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The Impact of E-Learning on the Level of Perceived Self-Efficacy among Secondary School Students in Government Schools in Karak Governorate

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ABSTRACT
The study aimed to identify the impact of e-learning on the level of perceived self-efficacy among secondary school students in government schools in Karak Governorate. The study relied on the (analytical descriptive) method, by using the (paper) and (electronic) survey methods. The study population consisted of all secondary school students in government schools in Karak governorate, who were registered in the second semester of the academic year (2020/2021). The study sample consisted of (1413) male and female students, and the study sample was chosen by random method. The researcher designed and built the study tool, which consisted of a focus for personal variables and consisted of (gender, academic stage, specialization). The main axis of measuring the level of (perceived self-efficacy) associated with (e-learning), which included three main areas (self-confidence, persistence and perseverance, emotionality, problem solving), and the questionnaire was formed in its final form on the scale as a whole in all its fields (27). paragraph. The five-step Likert scale was used to build the study tool. To answer the study questions, the following statistical methods were relied on: (frequencies and percentages, arithmetic averages, standard deviations, Cronbach Alpha stability coefficient). The most important results of the study indicated that the effect of e-learning on the level of perceived self-efficacy among secondary school students in government schools in Karak governorate was (low), and there were no statistically significant differences at the level of significance (0.05α≤) in the study sample vocabulary estimates on the effect of E-learning at the level of perceived self-efficacy among secondary school students due to study variables. The most important recommendations of the study indicated the need to take measures to improve and raise the atmosphere of perceived self-efficacy in the e-learning process, through improving and developing the philosophy of e-learning in proportion to the psychological, social, intellectual and cognitive needs of students.
KEYWORDS: E-LEARNING, PERCEIVED SELF-EFFICACY, SECONDARY SCHOOL STUDENTS.
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INTRODUCTION

In the past three years, e-learning has become a reality imposed by the current circumstances, and it has become a global trend for many countries of the world that rushed to it in light of the crisis of the Corona Virus (Covid-19) pandemic, as crises at that time imposed quarantine measures, social distancing and lack of Students were able to go to schools, to maintain their safety, but at the same time, e-learning must be viewed as a major shift in distance education tools that could have positive and negative effects on students. The most prominent of these effects is the perceived self-efficacy, being The measure by which we can judge the extent of the electronic experience as an alternative to face-to-face education.

E-learning is a method of teaching using modern communication mechanisms from a computer and various media such as image, sound, graphics, electronic libraries, electronic portals and Internet portals, whether remotely and in the classroom, using the teacher's hardware, software and special learning strategies in order to deliver information to the learner in the shortest, least effort and greatest benefit (Jethro et al. at 2019). In recent years, e-learning has witnessed a great development that contributed to the development of the educational system, and distance learning projects began to appear in an attempt to solve some educational problems, such as the knowledge explosion, and the huge increase in the number of students (Head, Lockee, & Oliver, 2012).

The concept of perceived self-efficacy is one of the new concepts in the educational field, as interest in it has increased in recent times in many studies and research. Perhaps this concept has emerged and crystallized through the research published by the Canadian psychologist Bandura entitled "Self-efficacy towards a monotheistic theory." to modify behavior" in 1977, as "Bandura" was interested in knowing the direct relationship between a person's perception of his self-efficacy and changing his behavior based on this awareness, with the aim of raising the level of individual motivation and providing him with new skills and behaviors that help him achieve his goals and make him able to face pressures and environmental stimuli. The Annoying (Al Ghaliqa, 2020).

Self-efficacy is one of the most important factors affecting students' academic performance, helping them

to face problems and difficulties, and enabling them to raise their preparations and their ability to form positive social relationships. Students' enjoyment of a good level of perceived self-efficacy is an indicator of the soundness of the teaching-learning process (Taholit, 2021). Self-efficacy beliefs are better predictors of success than the student's previous achievement, skills, and knowledge variables (Meera & Dustin, 2013).

The concept of self-efficacy constitutes a major focus of the social cognitive theory, which sees that the individual has the ability to control his behavior as a result of his personal beliefs. Affect how he behaves, as these beliefs are the main key to the driving forces of an individual's behavior. The individual works to interpret his achievements based on the abilities he believes he possesses, which makes him do his best to achieve success (Al-Alwan and Al-Mahasna, 2014).

THE STUDY PROBLEM:

Jordanian society, like other societies, was affected by the Corona pandemic, which first appeared in late 2019 in China. Among these events that imposed a challenge on education, the Corona pandemic, and one of these challenges is the discontinuation of face-to-face education and its replacement with strategies that use e-learning. Both (Venkatesh et al., 2019) (Oktal et al., 2016) (Mohammed, 2016) indicate that perceived self-efficacy refers to the confidence that individuals have in using technological innovations. He described it as a diligence of the individual's ability to use a specific technological application in order to perform certain tasks, and given that the individual characteristics differ greatly, there may be differences in the levels and degree of confidence of the individual in this task.

