staff impression after trying e-learning. Which 46.8% mention that distance education would be their prioritized study mode as it provides highly greater flexibility than traditional education. 38.3% answer by choose the traditional education because they can't study seriously in e-learning.

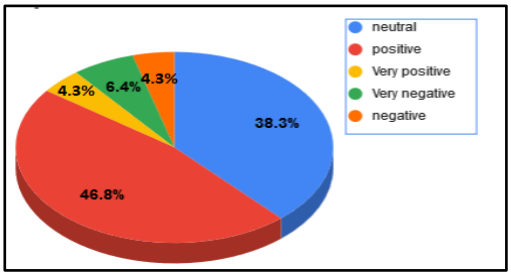


Figure 11. The staff impression after using distance education

Factor 9: If the staffs receive training about distance education before

In figure 12, 59.6% said they didn't received training about e-learning before, the remaining 40.4% of the sample said they received training about e-learning before.

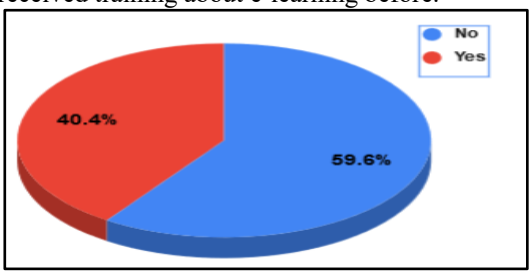


Figure 12. Training related to distance education

Factor 10: Have the staff worked on broadcasting lectures prepared for their students (self-initiated)

53.2% they prepared self-initiated broadcasting lectures, the remaining 46.8% they didn't prepare broadcasting lectures

as shown in figure 13, which they recording the lectures only and sending them to students.

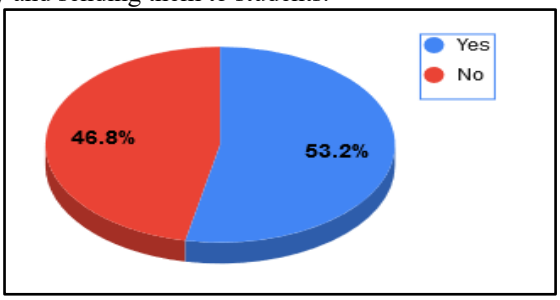


Figure 13. Broadcasting lectures

Factor 11: The challenges that faculty members face while pursuing educational content

With the above factors, the ability of staff members to apply and embrace distance education depends on different things. 80% of the staff said the ability to access the Internet, 30% said multiplicity of classes that teach and 10% said their children studied remotely. The percentage of staff responses to factor 11 are shown in figure 14.

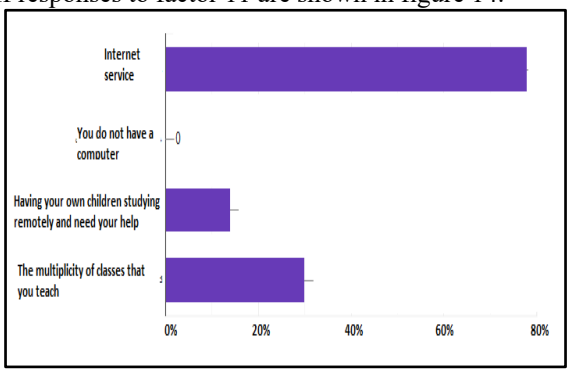


Figure 14. The challenges that faculty members face during the educational process

Factor 12: The satisfaction of faculty members to the distance education content provided to student

Staff were asked about their satisfaction to e-learning content provided to students. Figure 15 provides the responses obtained. 51.1% of staff in the sample said they satisfied, 17% strongly agree, only 8.5% of the staff choices strongly disagree.

