

The Quality of Distance Learning of Post Graduate Students in the Universities of the Southern Territory from their Perspective

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Abstract

This study aims at revealing the quality of distance learning of post graduate students in the universities of the Southern Territory in Jordan from their perspective. The sample of the study consisted of (442) male and female post graduate students from the governmental Jordanian universities: Mutah University, Tafila Technical University and Al-Hussein Bin Talal University. It was chosen by the cluster randomization method. An evaluation instrument was developed to achieve the purpose of this study, which was included (29) items in its final version. The reliability and validity of instruments were verified. The findings of the present study revealed that the estimates of the quality of distance learning of post graduate students in the universities of the southern territory from their perspective were within the moderate degree. The domain designing and developing instructional materials has ranked first, technology infrastructure has ranked second and student support services has ranked last. In addition, the results showed that there aren't any statistically significant differences at ($\alpha \geq 0.05$) between the means of the evaluation estimates due to the educational qualification variable, diploma and bachelor's degree, in all the domains. It is also concluded that there are statistically significant differences at ($\alpha \geq 0.05$) due to the gender variable with regard to student support services in favor of females. The study recommended the necessity of activating the indicators and domains of the quality of distance learning by stimulating universities to adhere to them.

Keywords: quality, distance learning, graduate students.

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Introduction

Digital knowledge technology and the related modern educational concepts such as: education software, virtual classes, online learning or distance learning, and many other modern concepts are among the most important technological discoveries in the contemporary time. Accordingly, most countries of the world seek to develop its educational and pedagogical systems, and teaching and learning methods (Ibrahim, 2015). In addition, this modern technology has pushed educational institutions to provide solutions to take advantage of modern educational concepts, and to employ them in the educational reality in accordance with their goals and postulates. It is also imposed on educational institutions to present the initiative to benefit from technology in distinguishing the outcomes of the educational process, as it is not possible in front of these rapid developments to continue to use traditional methods and methods of education, whether in curricula, teaching methods, or activities that are used in educational situations (Kallab, 2016).

The distance learning pattern is a result of technological developments, especially after the educational process was directly affected by the automation of industry and the development of "Artificial Intelligence" technology and the "Internet of Things", as well as the information technology revolution that stormed the classroom and became a part of authentic ones. Distance learning is based on the delivery of knowledge and instructional materials to the student through different technical means and methods, where the student is far from or separated from the teacher or the supervisor of the educational process. It employs technology to fill the gap between each of the two parties in a manner that simulates face-to-face communication. Distance education is considered a kind of educational interactions in which the teacher and student are separated from each other in time or space, or both (Al-Hassan, 2014).

The objectives of using distance learning are achieved through the design of various academic programs and the quality of the equivalent quality of printed, visual and audio instructional materials, as educational programs and materials are the basic products that students need in this educational system, and their quality is not sufficient to make distance learning good, but there are other important aspects that must be planned and implemented in good quality, including the provision of appropriate educational support for the student learning process, and the delivery of such support in a manner that includes its efficacy, evaluation of their learning and performance. The application of all aspects in an integrated and harmonious manner ensures that parts of the distance learning process are interlinked, and all these aspects are educational service aspects performed by the educational institution with its academic, technical and administrative staff for learners (Kamal, 2002).

Furthermore, agreeing upon measurement standards in line with international standards for the educational product is an important, serious and vital matter. We must take into account the inputs, means and outputs of the educational process product When measuring and formulating standards. Consequently, those who want to apply standards to the society in which they live must mix and select from standards which are in line with the nature of society and its homogeneity with the society of the study in which it was presented. These standards also should keep pace with the developments that have occurred in the educational and technological domain (Al-Wurthan, 2007).

From the foregoing, the need to study the quality of distance learning in universities and educational institutions in general and universities in particular appears due to its importance in development and upgrading the level of its students. The increasing progress in knowledge and the information revolution that the world is witnessing makes it necessary to create a new educational system characterized by quality and aims at increasing the efficiency of the teaching-learning process, and the development of communication between teachers and students through the use of more modern means that would achieve the highest efficiency of the teaching-learning process.

Statement of the problem

Most educational institutions at all levels tend to declare belonging to the language of the age and use information technology in education, both with regard to its use as an instructional material within the educational curricula, and with regard to its use in managing student and teacher affairs and with regard to its use as an educational tool. In addition, it is vital to search for new methods through which this technology can contribute to achieving and supporting the objectives of the educational curricula (Abdul Hamid, 2006).

Although modern education strategies, especially distance learning, e-learning and blended and hybrid learning have become a major concern in various countries of the world, many countries have sought to launch professional electronic platforms that help take advantage of these systems. However, every country should study well the extent to which these systems can be applied to its students and teachers, and try to qualify and train them well to deal with them first before actually starting the application. It should take into consideration that the inability to use these systems by any member of the educational process will return with a negative return that is completely devoid of any significant benefit (Hassan, 2020).

