

Trends of faculty members in the psychology departments of Palestinian universities towards the employment of education technology

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Abstract:

This study aims to identify trends faculty members in the psychology departments of Palestinian universities towards the employment of education technology. The study aimed to identify the relationship of each of the variables (gender, scientific qualification, years of experience) to the responses of faculty members towards the use of education technology, study was designed from (30) paragraphs and distributed to (140) faculty members in the psychology departments of universities Palestinian.

The results were:

There were no statistically significant differences at the level of significance ($\alpha \leq 0.05$) between trends faculty members in the psychology departments of Palestinian universities towards the employment of education technology due to variables (gender, scientific qualification, years of experience).

Recommendations include:

- Providing laboratories equipped with computers and the Internet at the university.
- Holding courses and seminars on the importance of using technological means, media and technologies in education.

Keywords: Psychology Departments, Teaching Technology Recruitment, Palestinian Universities, Faculty.

المخلص

تهدف هذه الدراسة إلى التعرف إلى اتجاهات أعضاء هيئة التدريس في أقسام علم النفس بالجامعات الفلسطينية نحو توظيف تكنولوجيا التعليم. هدفت إلى التعرف على علاقة كل من المتغيرات (النوع الاجتماعي، المؤهل العلمي، سنوات الخبرة) باستجابات أعضاء هيئة التدريس نحو استخدام تكنولوجيا التعليم ولتحقيق ذلك تم تصميم استبانته من (30) فقرة ووزعت على (140) من أعضاء هيئة التدريس في أقسام علم النفس بالجامعات الفلسطينية. كانت النتائج: عدم وجود فروق ذات دلالة إحصائية عند مستوى الدلالة ($\alpha \leq 0.05$) بين اتجاهات أعضاء هيئة التدريس في أقسام علم النفس بالجامعات الفلسطينية نحو توظيف تكنولوجيا التعليم تعزى لمتغير النوع الاجتماعي المؤهل العلمي والخبرة. من التوصيات:

- توفير مختبرات مجهزة بأجهزة حاسوب وانترنت في الجامعة.
- عقد دورات وندوات للوسائل والوسائط والتقنيات المستخدمة في تكنولوجيا التعليم.

الكلمات المفتاحية: أقسام علم النفس، توظيف تكنولوجيا التعليم، الجامعات الفلسطينية، أعضاء هيئة التدريس.

Introduction

The recruitment of educational technology innovations in teaching is an important and contemporary topic, and everyone has realized that the destiny of nations depends on the creativity of their children and the extent to which they face the challenges of change and development. Education is prominent within the framework of the community transition.

Education technology is an educational science that has witnessed rapid growth and development in the modern era. Although this science is a modern concept - as an entry point for the development of education, a relatively recent science that may have a real beginning after World War II, its roots extend to the distant past, since man began to teach and is trying hard to improve this education, he used small stones in the count also used many materials that have the ability to transmit learning and is clearly shown in the traces of ancient civilizations such as the ancient Egyptian civilization where the ancient Egyptians used writing, statues and pictures as also shown in the ancient Greek and Roman civilization (khamees,2003)

The stages of the development of this science can be determined in three main stages: the focus on separate educational materials, the focus on equipment and machinery, and the stage of focus on methods and strategies (Romesofeske, 1976) (this stage that this research is interested in because it is the stage that was interested in employing Innovations in education technology in terms of performance and interaction in education where the use of education technology in an effective way helps to solve many educational problems in general, and in teaching mathematics in a special way.

Education technology brings a significant return and can provide our efforts; research has demonstrated the great potential of teaching technology for the school and its effectiveness in the teaching and learning process. Khayat and Ajami (2001) have concluded that the use of education technology helps achieve educational goals, interest students, attract their attention towards the lesson, bring the subject of the lesson closer to their level of awareness, and improve their orientation towards the subject of the lesson. Asettea also stated that education technology could help better educate students of all ages and mental levels, save effort in teaching, ease the burden on teachers, and contribute to raising the level and quality of education.

It has been found that trends can make us predict how popular people are and their adoption of modern technology. After studying a number of faculty members at the basic education level, Anderson (2001) found that education using modern technologies could increase when people have positive attitudes towards this modern technology.