From the above, and through the researcher's observation and follow-up, she found a decrease in the desire and motivation towards the e-learning process by secondary school students, and this matter, in the researcher's belief, may be due to the number of reasons, including that e-learning is a new experience for students, and it needs more organization and study to meet all Students' needs, as well as the fear of the impact of this experience on students' achievement, as well as the impact that may accompany the e-learning process on psychological, social and cognitive factors and variables, which may lead, in the researcher's belief, to change the students' perceived levels of self-efficacy.

HENCE, THE CURRENT STUDY CAME TO ANSWER THE FOLLOWING QUESTIONS:

1. What is the effect of e-learning on the perceived self-efficacy level of secondary school students in government schools in Karak Governorate?
2. Are there statistically significant differences at the significance level ($\alpha \geq 0.05$) in the effect of e-learning on the perceived self-efficacy level of secondary school students in government schools in Karak governorate due to the variable (gender, specialization, and stage of study).

THE IMPORTANCE OF THE STUDY:

THEORETICAL IMPORTANCE:

This study is expected to provide theoretical literature related to e-learning in terms of its repercussions and impact on the perceived self-efficacy of secondary school students, and to know more about these effects and how to improve them and find solutions to them if needed, to ensure the effectiveness of the educational process, as well as identifying the points Positive and negative e-learning experience, and provide some solutions and tips that will develop and improve e-learning.

PRACTICAL IMPORTANCE:

It is expected that this study will be useful in its results and recommendations to decision-makers in the Ministry of Education and decision-makers, in identifying the positive and negative points of the e-learning process, as well as assisting in developing the e-learning system, in line with the requirements and needs of secondary school students in government schools in Karak Governorate, and raising the level of their perceived self-efficacy, to reach an appropriate educational environment to achieve the lofty goals of the vision and mission of education in Jordan.

OBJECTIVES OF THE STUDY:

The current study aimed to find out:

- The impact of e-learning on the perceived self-efficacy level of secondary school students in government schools in Karak Governorate.
- The differences in the impact of e-learning on the level of perceived self-efficacy among secondary school students in government schools in Karak governorate, according to the variable (gender, specialization, school stage).

THE LIMITS OF THE STUDY:

GEOGRAPHICAL LIMITS: the Hashemite Kingdom of Jordan.

- **SPATIAL LIMITS**: government secondary schools in Karak Governorate.
- **HUMAN LIMITS:** secondary school students.
- **TIME LIMITS:** This study was conducted from the second semester of the academic year 2020/2021 AD.

TERMINOLOGY OF STUDY:

E-LEARNING: It is defined as a method of teaching using modern communication mechanisms from a computer and various media such as image, sound, graphics, electronic libraries, electronic portals and Internet portals, whether remotely and in the classroom, using the teacher's hardware, software and special learning strategies in order to deliver information to the learner in the shortest, least effort and greatest benefit(Cracraft, 2015).

PERCEIVED SELF-EFFICACY: Bandura defines it (Bandura, 1997) as the conviction of individuals about their ability to control their level of performance and the events that affect their lives. It is defined procedurally: it is the degree obtained by secondary school students on the perceived self-efficacy scale associated with e-learning that was designed in this study.

Public schools in the Karak Governorate: They are the schools affiliated to the Ministry of Education, which fall within the scope and responsibility of the Karak Governorate, and which provide educational and educational services to its affiliated students (procedural definition).

THEORETICAL FRAMEWORK AND PREVIOUS STUDIES:

THEORETICAL FRAMEWORK:

The world in general and the Jordanian society has faced the repercussions of the Corona virus pandemic, which imposed many preventive measures such as home quarantine and social distancing, and with regard to the field of education, a transition was made to e-learning (distance learning) to preserve the safety of students and teachers from the repercussions of the Corona virus, in addition to The accelerating challenges as a result of the tremendous developments in various fields, especially in the scientific and technological field that the world witnessed during the last quarter of the last century, and which are expected to continue with great acceleration. Employing modern technology in the service of education in our society has become an imperative to ensure the quality of the outputs of the educational process to meet the needs of the society, which is in dire need of keeping pace with the developments of the times.

FIRST: E-LEARNING:

THE CONCEPT OF E-LEARNING:

Muhammad (2016) defined it as that type of education that depends on the use of technological media to achieve educational goals and deliver educational content to learners without regard to temporal and spatial barriers. These electronic media may be represented in modern electronic devices such as: computers and satellite receivers, or from Through computer networks represented by the Internet and other media such as educational websites and electronic libraries.

Al-Taweedi (2009) defines it as an educational system that follows the formal education curricula but using electronic means, and this type of education can be followed inside or outside the classroom.

