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The Degree to Which Public Secondary School Principals Practice E-leadership in Jerash Governorate in Light of the Corona Pandemic from the Point of View of Islamic Education and Arabic Language Teachers

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Abstract

This study aimed to identify the degree to which public secondary school principals practice E-leadership in Jerash Governorate in light of the Corona pandemic from the point of view of Islamic Education and Arabic Language teachers. The study sample consisted of (350) male and female teachers who were randomly selected and the descriptive survey method was adopted to achieve the study's objectives. A questionnaire was developed that included (24) items distributed into three sections: the culture of learning in the digital age, excellence in professional practices, and Cyber development and improvement. The results of the study showed that the degree of practice of E-leadership by government secondary school principals in Jerash Governorate in light of the Corona pandemic from the Islamic

Education and Arabic Language teachers' point of view was at a high level in all sections and with regard to the questionnaire as a whole. It was also shown that there were statistically significant differences at the significance level (α=05.0 due to the gender variable in favor of females, as well as to the educational qualification variable in favor of the bachelor's category and below. Furthermore, it was found that there were no statistically significant differences at the significance level) (α=05.0). Between the averages of the study sample's estimates on the total degree of the scale due to the years of experience variable. The study recommended to train and teach educational leaders in public schools in the secondary and basic stages modern and emerging electronic applications on an ongoing basis.

Keywords: E-leadership, corona pandemic, public secondary school principals.

Introduction

The beginning of the twenty-first century witnessed a great development and a tremendous scientific and technological revolution, which created an interest in modern programs in the field of education to raise the level of efficiency of E-leadership in schools, as well as to complete all work related to school and educational management with ease, and in a manner that saves effort and time, and reduces costs. This is referred to as "knowledge economy".

Successful school management is a key factor in the progress of educational institutions in all fields, because it holds the responsibility of making and formulating appropriate decisions to serve the educational process, and in order to reach a distinguished leadership. The desired change to achieve the goals of the educational process starts from the school

administration first , then the rest of the school's staff including the teaching staff and others (Khraisha, 2021).

It is worth noting that the school administration has an important role in the educational and learning processes as well as in the employment of educational technology, because the process of development and modernization in schools depends on a successful and effective educational administration that can keep pace with all technological developments that serve the learning and teaching processes (Amal, 2016).

It should be pointed out that successful leadership is the basis of the administrative process that greatly plays a role in the success of the school administration. which in turn determines the success and failure of the educational process. The success and failure of the educational process is determined by the educational administration, which is considered the driving force for the educational leader when dealing with emerging circumstances and changes, especially with the Corona pandemic and its restrictions (Abu Ela, 2013).

Therefore the E-leadership that reflects the concept of educational leadership emerged and later developed to cope with today's requirements and to enhance the level of school leadership performance on all aspects (Sorensen, Range, 2013)

E-leadership improves work performance in the school as it involves the use of modern technological methods that are effective, highly efficient and speedy. It also achieves administrative flexibility in terms of organization, planning, development, administrative follow-up, delegation of powers, improving performance and making appropriate decisions (Arian, 2018).

Based on the above, the importance of E-leadership in keeping pace with the conditions imposed on us by the Corona pandemic is evident through being implemented in school administration, accomplishing work and administrative tasks, achieving educational goals with high efficiency, and raising the level of administrative and teaching performance. Accordingly, this study was conducted to determine the degree to which secondary school principals practice E-leadership in Jerash Governorate in light of the Corona pandemic from the point of view of Islamic education Arabic Languge teachers.

Study problem

The theories of school administration have developed as a result of the application of modern electronic technologies in school administration and teaching methods. It was necessary to integrate them into school administration and the educational system in general (Al-Tashah, 2013).

Therefore, it has become necessary to switch all educational administrative work from traditional methods to modern electronic methods to be in line with the scientific and electronic progress imposed by the Corona pandemic these days, and in order to complete educational administrative tasks quickly, with minimal time and effort, and with high quality.

Despite the challenges imposed by the Corona pandemic, E-leadership is underused which is the topic addressed by this study. Its problem is trying to identify the degree to which secondary school principals practice E-leadership in Jerash Governorate in light of the Corona pandemic from the point of view of Islamic Education and Arabic Language teachers.

Study objectives

This study aims to know the degree of electronic leadership practice among secondary school principals in Jerash Governorate in light of the Corona pandemic from the Islamic Education and Arabic Language teachers' point of view.

