

The electronic research and academic services provided to graduate students in light of the digital transformation

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Abstract

The current study aimed to identify the status of the academic and electronic research services provided to graduate students in light of the digital transformation from their perspectives. To accomplish the aims of the study, the researcher used the descriptive analytical method by administering a questionnaire to 303 male and female graduate students who were randomly selected using the simple random sampling method. The results of the study revealed that the electronic academic services provided to graduate students were medium, while the electronic research services provided to graduate students were poor. The results also showed that there are many obstacles that prevent the provision of electronic academic and research services to graduate students in light of the digital transformation from their perspectives.

Keywords: electronic services, academic services, research services, KKU.

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1. Introduction

The current time is witnessing amazing scientific, cognitive and technical development in various fields, especially with the launch of the Fourth Industrial Revolution and the accompanying changes that removed the boundaries between what is logical and illogical; it also caused a qualitative leap in different aspects of life. Thus, new terms and concepts have appeared leading to a change in lifestyles. Realising its pioneering and cultural role at the Arab, Islamic and global levels, Saudi Arabia's digital transformation vision (2030) was launched to assure the Kingdom's openness to the latest contemporary technological revolutions and benefit from them in all aspects.

Developing education in general and university education in particular is one of the priorities that the Kingdom of Saudi Arabia seeks in order to reserve a place among smart educational institutions and systems. Saudi Arabia also wants to keep pace with information technology challenges to build a university community that is compatible with the knowledge society in the digital age; bearing in mind the fact that university education has a decisive role in developing and improving societies This requires continuous development because of the continuous technological and digital transformations in societies (Larsson & Teigland, 2019).

In order for universities to play this role, they need to alter their educational system by turning from traditional ways into more interactive and dynamic ones. They should also employ modern technologies to make the educational process more vital and effective and by changing the student from a knowledge consumer to a producer and thus transforming the entire society into a digital one (Bakro, 2017). This cannot be achieved unless the university plays its role by providing appropriate educational, academic and research services that absorb the technical developments and needs in order to help achieve higher education and carry out accurate scientific research (Al-Ghamdi & Houria, 2017; Hassanein & El-Sherbiny, 2017).

1.1 Problem statement

The challenges posed by digital transformation on educational institutions make it compulsory to cope with these developments, especially university education since all hopes of development, visions and future plans depend mainly on it. Thus, introducing academic and research services electronically matches this transformation. King Khalid University has established a unit for digital transformation and institutional infrastructure in 1438AH to make the digital transformation faster. It is also responsible for making plans, programs and studies that would support and facilitate work.

Despite the fact that the importance of academic and research services, the study of Al-Zaher and Al-Shahrani (2022) showed that the academic and educational services provided at King Khalid University were medium, and the researcher thinks that in light of what King Khalid University is witnessing especially in the College of Education in terms of technical development and transformation, these services must be evaluated from the students' point of view as they are the focus of the educational process and their evaluation of it is positively reflected on the level of those services.

Thus, the present study aims to tackle the electronic academic and research services provided to graduate students at the College of Education, King Khalid University, in light of the digital transformation from their perspectives, by answering the following main question: What is the status of the electronic academic and research services provided to graduate students at the College of Education, King Khalid University in light of the digital transformation from their perspectives? This question implies the following sub-questions:

1. What is the status of the electronic academic services provided to graduate students at the College of Education, King Khalid University, in light of the digital transformation from their point of view?

2. What is the status of electronic research services provided to graduate students at the College of Education, King Khalid University, in light of the digital transformation from their point of view?

3. What are the obstacles to using the academic and electronic research services provided to graduate students at the College of Education, King Khalid University, in light of the digital transformation from their point of view? There are several ways to identify training needs, the most important of which are the following:

1.2 Research objectives

The objectives of the present study are as follows:

1. To explore the status of the academic and electronic research services provided to graduate students at the College of Education, King Khalid University.
2. To identify the obstacles to using academic and electronic research services provided to graduate students at the College of Education, King Khalid University.

1.3 Significance of the study

This study is, as far as the researcher is aware, the first one to discuss the academic and electronic research services at King Khalid University in general and in the College of Education in particular. It also aims at fulfilling the current requirements that caused huge transformations in the fields of technology and communication. It comes as a response to the Kingdom's Vision (2030) in generating a kind of education that contributes to improving the economy and digital transformation through the preparation of technical services that push the educational process forward.