The transition to distance learning requires continuous realistic study and evaluation, developing perceptions that improve learning outcomes and outcomes, and taking measures that achieve the quality of distance learning. This can be done through specific and clear criteria that measure the extent to which its objectives are achieved and its requirements are met, both in terms of the curriculum and its presentation to students and as a mechanism of conducting and controlling exams, providing the necessary means of communication and electronic devices, and other basic requirements for faculty members and students at the same time.

Specifically, the present study attempts at answering the following two questions:

- 1- What is the degree of distance learning quality for postgraduate students in the universities of the Southern Territory in Jordan from their point of view?
- 2- Are there any statistically significant differences at the significance level ($\alpha \geq 0.05$) in the degree of quality of distance learning among graduate students in the universities of the Southern Territory in Jordan from their point of view due to the variables (gender, college, and university)?

Objectives of the study

- 1- Knowing the degree of quality of distance learning among postgraduate students in the universities of the Southern Territory in Jordan from their point of view.
- 2- To identify whether there are statistically significant differences in the degree of quality of distance learning among graduate students in the universities of the Southern Territory from their point of view. It is attributed to the study variables (gender, college, and university).

Significance of the study

This study gains its importance from the importance of the topic itself 'Distance learning'. Specifically, the present study aims to reveal the quality of distance learning among postgraduate students in the universities of the Southern Territory in Jordan from their point of view.

In addition, the results of this study may benefit higher education institutions and decision-makers in providing feedback on the use of distance learning, identifying the quality of distance learning, the extent of benefit and achieving its objectives, and the feasibility of increasing its use as one of the important technological innovations that must be available in all universities.

Moreover, the present study may contribute to the provision of new theoretical literature on the quality of distance learning to feed the Arab library in general and the Jordanian library in particular with this. Educational

researchers can also benefit from the current study instrument in their future studies.

Conceptual and procedural definitions

- **Distance learning:** It is defined as: “Education that is characterized by the lack of total direct communication between the faculty and students, where instructional materials are provided through the local or global network (the Internet) through the use of education and communication technology within the framework of the educational process” (Al-Sharhan, 2014: 2).

Quality: It is “translating the needs and expectations of service students or beneficiaries regarding the service into specific characteristics, which are the basis for designing the educational service and providing it to its students in accordance with their expectations (Al-Kasji, 2012: 38).

Limitations of the study

The study was limited to the following limits: -

- **Temporal limits:** This study was applied in the first semester of the academic year (2020-2021).

- **Human limits:** This study was applied to graduate students in the universities of the Southern Territory in Jordan.

- **Spatial boundaries:** This study was applied in the universities of the South Territory in Jordan (Mutah University, Tafila Technical University, Al Hussein Bin Talal University).

Theoretical framework and previous studies

Distance learning

Distance learning depends on the competencies of e-learning in providing educational content to students in an effective manner, through its positive characteristics; As a shortening of time, effort, and cost Its economic potential and its great potential to enhance students' learning and effectively improve their scientific level. In addition, it provides an interesting and interactive learning environment for both teachers and students, in which the determinants of time and place are eliminated, and students are allowed to learn in light of their capabilities, scientific ability and knowledge levels (Ahmed, 2016).

Distance learning focuses on accessing education and training, liberating students from the constraints of time and space. It provides flexible learning opportunities for learners. It can be described as learning that includes implementing information technology, computing and communication applications in more than one location. It focuses on teaching methods and technology with the aim of providing teaching, which is often on an individual basis for the student other than those in a traditional educational environment (Amer, 2013).

Distance learning is defined as: the method in which the student learns while he is not under the direct supervision of the teacher for most of the teaching time, but is under the responsibility of the educational institution to organize it, and it depends on the prior production of courses, including what this production requires from the design of the course and the selection of production templates and then the production processes themselves. It employs photography and audio-visual recordings, then the course is printed on paper in order to be a reference for these instructional materials (Salem, 2004).

Al-Kasji (2012) defined it as: education that is based in principle on not requiring the simultaneous presence of the learner with the teacher in the same place. In this way, the teacher and the student will not have to deal directly with the other party, and then the necessity arises for a mediator to exist between the teacher and the student. This mediation has technical, human and organizational aspects.

Matthew & Karen (2016) defined it as: the process of separating the student, teacher, and writers in the learning environment, and transferring the traditional environment of learners from a university or school and others to a multiple and geographically separated environment, and in a modern way for learners that developed with the rapid technological development in the world. It aims at giving the opportunity to generalize and providing it to students who cannot obtain it in traditional circumstances and almost daily.

Berg & Simonson (2018) defined distance learning as: an interactive system linked to the educational process. This system relies on the existence of an electronic environment that presents the learner with courses and activities through electronic networks and smart devices.