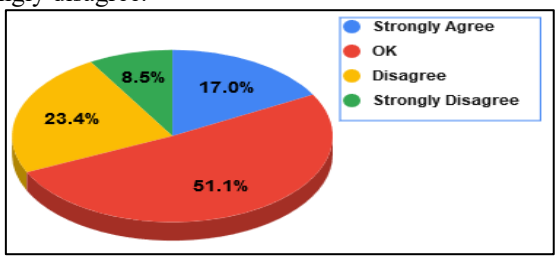


Figure 15. The satisfy of staff members to the distance education content provided to student

Factor 13: The distance learning content attractive elements (video, picture, etc)

Staffs were asked about if the distance learning content provided to student use attractive elements (video, picture, etc). Figure 16 provides a pictorial representation of the obtained responses. 66% of staff said yes, 21.3% strong agree which display attractive elements to students.

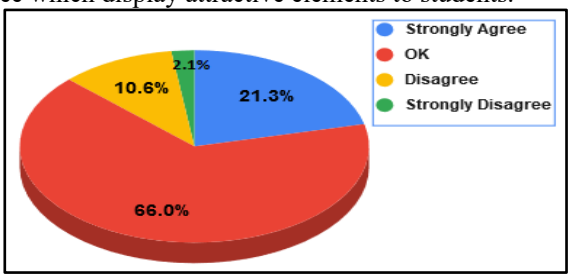


Figure 16. The distance learning content provided to students used attractive elements

Factor 14: The distance learning content covers all materials contents

The responses provided in factor 14 display that the content of e-learning covers all materials elements by 55.3%, 29.8% they don't cover all the materials content and 14.9% they cover all the contents without leaving any topic as shown in figure 17.

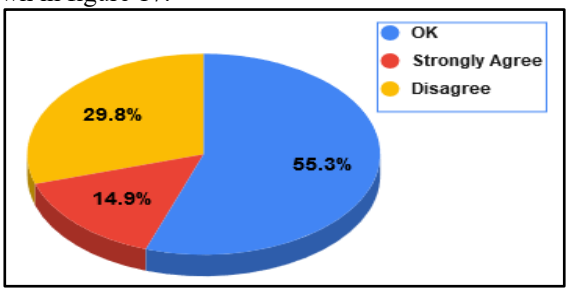


Figure 17. The educational content provided to students covers the various elements of the study materials

Factor 15: Is there a direct discussion with students at the same time as the lecture or it was relying on recording the lectures only and sending them to students

44.7% said yes there is a discussion in electronic lectures as shown in figure 18, the remaining 55.3% of the sample said no discussion in electronic lectures because they send to the students after recording it.

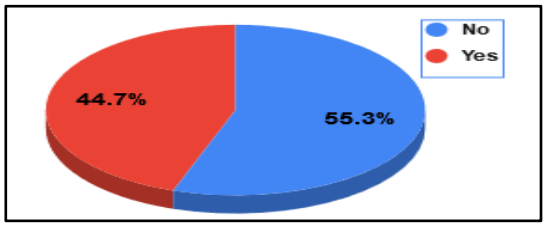


Figure 18. A direct discussion with students at the same time as the lecture

Factor 16: Staffs experiences & teaching skills

This factor declears if the e-learning develops the staff's skills and experiences. In the sample more than half 50.1% said that they developed their teaching skills through using e-learning, which they learn different methods to contact with the students and upload materlais as shown in figure 19.

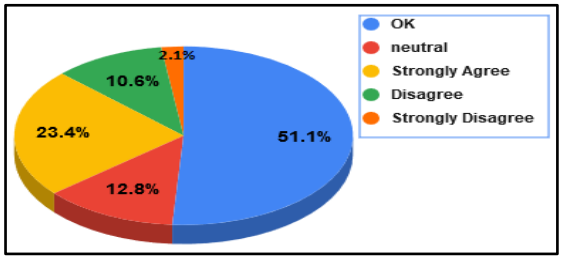


Figure 19. Follow-up on the educational content provided remotely enriched the staff experiences and teaching skills

Factor 17: Appropriate e-learning for different circumstances and ages

This factor declears how appropriate is the distance education method for different circumstances and ages. 46.8% said that the e-learning is greater flexibility than traditional eduction with regard to when and where they might learn or study as shown in figure 20.