The researcher also hopes that the results of the study will provide those in charge of planning the educational process at King Khalid University with the strengths and weaknesses of the electronic academic and research services so that they can develop them in light of the results of the study. The results of the study may benefit faculty members in evaluating the technical performance of the electronic services provided by the College of Education to offer initiatives, ideas and studies that may improve and enhance those services.

2. Theoretical Framework

2.1 Electronic services

Service providers generally seek to get the best of information and communication technology when providing services and facilitating them for beneficiaries, and no one denies the role of technology in influencing and facilitating services and transforming them from traditional services to electronic services. Electronic services are defined as services provided over the Internet where the client helps himself to obtain an electronic service directly without the presence of any person (Tianxiang & Liu, 2010). Al-Adayleh and Al-Muharib (2017) defined it as procedures, efforts and performance which are reported using information technology, including service sales, customer service and service delivery. The electronic services can be divided into electronic academic services and electronic research services as explained in the following subheadings.

2.1.1 Electronic academic services

Electronic academic services are defined as converting all academic, educational and administrative processes within the university from traditional to electronic forms, using special programs that run all aspects of the academic process in order to achieve the goals of the educational process (Houria & Al-Qurashi, 2017). Al-Otaibi (2021) defined it as the services or assistance provided by the school in relation to staff, course registration, examinations, use of teaching aids, information sources and student activities, while Al-Maliki (2020) defined it as services for students in academic and educational fields such as library services, technology services and solutions, e-learning, activities and events, guidance and awareness that help improve learning efficiency and enable most of its capabilities.

2.1.2 Electronic research services

Educational services involve providing the digital library and its applications in order to provide educational services to the beneficiaries to conduct self-study by accessing its educational content. It allows the beneficiaries to learn according to the time that suits them and ease of access because learning resources are available at any time and anywhere and continues to enable the learners to benefit from the same lesson more than once (Al-Hajji, 2020). The educational services play a role between the beneficiary of the service and the service provider, and it is divided into:

a) Interactive educational services and can be divided into service interaction between students and content, the interaction between students, the interaction between students and teachers, the interaction between students and the interface. Students can communicate with service providers and get answers to their inquiries at the same time. It motivates students to interact in the classroom and introduces the lecturer or teacher to the benefits of the class and the level of students' understanding (Al-Hajji, 2020).

b) Pre-prepared educational services: This service is provided based on computer technology, and the beneficiaries interact with them when receiving information, asking questions and interacting by performing some skills resembled as notes (Al-Hajji, 2020).

2.1.3 Academic and Research Services provided by King Khaled University:

King Khalid University is keen to provide electronic academic and research services that facilitate students' learning procedures and stay updated. These services include the following:

Blackboard: An environment for offering courses and electronic content that helps communication between faculty members and students through interactive communication tools.

Academia: It is a website provided by the Deanship of Admission and Registration to help the student register directly and access a set of services such as (academic record, modifying schedule, absence rate, uploading research plan with its tools, final form scripts and communicating with the academic advisor and the thesis supervisor).

Open Courses: An educational channel that contains a number of full courses prepared by the university.

Tamkeen: One of the channels of the E-Learning Deanship, through which it seeks to spread the culture of e-learning by producing educational lessons that enable faculty members and students to use e-learning systems in addition to learning skills.

Office 365 package: It is a cloud service that allows students and faculty members to access and edit their office files across all platforms, whether it is a computer, a tablet or a mobile phone.

My Apps: A service that allows students to download office and academic programs related to their courses on personal devices for free and allows employees and faculty members to assemble office and public programs at a very low price.

KKUx: A platform that contributes to providing the most important skills for future jobs with qualitative, high-quality and international electronic content for future job seekers or people who want to develop their skills.

myKKU: A service provided by the university to enable the users to obtain alerts, check attendance and absence, warnings and results. Financial and administrative transactions are also clarified to all university beneficiaries.