In a study (Roob, 2001), it was found that experience in education technology had a significant impact in reducing the level of fear of the use of techniques and in improving their attitudes towards them .

(De School, 2005) states that attitudes towards behavior can be influenced by a number of factors, including a person's ability to perform such behavior, the manners of that person, beliefs, past experiences, and the ease or difficulty of such behavior. The person's direction can also be influenced by other things, such as encouragement and reinforcement by others. In order to improve the trend towards education technology, it is necessary to remove barriers that can lead to a person's reluctance to use such means; for example, the difficulty of obtaining the equipment and materials needed by teachers, the in viability of such equipment and materials for use due to lack of maintenance and low maintenance, and low maintenance. The level of materials and software in terms of quality, quality and modernity that teachers need. This study also found that the involvement of faculty members in psychology departments in the selection and evaluation of methods, in addition to holding training courses related to the design, selection and use of education technology can help to improve the attitude of faculty members in the psychology departments towards those methods, and can Education technology plays an important role in the educational system, although this role is more evident in the societies in which this science originated, but this role in our Arab societies in general does not exceed the traditional use of some means , if any - without direct impact on the learning process and the lack of this The use of the formal method, which is confirmed by the contemporary concept of education technology.

From this point of view, Saudi Arabia has sought to modernize the educational process, by introducing computer education field, and officials in the Ministry of Education have been interested since 1986 to spread the culture of computer. It was decided to establish (300) computers for girls' secondary schools in different regions of Saudi Arabia.

In 2002, countries began to expand using the applications of education technology at all levels of education, notably the United States of America, where Martin stated that the administration of President Bill Clinton spent \$8 billion on education technology during the period (1995-2000).

The government of Saudi Arabia has accompanied this development and acceleration with the development of the National Plan for Communications and Information Technology () and the fourth aim of the plan was stated in the National Plan for Communications and Information Technology, the optimal recruitment of communications and information technology in education and training in all Stages.

The success of employing educational technology innovations in teaching depends on the degree to which the teacher has the knowledge and skills to use the innovations of education technology and how to deal with it, and given the importance of using technology in mathematics education, the National Association of Teachers Mathematics updates the standards of school mathematics and is implicit in the technical principle that "technical educational mathematics programs should be used to help students understand mathematics and prepare them for use in an increasingly technical science".

Study problem

The student has become the focus of the educational process and its public and private aim and with the increase in the number of students it has become necessary to use an attractive, fast and effective method of education to transmit information and hence this research discusses trends (faculty members in Palestinian schools) towards employing Education technology as an educational method to keep pace with the developments of the times and take into account the needs of students.

Study objectives

This study aims to achieve:

- Identify trends faculty members in the psychology departments of Palestinian universities towards the employment of education technology.
- Identify whether there are fundamental differences between the trends faculty members in the psychology departments of Palestinian universities towards the employment of education technology due to variables (gender, scientific qualification, years of experience).

Study questions

- What are the trends faculty members in the psychology departments of Palestinian universities towards the employment of education technology?
- Are there statistically significant differences at the level of significance ($\alpha \leq 0.05$) between the trends faculty members in the psychology departments of Palestinian universities towards the employment of education technology due to gender variable?

-Are there statistically significant differences at the level of significance ($\alpha \leq 0.05$) between the trends faculty members in the psychology departments of Palestinian universities towards the employment of education technology due to the variable scientific qualification?

-Are there statistically significant differences at the level of significance ($\alpha \leq 0.05$) between the trends faculty members in the psychology departments of Palestinian universities towards the employment of education technology due to the variable years of experience?

Study hypotheses

-There are no statistically significant differences at the level of significance ($\alpha \leq 0.05$) between the trends faculty members in the psychology departments of Palestinian universities towards the employment of education technology due to the gender variable.

-There are no statistically significant differences at the level of significance ($\alpha \leq 0.05$) between the direction's faculty members in the psychology departments of Palestinian universities towards the employment of education technology due to the scientific qualification variable.

