

# Law and Humanities Quarterly Reviews

Shawabkeh, J. T. A. W., & Al-Baher, I. A. The Level of Awareness of Male and Female Directors of Special Education Schools in Jordan about Twenty-First Century Skills from their Own Point of View. *Law and Humanities Quarterly Reviews*, 3(3), 41-54.

ISSN 2827-9735

DOI: 10.31014/aior.1996.03.03.124

The online version of this article can be found at: https://www.asianinstituteofresearch.org/

Published by:

The Asian Institute of Research

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The Asian Institute of Research Law and Humanities Quarterly Reviews

Vol.3, No.3, 2024: 41-54 ISSN 2827-9735

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# The Level of Awareness of Male and Female Directors of Special Education Schools in Jordan about Twenty-First Century Skills from their Own Point of View

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#### Abstract

The current study aimed to identify the level of awareness of male and female directors of Special education schools in Jordan about twenty-first century skills. The study sample, which was stratified randomly, consisted of (81) male and female directors of Special education schools in Jordan. The descriptive survey method was used in the current study, and to achieve the objectives of the study, a questionnaire was developed, and its validity and reliability were confirmed. The results showed that the level of awareness of male and female directors of Special education schools in Jordan about twenty-first century skills was average. The results of the study also showed that there were statistically significant differences at the significance level (  $\alpha \leq 0.05$ ) according to the gender variable in Favor of the male group. There were no statistically significant differences according to the years of experience variable, and there were no statistically significant differences according to the academic qualification variable. In light of these results, the study recommended the need to educate educational administrations and their leaders working in Special education schools about the skills of the twenty-first century and their importance in building the educational situation, and to conduct further studies and research to study the skills of the twenty-first century and how to benefit from them in achieving efficiency and effectiveness in the educational process in its various aspects.

Keywords: Twenty-First Century Skills, Special Education

# 1. Introduction

Coinciding with the phenomenon of globalization, which the beginning of the twenty-first century witnessed an unprecedented breakthrough in information and communication technology, and the abolition of spatial and temporal boundaries, which made us live the concept of the global village as a tangible reality and an obvious reality. This resulted in rapid growth in technical programs and applications in the areas of daily life, resulting in the emergence of modern types of skills that young generations need for life and work - these are the skills of the twenty-first century.

Education in the twenty-first century is experiencing a state of continuous transformation and change due to what was imposed by globalization and the surrounding conditions of global development in digital technology, which cast a shadow on the form of the educational process in its various theoretical and practical aspects.

As an inevitable result of the tremendous development witnessed by the twenty-first century, skills have emerged that have begun to develop rapidly and in an engineering sequence that includes various educational conditions and situations, including psychological, psychomotor, and sociological situations, whose effects have exceeded the educational environments for ordinary students, gifted people with special needs, and disabled people of all kinds.

Such a matter requires that educational leaders work hard to ensure that these skills are kept up to date because of their great importance in refining the educational situation and ensuring its success in all its aspects, in addition to reformulating the personality of workers in the educational sector so that they are able to lead themselves and others in an effective manner within a framework of efficient communication. In a way that ensures the soundness of the decision taken in order to solve the problems facing the educational organization, regardless of their nature and characteristics, Thus, the educational environment is stabilized so that it becomes an incubator for science and knowledge, so that it provides society with all its economic, social and educational institutions with distinguished competencies, which contributes to raising their level and advancing their services. Hence the importance of realizing the skills of the twenty-first century in their ability to achieve the desired educational goals and objectives (Al-Ghamdi, 2021).

Many studies and research confirm that the importance of identifying twenty-first century skills is evident in the ability to build policies and make decisions that will achieve positive aspects, correct negative aspects, and improve the psychological health of its employees and their morale, which reflects positively on achieving the organization's goals.

Satisfying individual and collective needs and desires. Twenty-first century skills are defined as the set of capabilities that both the individual and the group need to keep pace with the accelerating requirements of the twenty-first century, which ensures the success of the intellectual, educational, and conceptual construction of individuals and institutions alike (Al-Bahr, 2024).