Research store: A system that enables university employees to upload and make their research and scientific output available on the university's website or the international scientific search engines such as (Google Scholar) and others under the name of the college, department and researcher (Abdul Khair, 2021)

2.2 Digital transformation

The 21st century is a time of great transformations, due to the rapid development in the technological field. The work environment of institutions has become more focused on the use of modern technological procedures, networks and devices in an attempt to accomplish better communication between individuals and institutions to achieve their goals, develop their performance quality, and provide better services and products. Digital transformation has appeared as a necessary alternative to the traditional way of doing business, whether in public or private sectors (Brdese & Alsaggaf, 2022). Salaimi and Bushi (2019) define digital transformation as 'a process of bringing together business models and technological and digital abilities to create innovative products and services'.

In addition to improving operational efficiency, reducing costs, and reaching a wide range of customers to outperform competitors compared to traditional ways of providing services. Namouni (2020) sees digital transformation as a complex phenomenon when implementing and managing it. When becoming familiar with the concept, it can be viewed from two perspectives: 1. Organisational: this means the transformation that happens within the organisation, and 2. Context-based: this means the transformation in the environment.

Digital transformation is of great importance for the benefits it provides to institutions, customers and other beneficiaries (Al-Ghobeiri & Muhammad, 2020; Al-Shammari, 2021). It significantly saves cost, effort and time, improves and regulates operational efficiency and increases its quality, simplifies the procedures to obtain greater value for the services provided to customers and increase their satisfaction, creates opportunities to provide innovative and creative services away from traditional ways of providing services, helps organisations to expand and spread in a wider range by accessing global markets to reach larger numbers of customers, helps in obtaining data and information that monitor performance and improves the quality of services.

In addition to the fact that analysing this data facilitates decision-making and setting goals, and it helps to link the institutions with each other, which reflects positively on the clients. In light of the Corona pandemic, the importance of digital transformation for conducting electronic transactions, electronic shopping, distance education and electronic payment has increased due to the quarantine imposed on most countries in the world.

2.3 Related research

Several studies have been conducted to investigate the electronic educational services provided in different places. The study of Hassanein and El-Sherbiny (2017) sought to monitor the actual status of educational services provided to graduate students at King Khalid University according to the SERVQUAL scale and in light of the Afaq vision. The results showed that the quality of educational services was low, including research services provided to graduate students at King Khalid University from their viewpoint which was reflected in the questionnaire general average that scored 106.82 out of 185.

Houria and Al-Qurashi (2017), conducted a study aimed at identifying the reality of the administration of electronic academic services at the Deanship of Distance Education at Taibah University in Al Madinah from the point of view of female students and female faculty members. The results of this revealed that the level of academic services management at the Deanship of Distance Education at Taibah University was medium.

Ashry (2018) aimed to measure the extent to which electronic management is applied in the educational process, and its role in achieving the quality of educational service at Taibah University. The most important results of the study were that electronic management is applied in the educational process and the quality of the educational service is highly achieved at Taibah University from the point of view of the students as an external client.

Al-Kandari (2018) conducted a study that aimed at identifying the degree of satisfaction of the students of the College of Basic Education with the academic and administrative services provided to them by the college. The study sample consisted of 363 male and female students. The researcher used the descriptive approach, where

he designed a questionnaire. The results of the study showed that the students' satisfaction with the academic and administrative services was medium.

Al-Otaibi's (2021) study aimed to identify the availability of the necessary academic services in the colleges of Dawadmi Governorate at Shaqra University in light of the Kingdom's vision (2030). To achieve the study's objectives, a questionnaire which included 31 items, was applied to a sample of 705 male and female students in 7 colleges. The results of the study showed that the availability of academic services was medium.

In a similar vein, Al-Zaher and Al-Shahrani (2022) conducted a study aimed at examining the quality indicators of student services at King Khalid University in terms of (student affairs services, housing, nutrition, various subsidies, various activities, guidance and counseling and student rights), and the requirements for applying quality indicators. The results of this study found that student services quality indicators at King Khalid University in terms of (student affairs services, housing, nutrition, various subsidies, guidance and counseling and various activities), were medium.

Through the researcher's review of previous studies, she found diversity in its objectives, methodology, tools and sample used in the study, and its relationship to the current study. The previous studies differed among themselves, some of the studies linked between electronic management and the achievement of the quality of educational services as Ashry's (2018) study, and some of them were interested in knowing the degree of satisfaction with the academic services, such as Al-Kandari's (2018) study.