Al-Shanaq and Bani Doumi (2020) defined it as: providing educational and training programs through various electronic media, including CDs and the Internet, in a synchronous or asynchronous manner, using the principle of self-learning or the help of a teacher.

Finally, UNESCO (UNESCO, 2020) defined distance learning as: an educational process in which all or most of the teaching takes place by a person far away from the student in place and time, emphasizing that most communications between teachers and students take place through a specific medium, whether electronic or printed.

Through the previous definitions, it is clear that distance learning is one of the types of education that provides education to the student without direct supervision from the teacher, or commitment to the specified

time and place for those who cannot attend face-to-face education. On preparing instructional materials and tools for individual education based on several technological media such as television, computer, Internet, interactive video, satellite channels and other technology that can help in two-way communication between the student and the teacher.

Al-Arini (2013) indicated that distance learning aims at:

- Providing educational opportunities for those who missed out on educational opportunities at all levels of education for many reasons that may be political, geographic, economic or social. Therefore, the main goal of distance learning is to help those who have ambition to develop and educate themselves and improve the educational, social and professional level where traditional education is unable to achieve it.
- Creating appropriate educational conditions that suit the needs of learners to continue learning.
- Increasing the flexibility and the ability to adapt to all educational conditions for learners such as housewives, farmers, industrialists and employees.
- Achieving a new concept of education that is compatible with the explosion of knowledge and the scientific and technological revolution experienced by the present era. This concept is to rehabilitate qualified individuals through continuous education and self-learning at anytime and anywhere, without the obligation to teach in the classroom.
- Opening up fields for some of the newly developed, dual and interdisciplinary majors that society needs and that traditional college systems do not allow to achieve.
- Presenting cultural programs to all citizens, raising their awareness and providing them with knowledge. Using modern means of communication such as television and satellites, and broadcasting educational programs through them, the benefit is not limited to students only, but also addresses all citizens.

Abdul Hai (2010) mentioned the existence of three models for employing distance learning in the teaching and learning processes, and one of these models may be employed, or they may be employed together.

- The first model is the partial or auxiliary model in which some distance learning tools are used to support (traditional) classroom education. It may take place during the school day in the classroom, or outside the school day.
- The second model is the blended model. This model includes a combination of classroom education and distance learning in the classroom, in the computer lab, in the learning resource center, or in smart classes.
- The third model is the complete model of distance learning. In this model, distance learning is considered an alternative to classroom education, and this model goes outside the boundaries of the classroom. Rather, learning takes place from anywhere, at any time, where classes are transformed into virtual classes, and this is what is called Virtual Learning, where the Internet is the primary mediator in the learning process. Teachers make learners study electronic content through self-study, or participates in a specific group in learning and completing educational projects using distance learning tools such as chat rooms and dialogue forums.

The quality

The movement of international standards for quality has appeared in the contemporary world and is gaining increasing attention, especially in the educational field. This was confirmed by Al-Khatib (2007) who stated that the reasons for this increasing interest in introducing these standards and their use in educational and educational systems comes from a complete conviction that these standards are a means to ensure the success of the educational product and its continuous improvement through the use of measurable and observable indicators.

The international organization defined quality as: 'a set of qualities and characteristics of a good or service that led to the possibility of achieving stated or implicitly assumed desires' (Ahmed and Zaki, 2017: 67).

Azab (2008: 64) defined it as: "Any specific institution or organization providing a service that is characterized by a high level of proficiency and quality, to fulfill the needs and desires of people in a way that is consistent with their expectations about the level of this service, thus achieving their satisfaction and pleasure."

Attia (2008) also defined it as: the integration of features and characteristics of a product or service in a way that meets specific needs and requirements known to the beneficiaries.

Through the previous definitions, the researcher defines quality as: quality, good performance and workmanship, which is the total sum of the characteristics and features of the product, whether physical or human, or the continuous service provided by the institution to satisfy the overt and implicit needs of the beneficiaries, and satisfy their desires, aspirations and expectations with a high degree of efficiency and assured satisfaction.

Quality in higher education

The issue of quality assurance is more important in educational institutions and educational systems. The high cost of education is made even more important by the high cost of education in the light of global inflation rates, the poor quality of some educational outcomes and their poor association with the labor market. This negatively affects development rates and the ability of society to achieve its ambitions and objectives. Adjusting the quality of education is a means of making sure that the educational process, educational management, training of teachers and administrators, and educational development in educational institutions are all carried out in accordance with approved plans and standard specifications (Badi, 2010).

The implementation of the quality assurance system in educational institutions seeks to achieve a set of objectives, some of which reflect the interests and requirements of the governments of countries, and others reflect the internal needs of the education institution. Atta (2013) classified the objectives of the quality assurance system in educational institutions into three categories, namely:

1. **Quality assurance:** is one of the main concerns of the governments of countries, and one of their most important roles to ensure that the outputs of the education system meet the minimum quality requirements. The emergence of private education institutions and the continuity of their spread and expansion impose the need for governments to monitor seriously and carefully the quality level of these institutions. This can ensure the alignment of education outputs with the needs of the labor market, and that the services of educational institutions meet the goals of national development.