It is also defined as providing electronic educational content through computer-based media and networks to the learner in a way that allows him to interact actively with this content and with the teacher and with his peers, whether synchronously or asynchronously, as well as the possibility of completing this education in the time and place and at the speed that suits his circumstances and abilities As well as the possibility of managing this learning also through these media (Allen, at .el, 2009).

THE IMPORTANCE OF E-LEARNING:

(Baharvand, 2014) (Bray & Tangney, 2017) points out that there are many benefits offered by e-learning that will make it replace traditional education methods:

1. It reduces costs, as there is no need for a special facility or building new classes to conduct courses and seminars.
2. It is available to all individuals and different age groups. People of all ages can benefit from online courses and gain useful skills for them without the restrictions of traditional schools.
3. It is flexible, especially since there are no ties to the topic of time, so people can learn at any time they want according to the time convenient for them.
4. Increase learning and reduce time loss, as the idea of interactions between students and lost time during chat and questions are eliminated, so the amount of what an individual learns without any disruptions is

eliminated.

5. Provides neutral and structured education, where students have the same educational content, in addition to evaluating tests in an impartial manner, and accurately tracking each student's achievements and online activity record.
6. It is environmentally friendly, since there is no need to use papers, pens and other materials that may harm the environment when disposed of.

TYPES OF E-LEARNING:

(Al-Kasbani, 2012) (Mahdi, 2015) indicates that e-learning includes basic types, which are as follows:

1. Simultaneous education: This type includes the interaction of the teacher and his students via the Internet at the same time, through a video call, audio conference, or through chat and instant messaging, and through this type of education it is possible to record all lectures and play them at a later time and track all required activities During it, the teacher can also monitor his students, correct their mistakes, assign each student what he wants to teach him, and also give students the opportunity to communicate and cooperate with each other.
2. Asynchronous education: This education includes the interaction of the teacher and his students via the Internet at different times and not at the same time, so that educational courses and lectures are available on computers, on CDs, or through dedicated websites that can be accessed through the Internet, and this education allows Learners have access to courses whenever they need them and at their own pace, and they can interact with each other via message boards, bulletin boards, and discussion forums.
3. Blended Learning: It is a type that combines synchronous and asynchronous teaching, so that the teacher and students interact via the Internet at the same time that the training courses are given, and then these courses are transferred to CDs for later use for self-study separately from the teacher.

E-LEARNING OBJECTIVES:

1. Both (2014 Borstorf& Lowe,) (Katet, 2011) indicate that e-learning seeks to achieve many goals, the most important of which are the following:
2. Creating an interactive learning environment through new electronic technologies.
3. Supporting the process of interaction between students, teachers and assistants through the exchange of educational experiences, opinions and discussions aimed at exchanging opinions.
4. Providing teachers with technical skills to use modern educational technologies.
5. Providing students with the necessary skills to use communication and information technologies.
6. Modeling and presenting education in a standardized form.
7. Creating educational networks to organize and manage the work of educational institutions.
8. Providing education that suits different age groups, taking into account the individual differences between them.

PERCEIVED SELF-EFFICACY:

THE CONCEPT OF PERCEIVED SELF-EFFICACY:

The concept of perceived self-efficacy is one of the concepts of modern psychology, which Bandura referred to in the cognitive social learning theory, which sees that the individual's beliefs about his self-efficacy appear through the cognitive awareness of personal abilities and multiple experiences, whether direct or indirect, and therefore the competence Subjectivity can determine the path that the individual follows as behavioral measures, either in an innovative or stereotypical form, and this path can indicate the extent to which the individual is convinced of his personal competence and his confidence in his capabilities required by the situation (Al-Yousef, 2010).

Shehata and Al-Najjar (2003) define it as the individual's possession of a set of knowledge, skills, abilities, concepts and trends, which can be derived from his multiple roles, and it is a practical performance that can be observed, analyzed, interpreted and measured.

While Lambert and others (Lambert, at. el, 2012) defined it as the individual's awareness of his abilities and potentials in dealing with stressful and stressful events, dealing with problems and painful situations, and his ability to adapt that appears through his behaviors, and to manage external environmental requirements.

TYPES OF SELF-EFFICACY:

Dubai (2017) and Pajares (2007) classified self-efficacy into several types, including:

1. National competence: it may be linked to events that citizens cannot control, and it also works to give them ideas and beliefs about themselves as the owners of one nationality or country.
2. Social competence: It is a group that believes in its capabilities and works in a social system to achieve the required level of it. Individuals' awareness of collective competence affects what they accept as groups and

the amount of effort they make, and that the roots of social competence lie in the competence of group members.