Some studies were interested in knowing the availability of electronic academic services. The current study is similar, in one of its sub-objectives, to the study of Houria and Al-Qurashi (2017) in that they both seek to know the actual status of the electronic academic services. The current study is unique from previous studies in that it combined the academic services and the electronic research services provided at King Khalid University.

The current study also agreed with some previous studies in applying the study to students, such as the study of Abdel Hamid (2019). Other studies brought together students and faculty members as the Ashry (2018) study. Moreover, the current study agrees with all previous studies in using the descriptive approach and using the questionnaire as a tool for collecting data.

3. Methodology

3.1 Research design

In order to achieve the objectives of the study; the researcher used the descriptive-analytical approach, which is defined as that type of research in which all members of the research community, or a large sample of them, are interrogated in order to describe the nature of the phenomenon, and its presence only (Creswell & Guetterman, 2019).

3.2 Population and sample

The population of the study is represented by male and female graduate students at King Khalid University in the graduate programs of the College of Education only in the academic year 2021/2022. The sample of this study was selected based on Krejcie and Morgan (1970), in which 303 participants were involved out of 961 graduate students with a confidence margin of 95%, an error of 5%.

3.3 Research instrument

Based on the nature of the data, and the method used in the study, the researcher developed a questionnaire based on the previous literature related to the purpose of the research. The questionnaire focused on two aspects: the first is the real status of academic services and electronic research methods presented for graduate students at the College of Education, King Khalid University, in light of the digital transformation from their point of view.

It consisted of 28 items divided into 2 main dimensions, a dimension related to the status of electronic academic services and a second dimension related to the status of electronic research services. The second aspect, it dealt with the obstacles that graduate students at the College of Education, King Khalid University, in light of the digital transformation from their point of view may find. It consisted of 14 statements. The respondents had to answer each item based on 5-Point-Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

The researcher checked the validity of the instrument by presenting it to 12 arbitrators from the specialised faculty members to be guided by their opinions. After confirming the apparent validity of the questionnaire, the researcher made sure of the internal consistency by applying the questionnaire to an exploratory sample outside the study sample. The internal consistency of the questionnaire's items was calculated, the correlation coefficient between the sample answers for each paragraph of each aspect and the total sample answers to all the statements in the questionnaire were calculated, using the Statistical Package for the Social Sciences (SPSS) program. The internal consistency values of the participants' answers ranged from 0.569 to 0.866.

4. Results

4.1 Results of the first question

To answer the first question of this study, what is the status of the electronic academic services provided to graduate students at the College of Education, King Khalid University, in light of the digital transformation from their point of view? The researcher used mean scores, standard deviation, rank and the degree of approval for each item of this section as shown in Table 1.

Table 1

Mean Scores and Standard Deviation for RQ 1

No.	Item	Mean	SD	Rank	Degree
1.	The university provides a variety of electronic educational services to assist the student in the educational process at anytime and anywhere.	3.48	1.162	7	Agree
2.	The university provides an adaptive learning service that suits the different learning styles for students.	2.11	1.233	13	Don't agree
3.	The university provides suitable electronic learning resources that help the student complete the assignments when needed, anytime and anywhere	3.21	1.051	9	Neutral
4.	The university provides training programs in the field of technological innovations via electronic platforms that help the student to constantly develop his skills.	3.61	0.918	5	Agree
5.	The university provides training programs through various electronic platforms that help the student to improve various research and academic skills.	3.15	1.061	12	Neutral
6.	The university provides training workshops on electronic exams via electronic platforms that help the student perform the exams easily and conveniently.	3.44	1.077	8	Agree
7.	The university provides a platform that facilitates the organisation and follow-up of scientific activities and assignments.	3.77	0.980	2	Agree

8.	The university's electronic system has an academic guide that facilitates the e-learning process for students.	3.88	0.861	1	Agree
9.	The university provides a platform that facilitates communication between students	3.62	1.038	4	Agree
10.	The university provides a platform that facilitates the process of communication between students and faculty members.	3.72	1.045	3	Agree
11.	The university provides a platform for clearly and publicly evaluate student learning outcomes.	3.50	1.045	5	Agree
12.	The university provides electronic assessment tools that ensure objectivity in judging the level of students without bias.	3.20	1.074	10	Neutral
13.	Electronic evaluation mechanisms are characterised by continuity to measure the intended learning outcomes.	3.16	1.062	11	Neutral
Overall		3.73	1.05		Neutral

The previous table shows that the status of the electronic academic services provided to graduate students at the College of Education, King Khalid University in light of the digital transformation of view was medium, ($M = 3.73$, $SD = 1.05$) and the degree of approval neutral. It is a high value that indicates the diverse opinions of the study sample about the status of the electronic academic services provided to graduate students. The standard deviations ranged between 0.861 and 1.233 with high values. This explains the diversity of opinions of the study sample about those items, except for items (4, 7 and 8), which have low values. This shows the homogeneity of the opinions of the study sample about those paragraphs.