2. **Accountability and Transparency:** The implementation of the quality assurance system also aims to impose responsibility for conforming to the established standards, and to ensure that each individual bears the responsibility for achieving quality in the processes for which he is responsible, as each individual must perform his duties in light of the training programs and procedures that have been identified by Quality Assurance System.

3. **Improving current practices:** The implementation of the quality assurance system helps to improve the current practices in the education institution, through the most important procedure based on it, which is to conduct a self-evaluation that aims to provide decision-makers with feedback about the unit under evaluation, highlighting the strengths and weaknesses. This enables them to develop strategies, plans, and take actions that would bridge gaps, correct errors, and make optimal use of capabilities to achieve better performance.

The success of the implementation of quality in educational institutions depends on the availability of a set of conditions, which were clarified by Salama (2015):

- 1- The successful quality assurance ensues the existence of an atmosphere of trust between those who evaluate these operations and those concerned.
- 2- The successful quality assurance should be conducted during the course of work and not at the end of it.
- 3- The successful quality assurance provides information that can be used to guide one towards the subsequent steps to be followed in direct behavior for continuous improvement.
- 4- The successful quality assurance does not include decisions of an administrative nature, and it is sufficient to describe reality as its strengths and weaknesses.
- 5- The successful quality assurance takes into account the possibilities available and the potential risks, it is advisable that these operations take place periodically and regularly.

The concept of quality in education in general falls within the main phases as Al-Badi (2010) explained:

1. **Quality means achieving goals:** means a high-quality higher education institution sets specific goals and achieves them well.

2. **Quality of inputs and processes:** means achieving goals depends on many factors, the most important of which are the quality of the material and human inputs used and the set of methods and processes used to invest these inputs.

3. **Standardized quality:** The term quality is standardized, so performance is evaluated as excellent, good or bad according to specific criteria and benchmarks.

4. **Quality vs. Quantity:** Quality education is a balance between quantity and quality.

5. **Technocratic quality:** The application of the scientific method in relation to scientific or technical knowledge to enable the educational system to meet the technological and economic needs of society.

Many quality assurance policies in higher education institutions that offer distance learning programs were built on several axes, which are mentioned by Hindawi and Al-Zuhairi, (2009):

1. Designing the educational learning environment of the institution to ensure that it meets the approved quality standards. These include learning resources, services available to students, administrative staff, human and technological needs.

2. Measuring outputs and comparing them with traditional education outputs where distance learning institutions conduct comparative studies to perform standard samples for students of distance learning programs and compare them with a sample similar to traditional education students as well as conduct proficiency examinations for selected samples of students enrolled and graduates.

3. Comparing the success rates of students of distance learning programs in professional examinations conducted by stakeholders such as trade unions, professional associations and employers.
4. Internal (self) assessment, which is a set of internal procedures and processes carried out by the distance learning institution to achieve quality in its programs, including surveys of students and employers' opinions, assessment of graduates and quality assurance mechanisms in study plans in terms of level, subtraction, exams, and others.
5. The external evaluation is conducted by a specialized external professional committee that examines the components of the distance learning program in all its aspects, taking into account the elements of quality, as it is considered one of the most important processes that ensure quality in distance learning. This evaluation may be voluntary at the request of the distance learning institution or compulsory by governments represented by ministries of higher education or government academic accreditation bodies supervising higher education institutions in that country.
6. Academic and professional accreditation: means that the distance learning institution obtains the necessary accreditations for its programs from local and international councils, organizations and bodies that are concerned with setting standards that the distance learning institution must achieve in order to be approved. Accreditation is defined as a set of procedures undertaken by a third party to ensure that the distance learning institution achieves minimum quality standards related to academic, administrative and support services aspects.
7. Continuous improvement procedures in quality assurance that show the seriousness of the learning institution in adopting the best practices in distance learning and that the objectives of the institution include a clear goal to ensure the elements of basic quality assurance.

Previous studies

Hassanein (2011) conducted a study aimed at identifying the current reality of the employment of educational technology in the faculties of education in Sudanese universities that adopted the distance learning system, in the programs and decisions of this system. The study sample consisted of (32) professors from the faculties of education. The study followed the descriptive approach. The results of the study revealed that the distinguishing feature of the teachers' views of the faculties of education is negative about the use of educational technology in the distance learning programs in these faculties. In these programs, it is not possible to contain this technological formula.