-There are no statistically significant differences at the level of significance ($\alpha \leq 0.05$) between the tendencies of faculty members in the psychology departments of Palestinian universities towards the use of education technology for a variable years of experience.

Study limits

-The study was limited to faculty members in the psychology departments of Palestinian universities during the first semester of the academic year (2019/2020).

-This study was limited to the tool used.

-The results of this study are disseminated to the study community and similar communities.

The importance of study

The importance of the study lies in the following:

-To identify the trends of faculty members in the psychology departments of Palestinian universities towards the use of education technology in order to take the necessary measures by officials and provide the appropriate capabilities that help faculty members in the psychology departments to employ education technology in Palestinian universities.

Study terms

- Arf Cherkaoui (2003) Education Technology: Designing, Producing and Using All New In The Field of Education Technology with the aim of maximizing effectiveness in teaching and learning attitudes and solving educational problems.

-Khamis (2003) saw the educational technological innovation as an idea, process, application or something new that leads to a positive change in the whole system or some of its components, so that it becomes more efficient and effective in improving the system, achieving its objectives, and meeting the needs of society .

-Al Najjar (2009) defines education technology as: a concept that refers to an integrated system that includes all that is new in education technology: educational devices, software, educational environments, and working methods, to raise the level of the educational process, and to increase its effectiveness and efficiency on scientific grounds, such as Multimedia presentations, educational information and communication technology, distance learning conference technology, educational environment technology, educational equipment for educational technology, (Abdul Majid, 2000) he think: the term education technology refers to all that is new, in the field of the use of technological means in the educational process of: modern machines and teaching methods, with the aim of increasing the abilities of the teacher and learner to interact with the educational process.

-(Judge, 2017) that technological innovations are: innovative solutions to the problems of education, expanding educational opportunities, reducing the cost and increasing its effectiveness in proportion to the nature of the times, and these solutions may be material, intellectual or design.

-Employment of education technology: Defines him (Abdul Latif, 2015) as "the ability to use the Internet in all educational processes and all activities performed by students related to the knowledge, information, theories and facts that they are going through ".

-It is defined by (Al-Kindi, 2015) as the use of modern technology to serve general education and the use of technology as an educational assistant in the educational process to teach different subjects in general education, whether theoretical or practical through the use of modern technology or through practice, exercise and simulation, in order to achieve the objectives of these subjects with general education.

-The researchers are known procedurally as planning, designing and implementing the use of learning technology skills as needed .

-Barriers to the employment of education technology: the researchers know procedurally: these are the factors or conditions that prevent the best use of modern methods in the field of education technology, which reduces the use of them in building education and achieving the desired aims in general and society in particular".

-Skill in the use of teaching technology: (Zaytoun, 2001) defines the skill as: the ability to complete a work consisting of a set of small performances .

-The researcher is known procedurally for the skill of using teaching technology: "The ability and willingness to deal with education technology and how to use it to serve the educational process".

Previous studies

First: Arab Studies

-Safety and Jad Study (2009), entitled (Reality of using e-learning at Al Quds Open University / Riyadh branch from the point of view of students), where this study aimed to review the procedures followed in the use of e-learning at Al Quds Open University / Riyadh branch from the point of view of students, such as these procedures: identifying the extent of students' use of e-learning and its disabilities, and the sample of the study consisted of 100 students, and using the descriptive curriculum the study reached several results of the study, the most important of which are: Open Jerusalem / Riyadh branch with an average of (4.174 out of 5), the absence of statistically significant differences at the level of indication (0.05) towards the degree of use of e-learning methods by students of Al Quds University for e-learning methods attributed to the variable (specialization and academic level), the existence of statistically significant differences at the level of indication (0.05) towards the use of e-learning methods by students of Al Quds University due to the variable (gender) in favor of females. The researchers recommends: establishing an adequate infrastructure for the use of e-learning in open education, benefiting from global and Arab experiences in the planning, management and application of e-learning in university education, conducting studies on the trends and inclinations of academic, administrative and student mentors on the use of e-science in open education, which is adopted by the Open University of Jerusalem.