Statement no. (8): (the university electronic system has an academic guide that facilitates the e-learning process for students) came first, with an arithmetic mean of 3.88, a standard deviation of 0.861 and a high degree of availability (I agree). The researcher attributes this result to the university's care to spread the academic guide and how important this is to make the e-learning process easier, through Academia platform that is provided by the Deanship of Admission and Registration, and Tamkeen platform provided by the Deanship of E-Learning where it seeks to spread the culture of e-learning by designing and producing educational lessons that enable faculty members and students to use e-learning systems in addition to learning skills.

Statement no. (7): (The university provides a platform that facilitates the organisation and follow-up of scientific activities and assignments) was in the second place with an arithmetic mean of 3.77, a standard deviation of 0.98 and a high degree of availability (I agree). The researcher attributes this result to the Blackboard platform, which is provided by the university to help organise and follow-up activities and assignments, and communication between the faculty member and students through interactive communication tools, and the Office 365 package which is a cloud service that allows the student and faculty member to access and edit the office files across all platforms, whether it is a computer, tablet or mobile phone.

Statement no. (2): (The university provides an adaptive learning service that suits the different learning styles of each student) was in the last place with an arithmetic mean of 2.11, a standard deviation of 1.233 and a low degree of availability (I do not agree) This may be because of the nature of the adaptive learning environment, which is a complex process that requires some educational resources and materials in multiple formats to accommodate different learning means. Adaptive learning environments also require a great effort from designers and teachers.

These results generally agreement with Houria and Al-Qurashi (2017) study, which showed that the academic services at the Deanship of Distance Education at Taibah University were average from the female students' point of view, and Al-Kandari (2018) study, which showed that the students are satisfied with the electronic academic and administrative services. Its degree was medium. Ali's (2019) study showed that students' satisfaction with the

quality of educational services provided to them was medium. Saleh's study (2020) showed the electronic services of the distance education system at the Faculty of Education in Sohag. Al-Otaibi (2021) study showed that the availability of the necessary academic services in the colleges of Dawadmi Governorate at Shaqra University in light of the Kingdom's vision 2030 was medium. The study of Al-Zaher and Al-Shahrani (2022) showed that the indicators of the quality of student services at King Khalid University were medium. These results differ from the results of the Ashry (2018) study in that the application of electronic services at Taibah University is high. The study of Abdul Khair (2021) showed that the application of academic services in e-learning at King Khalid University is high, too.

4.2 Results of the second question

To answer the second question of this study, what is the status of electronic research services provided to graduate students at the College of Education, King Khalid University, in light of the digital transformation from their point of view? The researcher used mean scores, standard deviation, rank and the degree of approval for each item of this section as shown in Table 2.

Table 2

Mean Scores and Standard Deviation for RQ 2

No.	Item	Mean	SD	Rank	Degree
14.	The university provides an attractive electronic academic environment that helps students and motivates them to carry out scientific research with ease.	2.54	1.315	7	I do not agree
15.	The university provides electronic training courses specialised in scientific research in order to develop students' research skills	3.22	1.160	5	Neutral
16.	The university provides online research advisory services for experts specialised in the field of scientific research, enabling students to seek help and advice to complete their research	1.78	1.244	11	Strongly disagree
17.	The university provides a platform that offers statistical programs such as SPSS / STATA / SAS specialised in the statistical	1.39	1.223	13	Strongly disagree
18.	The university provides a platform that provides programs that facilitate the documentation process in scientific research, such as (EndNote).	1.29	1.216	15	Strongly disagree
19.	The university provides a platform that provides a service for checking the rate of plagiarism.	2.76	1.266	6	Neutral
20.	The university provides a platform that provides translation service for previous studies.	1.31	1.141	14	Strongly disagree
21.	The university provides a platform that facilitates qualification services for publication.	1.48	1.153	12	Strongly disagree
22.	The university provides a platform that facilitates the service of subject registration and appointment of the supervisor.	3.30	1.076	4	Neutral
23.	The university provides a platform that facilitates the procedures for approving the research plan.	3.36	1.010	3	Neutral
24.	The university provides a platform that facilitates the procedures for discussing the thesis.	2.49	0.976	9	I do not agree
25.	The university provides a platform that facilitates the thesis writing procedures.	2.53	1.071	8	I do not agree
26.	The university provides a platform that facilitates communication with the academic advisor.	3.47	1.063	2	Agree