Study questions

The current study attempts to answer the following questions:

- To what degree secondary school principals practice E-leadership in Jerash Governorate in light of the Corona pandemic from the point of view of Islamic Education and Arabic Language teachers?

- Are there statistically significant differences at the significance level (α=05.0) in the degree of E-leadership practice among public secondary school principals in Jerash Governorate in light of the Corona pandemic from the Islamic Education and Arabic Language teachers' point of view due to gender, years of experience, and educational qualification variables?

Study importance

The importance of the study lies in the following:

- This study is one of the few studies, according to the researchers' knowledge, and after research and investigation, that dealt with E-leadership in light of the Corona pandemic from the point of view of Islamic Education and Arabic Language teachers.

- This study constitutes a methodological and cognitive framework that enables researchers and scholars to use it as a reference any time to benefit from it.

-The training and development centers in the Jordanian Ministry of Education can use this type of studies in preparing special training programs on the subject of E-leadership.

- Principals in secondary and primary schools can also benefit from it in understanding Eleadership and its role in improving the performance of the school and its employees.

Study limitations

The study limitations include the following:

Human limitations: This study was limited to Islamic Education and Arabic Language teachers in public secondary schools.

Spatial limitations: This study was limited to public secondary schools in Jerash Governorate.

- Temporal limitations: This study was conducted in the second semester of 2022/2023 AD.

Procedural definitions

Degree of practice: The estimations of Islamic education Arabic Language teachers in public secondary schools in Jerash Governorate regarding school principals' practice of E-leadership.

E-leadership: It is the ability to employ various means of modern technology, information and computer programs in school administration, in order to facilitate and speed up the achievement of educational goals.

Secondary School Principals: Those in charge of administrative tasks in secondary schools in Jerash Governorate.

Corona pandemic: a viral disease caused by the emerging corona virus, discovered by the World Health Organization on December 31, 2019 AD, after a group of individuals got infected with viral pneumonia in Wuhan, People's Republic of China.

Theoretical framework and previous studies

The school administration plays a major role in the process of disseminating technology in the school, and the development of the educational processes depends on the educational leadership and its ability to keep pace with technological developments in both educational and administrative processes.

The school is considered the most important educational institution that helps students develop their abilities in aspects, in a manner that is in line with their predisposition, tendencies and attitudes. (Rozaki, 2014).

In order for the school to perform its mission effectively, it needs to provide all modern electronic means to keep pace with the developments imposed by the Corona pandemic, and this is reflected positively on the outcomes of the educational learning process (Rozaki, 2014).

It is worth noting that the transition to E-leadership in educational institutions in general, and schools in particular, is of great importance in order to enhance performance, reduce time and effort, and reduce costs, especially since the world at the present time is a small

village, and this is considered one of the positive outcomes of globalization (Van Roman, Wang.Liv.2016).

Educational leadership constitutes an important basis in various school activities, and due to the transfer of large numbers of students from private schools to public schools and the increase in the absorptive capacity of public schools in light of the Corona pandemic, the need has become urgent to find an electronic educational leadership that keeps pace with developments, and contributes to absorbing the large and increasing numbers of students in each school (Crow, 2013).

It should be noted that the practice of E-leadership as an effective and new administrative method, leads to improving the administrative level, and creates a positive interaction between the employees within the school. Furthermore, the negatives of traditional leadership are removed, as E-leadership employs modern technological tools to easily complete, archive, and quickly retrieve school tasks when needed. Also, it protects information from being attacked, stolen, distorted or changed by keeping backup copies in places outside the school (Al-Ghaith, 2017).

E-leadership requirements:

The two requirements for E-leadership, are as follows: (Abu Telkh, 2014) First:

Administrative requirements:

1- Developing strategies, plans and programs to deal with E-leadership and its tools in line with the school's surroundings and its capabilities.

2- Creating a suitable environment for work, and providing sufficient data and information about the school and its employees.

3- Adapting to E-leadership by school staff, and the convertibility of the leadership style from traditional to electronic.

Second: Physical and technical requirements:

1- Financial support in order to purchase the necessary devices and tools to create websites at the school.

2- Programs that facilitate administrative and teaching work in general.

3- A high-speed Internet suitable for carrying out administrative, leadership and educational duties and tasks.

E-Leadership Objectives:

E-Leadership aims to achieve a set of goals, including: (Abed, 2015)

First: To continuously manage and follow-up the school's work, and to collect basic data from its original sources.