The Agel's study (2014) aimed to reveal the attitudes of faculty members in Jordanian public universities towards distance learning and their relationship to some variables. The descriptive survey method was used. Fifty-five items are divided into four areas (the importance of distance learning for the teacher, the importance of distance learning for the learner, the impact of distance learning on the educational process, and the obstacles to adopting distance learning). The results showed that the attitudes towards distance learning were moderately positive, as well as the absence of statistically significant differences between the mean scores of the trends of faculty members due to the variables of academic rank and academic specialization, as well as the presence of obstacles that limit the possibility of applying distance learning in Jordanian universities, including the lack of experts and specialists in the production of distance learning materials and the community's lack of awareness of this system. It is recommended the need to reduce obstacles and intensify studies on distance learning to set standards for the success of distance learning.

Awad and Helles (2015) studied the goal of identifying the trend towards distance learning technology and its relationship to certain variables among graduate students in Palestinian universities. The sample of the study consisted of (91) students studying graduate programs in the faculties of education in the Palestinian universities (Al-Aqsa, Islamic, and Azhar). The researchers used the analytical descriptive curriculum and used a measure prepared to measure the trend towards distance learning technology. The results of the study showed that the trends of graduate students in Palestinian universities towards distance learning technology was high and positive. In addition, the results of the study showed that there were no statistically significant differences due to the gender change, educational level and general assessment. There aren't any statistically significant differences attributable to the university change and to the benefit of the Islamic University.

Abu Seif (2017) conducted a study aimed at presenting a proposed model for the development of distance learning programs in Jordanian universities in light of the problems it has. the study community is a faculty member in Jordanian public universities, and the sample of the study included (311) faculty members selected by stratified random method. The researcher used the development survey curriculum, and a questionnaire consisting of (41) items. The results showed that the problems of distance learning related to students and faculty came with a moderate degree in the official Jordanian universities, while the problems of distance learning in some universities came high. There aren't any statistically significant differences on the tool attributable to the gender change and experience. It is recommended the need to increase and develop awareness of the importance of distance learning and adopt the proposed perception presented by the study.

Abu Shekhidim (2020) conducted a study aimed at revealing the effectiveness of e-learning in light of the

spread of the Corona virus from the point of view of teachers at Kadoorie University. To achieve the objectives of the study, which is based on the descriptive analytical approach, the study sample consisted of (50) faculty members at Kadoorie University who were suitable to teach during the period of the spread of the Corona virus through the education system. The data was Via a questionnaire whose reliability reached (0.804). The results of the study revealed that the study sample's evaluation of the effectiveness of e-learning in light of the spread of the Corona virus from their point of view was moderate. The researchers recommended holding training courses in the domain of e-learning for both teachers and students and to help get rid of all obstacles that prevent benefiting from the e-learning system followed, and the need to combine face-to-face education and e-education in higher education institutions in the future.

Basilaia and Kvavadze (2020) conducted a study aimed at education in the stage of education and online learning via the Internet during the spread of the Corona virus epidemic, as it was based on the statistics of the first week of teaching in private schools to know the results of online education. The (EduPage) and Gsuite platforms were used, and the statistics of the first week of education via the Internet was built. The researchers concluded that the transition between traditional education and online education was successful, and the system and skills acquired by teachers, students and school management in the post-epidemic period can be used in different cases, such as those with special needs who need additional hours, or by increasing the effectiveness of group teaching, or increase student independence and acquire new skills.

Commenting on previous studies

It is clear from the above the diversity of previous studies that dealt with distance learning, which focused on the use of distance learning in educational institutions, the extent of its effectiveness in achieving goals and its relationship to some variables, such as the study of Abu Shekhidim (2020), the study of Abu Seif (2017) and the study of (Basilaia, Kvavadze, 2020).

The studies also varied in terms of the methodology used to achieve the results. They relied on the descriptive approach, such as the Agel study (2014) and the Awad and Helles study (2015), using the questionnaire instrument and the case study as a study (Basilaia, Kvavadze, 2020).

Previous studies have benefited from the scientific methodology followed by those studies. As well as in the way the material is presented, and in the design of the study instrument, which showed the need for an instrument to measure the quality of distance learning in universities.

The current study differed from previous studies in terms of spatial and temporal limits, the study sample, its society, its variables and its instruments.

Study design

The descriptive survey method was relied on to suit the method for this type of studies.

Study population

The study population consists of (3,684) graduate students in the universities of the Southern Territory (Mutah, Tafila Technical, Al Hussein bin Talal) according to the statistics of the Ministry of Higher Education for the year 2020-2021.

Study sample

The study sample consisted of (442) male and female students. The sample constituted (12%) of the original population size for the study, and they were chosen by random method. Table (1) shows a description of the study sample according to its independent variables.

Table (1)
Distribution of study sample members according to gender, college and university variables

Variable	Categories of the variable	Number
Gender	Male	C
	Female	272
College	Humanities	285
	Scientific	157
University	Mutah University	220
	Tafila Technical University	100
	Al-Hussein Bin Talal University	122
	Total	242

Study instrument

The study tool consisted of a questionnaire developed based on previous studies and indicators of the quality of

distance learning programs, to suit the purpose of the study. The instrument was formed in its initial form from three domains (design and development of materials, technological infrastructure, student support services). It contained 25 items. The responses upon each item are measured by the Five- Likert scale.