27.	The university provides a platform that facilitates communication with the thesis supervisor.	3.48	1.038	1	Agree
28.	The university provides a platform that facilitates the arbitration procedures for study tools.	2.10	1.090	10	I do not agree
	Overall	2.44	1.14		I do not agree

It is clear from the previous table that the status of electronic research services provided to graduate students came with a low degree of practice, where the general average came equal to 2.44 and the approval degree was (I do not agree), with a standard deviation of 1.14, which is a high value that indicates the diversity of opinions of the study sample about the status of electronic research services provided to graduate students at the College of Education, King Khalid University in light of the digital transformation from their point of view. This explains the diverse opinions of the study sample about the paragraphs, except for paragraph no. (24), which value is low. This shows the homogeneity of the opinions in regard to that paragraph.

Statement no. (27): (The university provides a platform that facilitates the procedures for communicating with the thesis supervisor) came first with an arithmetic mean of 3.48, and a standard deviation of 0.976, it obtained a degree of approval (I agree). Statement no. (26): (The university provides a platform that facilitates the procedures for communicating with the academic advisor) was in the second place with a mean of 3.47, a standard deviation of 1.063, and a degree of approval (I agree), and phrase no. (23) (the university provides a platform that facilitates the procedures for approving the research plan) with an arithmetic mean of 3.36, a standard deviation of 1.010, and a (neutral) degree of approval. The researcher refers this to the fact that the university made the contact data regarding the employees available to students by simply typing the name, number, college or department, as well as the interactive communication tools provided by the Blackboard platform by providing an icon for students to communicate with the supervisor through the Academia platform and also through the MyKKU application that it provides for students and faculty members.

Before last was statement no. (20): (The university provides a platform that provides translation service for previous studies) with a mean of 1.31, and a standard deviation of 1.141, with a very low degree (strongly disagree). In the last place came statement no. (18): (The university provides a platform that provides programs that facilitate the documentation process in scientific research, such as [EndNote]), with an arithmetic mean of 1.29, a standard deviation of 1.216, and a low degree of agreement (I don't totally agree). This may be due to the university's relative interest in academic services rather than research services, and the weakness of the services provided by the university in terms of platforms and applications that are concerned with documentation and translation in particular, provided to graduate students at King Khalid University. The result of this generally agrees with the result of the study of Hassanein and El-Sherbiny (2017), which showed a decline in educational services in general and research services in particular provided to graduate students at King Khalid University, and the study of Abu Radi (2019), which indicated the weakness of research services provided by Egyptian universities.

4.3 Results of the third question

To answer the third question of this study, what are the obstacles to using the academic and research services provided to graduate students at the College of Education, King Khalid University in light of the digital transformation from their point of view? The researcher used mean scores, standard deviation, rank and the degree of approval for each item of this section as shown in Table 3.

Table 3

Mean Scores and Standard Deviation for RQ 3

No.	Item	Mean	SD	Rank	Degree
29.	Weakness of the internet in the university units.	4.06	1.107	1	Agree