-Study by Ben Doumi and Al-Shasnak, 2009. Entitled "The obstacles to education technology in Jordanian secondary schools from the point of view of faculty members in the departments of psychology and students" presented this study to the conference "Education in the third millennium, a real-time and future vision", organized by the Private University of Israa / Amman, the study showed that the process of education technology faced Many problems on the part of students, including: the lack of equipping the computer lab with the necessary printers and headphones and frequent malfunctions and the lack of the number of computers and internet in the school, which suffer from the lack of connection with the internet and its weakness, which leads to the loss of time in the movement between sites and pages.

There is also a study entitled "Education Technology - The Possibility of Its Use in the Arab World" presented by the researcher at the first scientific conference organized by Hussein Bin Talal University / Maan City / Jordan entitled "The learning process in the Arab world to where" during the period (3-5/5/2004) .

Second: Foreign Studies

-The study (Abeles, 2002) conducted at an American university, this study aimed at surveying students on e-learning compared to traditional learning, and the results of the study indicated that most students, despite all the results of the study that talk about positive interaction in classrooms, prefer e-learning because they do not want to wake up early and join the classroom.

-Study (Burgess,2003) this study aimed at knowing the extent to which students enjoy using the Internet, the researcher used the analytical descriptive curriculum where the questionnaire was distributed (including open questions) to (57) students at the end of the semester and revealed the results: the web coast system is useful for all students, especially those who are comfortable using technology and do not face technical problems. (Arab University Union Journal, 2009)

-The first International Conference on E-Learning in Denver, In the United States of America, in August 1997, was attended by the most important founders of education technology in Amika and many other countries, and one of the most important recommendations of this conference was: education technology and all its means will be necessary and common to give learners the skills needed for the future. Education technology is a necessary need for future students, and the benefits of education technology must be applied to the usual educational realities. (Palestinian Journal of Distance Open Education, 2007)

Study community:

The study community is made up of faculty members in the psychology departments of Palestinian universities during the first semester of the academic year (2019/2020) .

Sample study:

The study was conducted on a sample of (140) faculty members in the psychology departments of Palestinian universities during the first semester of the academic year (2019/2020). They were randomly selected and tables (1), (2), and (3) showed the distribution of the study sample according to its independent variables.

Table 1: Distribution of study sample according to the gender variable

Gender	Repetition	Percentage
Male	80	%57
Female	60	%43
Total	140	%100

Table 2: Distribution of study sample according to the scientific qualification variable

Scientific qualification	Repetition	Percentage
Ph.D.	50	%36
Master	90	%64
Total	140	%100

Table 3: Distribution of study sample according to the years of experience variable

Years of experience	Repetition	Percentage
10 years or less	65	%46
More than 10 years	75	%54
Total	140	%100

Study curriculum:

The descriptive approach was followed in this study because of its suitability for its nature, where data are collected, statistical analysis is carried out to extract the required results, and recommendations are extracted.

Study tool:

Based on the literature of research and previous studies and expert consultation, a questionnaire was built to collect data from the sample of the study, which included (30) paragraphs distributed in two dimensions as in table (4).

Table 4: Questionnaire paragraphs depending on the areas of study

#	Dimension	Number of paragraphs	Paragraphs
1	Teacher's dimension	15	01-15
2	Learner's dimension	15	16-30

Legalization of the study tool:

Believe the tool:

The study tool was presented to a group of experts in Palestinian universities, and they recommended its validity after modifications, and these modifications were made and the resolution was finalized.

The stability of the tool

To verify the stability of the instrument, the Alpha Cronbach equation was used to extract stability, with a total ratio of 0.903 resolution paragraphs, a high stability ratio that confirmed the possibility of using the tool.

Statistical treatment:

After collecting the data, the data was entered for the computer to be processed by the Statistical Program for Social Sciences (SPSS), and weighted percentages and averages were used, tested (t) and mono contrast analysis.

Study results

First: The results of the first question: What are the attitudes of faculty members in the psychology departments of Palestinian universities towards the employment of education technology?

In order to answer this question, the arithmetic averages and percentages of each paragraph were used for each area of resolution.