Second: To eliminate obstacles in decision-making by providing data and associating them with each other.

Third: To save effort and time during the implementation of administrative and educational work inside the school.

Fourth: To increase the connection between employees inside the school, and to complete the work required of them quickly, and in an effortless manner.

E-Leadership components:

E-Leadership depends on three main elements: (Belkhair, 2016)

1- The physical element: which is represented in computers, networks, systems and others.

2- Software: which is represented by e-mail, data, and computer applications.

3- The human element: which is represented by leaders, managers, analysts, and intellectual capital.

The role of the leader (school principal) in achieving E-leadership:

The school principal needs to possess the educational E-Leadership competency in order to prepare the teachers working in the school with high efficiency, and to keep pace with the electronic progress. Hence, school principals must be educational leaders in an electronic environment who have standards based on information, knowledge and sciences related to the electronic aspect that enable them to lead schools with a high degree of efficiency (Shepherd & Taylor, 2019).

E-Leadership in light of the Corona pandemic:

The Corona pandemic had a significant negative impact in all areas of human life. It led to damage and negative effects on education as the Jordanian government had issued the Defense Law No. (2) to disrupt all schools in Jordan, at all educational levels, and to switch education from within schools to distance education for fear of the spread of this virus among teachers and students (Ministry of Education, 2020).

Therefore, the use of modern technology in light of this pandemic was wider and greater than it was previously used, because the usual traditional methods of education were changed to electronic with remote leadership mode in order to continue the educational process and manage it to the fullest in light of the challenges imposed by the Corona pandemic (Mahmoud, 2020).

Previous studies

Al-Nawaji (2020) conducted a study aimed at knowing the degree to which public school principals in Ain Al-Basha in Jordan practice E-leadership and its relation to the level of administrative communication from the teachers' point of view. The study consisted of (300) male and female teachers from public schools in Ain Al-Basha District, and the results of the study showed that the degree to which public school principals in Ain Al-Basha District practice E-leadership from the teachers' point of view, and the level of administrative communication were intermediate. Also, the results showed that there were no statistically significant differences in the estimations of the study sample according to the gender, academic qualification and experience variables.

Abdul Rahman (2018) conducted a study aimed at revealing the reality of the implementation of electronic management in the administrative operations by Jordanian school principals in the capital Amman and the ways to develop it from the point of view of the principals themselves. To achieve the objectives of the study, the researcher used a questionnaire as a tool for data collection, and the study sample consisted of (330) male and female principals. The results of the study showed that the implementation of electronic management was to a high degree, and it also showed that there were statistically

significant differences in the estimations of the study sample attributed to the type of schools variable.

Al-Sharman and Khattab (2018) carried out a study aimed at identifying the degree to which secondary school principals practice E-leadership, and its relation to the degree of change leadership in their schools from the point of view of teachers in the capital, Amman. The descriptive correlative approach was used, and a stratified random sample consisted of (370) male and female teachers, who were selected from public and private secondary schools in the capital Amman. The results of the study showed that the degree of high school principals' practice of E-leadership in their schools was intermediate, while the degree of their practice of change leadership was high. It also showed a positive correlation between the degree of high school principals' practice of E-leadership and the degree of change leadership.

Arian (2018) conducted a study that aimed to identify the degree of E-leadership practice by the school principals of Hawally Educational District and its relationship to the degree of change leadership in their schools. For this purpose, the researcher used the descriptive correlative approach and prepared a questionnaire as a tool for data collection. The study sample consisted of (111) male and female principals. The results of the study showed that the degrees to which school principals practiced E-leadership and change leadership were high.

By reviewing previous studies, the researchers concluded the following:

- Some previous studies focused on secondary school principals and the degree to which they practice E-leadership, such as the study of Al-Shurman and Khattab (2018). As

for the current study, it focused on the principals of public secondary schools in Jerash Governorate and the degree to which they practice E-leadership.

- Some previous studies focused on E-leadership and its relation to the degree of change leadership in their schools, such as the study of Arian (2018). As for the current study, it focused on E-leadership in light of the Corona pandemic.

- Some studies focused on the implementation of electronic management in administrative operations, such as the study of Abdul Rahman (2018). As for the current study, it focused on the degree to which public school principals in Jerash Governorate practice E-leadership in light of the Corona pandemic from the Islamic Education and Arabic Language teachers' point of view.