30.	Deficiencies in the infrastructure and modern communication system at the university.	3.71	1.125	5	Agree
31.	The lack of educational activities based on the use of electronic technologies	3.41	1.100	11	Agree
32.	Some students' reluctance to use modern electronic services in the process of learning and writing research papers, thinking that they are not useful.	3.24	1.112	13	Neutral
33.	Students' lack of experience in using e-learning tools	3.29	1.092	12	Neutral
34.	Weakness of opportunities for social interaction among students during learning in light of the use of electronic platforms and services.	3.56	1.205	8	Agree
35.	Lack of training for students to use e-learning and e-services.	3.44	1.096	10	Agree
36.	The students' weak skills in e-learning	3.10	1.102	14	Neutral
37.	Students' lack of awareness of the electronic academic and research services provided by the university.	3.98	1.096	2	Agree
38.	Unavailability of an electronic platform specialised in academic services for	3.82	1.217	4	Agree
39.	Unavailability of an electronic platform specialised in research services for postgraduate students	3.97	1.118	3	Agree
40.	Neglecting of electronic academic services by the designers of digital transformation programs at the	3.65	1.091	7	Agree
41.	Neglecting electronic research services by the university's digital transformation program designers.	3.70	1.039	6	Agree
42.	Too many platforms on the university portal cause confusion and the inability to choose and follow up	3.52	1.263	9	Agree
Overall		3.60	1.13		Agree

It is clear from the previous table that the mean score of the obstacles to the use of electronic academic and research services provided to graduate students was 3.60 and the degree of approval (I agree), with a standard deviation of 1.13, which is a high value that indicates the divergence in the opinions of the study sample members about the obstacles. The standard deviations ranged between 1.263 and 1.039. All statements scored high values. This explains the diversity of opinions of the study sample about these paragraphs phrase no. (29): (the weakness of the Internet in the university units) was in the first place, with an arithmetic mean of 4.06, a standard deviation of 1.107, and an approval degree (I agree). The researcher attributes these results to the faculty's lack of interest in spreading the density of the number of students at the university and pressure. On the Internet at the university, which leads to its weakness.

This is followed by statement no. (37): (Lack of students' awareness of the academic and research services provided by the university) with an arithmetic mean of 3.98, a standard deviation of 1.096, and a degree of approval (I agree). The researcher attributes this result to the college's lack of interest in publishing evidence, lack of advertisements that the university publishes in its corridors about the electronic services provided by the university and depends only on the advertisements submitted through the university's website and emails, which are ignored, unfortunately, by a large number of students due to their ignorance of how important they are. Then comes statement no. (39): (Unavailability of an electronic platform specialised in research services for postgraduate students) with an arithmetic mean of 3.97, a standard deviation of 1.118 and a degree of approval (I agree). The researcher attributes this to the college's interest in academic services at the expense of research services which are weakly provided.

Statement no. (36): (The students' weak skills in e-learning) was in the last place with an average of 3.1, a standard deviation of 1.102, and a degree of approval (neutral). The researcher attributes this result to the modernity of the concept of e-learning for students and their familiarity with the traditional education in the

previous educational stages and not widely using e-learning tools to in the educational process. It is clear from the results above that there are many obstacles to the use of electronic academic and research services provided to graduate students at the College of Education, King Khalid University in light of the digital transformation related to e-learning tools and awareness of their use. This matches the result of Abu Lawi and Al-Zuhairi (2017) which showed that many of the obstacles and difficulties that face learners in using technology; some of which are technological obstacles due to the ignorance of the way of use and the fear of using it, others include the difficulty of understanding and interpreting electronic activities related to the legislative and legal aspect when using e-learning tools. Moreover, the lack of awareness to using e-learning tools because they are not accustomed to such types of learning and teaching patterns. This forms a major barrier in understanding and realising how to use e-learning tools. The study of Nair et al. (2016) showed the lack of graduate students at the College of Education at King Khalid University to the skill of using e-learning tools and resources as one of the obstacles facing the development of graduate programs in the University.

5. Recommendations of the Study

In light of the results of the present study, the researcher recommends providing a strong Internet network in the university units, working to provide a strong infrastructure and a modern communication system at the university, spreading awareness among students about the electronic academic and research services provided by the university. There is also necessity of having an electronic platform specialised in research services for postgraduate students, caring about the electronic research services by the university's digital transformation program designers, paying attention to the academic electronic services by the university's digital transformation program designers, encouraging social interaction among students during learning while using electronic platforms and services, providing necessary training for students on how to use e-learning and e-services, and the courses must contain educational activities that demand the use of electronic technologies.

6. Suggestions for Future Research

The present study suggests for future research to conduct more similar studies in other professional environments, regions and societies, conduct more studies that aim to identify the status of the academic and electronic research services provided to students in light of the digital transformation, using variables different from those used in the current study, conduct a study on the obstacles when using the academic and electronic research services provided to graduate students, and to conduct studies on the development of electronic academic and research services provided to graduate students.

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