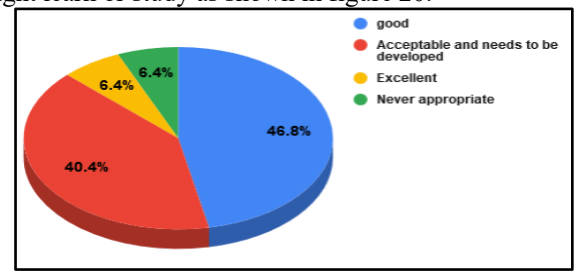


Figure 20. How appropriate is the method of distance education for the needs of those wishing to education of different circumstances and ages

Factor 18: Skills of PCs

Figure 21 shows that 73.9% of staff said that the student need only intermediate skills to use e-learning. 15.2% said they need advanced and high skills and 6.5% said they didn't need any skills.

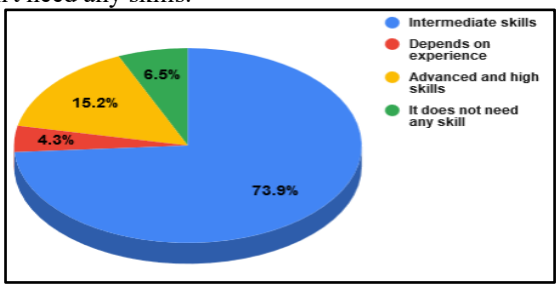


Figure 21. The skills level that the students need to use the techniques of distance education

The second axis: students

A breakdown of the sample constituents is provided to gender and specification.

Gender:

The Sample included 68.5% female students and 31.5% male students as shown in figure 22.

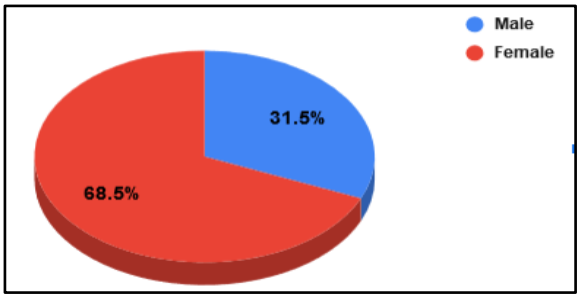


Figure 22. Gender

Specialization: The second questionnaire sample included students from different disciplines as science, commerce, computer science, law, languages, literature, pharmacy and other.

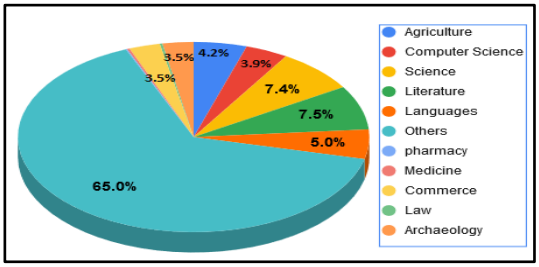


Figure 23. Specialization

The following factors are quantitative illustration of the results

Factor 1: E-learning knowledge

Figure 24 showed that less than half 49.5% of the students' sample strongly disagree that the distance education is not easy for them. For most of student this is the first time for them using e-learning method and they had no idea about distance education.

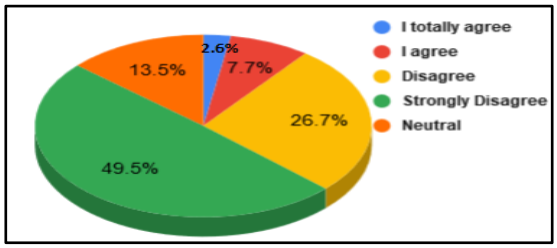


Figure 24. The knowledge of e-learning

Factor 2: Internet speed

65% of sample the major problem with them is the internet speed as shown in figure 25. Which it is not suitable, and the most popular subject is available for them without interruption.