- Some previous studies focused on E-leadership and its relation to administration, such as the study of Al-Nawaji (2020). As for the current study, it focused on E-leadership in public secondary schools in light of the Corona pandemic.

The current study differed and is distinguished from previous studies, that it focused on the E-leadership of public secondary school principals in Jerash Governorate in light of the Corona pandemic from the point of view of Islamic Education and Arabic Language teachers.

- The current study has benefited from previous studies in building the study tool, the theoretical framework, choosing the research methodology, the study questions, and discussing the results. For example, the studies of Al-Nawaji (2020), Abdul Rahman (2018), Sharman and Khattab (2018), and Arian (2018).

Study methodology

In order to achieve the objectives of the study, the descriptive survey method was used, which is the appropriate method for this type of studies.

Study population

The study population consisted of all public secondary school teachers in Jerash Governorate, who amounted to (1587) Islamic Education and Arabic Language teachers, of which (669) were males, and (918) were females, according to the statistics of Jerash Governorate Education Directorate for the academic year 2022/2023 AD.

The study sample

The study sample consisted of (350) male and female of Islamic Education and Arabic Language teachers who were selected by the stratified random method, and they constituted (20%) of the study population. The sample is representative of the study population, with a confidence margin amounting to (95%) and a (5%), margin of error. The questionnaire was distributed to the participants electronically via Google Drive, and Table No. (1) shows the study sample according to its variables.

Table (1): Distribution of the study sample according to its variables

Variable	Category	Number
Gender	Male	251
	Female	291
	Total	053
Educational qualification	Bachelor's degree or less	175
	Higher education	75
	Total	053
Experience	Less than 5 years	15

	5 to less than 10 years	90
	10 years or over	71
	Total	53

Study tool

To achieve the objectives of the study, the researcher developed a questionnaire by relying on theoretical literature, some previous relevant studies, and the opinions of some specialized educators. The questions included in the questionnaire were developed with reference to a number of previous studies, such as the study of Al-Shurman and Khattab (2018), and the study of Arian (2018). The questionnaire was divided into three sections: the culture of learning in the digital age, excellence in professional practices, and electronic improvement and development.

Validity of the tool

After the tool was prepared in its initial form, the researcher presented it to a group of faculty members in public and private Jordanian universities, specializing in educational administration, curricula and methods of teaching, and measurement and evaluation and they were asked to express their opinions, and to judge the tool in terms of the item's consistency and their classification in the sections, the clarity of the linguistic formulation, and the clarity of the items' meanings. In light of their observations, the items which five or more arbitrators suggested to exclude were deleted, some items suggested by some arbitrators were added, and some items were modified and reformulated, until the study tool reached its final form consisting of three sections that include (24) items.

Construct validity

The construct validity of the study tool was confirmed by applying it to an exploratory sample of (30) male and female of Islamic Education and Arabic Language teachers from the study community, and then calculating the correlation coefficient of the items with the section they belong to and the tool as a whole as shown in Table No. (2)

Table (2)

The construct validity of the study tool

No.	Correlation coefficient with section	Correlation coefficient with tool	No.	Correlation coefficient with section	Correlation coefficient with tool	No.	Correlation coefficient with section	Correlation coefficient with tool
1	.806**	.454**	2	.632**	.523**	2	.847**	.586**
2	.843**	.704**	1	.387**	.527**	1	.718**	.686**
3	.858**	.730**	0	.466**	.622**	0	.860**	.656**
4	.842**	.787**	4	.433**	.544**	4	.678**	.669**
5	.909**	.777**	5	.632**	.513**	5	.850**	.719**
6	.911**	.541**	6	.649**	.514**	6	.936**	.785**
7	.757**	.741**	7	.542**	.415**	7	.875**	.576**
8	.750**	.765**	1	.478**	.512**	1	.812**	.596**
the culture of learning in the digital age			excellence in professional practices			electronic improvement and development.		

Statistically significant at the level of significance (α = 0.01).

Table (2) shows that all correlation coefficients between the total score of the tool and the score of the items ranged between (0.454-0.785), while the correlation coefficients of the section and the total score ranged between (0.718-0.936). All the coefficients were statistically significant at the significance level (α = 0.01), which indicates that the internal

consistency between the items constituting the questionnaire is acceptable and structurally valid, and therefore is valid for application to the study sample members.