Twenty-first century skills emerge from three basic skills:

- Life Skills; These are social skills and personal behaviors that require forming positive relationships with others, avoiding crises, and the ability to think innovatively to help adapt to society. Life skills include many skills; Such as communication skills, self-dealing, negotiation, creative thinking, stress management, and dialogue with society (Al-Harbi, 2016).
- Soft skills: These are skills and abilities possessed by an individual that contribute to the development and success of the institution to which he belongs. These skills are related to leading others and forming relationships with them. These skills include: Leadership, team work, emotional empathy, advocacy, decision making and problem solving (Khamis, 2018).
- Technical skills: These are the skills necessary to perform the work successfully, which include the ability to use available technology, communicate effectively through it, and the ability to program, analyze data, manage networks, and creative design (Abboud, 2016).

Considering the special education centers, which are considered the first refuge after home for people with special needs, including gifted people and people with disabilities, considering that these centers constitute a house of expertise that can provide students with the skills of contemplating the life situations they face and the technical development and modernity that has invaded the world by adapting to it and trying to harness it to serve... The aspect of weakness they suffer from, whether in hearing, sight, or thinking Perhaps this achieves an important goal that special education has sought since ancient times, towards building the personality of the student who suffers from a disability, whether motor or mental, so that the desired educational goals and the targeted learning outcomes are achieved from the educational curricula that are currently offered to this category of students through means that guarantee the achievement of contemporary skills. Modern communication

related to effective communication, problem solving and serious decision-making, and the ability to lead and influence others to ensure their attraction to him. Therefore, from this logic, the skills of the twenty-first century were able to make a big difference and were able to cover a great distance in the field of education and special education through their role in Integrating the group of students with special needs into the school community as well as society in general, which played a pivotal role in building bridges of trust between this group and natural persons, thus opening the labor market for them and enabling them to contribute to the sustainable development of society (Al-Baber, 2022).

# 2. The study problem and its questions

Educational administrations in educational institutions seek to become familiar with and adapt to the skills of the twenty-first century in order to ensure the highest levels of efficiency and effectiveness in various educational situations, so that they are keen on everything that would raise the level of employees and ensure the use of those skills to achieve a high level of interaction and integration in the fulfillment of their duties. Educational support towards the beneficiary students, looking at special education centers, the researcher noticed that many organizational conflicts were generated in those centers as a result of weak communication between them, in addition to the fact that the decisions taken to solve problems were characterized by stereotypes.

In addition to the presence of leadership that contributes to astaticism, its inability to interact dynamically with educational situations, its uniqueness in performance and monopolization of it, and the dominance of authoritarianism in the process of moving towards achieving goals, in addition to a number of complex routine procedures that are not compatible with the requirements of the twenty-first century, which reflects negatively on work mechanisms. Educational education and its strategies, and this were confirmed by the results of the study of: Shalamish (2021), Melhem (2017), Al-Harbi (2016), Ahonen and Kinoni (2015), Therefore, this study seeks to determine the level of awareness of male and female directors of Special education schools about twenty-first century skills, by answering the following questions:

- The first question: What is the level of awareness of male and female directors of Special education schools about twenty-first century skills from their point of view?
- The second question: Are there statistically significant differences at the level of significance ( $\alpha \le 0.05$ ) between the arithmetic averages of the responses of the study sample members regarding the level of perception of male and female directors of Special education schoolsof twenty-first century skills due to the variables (gender, years of experience, and academic qualification)?

#### 3. The importance of studying

It is hoped that the results of this study will benefit:

- Theoretically, adding new knowledge in the field of twenty-first century skills.
- From a practical standpoint, helping educational leaders in educational administrations realize the skills of the twenty-first century and their importance in the success of the educational process and achieving educational goals, objectives, and goals.

# 4. Terminology of study

This study included the following terms:

- Twenty-first century skills (terminologically): They are the capabilities and skills that ensure adaptation to the requirements of the twenty-first century in order to ensure the achievement of its goals in building the contemporary human being capable of interacting with his technical and life components (Azmi, 2019).
- Twenty-first century skills (procedurally): These are the skills through which Special education schools in Jordan can interact with the circumstances imposed by the twenty-first century, so that these skills include communication skills, decision-making skills, and leadership skills, in a way that enables the achievement of educational goals. desired.