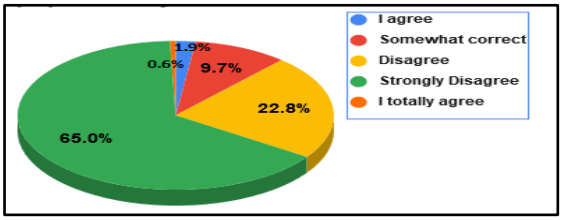
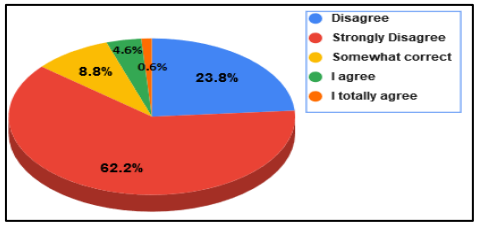


Figure 25. Internet speed

Factor 3: Distance education and traditional education
This factor asked the respondents if they think that distance education is more flexible than traditional education. Figure 26 (a) declares that the utilization of distance technology would have no effect or only a minor influence on improving the education process. 62.2% of the sample said that distance education is not flexible than face to face education. Figure 26 (b) answered about if it possible to replace distance education by traditional education. More than half 64.4% rejected the idea of replacing distance education by traditional education; they prefer the traditional methods to learn.



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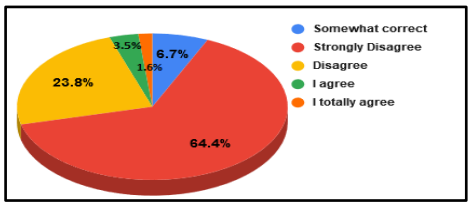


b

Figure 26. a) if distance education is more flexible than traditional education, b) distance education can replace traditional education

Factor 4: Appropriate technical assistance
In figure 27, near the half 45.9% of the sample said there isn't appropriate technical assistance from the university to facilitate the educational materials use. This is the first time when all the university faces like epidemics in Egypt.

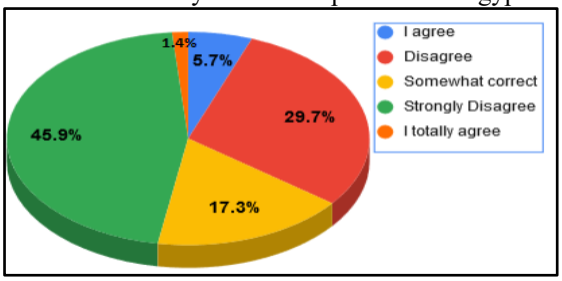
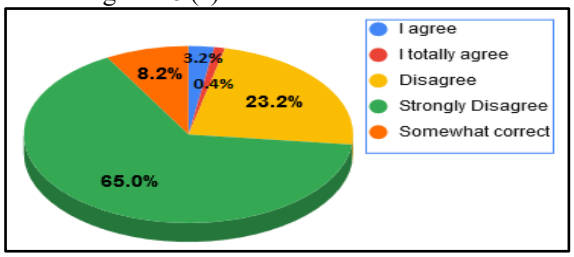


Figure 27. Appropriate technical assistance

Factor 5: The distance learning help
More than half 65% of the students sample said that the e-learning method didn't help them to understand the scientific subject in an easy and clear way, as shown in figure 28 (a). 56.1% said that the present of the scientific subject electronically didn't provide them with any additional skills and training, as shown in figure 28 (b). Only 6.7% of the sample said that the using of distance learning method demonstrated self-thinking skills as declare in figure 28 (c).



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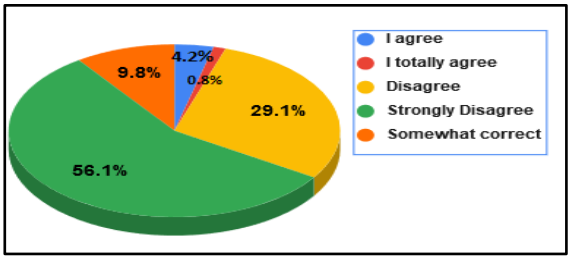