3. General self-efficacy: It means the ability to perform behavior that achieves positive and desirable results at a specific time and to control life pressures that affect the behavior of individuals, and to make self-expectations about their performance of tasks and activities, and the effort, activity and perseverance necessary to achieve the work to be done.
4. Special self-efficacy: It means the individual's special judgments related to their ability to perform a specific task in a specific activity such as mathematics and geometric shapes or in the Arabic language such as syntax and expression.
5. Academic self-efficacy: It is the individual's awareness of his ability to perform educational tasks at desirable levels, that is, it means the person's actual ability in the various subjects of study.

BELIEFS OF SELF-EFFICACY DEVELOP ON FOUR MAIN SOURCES:

1. Proficiency experiences: Success experiences support the individual's self-efficacy. If the individual's success is repeated, his sense of efficiency increases, while the repetition of failure in the individual reduces his sense of self-efficacy.
2. Representative experiences: that the individual derives from the surrounding social models, as the individual's sense of self-efficacy increases when he notices that those who are similar to him are in the ability to do a task.
3. Persuasion: Beliefs of self-efficacy are affected by the persuasion that the individual receives from some people who are trusted with their ability to perform a task.
4. Emotional and physiological states: Beliefs of self-efficacy are affected by the level of arousal. High emotionality negatively affects self-efficacy, while moderate emotional arousal improves performance and raises self-efficacy.

General characteristics of high self-efficacy:

Clevich (2019) pointed out that there are general characteristics of individuals with high self-efficacy and they have a strong belief in their abilities and capabilities, as mentioned by both, including:

1. They show a high level of self-confidence.
2. They have the ability to take responsibility.
3. They possess superior social skills.
4. They have high perseverance and a high level of ambition.
5. Resolute do not hesitate to make decisions.
6. They show multiple methods of adapting to different life situations and circumstances.

PREVIOUS STUDIES:

Al Karaki conducted (2021) a study aimed at identifying the level of each of the perceived self-efficacy and distance learning motivation among Mutah University students, and revealing the relationship between them; To determine the relative contribution of the components of perceived self-efficacy in predicting the motivation of distance learning among Mu'tah University students, and to achieve the objectives of the study, two scales were developed: the perceived self-efficacy scale and the distance learning motivation scale. The students were randomly selected, and the most important results of the study found that the level of perceived self-efficacy and distance learning motivation among students was average, and it was found that there is a positive correlation and statistical significance between the perceived self-efficacy and distance learning motivation.

Abdel Kafi (2021) conducted a study aimed at identifying the extent of perceived self-efficacy for the study sample students resulting from their participation in chat rooms. This study belongs to the descriptive studies, and is based on the sample survey method. Sample: The researcher applied his study to an available intentional sample of (400) students from Minya Governorate. The study tools included an electronic questionnaire and a scale of perceived self-efficacy. The most important results of the study indicated that there is a direct correlation with a statistical significance between the degree of students' participation in voice chat rooms in electronic games and the awareness of self-efficacy.

Debaja (2022) conducted a study aimed at revealing the attitudes of secondary school students in Irbid Governorate in Jordan towards e-learning in light of the Corona pandemic. To achieve the objectives of the study, the descriptive survey method was used through a questionnaire consisting of (26) items to reveal the attitudes of secondary school students in Irbid Governorate in Jordan towards e-learning in light of the Corona pandemic. The study sample consisted of (349) male and female students, of whom (119) males and (230) females, were chosen by simple random method. The results of the study showed that the attitudes of secondary school students in Irbid Governorate in Jordan towards e-learning in light of the Corona pandemic were positive. The results also showed that there were no statistically significant differences in the attitudes of secondary school students in Irbid Governorate in Jordan towards e-learning in light of the Corona pandemic, according to the variables of

gender and academic branch, and the interaction between them.

Kandil (2019) conducted a study that aimed to determine the ability of both the perceived self-efficacy and the control center to predict the competencies of inclusive education for teachers in regular schools in the Jordanian capital, Amman. The most important results indicated that the level of perceived self-efficacy of teachers was high, as the arithmetic mean of the items of the perceived self-efficacy scale was (3.95). It was also found that both the perceived self-efficacy and the internal control center have the ability to predict the competencies of inclusive education for teachers in regular schools, and the inability of the external control center to predict the inclusive education competencies for teachers.

McGhee &Kozuma (2012) conducted a study that aimed to reveal the extent of the use of modern technology that enhances and supports the practices of teachers and students in the classroom, and to show the change that occurred in the roles of teachers and students in light of the development of modern technology. The study sample consisted of (12) case studies using the survey method, and the results showed that teachers increased their dependence and use of modern technology in the classroom, and teachers also had new roles, including: designing teaching using computers, training students to employ computers in education, helping students, and coordinating Collective education, guiding students, advising them, monitoring students and assessing their performance, as well as the teacher has become more use of modern technology in the classroom, designing and building educational materials, and meeting the educational needs of students.