Tool reliability

The reliability of the study tool was confirmed by applying it to an exploratory sample of (30) male and female teachers from the study population. The reliability coefficient was estimated by using Cronbach-Alpha measure, for each of the questionnaire's sections and for the tool as a whole, and it was found that they have relatively high reliability coefficients. For the tool as a whole it amounted to (0.89), for the first section; (0.84), for the second section; (0.85), and for the third section; (0.91), which are acceptable reliability coefficients for conducting the study.

Study variables

The study variables were divided into two parts:

First, the independent variables which are:

1. Gender: male and female.

2. Educational qualification:: Bachelor's degree or less, Higher education.
3. Years of experience: less than 5 years, 5 years to less than 10 years, and 10 years.

Second: the dependent variable:

The degree to which public secondary school principals practice E-leadership in Jerash Governorate.

Criterion for interpretation of scores

The 5-point Likert scale was used as the study tool, and it includes five levels for the degree to which E-leadership is practiced by public secondary school principals in Jerash Governorate in light of the Corona pandemic from the Islamic Education and Arabic Language teachers' point of view. The levels are: (5) indicating always, (4) indicating often, (3) indicating sometimes, (2) indicating rarely, and (1) indicating never.

In order to judge the responses of the study sample to the study tool, the method of equal categories was adopted, which the majority of previous studies used and many arbitrators recommended. The following comparison criteria were used to judge the arithmetic averages, as shown in Table No. (3)

No.	Range	Significance
1	1300-2	Low
2	0367-1304	Intermediate
3	533-0361	High

Statistical processing

A number of the following statistical tests were used to test the study questionss:

1. Cronbach's alpha coefficient to estimate the tool reliability.
2. Means and standard deviations to estimate the degree to which E-leadership is practiced by public secondary school principals in Jerash Governorate in light of the Corona pandemic from the teachers' point of view.
3. Multiple variance analysis (MANOVA) to see whether the differences are statistically significant among the study sample members.

Study results and discussion

Results related to the first question, which states, " To what degree secondary school principals practice E-leadership in Jerash Governorate in light of the Corona pandemic from the point of view of Islamic Education and Arabic Language teachers?

To answer this question, arithmetic means, standard deviations, rank, and the sample's responses about E-leadership were calculated for each section of the study tool.

The first section: the culture of learning in the digital age:

Arithmetic means, standard deviations, rank, and the sample's responses about Eleadership were calculated for each section of the questionnaire, as in Table No. (4)

Table (4)

Arithmetic means, standard deviations, ranks and description of the study sample's responses to the items of the first section in the questionnaire : "The culture of learning in the digital age"

No.	Item	Arithmetic mean	Standard deviations	Rank	Description
5	They encourage teachers to integrate e-learning into the curriculum3	4.62	0.66	2	High
6	They Promote participation in teaching and learning communities that encourage electronic creativity3	4.46	0.73	1	High
1	They contribute to the spread of awareness about the importance of e-learning on an ongoing basis3	4.45	0.78	0	High
0	They promote the effective use of the tools and applications available in e-learning3	4.38	0.85	4	High

2	They contribute to spreading the school's electronic culture3	4.36	0.98	5	High
7	They Contribute to the implementation of effective electronic programs to qualify new teachers and develop them professionally3	4.35	0.84	6	High
4	They encourage cooperation to improve and develop education in the digital age	4.30	0.90	7	High
1	They Support the provision of e-learning resources to meet the different needs of teachers	4.28	0.83	1	High
The culture of learning in the digital age		4.366	0.844	High	

It is shown in Table (4) that the degree to which public secondary school principals practice E-leadership in Jerash Governorate in light of the Corona pandemic from the Islamic Education and Arabic Language teachers' point of view was high, with an arithmetic mean of (4.366) and a standard deviation (0.844). Item No. (5), which states that "They encourage teachers to integrate e-learning into the curriculum" was ranked first with an arithmetic mean of (4.62), a standard deviation of (0.66), and a high estimation. Item No. (6) which states, " They Promote participation in teaching and learning communities that encourage electronic creativity." Was ranked second with an arithmetic mean of (4.46) , a standard deviation of (0.73), and a high estimation. Item. (2), which states " They Support the provision of e-learning resources to meet the different needs of teachers" occupied the last rank with an arithmetic mean of (4.28), a standard deviation of (0.83) and a high estimation.