Validity of the instrument

The validity of the instrument was verified using the apparent validity by presenting it to (10) arbitrators specialized in the subject of the study in curricula, teaching methods, measurement and evaluation, and quality assurance in order to express an opinion on each of the items that were developed in the instrument and in each domain. The item belongs to him, and the wording of each item in terms of language and the domain to which it belongs. the items which were agreed upon by (80%) of the arbitrators were retained. The arbitrators' opinions were summarized as follows: merging some items for interconnection between them, the difficulty of separating them, canceling the items that were repeated and deleting the items that are not related to the topic, so that the number of items for the instrument in its final form became (20) items and distributed into three domains (design and development of instructional materials, infrastructure technology, student support services).

The reliability of the instrument

The reliability of the instrument was confirmed by the method of internal consistency of the items of the questionnaire using the Cronbach alpha method.

Table (2)
Calculated reliability coefficients for the study instrument

Domain	Cronbach Alpha Reliability
Designing and developing instructional materials	0.86
Technological infrastructure	0.88
Student Support Services	0.75
Total	0.86

It is noticed from Table (2) that the values of the reliability coefficients are acceptable and the scale is usable.

Study variables

1- The independent variables: Gender has two levels: 1. Male 2. Female

2- The college has two levels: 1. Humanities 2. Scientific

3- The university has three levels: 1- Mutah University 2- Tafila Technical University 3- Al-Hussein Bin Talal University

Results and discussion

The results and discussion of the first question, which states: What is the degree of quality of distance learning among graduate students in the universities of the Southern Territory from their point of view?

To answer this question, arithmetic means and standard deviation were used. They were arranged in descending order according to the arithmetic mean, and Table (3) shows this:

Table (3)
Mean scores and standard deviations of the estimates of the study sample members on the instrument domains, arranged in descending order

Rank	No.	Domains of quality distance learning	Mean score	Standard deviation	Degree
1	3	Student Support Services	3.55	0.87	Moderate
2	2	Technological infrastructure	3.53	0.71	Moderate
3	1	Designing and developing instructional materials	3.38	0.76	Moderate
Total			3.49	0.77	Moderate

It is noted from Table (3) that the degree of quality of distance learning among graduate students in the universities of the Southern Territory from their point of view came at a moderate degree. Student support services ranked first with a mean (3.55) at a moderate degree and a standard deviation (0.87), while the design and development of instructional materials came in the last rank with a mean (3.38) with a mean degree and a standard deviation (0.76).

The mean scores and standard deviations of distance learning quality domains were calculated for graduate students in the universities of the Southern Territory from their point of view, as they were as follows:

The first domain: design and development of instructional materials

The mean scores and standard deviations of the quality of distance learning among graduate students in the universities of the Southern Territory were calculated from their point of view on the items of this domain, as they came as shown in Table (4):

Table (4)
Mean scores and standard deviations of the estimates of the study sample members on the domain of design and development of instructional materials, arranged in descending order

Rank	No.	Items	Mean scores	Standard deviation	Degree
1	4	Clarity of educational objectives and the content of the subject, its modernity and keeping pace with modern scientific development.	3.70	0.72	مرتفعة
2	7	Clear learning outputs at the program level as well as at the level of each module and linking the outputs of the units to the outputs of the program as a whole and clearly and coordinated.	3.61	0.79	Moderate
3	8	Means and means of learning and education used in the teaching of the subject remotely.	3.52	0.81	Moderate
4	3	The ability of bitter beer, development and updating of the contents of the subject with documentation in a file for each subject.	3.50	0.83	Moderate
5	1	Access to open material content based on output	3.47	0.85	Moderate
6	2	Is the program regularly reviewed?	3.40	0.86	Moderate
7	6	Clarity of evaluation and examination mechanisms and linking them with the required learning outcomes, effective mechanisms for monitoring examinations, applying integrity mechanisms and preventing fraud.	3.36	0.87	Moderate
8	5	The amount and percentage of interaction and dialogue in the course.	3.33	0.89	Moderate
Total			3.38	0.76	Moderate

It is noted from Table (4) that all items in the domain of design and development of instructional materials came to a medium degree, except for one item that came with a high degree, and item No. (4) was resolved, which states "the clarity of educational objectives, content of the instructional material, its modernity and keeping pace with modern scientific developments." In the first place, with a mean of (3.70) and a standard deviation of (0.72), while item No. (5), which states " The amount and percentage of interaction and dialogue in the course." in the last rank, at a moderate degree, with a mean of (3.33) and a standard deviation of (0.89).