Commenting on previous studies:

It is clear from the previous presentation of previous studies that most of these studies dealt with the impact of e-learning on teaching and learning and its link with some variables, whether related to the process, the level of perceived self-efficacy, or some other related variables such as the practices and competencies of learners (students), and some directed to search for requirements Or the ingredients for the success of the e-learning process, and some are directed to search for obstacles, positives and negatives of the e-learning process, to come up with a set of results and recommendations to benefit from them in improving e-learning, and the current study is similar to these studies in the methodology and its interest in identifying the reality and impact of e-learning in general, and differs The current study with these studies in the variables related to perceived self-efficacy, and its use by a sample of secondary school students.

AREAS OF BENEFIT FROM PREVIOUS STUDIES:

Previous studies and research are considered scientific and experimental experiences that opened the way for the researcher during the steps of his study. Al-Baha benefited from these studies as follows: 1. Defining the study's title and problem 2. Defining the steps followed in the study's procedures 3. Setting the outlines of the study and formulating the study's objectives and questions including It corresponds to the title and the nature of the study 4. Identifying the problems that the researcher may face during his application of the study and how to overcome them 5. How to choose the appropriate method for choosing the study method and sample.

WHAT DISTINGUISHES THE CURRENT STUDY FROM PREVIOUS STUDIES AND RESEARCH?

1. This study is the first of its kind in the Arab world within the limits of the researcher's knowledge. By linking it to the most important topics in the educational process, which is e-learning in light of the Corona pandemic and its impact on the perceived self-efficacy of secondary school students.
2. This study was characterized as being simultaneous. With Jordan's interest in the emergence of the emerging Corona pandemic (Covid 19), which imposed on the countries of the world, including Jordan, the distance learning system in all schools and universities, according to Defense Resolution No. (7) of 2020. Which created an urgent need to know the effects of e-learning technology on some important variables, such as the perceived self-efficacy of secondary school students.

STUDY APPROACH:

The study relied on the (analytical descriptive) approach, through the use of the (paper) and (electronic) questionnaire survey methods, and the questionnaire was designed to collect study data, by distributing it directly to secondary schools in the city of Karak, and on all private social media platforms for secondary school students in Karak, to reach the largest possible number of the study community.

STUDY COMMUNITY:

The study population consisted of all secondary school students in government schools in Karak governorate, who were registered in the second semester of the academic year (2020/2021).

THE STUDY SAMPLE:

The study sample consisted of (1413) male and female students, and the study sample was chosen randomly. The following table No. (1) shows the characteristics of the study sample members according to personal variables:

TABLE (1): THE STUDY SAMPLE WAS DISTRIBUTED ACCORDING TO PERSONAL VARIABLES. (N = 1413)

Variable	Category	NO	Percentage
Gender	Male	611	43.2
	Female	802	56.7
Educational level	First Secondary	723	51.1
	Second Secondary	690	48.8
Specialization	Literary	518	36.6
	Scientific	498	35.2
	Legal	397	28.0

The researcher designed and built a questionnaire to measure the variables of the study, according to (the effect of e-learning on the level of perceived self-efficacy among secondary school students), and it was only based on literature, theory and previous studies in designing the study tool, which consisted of three main areas: (self-confidence, persistence Perseverance, emotionality, problem solving), and in the light of these areas, the paragraphs of each dimension were designed to be consistent with the nature of the dimension and at the same time linked with the (e-learning) axis. Specialization). The scale as a whole in all its fields is (27) items. The five-step Likert scale was used in building the study tool, according to the following gradation: (strongly agree = 5), (agree = 4), (neutral = 3), (disagree = 2), (strongly disagree). =1), and each of them was given the following scores (5), (4), (3), (2), and (1), and arithmetic averages were used as a criterion for judging using the equation of the range = largest value - least value / The number of categories (5-1 = 4) and then divide 4/3 = 1.33.

TABLE (2): SCALE TO JUDGE THE RESULTS OF THE SCALE

High	Medium	Low
3.67-5	2.34-3.66	1-2.33

STUDY TOOL:

VALIDITY AND RELIABILITY OF THE STUDY TOOL:

VALIDITY OF THE STUDY TOOL:

The apparent validity of the questionnaire and the validity of the content were confirmed by presenting it to a group of arbitrators with expertise and experience in the field of study; In order to arbitrate it after reviewing the title of the study, its questions, and its objectives. The arbitrators were asked to express their opinions and observations about the paragraphs of the questionnaire in terms of the appropriateness of the paragraphs to the subject of the study, and their sincerity in revealing the desired information for the study, as well as in terms of the connection of each paragraph with the axis to which it belongs. The extent of the clarity of the paragraph, the soundness of its wording, and the suggestion of ways to improve it by referring to deleting, keeping, or modifying the paragraphs, considering the gradation of the scale, its suitability, and other things that it deems appropriate.