The researchers attribute this result to the fact that principals and administrators are aware of the importance of employing the electronic means in education and learning in order to save time and effort, and to achieve educational goals, especially in light of the conditions

imposed by the Corona pandemic. Furthermore, the communication within the school environment during the Corona pandemic has become dependent on the use of modern electronic means in order to achieve the planned goals set for the educational learning process. Also, principals and administrators have financial support to provide the resources needed by teachers, in a variety of ways that are limited to the authorities of the principals, and to the responsiveness of the Ministry of Education regarding the provision of various educational resources.

This result is consistant with the study of Erian (2018) that the degree to which the school principals of the Hawalli educational district practiced E-leadership from their point of view was high. However, this study differed with the study of Al-Sharman and Khattab (2018) in that the degree to which the principals of public and private secondary schools in the capital Oman practiced E-leadership in their schools was intermediate.

The second section: Excellence in professional practices:

Arithmetic means, standard deviations, rank, and the sample's responses about Eleadership were calculated for each section of the questionnaire, as in Table No. (5)

Table (5)

Arithmetic means, standard deviations, ranks and description of the study sample's responses to the items of the first section in the questionnaire :"Excellence in professional practices".

No.	Item	Arithmetic mean	Standard deviations	Rank	Description
0	They Employ electronic programs to accomplish daily administrative and educational tasks3	4339	3392	2	High
5	They employ the available administrative systems to access the data of teachers and students3	4335	3392	1	High
4	They Employ professional development activities to improve electronic use within the school3	0397	3391	0	High
7	They encourage teachers to evaluate electronic tools used to improve educational outcomes based on their satisfaction	0393	2332	4	High
2	They Employ electronic software for effective communication between administration and teachers3	0317	3397	5	High
6	They are keen to actively participate in stimulating learning communities in the electronic field	0316	3391	6	High
1	They keep pace with the educational developments in the electronic field and its uses in the educational and administrative process	0315	2333	7	High
1	They are keen to provide electronic copies of educational publications to all teachers in the school	0377	2320	1	High
Excellence in professional practices		0391	3311	High	

Table (5) shows that the degree to which public secondary school principals practice Eleadership in Jerash Governorate in light of the Corona pandemic from the Islamic Education and Arabic Language teachers' point of view was high, with an arithmetic mean of (3.93) and a standard deviation of (0.82). Item No. (3), which states “They Employ

electronic programs to accomplish daily administrative and educational tasks" was ranked first with an arithmetic mean of (4.09), a standard deviation of (0.91) and high estimation. Paragraph No. (5), which states "Employs They employ the available administrative systems to access the data of teachers and students" was ranked second with an arithmetic mean of (4.05), a standard deviation of (0.91) and a high estimation. While item No. (8), which states "They are keen to provide electronic copies of educational publications to all teachers in the school." Occupied the last rank with an arithmetic mean of (3.77), a standard deviation of (1.13), and a high estimation.

The researchers attribute this result to the fact that the principals of public secondary schools in Jerash Governorate, during the Corona pandemic, realized the importance of optimal use of educational platforms and systems of the Ministry of Education, in order to follow up the progress of the educational process and carry out administrative and educational work and tasks every day. Moreover, The E-leadership is very important in accessing students' data, especially since the Corona pandemic caused the disruption of schools throughout Jordan, as it established an electronic database on students and teachers that is linked between the Ministry of Education and the principals of public secondary schools. In addition, the interest of public secondary school principals in providing educational publications, and directing teachers to continuously check the websites and educational platforms of the Ministry of Education, and follow up on what is new and serves the educational process, had a great impact which explains the high estimation.

These results were consistent with the study of Abdul Rahman (2018) in that the implementation of electronic management in the administrative operations by the principals of Jordanian schools in the capital Amman was at a high degree. While they

differed from the study results of Al-Nawaji (2020) in that the degree of practice of Eleadership by public school principals in Ain Al-Basha in Jordan and its relation to the level of administrative communication from the teachers' point of view was intermediate.

The third section: Electronic improvement and development:

Arithmetic means, standard deviations, rank, and the sample's responses about Eleadership were calculated for each section of the questionnaire, as in Table No. (6)

Table (6)

Arithmetic means, standard deviations, ranks and description of the study sample's responses to the items of the first section in the questionnaire :" Electronic improvement and development".