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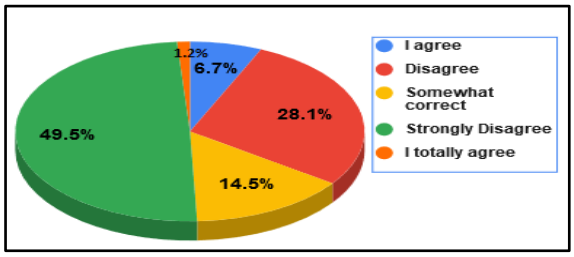


c

Figure 28. a) The distance learning help, b) the present of the scientific subject electronically, c) demonstrate self-thinking skills

Factor 6: The e-study materials assessment
This factor asks about student's assessment of the e-study materials that the college offers remotely. 80% of the sample said the e-study material does not meet the students' needs, as shown in figure 29.

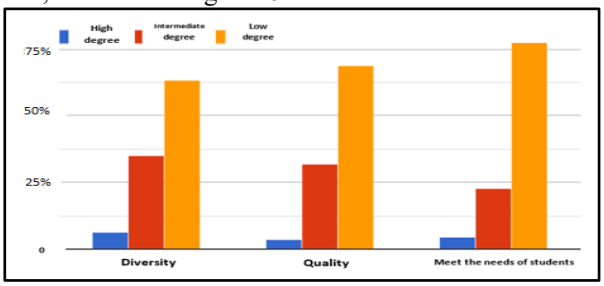


Figure 29. Assessment of the e-study materials

Factor 7: Distance technology effect

This factor ask if the technology of distance education contribute effectively to the success of the educational process. Most of the students 71.3% said that the e-learning can significantly enhance and success the learning process, as shown in figure 30.

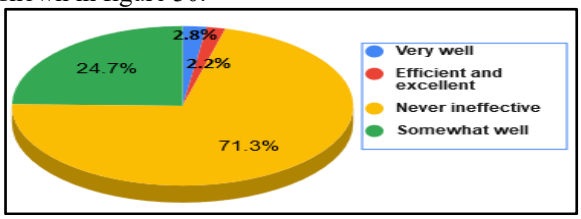
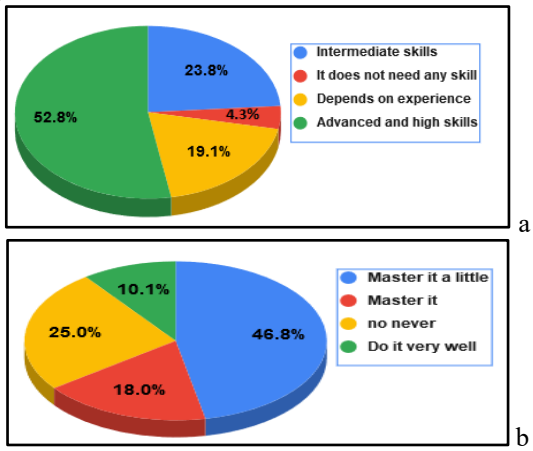


Figure 30. Effect of distance technology

Factor 8: Student's skills

This factor asks about the skills level, does the student need to use the techniques of distance education methods? Figure 31(a) declares that 52.8% of the sample said they need high and advanced skills to use e-learning. Also this factor asks about the use of computers and the Internet in distance education. 46.8% of the sample they said it should master little the internet and computer use as shown in figure 31(b).



a

b

Figure 31. a) Student's skills, b) Internet and computer use

Factor 9: Method used in distance education

This factor asks about the most effective method used in distance education. 37.8% choose YouTube, platform and Facebook, 30.6% choose WhatsApp and 18.4% choose video conference and zoom. The student's percentages responses to factor 9 are shown in figure 32.

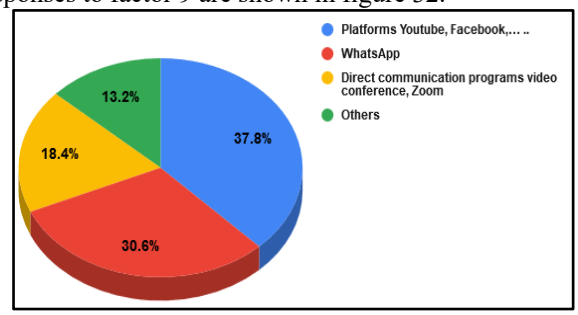


Figure 32. Method used in distance education

Factor 10: Appropriate e-learning for different circumstances and ages

This factor measure how suitable is the distance learning method for different circumstances and ages. Figure 33 decleared that 1.6% said that the distance education is greater flexibility than traditional eduction with regard to when and where they might learn or study. More than half 58.6% said it is only inappropriate in their learning.