Paragraphs with positive content (5) were given scores for each answer (I strongly agree), (4) scores for each answer (I agree), (3) scores for each answer (I'm neutral), two for each answer (I oppose), and one for each answer (I strongly oppose), the following balance of percentages of responses was adopted:

Table 5: Percentage balance of responses

Response grade	Percentage
Very low	Less than 50%
Low	From 50% to 59%
Medium	From 60% to 69%
High	From 70% to 79%
Very high	More than 80%

Tables 6 and 7 show results, and table 8 shows summary of results.

1. Results for the first dimension (teacher's dimension)

Table 6: Computational averages and percentages of the first dimension.

#	Paragraphs	Average response*	Percentage	The level of response
1	Education technology develops teacher professionally	4.18	%84	Very high
2	Education technology develops creativity and innovation in the teacher	4.18	%84	Very high
3	Traditional education is more effective when combined with education technology	4.11	%82	Very high
4	Education technology more flexible and effective than traditional education	3.93	%79	High
5	Economy in time and effort	4.04	%81	Very high
6	Reduces daily preparation burden	3.82	%76	High
7	Helps integrate the teacher into the curriculum	3.79	%76	High
8	Helps prepare academic staff	3.71	%74	High
9	Reduces learner review of teacher	3.68	%74	High
10	Non-compliance with a specific time and place	4.00	%80	Very high
11	E-learning helps enrich the curriculum and develop it	4.29	%86	Very high
12	Ease and speed of content update	4.14	%83	Very high
13	Development of research and knowledge skills	4.14	%83	Very high
14	E-discussion saving	3.93	%79	High
15	Material cost economy	3.64	%73	High
Overall degree		3.97	%79	High

* The maximum degree for each paragraph is (5)

Table 6 shows that the attitudes of faculty members in the psychology departments of Palestinian universities towards the employment of education technology were very high on paragraphs (1, 2, 3, 5, 10, 11, 12, and 13) where the response level was more than (80%) It was high on paragraphs (4, 6, 7, 8, 9, 14, and 15) where the percentage was between (70% - 79%) The overall response percentage was significantly higher (79%).

2. Results related to the second dimension (learner's field)

Table 7: Calculation averages and percentages for the second dimension

#	Paragraph	Average response*	Percentage	The level of response
16	Development skill of learning technology skills of learners	4.18	%84	Very high
17	Education technology increases freedom of expression	3.93	%79	High
18	Education technology increases learners' motivation to learn	3.93	%79	High
19	E-learning increases learners' self-confidence and reliance	3.86	%77	High
20	Education technology develop the self-learning between learners	3.82	%76	High
21	Get fast feedback	3.86	%77	High
22	offers opportunities for active participation	4.04	%81	Very high
23	increases the enthusiasm and attracting learners	4.18	%84	Very high
24	helps to expand your knowledge of students	4.36	%87	Very high
25	increases the interaction between pupils	3.89	%78	High
26	gives learners a chance to debate	3.86	%77	High
27	Helps learners to innovate	4.07	%81	Very high
28	Helps learners think critically	4.04	%81	Very high
29	Helps identify strengths and weaknesses	3.75	%75	High
30	Self-assessment and correction of errors	3.64	%73	High
Overall degree		3.96	%79	High

* The maximum degree for each paragraph is (5)

Table 7 shows that the attitudes of faculty members in the psychology departments of Palestinian universities towards the employment of education technology were very high on paragraphs (16, 22, 23, 24, 27, 28) where the response level was more than (80%), It was high on paragraphs (17, 18, 19, 20, 21, 25, 26, 29, 30) where the percentage was between 70% and 79%. The overall response percentage was significantly higher (79%).

This is due to the researcher's willingness of faculty members to use education technology for its benefits and advantages.

3. Summary of results and order of dimensions and overall degree of responses:

Table 8: Computational averages, percentages of dimensions and overall degree of responses

#	Dimension	Average response*	Percentage	The level of response
1	Teacher's dimension	3.97	%79	High
2	Learner's dimension	3.96	%79	High
Overall degree		3.97	%79	High

* The maximum degree for each paragraph is (5)

Second: The results of the second question: Are there statistically significant differences at the level of significance ($\leq \alpha 0.05$) between the trends of faculty members in the psychology departments of Palestinian universities towards the employment of education technology attributable to the gender variable?