- Special education (terminologically): It is a group of specialized educational programs that are provided to groups of non-normal individuals in order to help them develop their abilities to the maximum possible extent, realize themselves, and help them adapt (Al-Khatib, 2012).
- Special education (procedurally): It is the educational upbringing that is practiced in Jordanian Special education schools within a specific educational curriculum and with interesting educational methods that take into account the totality of the students' physical, psychological, and mental abilities and capabilities.

# 5. The limits of the study

The limitations of the study included the following:

- Human limits: male and female directors of special education schools.
- Time limits: Academic year (2023/2024).
- Spatial boundaries: Jordanian special education schools.

#### 6. Previous relevant studies

This part will include a presentation of the previous studies that were reviewed, both Arabic and foreign, arranged historically from oldest to newest, as follows:

Conducted by Safarova (2023). A study aimed to identify the degree to which leaders of Special education schools in Poland practice the empowering leadership style from the point of view of teachers, the degree of availability of organizational citizenship behavior among teachers, and to reveal the relationship between school leaders' practice of empowering leadership and organizational citizenship behavior among teachers. The sample consisted of (281) school leaders. The results of the study showed that school leaders practiced empowering leadership to a high degree. The practice of organizational citizenship behavior among teachers was (high). In addition, there is a positive relationship between the empowering leadership of school leaders and organizational citizenship behavior among teachers. The study recommended the necessity of striving to consolidate the concept of empowered leadership among school leaders through designing and implementing training programs.

Shalamish (2021) conducted a study that aimed to identify the degree of awareness of vocational school principals and teachers about twenty-first century skills in the northern governorates of the West Bank from their own point of view. The study sample consisted of (122) male and female teachers and (4) vocational school principals. The results showed the study tool is that the degree of awareness of vocational school teachers about twenty-first century skills was very high. There are no statistically significant differences at the level ( $\alpha \ge 0.05$ ) in the degree of awareness of vocational school principals and teachers about twenty-first century skills in the northern governorates of the West Bank according to the variable of gender, academic qualification, directorate, specialization, and there are statistically significant differences at the level ( $0.05\ge \alpha$ ) in the degree of awareness of vocational school principals and teachers about twenty-first century skills in the northern governorates of the West Bank according to the years of experience variable. The results of the study recommended the necessity of holding training courses to develop the performances of school principals and teachers, aiming to develop teacher training programs to raise the level of their teaching performance in light of the skills of the twenty-first century, in addition to developing educational policies that support the roles of school principals and teachers, adopting the use of information and communications technology to achieve the goals and outcomes of education in a way that suits the needs of the market, the job.

The aim of the study was Al-Zamil and Al-Awwad (2021). To reveal the reality of the practice of participatory leadership among the leaders of Special education schools in light of the requirements of leadership change, and to identify the challenges that prevent its practice, and the mechanisms for improving it. The study sample consisted of (109) leaders of Special education schools in Kuwait. The study concluded that the degree The practice of participatory leadership among the leaders of special education centers, in light of the requirements for leadership of change, came in at a moderate level. The study also revealed the existence of challenges that prevent the practice of participatory leadership among the leaders of the centers, and that the most important improvement mechanisms from the teachers' point of view were encouraging the leaders of the centers to

cooperate with the teachers. In determining the work mechanisms in the centers, and ensuring the development and updating of the skills of the center leaders in strategies for resisting change.

Al-Sakran (2021) conducted a study that aimed to identify the degree to which directors of Special education schools possess twenty-first century skills, and their relationship to the extent to which students acquire them. The study sample consisted of (102) principals and (59) principals, and the results of the study revealed that the degree to which center directors possess Special education for twenty-first century skills was high, and the degree of students' acquisition of skills was moderate, with a strong and positive relationship between the twenty-first century skills that teachers possess and students' acquisition of those skills. The study recommended the necessity of conducting more studies on the importance of 21st century skills.

Al-Ghamdi's study (2021) aimed to identify the degree to which teachers of people with intellectual disabilities possess twenty-first century skills from their point of view. The study sample consisted of (156) teachers, and questionnaires were used as a tool for the study, which consisted of (52) items within three areas, and the results of the study were concluded. To the extent that teachers with intellectual disabilities possessed twenty-first century skills to a moderate degree, the study recommended the need to intensify seminars and conferences that raise awareness of twenty-first century skills among teachers of this category.