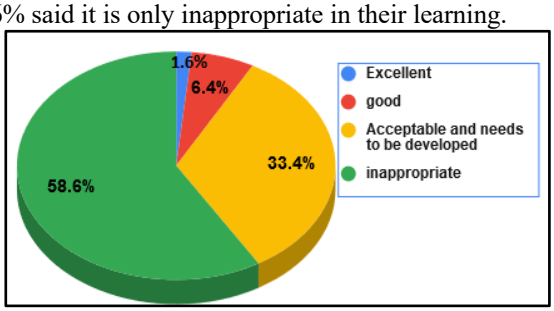
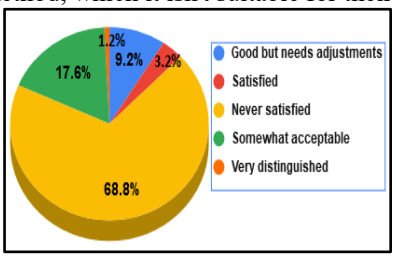


Figure 33. Appropriate e-learning for different circumstances and ages

Factor 11: Students impression

This factor answers about three questions. The first one is how satisfied as a student through distance education. Figure 34(a) explains that 68.8% of the sample is never satisfied about e-learning process. The second is after trying distance education, what is their impression. 46.7% of student's impression is very negative about e-learning as shown in figure 34(b). Another question is if e-teaching provides for students with an easy way to review according to their abilities and appropriate times for them. As clear from figure 34(c), 74.1% said that they could not accept e-learning method, which it isn't suitable for their abilities.



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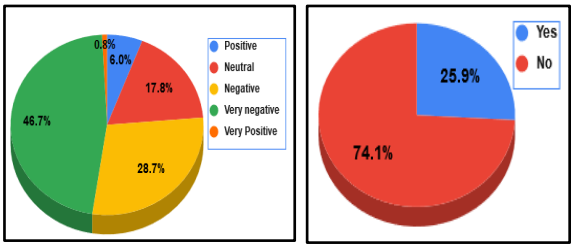


b c

Figure 34. a) level of student satisfied through distance education, b) Students impression, c) If e-teaching provides for students with an easy way

Factor 12: E-learning used

This factor measures different level for e-learning. Only 12.5% of the students's sample agrees that the distance education use is able to direct students towards a scientific

use of computers permanently and reduce its use in entertainment as shown in figure 35(a). Figure 35(b) declares that 16% of the sample said that distance education raises their level of technological knowledge (computer control, research capacity development). 24.5% of the sample said that their low electronic culture is considered one of the obstacles to the success of distance education as shown in figure 35(c).

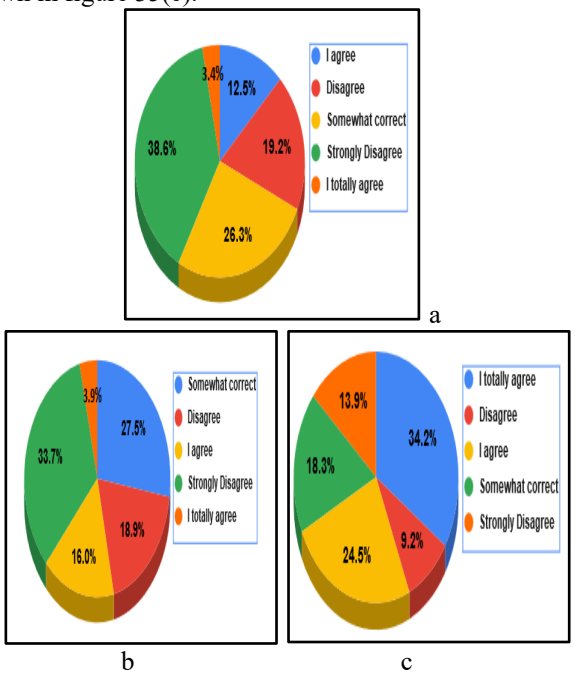
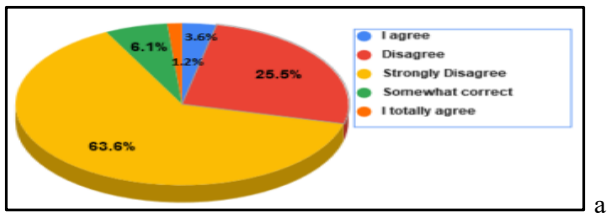