No.	Item	Arithmetic mean	Standard deviations	Rank	Description
0	They cooperate with highly qualified teachers in employing electronic programs to improve the educational process	0390	2334	2	High
2	They invest in the electronic field to achieve the desired goals of the educational process	0392	3390	1	High
6	They continue to improve the electronic means and tools that meet the needs of students	0316	2335	0	High
5	They monitor the availability of the effective electronic infrastructure necessary for the educational process	0313	2331	4	High
1	They follow up on the maintenance of available electronic tools to improve the quality of education	0379	2332	5	High

4	They promote the principle of strategic partnership to improve the employment of educational platforms	0371	2331	6	High
1	They collaborate to develop data collection tools to provide a database for teachers	0371	2331	7	High
7	They provide various educational opportunities based on the use of electronic programs to meet the needs of teachers and students	0371	2330	1	High
Electronic improvement and development		0311	3311	High	

Table (6) shows that the degree to which public secondary school principals practice Eleadership in Jerash Governorate in light of the Corona pandemic from the Islamic Education and Arabic Language teachers' point of view in relation to the third section: “Electronic improvement and development”, was high, with an arithmetic mean of (3.82) and a standard deviation of(0.88). Item No. (3) which states: “They cooperate with highly qualified teachers in employing electronic programs to improve the educational process” was ranked first with an arithmetic mean of (3.93), a standard deviation of (1.04) and a high estimation. Item No. (1), which states: “They invest in the electronic field to achieve the desired goals of the educational process” with an arithmetic mean of (3.91), a standard deviation of (0.93) and a high estimation. While item No. (7) which states: “They provide various educational opportunities based on the use of electronic programs to meet the needs of teachers and students” occupied the last rank with an arithmetic mean of (3.72), a standard deviation of (1.03) and a high estimation.

The researchers attribute this result to the fact that the principals of public secondary schools in Jerash governorate are committed to providing means to complete basic electronic tasks, by building an effective electronic environment within the schools that

helps teachers in accomplishing all educational and teaching responsibilities. Moreover, school principals seek by all the electronic means and methods to achieve psychological comfort for teachers in order to carry out educational tasks on time and with a high degree of accuracy, especially in light of the challenges posed by the Corona pandemic.

The secondary school principals in Jerash governorate are also very keen to raise the teachers' electronic literacy, as improvements and developments in work within the school depend on the teachers' competence, and the full conviction that teamwork is one of the basic elements for obtaining the best educational results.

It is worth noting that secondary school principals, during the Corona pandemic, relied on the experiences and skills that teachers already have in order to face the challenges posed by this pandemic, and to achieve the desired educational goals.

These results were found to be consistent with the study of Al-Sharman and Khattab (2018) that the degree to which secondary school principals practiced T-leadership in their schools was intermediate, while the degree of their practice of change leadership was high. This study also differed from the study of Al-Nawaji (2020) in that the degree of E-leadership practice by public school principals in Ain Al-Basha in Jordan and its relation to the level of administrative communication from the teachers' point of view was intermediate.

The second study question stated: "Are there statistically significant differences at the significance level (α=05.0) in the degree of E-leadership practice among public secondary school principals in Jerash Governorate in light of the Corona pandemic from the Islamic Education and Arabic Language teachers' point of view due to gender, years of experience, and educational qualification variables?"

To answer this question, arithmetic averages and standard deviations were calculated for the degree of E-leadership practice among public secondary school principals in Jerash Governorate in light of the Corona pandemic from the Islamic Education and Arabic Language teachers' point of view due to gender, years of experience, and educational qualification variables?", as shown in Table (7)

Table No. (7)
Arithmetic averages and standard deviations for the degree of E-leadership practice by public secondary school principals according to the variables (gender, educational qualification, years of experience).

Variable	Category	Descriptive statistics	The culture of learning in the digital age	Excellence in professional practices	Electronic improvement and development	Total score
Gender	Male	Arithmetic average	13.6	793.	23.7	73.6
		Standard deviation	20.9	60.8	60.8	20.8
	Female	Arithmetic average	03.9	63.9	63.8	83.8
		Standard deviation	50.8	30.8	190.	70.7
Educational	Bachelor's degree or less	Arithmetic average	4.00	04.0	03.9	43.9
		Standard deviation	40.8	10.8	60.8	70.7
	Higher educati	Arithmetic average	43.7	23.8	23.7	13.7

qualification	on	Standard deviation	10.	20.8	30.9	00.8
Years of experience	Less than 5 years	Arithmetic average	13.9	63.9	33.9	3.91
		Standard deviation	10.9	00.8	00.8	00.8
	From 5 years to	Arithmetic average	53.9	53.9	73.8	73.8
	less than 10 years	Standard deviation	20.8	30.8	50.8	40.7
	10 years or over	Arithmetic average	33.8	33.9	73.7	83.7
		Standard deviation	10.8	10.8	10.9	00.8

Table No. (7) shows that there are significant differences between the arithmetic averages of the degree of E-leadership practice by public secondary school principals in Jerash governorate according to the variables: (gender, educational qualification, and years of experience). The results of the multiple analysis of variance (MANOVA) were used to determine whether these differences had Statistical significance. Table No. (8) shows these results.