The second area: the technological infrastructure

The mean scores and standard deviations of the quality of distance learning among graduate students in the universities of the Southern Territory were calculated from their point of view on the items of this standard, as they came as shown in Table (5):

Table (5)
Mean scores and standard deviations of the estimates of the study sample members on the criteria of the technological infrastructure, arranged in descending order

Rank	No.	Items	Mean scores	Standard deviation	Degree
1	13	Instructional materials are provided to students at appropriate times for the used learning methods and for the nature of the prescribed instructional material.	4.12	0.72	High
2	9	The effectiveness and efficiency of the technological infrastructure needed for the distance learning system, including the availability of appropriate modern technologies and devices required in distance learning and learning processes, including simulation systems and modern communications that allow direct and indirect dialogue between students and professors and easy communication of students to learning sources.	3.92	0.79	High
3	11	Providing special IT (Information Technology) and data processing center for distance learning.	3.65	0.85	Moderate
4	14	Providing maintenance and technical support for the technological infrastructure and its periodic modernization, including maintenance of the learning management system.	3.63	0.86	Moderate

Rank	No.	Items	Mean scores	Standard deviation	Degree
5	12	There are sufficient guidelines in the instructional materials that enable the student to use them optimally with high efficiency and quality.	3.53	0.91	Moderate
6	10	The distance learning system ensures superior protection of the user`s privacy through the best technological standards.	3.46	0.94	Moderate
7	15	The existence of specific and clear policies and methods with a statement of responsibilities to ensure the quality of the methods of presentation of subjects and good and effective management of the means of communication used by students and teachers.	3.46	0.97	Moderate
Total			3.53	0.71	Moderate

It is noted from Table (5) that all the items of the technological infrastructure domain came to a moderate degree, except for four items that came with a high degree, and item No. (13) which states “Instructional materials are provided to students at appropriate times for the used learning methods and for the nature of the prescribed instructional material.” has ranked first, with a mean of (4.12) and a standard deviation of (0.72), while item No. (15), which states “The existence of specific and clear policies and methods with a statement of responsibilities to ensure the quality of the methods of presentation of subjects and good and effective management of the means of communication used by students and teachers. ” has ranked last rank, within a moderate degree, with a mean of (3.46) and a standard deviation (0.97).

Third Domain: Student services and support

The mean scores and standard deviations of the quality of distance learning among graduate students in the universities of the Southern Territory were calculated from their point of view on the items of this standard, as they are shown in Table (6):

Table (6)
Mean scores and standard deviations of the estimates of the study sample members on the standards of services and student support arranged in descending order

Rank	No.	Items	Mean scores	Standard deviation	Degree
1	20	Availability of services provided to the student after the completion of the study of the prescribed subject and includes information on the result, financial assistance , drop-out policies and others.	3.74	0.71	High
2	16	Continuous evaluation of services provided to students through questionnaires of the sstudents` satisfaction and the introduction of students` opinions in the development of technical services provided to them to conduct distance learning and education processes.	3.70	0.86	Moderate
3	19	Availability of services provided to the student during his studying for the subjects such as enquiry and dialogue services ,e-books ,courses ,evaluation methods , examinations and all the assistance required for the student to successfully finish the subject.	3.69	0.83	Moderate
4	18	Availability of services provided to students before enrolling in the program and includes study requirements, processing and techniques required to succeed in subjects with the possibility of training the student on the techniques used in education.	3.67	0.85	Moderate
5	17	Training for learners on techniques used in education and providing students with learning opportunities to suit their needs and circumstances.	3.64	0.89	Moderate
Total			3.55	0.84	Moderate

It is noted from Table (6) that all items of the domain of student services and support came to a moderate degree, with the exception of one item that came with a high degree, and item No. (20) which states “Availability of services provided to the student after the completion of the study of the prescribed subject and includes information on the result, financial assistance, drop-out policies and others.” has ranked first, with a mean of (3.74) and a standard deviation of (0.71), while item No. (17), which states “Training for learners on

techniques used in education and providing students with learning opportunities to suit their needs and circumstances.” has ranked last, with a moderate degree, with a mean of (3.64) and a standard deviation of (0.92).

The results indicated that the degree of quality of distance learning among graduate students in the universities of the Southern Territory from their point of view came to a moderate degree, and therefore it needs more work in order to raise its effectiveness, and this may be attributed to the fact that the issue of quality has not yet been possible in Educational institutions are still in their infancy, and this can be explained by the lack of clear standards for the quality of distance learning in universities and the lack of graduate students accustomed to that, as the study was conducted face to face.

As for the solutions in the domain of student support services in the first place and at a moderate degree, this result can be attributed to what the universities in the Southern Territory have done in preparing the infrastructure in universities, as this helped the government trend to resort to distance learning for the continuity of education in universities.