Based on the opinions and observations of the arbitrators, some paragraphs were modified, and some paragraphs were added and deleted so that the questionnaire became valid for application, and the questionnaire in its final form consisted of (4) fields, and the number of paragraphs of the scale as a whole was (27) paragraphs.

SECONDLY. STABILITY OF THE STUDY INSTRUMENT:

The reliability of the study tool was calculated by Cronbach's alpha method, where (α) is Cronbach's alpha reliability coefficient, (K) is the number of items, and (r) the average values of the correlation coefficients between the items. Table (3) shows the reliability coefficients and the self-reliance coefficients for the study tool.

TABLE (3): CRONBACH'S ALPHA COEFFICIENTS FOR THE STABILITY OF THE STUDY INSTRUMENT

NO	Domain	Cronbach's alpha coefficient	self-honesty coefficient	stability level
1	The first domain: self-confidence	0.96	0.97	
2	The second domain: persistence and perseverance	0.94	0.98	
3	Third Domain: Emotional	0.98	0.99	High
4	Fourth Domain: Problem Solving	0.98	0.97	
	Total	**0.96**	**0.97**	

It is clear from Table (3) that the value of Cronbach's alpha coefficient for the stability of the study tool was (0.96), and the stability coefficients for the dimensions of the study tool were all high; Where it ranged between (0.94-0.98), and the stability analysis indicates the good stability of the tool, and thus confidence in the results of

the field study and the safety of building on it. It is also clear that the coefficient of the subjective validity of the study tool has reached its value (0.97), and that the subjective validity of the dimensions of the study tool were all high; It ranged between (0.97-0.99), which confirms the subjective validity of the study tool.

STUDY VARIABLES:
FIRST: THE INDEPENDENT VARIABLES: e-learning.
SECOND: DEPENDENT VARIABLES: Perceived self-efficacy.

THE SURVEY:
The researcher conducted an exploratory experiment on a sample outside the original sample of the study, which numbered (32) male and female students, from secondary school students, who were chosen intentionally from the same research community. The exploratory experiment was conducted, and the purpose of the exploratory study was:
1. The validity and clarity of the study tool used in the current study.
2. Discovering the potential obstacles that the researcher may face while applying the study to the students.
3. Develop a timeline, place and application for how to work on starting the application.
4. Identify the appropriate statistical method for the current study.

STATISTICAL PROCESSING METHODS USED IN THE STUDY:
To answer the study questions, the following statistical methods were used:
1. Frequencies, and percentages.
2. Arithmetic averages, and standard deviations.
3. Stability coefficient (Cronbach Alpha).

PRESENTATION AND DISCUSSION OF THE RESULTS:
THE FIRST STUDY QUESTION, WHICH STATES: What is the effect of e-learning on the level of perceived self-efficacy among secondary school students in government schools in Karak Governorate.
To answer this question, the arithmetic averages and standard deviations of the dimensions, the total score, the paragraphs and tables No. (4) (5) (6) (7) (8) have been extracted:

TABLE NO. (4): ARITHMETIC AVERAGES, STANDARD DEVIATIONS, RANK AND LEVEL IN THE IMPACT OF E-LEARNING ON THE LEVEL OF PERCEIVED SELF-EFFICACY AMONG SECONDARY SCHOOL STUDENTS.

NO	Domain	Arithmetic Mean	Standard Deviation	Rank	Level
1	The field of self-confidence associated with e-learning	2.17	0.922	2	Low
2	The field of persistence and perseverance associated with e-learning	1.97	280.9	4	Low
3	Emotional field associated with e-learning	2.70	0.870	1	Low
4	The field of problem solving associated with e-learning	2.07	0.835	3	Low
	Dimensions as a whole	**2.22**	**0.888**	**-**	**Low**

The results of Table (4) show that the general arithmetic mean in the impact of e-learning on the level of perceived self-efficacy among secondary school students reached (2.22) with a standard deviation of (0.888), and this represents a low degree of appreciation, according to the judging criterion on averages.

The following is a presentation of the arithmetic averages, standard deviations, rank and level of the items that measure the impact of e-learning according to the areas of perceived self-efficacy:

TABLE NO. (5): ARITHMETIC AVERAGES, STANDARD DEVIATIONS, RANK AND LEVEL OF THE ITEMS THAT MEASURE THE DOMAIN OF SELF-CONFIDENCE ASSOCIATED WITH E-LEARNING.