Figure 35. The student situation from a) Scientific use, b) Distance education raises the level of technological knowledge, c) Low electronic culture it impedes the process of distance education

Factor 13: Study the subjects electronically

63.6% of the student sample said they not felt a general relief from studying the subjects electronically. And minority of the student 1.2% said that the e-learning application enhance the education process as shown in figure 36(a). Figure 36(b) explains that 48.5% of the sample said that the distance education did not enhance the communication process with the teacher. More than half 55.4% of the sample faced many problems and obstacles when studying materials electronically as shown in figure 36(c).



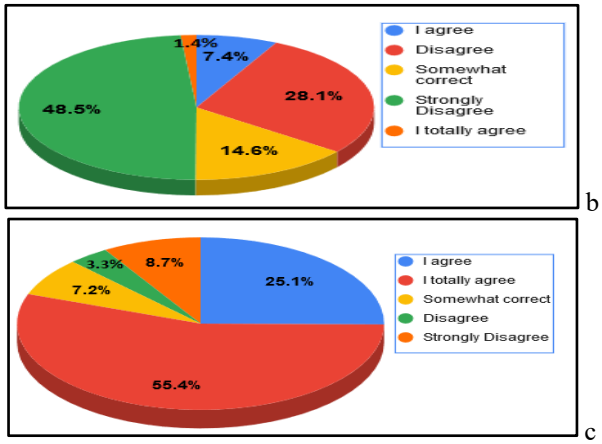


Figure 36. The student situation from a) Study the subjects electronically, b) The e-learning application enhance the education process, c) Problems when studying materials electronically

The distance education advantages and disadvantages in Egypt through studying in this paper:

Benefits of distance education:

The most important advantages offered by e-learning to the teacher, learner and society can be summarized as follows:

- Benefiting from technological and information advances and modern means of communication in making a quantum leap in the field of education, and the development of educational patterns that help in overcoming the challenges faced by traditional education.
- Easy access to knowledge sources and short time to search for information; Overcoming scarcity in some scientific disciplines: where the e-learning teacher can supervise a large number of students.
- Convenience and flexibility in scheduling study times, which prevents absence formwork.
- The ideal solution for educating and separating individuals geographically separated.
- Achieving the principle of continuing education for individuals.
- Minimizing costs and earning time for non-compulsory mobility (saving and investing teacher and learner time);
- Characterized by the multiplicity of teaching aids and the diversity of educational materials. Ranging from regular cross texts and still images to video, audio files, video conferences, chat, discussion group and e-mail.
- Developing the skills of using modern information and communication technology.
- It can be simultaneously any direct communication between the teacher and the learner, or asynchronously where the scientific material is available on the network for each learner according to the need and the appropriate time for it.
- Helps to interact between different cultures.