Table No. (8)

The results of the multiple analysis of variance (MANOVA) to indicate the differences between the arithmetic averages of the responses of the study sample about the degree of E-leadership practice by public secondary school principals according to the variables (gender, educational qualification, years of experience).

Source of variance	Sections	Sum of squares	Df	Mean square	F	Significance
Gender	The learning culture in the digital age	3.650	1	3.650	5.075	*0.024
	Excellence in professional practices	7.131	1	7.131	11.009	*0.001
	Electronic improvement and development	1.550	1	1.550	2.016	0.155
	Total score	2.712	1	2.712	4.540	*0.030
Educational qualification	The learning culture in the digital age	4.919	1	4.919	7.619	*0.005
	Excellence in professional practices	1.871	1	1.871	2.875	0.093
	Electronic improvement and development	13029	1	13029	3.012	0.081
	Total score	2.209	1	2.209	3.702	0.065
Years of experience	The learning culture in the digital age	1.395	2	0.697	0.969	0.379
	Excellence in professional practices	0.309	2	0.155	0.237	0.789
	Electronic improvement and development	0.462	2	0.233	0.300	0.743
	Total score	0.537	2	0.261	0.453	0.636
Source of variance	**Sections**	**Sum of squares**	**Df**	**Mean square**	**F**	**Significance**
Error	The learning culture in the digital age	3257.36	007	0.651		
	Excellence in professional practices	39303.5	007	0.769		
	Electronic improvement and development	5287.96	007	0.733		
	Total score	3235.14	007	0.596		
Total	The learning culture in the digital age	4285.30	049			
	Excellence in professional practices	4314.72	049			
	Electronic improvement and development	0343006	049			

	Total score	1563726	049			

It is indicated in Table No. (8) that there are statistically significant differences between the arithmetic averages of the study sample's responses about the practice of E-leadership by the principals of public secondary schools in Jerash governorate at the level of significance (α=05.0) according to the gender variable regarding the sections: (The learning culture in the digital age and excellence in professional practices, as well as the total score. By referring to Table No. (7), it is noticeable that this result was in favor of females.

The researchers attribute this result to the fact that females have a great interest in employing the electronic aspect of the educational process, and their keenness to learn everything new by attending courses and workshops related to it in order to reduce the effort and time while carrying out tasks that are part of the educational process.

It is also shown in Table No. (8) that there are statistically significant differences between the arithmetic averages of the study sample's responses about the practice of E-leadership by the principals of public secondary schools in Jerash governorate at the level of significance (α=05.0) according to "the educational qualification" variable regarding "The learning culture in the digital age section." By referring to Table No. (7), it is noticeable that this result was in favor of bachelor's degree or less.

The researchers attribute this result to the fact that using the electronics requires a high scientific qualification, especially since the electronic revolution has affected all aspects of the educational process, and as a result it became a requirement for all those in charge

of it to master and know its elements, so that educational goals are achieved with the least time, cost and effort, and that is presently known as knowledge economy.

Furthermore, Table No. (8) shows that there are no statistically significant differences between the arithmetic averages of the study sample's responses about the practice of Eleadership by the principals of public secondary schools in Jerash governorate at the level of significance (α=05.0) according to "the years of experience" variable .

The researchers attribute this result to the fact that the use of modern technology does not require specialized experience in this field, especially since it has spread in most of life's aspects at the present time, and everyone is using it being part of our current era.

Recommendations

Based on the findings, the study recommends the following:

To take serious actions to improve the E-leadership skills of school principals, whether public or private, at the secondary and primary levels, through continuous training and education.

To establish collaborative work between educational institutions and various government institutions in order to share experiences and knowledge related to E-leadership

To provide educational and cultural publications that help to better employ the electronic aspect of the educational process.

To conduct more studies related to E-leadership in the different stages of education, such as the primary stage.

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