This question relates to the hypothesis of the study, and table 9 shows the results of its examination.

The results of the examination of the first hypothesis, which read: There is no statistically significant relationship at the level of indication ($\alpha \leq 0.05$) between the directions of faculty members in the psychology departments of Palestinian universities towards the employment of education technology attributable to the gender variable.

To examine the hypothesis, the test (T) and table number (9) were used to show the results :

Table 9: (T) Test results depending on gender variable

#	The dimension	Male		Female		(T)	Indication*
		Average	Standard deviation	Average	Standard deviation		
1	Learning method	3.8571	.35840	4.0857	.57195	-1.267	.216
2	Curriculum	3.9048	.20037	4.0143	.52244	-.732	.470
Total		3.8810	.25544	4.0500	.53537	-1.066	.296

* Statistically at the indication level (0.05)

Table 9 shows that there are no statistically significant differences at the level of significance ($\alpha \leq 0.05$) between the directions of faculty members in the psychology departments of Palestinian universities towards the use of education technology attributable to the variable (gender) on all dimensions and at the overall degree where the level of significance of the values (T) on them was greater than (0.05) and thus we accept the zero hypothesis .

This is due to the researchers' view that teachers and faculty members in psychology departments find in education technology a flexible, easy, appropriate and sensitive teaching tool.

The results of the examination of the second hypothesis, which read: There is no statistically significant relationship at the level of indication ($\alpha \leq 0.05$) between the directions of faculty members in the psychology departments of Palestinian universities towards the employment of education technology attributable to the variable (scientific qualification). To examine the hypothesis, the test (T) and table 10 were used to show the results :

Table 10: (T) Test results depending on scientific qualification variable

#	The Dimension	Master		Ph.D.		(T)	Indication*
		Average	Standard deviation	Average	Standard deviation		
1	Learning method	4.0133	.42490	3.9481	.52222	.337	.739
2	Curriculum	3.9333	.39000	3.9741	.40399	.259	.798
Total		3.9733	.39932	3.9611	.44314	.072	.943

* Statistically at the indication level (0.05)

Table 10 shows that there are no statistically significant differences at the level of significance ($\alpha \leq 0.05$) between the directions of faculty members in the psychology departments of Palestinian universities towards the employment of education technology attributable to the variable (scientific qualification) on all dimensions and at the high level where the level of significance of the values (T) on them was greater than (0.05) and thus we accept the zero hypothesis . This is due to the researchers' view that the variable (scientific qualification) did not cause differences of opinion towards the use of education technology.

The results of the examination of the third hypothesis, which read: There is no statistically significant relationship at the level of indication ($\alpha \leq 0.05$) between the directions of faculty members in the psychology departments of Palestinian universities towards the employment of education technology attributable to the years of experience variable. To examine the hypothesis, the test (T) and table number (11) were used to show the results :

Table 11: (T) Test results depending on years of experience variable

#	The Dimension	10 years or less		More than 10 years		(T)	Indication *
		Average	Standard deviation	Average	Standard deviation		
1	Learning method	3.9444	.57588	4.0200	.26115	- .391	.699
2	Curriculum	3.9593	.46702	3.9600	.22267	- .005	.996
Total		3.9519	.50309	3.9900	.22665	- .226	.823

* Statistically at the indication level (0.05)

Table 11 shows that there are no statistically significant differences at the level of significance ($\alpha \leq 0.05$) between the directions of faculty members in the psychology departments of Palestinian universities towards the employment of education technology attributable to the variable (years of experience) on all dimensions and at the high level where the level of significance was the values (T) have greater than 0.05 and thus we accept the zero hypothesis .

This is due from the researchers' point of view that years of experience have not affected the willingness of faculty to use education technology.

Recommendations

- Providing laboratories equipped with computers and internet at the university.
- Holding courses and seminars on the importance of using education technology.
- Training of education technology professionals in online curriculum design.
- Providing computer laboratories with technical guides.
- Encouraging students to use education technology in the curriculum.

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