- Raising the efficiency of the learner or the trainee in performance, developing his personality and creating self-reliance.
- It is the ideal solution in the epidemics spread event to maintain public health
- The scientific content is always available to the student. Also, the time is determined easily because it is not related to specific work periods that are controlled by external factors such as transportation, distance, etc.
- Reducing dependence on university books
- Facing any crisis that prevents the direct meeting of students
- Shows the varying abilities of students and helps to acquire new skills for students as well as a professor of the subject alike
- Save time, space, effort and reduce crowding
- Positive interactivity
- Provide an opportunity for more general and comprehensive questions and inquiries
- Not to waste time in the university corridors.
- Optimal use of technology

Distance education differs from other methods of education in that it takes place at the right time (appropriate for the learner), for the right individual (each learner takes only what suits him from the program according to his personal needs that may differ from other participants in the same program), In the right place (at home, library, internet cafe, work for), with the appropriate form and content (in terms of quantity and quality), at the appropriate speed (where individuals differ in their abilities and speed of assimilation, and each participant moves from one stage to another when he makes sure that he understands what he has studied.

The distance education disadvantages

Despite the advantages provided by e-learning for education, it is marred by some negatives, including:

- Impartiality of the human nature of the teacher and the learner not interacting face to face.
- Difficulty assessing and guarding with regard to exams.
- Lack of quality in education.
- Non-rational use of technology in non-producing countries and the spread of so-called project theft
- Marginalizing and underestimating the teacher role.
- Give up on attending lectures.
- A lot see it becoming a competitor to traditional education, which leads to mass exodus towards e-universities.
- The vast amount of information.
- Not suitable for practical exercises
- Lack of preparations and capabilities availability such as the suitable devices availability for both the teacher and the most educated (the student) and the Internet.
- Bad internet services in general, and their weakness and instability, which results in cutting the sound or image and slow loading.
- Many teachers do not understand the goal and how to implement courses within distance education technology and limit them only to PDF, Word, and PowerPoint files.
- There are downsides for the student in the event that the faculty member is unable to use the appropriate method effectively
- Lack of communication with students, failure to take the students views and failure to use new technologies.
- It is not sufficient to obtain the appropriate amount of information and explanation that enables the understanding of educational content.
- Needs development.
- If the student is attending, it is necessary to be in a dedicated platform for distance education that prevents the student from absenteeism and increases the teacher's ability to teach and let him care and explain with the supervision of the teachers.
- The teacher cannot answer all questions or even follow-up on duties and obligations and this leads to the student not studying or doing exercises.
- Makes the student neglected and not interested in studying practical lessons unlike in traditional education, the student will be forced to study and review practical lessons so that he can bypass the monthly exams.
- Increased use of the computer or phone, which exhausts the eye.
- Boredom.
- Students have neither experience nor training to keep up with distance education.
- It has no specific and critical criteria for both the professor and the student.
- It lacks discussion, interaction and feelings.
- Difficulty assessment sometimes for students.
- There is no enrichment and ideas of the teacher that are produced by the discussion about the scientific subject with students such as traditional education.

5 Conclusion

In this paper, the effect of distance education in the light of epidemics (COVID-19) was presented in Egypt. Corona virus is an e-learning business model: an opportunity we had to use. Distance education is a newly established educational method, the content of which depends on the difference in location and distance between the learner and the teacher; Its importance lies in providing an educational method that was placed in the hands of the learner despite the different geographical area; This is to attract students and challenge the difficult conditions they face in the traditional education program in universities under some circumstances such as the spread of epidemics. We have demonstrated the advantages and disadvantages of distance education, the advantages of distance learning: flexibility is

to provide the area and options for the learner according to his desire to participate, and secondly the impact: characterized by leaving it more effective and effective than the traditional education system for the learner; This is through the use of technologies and finally the occasion: as it suits all individuals, a lecturer or a student. Among its disadvantages are the high material cost, the inefficiency and speed of the Internet in Egypt, and society's lack of acceptance of this type of education. The advantages of distance learning: Firstly, flexibility is to provide the area and options for the learner according to his desire to participate, and secondly, the impact: characterized by leaving it more effective and effective than the traditional system of education for the learner; This is through the use of technologies and finally the occasion: as it suits all individuals, be it a lecturer or a student. The downsides of distance education are the high material cost of joining it, lack of access to the Internet, its efficiency and speed in Egypt and societies do not accept this type of education.

Conflicts of Interest

The authors declare that there is no conflict of interest regarding the publication of this article

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