The area of self-confidence associated with e-learning					
NO	**Item**	**Arithmetic Mean**	**Standard Deviation**	**Rank**	**Level**
1	I can use the skills of e-learning techniques	2.11	1.038	3	Low
2	I feel good about myself in the e-learning process	2.3	0.886	5	Low
3	It makes it easy for me to achieve all my academic goals in the e-learning process	2.24	0.937	4	Low
4	I think that the e-learning experience makes me a good student	2.14	1.141	6	Low
5	I can easily solve all my study problems with e-learning	1.37	0.779	7	Low
6	I can rely on myself to solve my homework in the e-learning process	2.43	0.904	2	Medium
7	I feel that others trust me in the e-learning process	2.61	0.773	1	High
	Dimensions as a whole	**2.17**	**20.92**	**-**	**Low**

TABLE NO. (6): ARITHMETIC AVERAGES, STANDARD DEVIATIONS, RANK AND LEVEL OF THE ITEMS THAT MEASURE THE DOMAIN OF PERSISTENCE AND PERSISTENCE ASSOCIATED WITH E-LEARNING.

The field of persistence and perseverance associated with e-learning					
NO	**Item**	**Arithmetic Mean**	**Standard Deviation**	**Rank**	**Level**
8	I like situations where there is a degree of challenge in the e-learning process	1.79	0.896	4	Low
9	I am trying to learn new things through e-learning process	1.42	0.765	7	Low
10	There are many ways and means to achieve everything I want in the e-learning process	2.14	0.925	2	Low
11	I seek to develop my abilities in the e-learning process	3.38	0.848	1	Medium
12	I find that e-learning helps me gain many new experiences	1.65	1.146	5	Low
13	E-learning opens the way for me to achieve my academic ambitions	1.51	1.173	6	Low
14	I can complete all study requirements during the e-learning experience	1.94	0.749	3	Low
	Dimensions as a whole	**1.97**	**280.9**	**-**	**Low**

TABLE NO. (7): ARITHMETIC AVERAGES, STANDARD DEVIATIONS, RANK, AND LEVEL OF THE ITEMS THAT MEASURE THE FIELD OF EMOTION ASSOCIATED WITH E-LEARNING.

Emotional domain associated with e-learning

NO	Item	Arithmetic Mean	Standard Deviation	Rank	Level
15	I feel anxious in the e-learning process	2.31	0.742	4	Low
16	I have the ability to control my behavior during the e-learning process	3.86	0.819	1	Low
17	I like face-to-face education more than e-learning	3.39	0.749	2	Medium
18	Look calmly at the cracks that appear in the e-learning process	1.73	1.023	7	Low
19	I'm bored with the e-learning process	1.88	0.964	6	Low
20	Behave well while following the online lessons.	3.62	0.767	3	Medium
21	I refuse to do some work that is requested from me electronically.	2.17	1.029	5	Low
	Dimensions as a whole	**2.70**	**0.870**	-	Medium

TABLE NO. (8): ARITHMETIC AVERAGES, STANDARD DEVIATIONS, RANK, AND LEVEL OF ITEMS THAT MEASURE THE PROBLEM-SOLVING DOMAIN ASSOCIATED WITH E-LEARNING

The field of problem solving associated with e-learning

NO	Item	Arithmetic Mean	Standard Deviation	Rank	Level
22	I have the ability to solve problems that guide me in the e-learning process	2.68	0.819	1	Medium
23	I can choose the best solutions to the problems that occur to me in the process of e-learning	2.3	0.842	3	Low
24	I act calmly when problems suddenly arise for me	1.55	0.782	5	Low
25	I find it easy to solve the problems that occur to me during my studies	1.89	0.769	4	Low
26	I think and focus well in solving the difficulties that may occur to me	1.43	0.765	6	Low
27	I can find suitable solutions to some of the problems that may occur to me through e-learning	2.61	1.038	2	Medium
	Dimensions as a whole	**2.07**	**0.835**	-	Low

The data in the previous tables indicate that the impact of e-learning on the perceived self-efficacy level of secondary school students in government schools in Karak governorate was (low), as the arithmetic mean of all dimensions of the scale as a whole was (2.22), which is a low percentage based on the judgment scale in the clarified In Table No. (2), the emotional domain associated with e-learning came in the first place with an arithmetic average of (2.70) with a (low) degree, and in the second place came the field of self-confidence associated with e-learning with an arithmetic average of (2.17), with a (low) degree. In third place is the field of problem solving associated with e-learning, with a mean of (2.07), with a low score. The field of persistence and perseverance associated with e-learning ranked fourth and last, with a mean score of (1.97), with a low score.

At the level of paragraphs, paragraph (15) came in first place, which reads "I have the ability to control my behavior during the e-learning process" with an average of (3.86). And in the last place, paragraph No. (5), which reads, "I can easily solve all my academic problems in the light of e-learning," came with a mean score of (1.37), with a low score.