As for solutions in the domain of design and development of instructional materials in the last rank and at a moderate degree, this result can be attributed to the fact that these works are not at the core of the teachers’ work and are not accustomed to such techniques, and they need continuous training and practice by teachers, and therefore they need to be engaged in training courses which helps them to good practice and practical application.

The results of the second question and its discussion, which states: Are there any statistically significant differences at the significance level ($\alpha \geq 0.05$) in the quality of distance learning among graduate students in the universities of the Southern Territory from their point of view that are due to the variables (gender, college, and university)?

To answer this question, the mean scores and standard deviations of the quality of distance learning among graduate students in the universities of the Southern Territory were calculated from their point of view due to the variables (gender, college and university). Table (7) shows that:

Table (7)

Mean scores and standard deviations of the degree of quality of distance learning among graduate students in the universities of the Southern Territory from their point of view on the total score and study variables

Domain		Gender		College		University		
		Female	Male	Humanities	Scientific	Mutah	Al-Tafila	Al-Hussein Bin Talal
Design and development of textbooks	Number	272	170	285	157	220	100	122
	Mean	3.75	3.49	3.53	3.48	3.64	3.53	3.44
	St. Deviation	.628	.595	.602	.609	.564	.679	.543
Technological infrastructure	Number	272	170	285	157	220	100	122
	Mean	3.53	3.27	3.30	3.26	3.52	3.39	3.29
	St. Deviation	.913	.836	.746	.948	.605	.697	1.04
Student Support Services	Number	272	170	285	157	220	100	122
	Mean	3.64	3.49	3.53	3.50	3.22	3.29	3.63
	St. Deviation	.653	.745	.721	.749	.716	.849	.660
Total	Number	272	170	285	157	220	100	122
	Mean	3.56	3.37	3.42	3.38	3.29	3.35	3.36
	St. Deviation	.578	.690	.546	.645	.856	.714	.759

Table (7) shows that there are apparent differences in the mean scores and standard deviations of the degree of quality of distance learning among graduate students in the universities of the Southern Territory from their point of view on the total score and the study variables, and to find out whether these differences are statistically significant, Multivariate Analysis of Variance was used.

Table (8)
Multivariate analysis of variance (MANOVA) to indicate the differences in the degree of quality of distance learning among graduate students in the universities of the South Territory from their point of view on the overall degree and study variables

Source of variance	Domains	Average squares	Degrees	Total squares	value F	Sig.
Gender Hotllings trace 028.	Design and development of textbooks	2.09	1	2.09	5.85	.240
	Technological infrastructure	2.20	1	2.20	3.00	.084
	Student Support Services	.753	1	.753	1.39	*.016
College Hotllings trace 039.	Design and development of textbooks	.134	1	.134	.374	.541
	Technological infrastructure	.151	1	.151	.206	.650
	Student Support Services	.046	1	.046	.086	.770
University Wilks` Lambda 927.	Design and development of textbooks	.972	2	1.94	2.71	.068
	Technological infrastructure	.712	2	1.42	.972	.380
	Student Support Services	.769	2	1.54	1.42	.244
Error	Design and development of textbooks	.358	259	90.916		
	Technological infrastructure	.732	259	185.981		
	Student Support Services	.542	259	137.594		

* Statistically significant at the level of significance ($\alpha \geq 0.05$)

It is evident from the following table (8):

- 1- There are no statistically significant differences ($\alpha \geq 0.05$) due to the university variable in all domains.
- 2- There are no statistically significant differences ($\alpha \geq 0.05$) due to the college variable in all domains.
- 3- There are statistically significant differences ($\alpha \geq 0.05$) due to the gender variable in the domain of student support services, and by returning to the mean scores, we find them in favor of females.

The results showed that there are differences in the degree of quality of distance learning among graduate students in the universities of the Southern Territory from their point of view due to the gender variable in the domain of student support services and in favor of females. This can be explained by the fact that females are more satisfied with the infrastructure and services provided by the university and their commitment and keenness than males. Females are always keen to take advantage of everything available.

The results also showed that there were no differences in the degree of quality of distance learning among graduate students in the universities of the Southern Territory from their point of view due to the variable of the college and in all domains. Teachers and students were developed through centers in those universities.

The results indicated that there were no differences in the degree of quality of distance learning among graduate students in the universities of the Southern Territory from their point of view due to the university variable, and the reason for this may be due to the three universities' reliance on unified applications through the Ministry of Higher Education and that these applications are available to those universities were unable to develop their own applications due to the short period of entry and transition to distance learning.

Recommendations

In light of the findings of this study, the following can be recommended:

- 1- The necessity of activating the quality indicators and domains of distance learning in the universities of the Southern Territory in particular and Jordanian universities in general.
- 2- Conducting awareness and educational sessions for the employees of the e-learning centers in the universities of the Southern Territory.
- 3- Conducting correlational studies between the quality of distance learning and other variables such as academic achievement in Jordanian universities.

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