The researcher attributes these results to the fact that e-learning had no effect on raising the level of perceived self-efficacy, to several things from the researchers' point of view, including that the e-learning experience came suddenly and without preparing students or teachers to practice e-learning using technology, communication means and various educational platforms, As this educational environment differs significantly from the previously face-to-face learning (traditional learning), as well as the lack of preparation and development of capabilities and skills related to the technological, cognitive, behavioral and emotional aspects that are necessary in the process of perceived self-efficacy. This is confirmed by (Batainh&Atoum&Alsmadi, 2021), who indicated that distance education (e-learning) requires capabilities and skills in information technology, in addition to smart devices and applications that help provide learning in an effective manner. Also, the responsibility of teachers is not easy; It requires significant efforts in order to successfully engage students in

the classroom and achieve the desired educational goals.

THE SECOND STUDY QUESTION, WHICH STATES: Are there statistically significant differences at the significance level ($\alpha \geq 0.05$) in the effect of e-learning on the perceived self-efficacy level of secondary school students in government schools in Karak governorate due to the variable (gender, specialization, school stage).

In order to answer this question, arithmetic means and standard deviations were calculated for the effect of distance learning on the academic integration process for the responses of the study sample members, and Table No. (9) illustrates this as follows:

TABLE (9):THE EFFECT OF E-LEARNING ON THE LEVEL OF PERCEIVED SELF-EFFICACY OF THE RESPONSES OF THE STUDY SAMPLE MEMBERS ACCORDING TO THE VARIABLE (GENDER, SPECIALIZATION, ACADEMIC STAGE)

Variable	Category	Arithmetic Mean	Standard Deviation
Gender	Male	2.199	.881
	Female	2.247	.896
	Total	**2.223**	**.888**
Educational level	First Secondary	2.101	889.
	Second Secondary	2.346	887.
	Total	**2.223**	**.888**
Specialization	Literary	3.032	895.
	Scientific	2.048	871.
	Legal	1.591	867.
	Total	**2.223**	**.8885**

The data in Table (9) indicate that there are apparent differences in the arithmetic averages of the impact of e-learning on the level of perceived self-efficacy among secondary school students depending on the variable (gender, specialization, school year). To detect whether these differences are statistically significant, an analysis was used the variance is in several directions and Table No. (10) shows this difference.

TABLE (10): TO REVEAL THE DIFFERENCES IN THE ESTIMATES OF THE STUDY SAMPLE MEMBERS OF THE IMPACT OF E-LEARNING ON THE LEVEL OF PERCEIVED SELF-EFFICACY OF THE RESPONSES OF THE STUDY SAMPLE MEMBERS ACCORDING TO THE VARIABLE (GENDER, ACADEMIC GRADE, SPECIALIZATION)

Contrast source	Sum squares	Freedom degree	mean squares	F value	Statistical significance
Gender	2.989	3	1.764	5.228	.042
Educational level	1.808	2	.904	2.897	.059
Specialization	4.035	2	.017	.494	.410
The error	41.559	143	.312		
Total	50.391	150			

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

The data in Table No. (10) indicate that there are no statistically significant differences at the level of significance ($\alpha \leq 0.05$) in the study sample vocabulary estimates in the impact of e-learning on the level of perceived self-efficacy among secondary school students due to the study variables.

The researcher interprets the data in the previous tables, which indicated that there are no statistically significant differences in the impact of e-learning on the level of perceived self-efficacy of secondary school students in government schools in Karak governorate due to the variable (gender, specialization, school stage). All students, except males or females, with different specializations and stages of study, live in the same cognitive, behavioral and emotional conditions, and all of them go through the same new changes required by the e-learning process, which is a new experience for them that they did not go through before and were not prepared for it in advance, so all their experiences In this field, they are somewhat equal, which does not show any statistically significant differences depending on the variables of the study.

RESULTS:

1. The effect of e-learning on the perceived self-efficacy level of secondary school students in government schools in Karak governorate was (low).

2. The emotional domain associated with e-learning ranked first with a (low) degree, and in the second rank came the self-confidence domain associated with e-learning with a (low) degree, and the problem-solving domain associated with e-learning came in the third rank with a (low) degree, and ranked third. The fourth and last is the field of persistence and perseverance associated with e-learning, with a (low) degree.
3. There are no statistically significant differences at the level of significance(α≤i0.05)n the vocabulary estimates of the study sample in the impact of e-learning on the level of perceived self-efficacy among secondary school students due to the study variables.

RECOMMENDATIONS:

1. The necessity of taking measures to improve and raise the atmosphere of perceived self-efficacy in the e-learning process, through the improvement and development of the e-learning philosophy in line with the students' psychological, social, intellectual and cognitive needs.
2. Activating the role of the e-services unit in the Ministry of Education to help students solve problems related to educational services on e-learning platforms.
3. The necessity of developing the content of curricula and curricula so that it is consistent with the characteristics and nature of e-learning.
4. The necessity of holding training and educational workshops for secondary school students in order to develop and improve the scientific and practical skills required by the e-learning process.

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