Steven conducted (2020). A study aimed to determine the degree to which administrators of Special education schools in the Sailsbury district, west of London, employ twenty-first century skills in a set of cognitive strategies in teaching, through virtual classes, from their point of view, and it adopted the descriptive and analytical approach. To achieve the objectives of the study, the researcher distributed a questionnaire to a sample size of (294) administrators. The results of the study concluded that there are no statistically significant differences attributable to the gender variable at the level of each of the tool and its three fields, in addition to the presence of statistically significant differences attributable to the academic qualification variable at the level of both the tool and its fields, in favor of males who hold academic degrees higher than a bachelor's degree.

Al-Khashani's study (2019) aimed to determine the degree to which Arabic language teachers in Jordan possess twenty-first century skills from the point of view of school principals and educational supervisors. The study sample consisted of (85) male and female principals, and (12) male and female supervisors, who were chosen intentionally. The results of the study showed that the degree to which Arabic language teachers in Jordan possessed twenty-first century skills from the point of view of school principals and educational supervisors was moderate. In light of the results reached, the study recommended the importance of holding training courses for Arabic language teachers to raise their awareness and qualify them more with twenty-first century skills, especially Digital culture skills, and including these skills in the Arabic language teacher's guide to employ them in the teaching-learning process.

Siddiq (2017) conducted a study aimed at identifying the extent of the ability of students with special needs to deal with digital technology and effective communication between them when faced with solving a problem. The study sample consisted of (144) male and female students with special needs, and the results of the study showed There are statistically significant differences in the gender variable in favor of males, and there are statistically significant differences in the variable of dealing with digital information and information and communications technology in favor of males.

The study by Ahonen and Kinnunin (2015) aimed to identify a set of twenty-first century skills that students need to practice in their various tasks. The study sample consisted of (718) male and female students in the basic and preparatory stages. The results of the study revealed the presence of significant differences. Statistical significance in favor of the ICT skills variable, and the study recommended the necessity of building a technical infrastructure that takes into account the availability of the latest ICT equipment, especially in educational institutes.

Darleen & Saavedra (2012) also conducted a study that aimed to identify the assumption that gifted students learn twenty-first century skills. The study showed that traditional lectures for gifted students cannot achieve the

desired skills, and evaluation methods that focus on measuring memory must be stopped. the facts. The researchers also prepared nine science lessons embedded with twenty-first century skills, and the study demonstrated the effectiveness of these lessons in providing the student with the skills they aimed to develop.

# 7. Summary of previous studies and the location of the current study

Previous studies were benefited from in knowing the appropriate methodology and statistical processes, and in learning about the theoretical framework of the topics and variables of the study, and in building the study tool, especially the study of Al-Rawadiyah (2021) and the study of Al-Ghamdi (2021), as well as in inventorying the skills of the twenty-first century, which were adopted. The current study, especially the study of: Siddiq (Siddiq, 2017), and Al-Shalamin (2021). The current study is consistent with previous studies in reviewing the concepts of twentieth century skills, their nature, the principles upon which they are built, their dimensions, and the extent of their activation in educational institutions. The current study is similar to previous studies, especially the study of Al-Khashani (2019) and Ahonen and Kinnunin (2015) in terms of the nature of the skills practiced, but it is distinguished from those studies in its focus on its study of twenty-first century skills in Jordanian special education centers.

# 8. Method and procedures

The descriptive survey method was used to achieve the objectives of the study.

#### 8.1. Study population

The study population consisted of all male and female directors of Jordanian special education centers, numbering (81), and Table (1) shows the distribution of the study population according to the study variables.

Variables	Variable	the number	the total
Sex	Male	43	
	Female	38	81
	Less than five years	13	
Years of Experience	5- 10 years	49	81
	More than 10 years	19	
Qualification	Bachelor's	36	
	Postgraduate	45	81

Table 1: Community distribution according to study variables

Source: Ministry of Education: 2023

#### 8.2. The study sample

According to Stephen Thompson's equation, the minimum size of the stratified random sample that represented the community was calculated at the significance level ( $\alpha \le 0.05$ ). It was the size of the study population itself, which was (81) male and female principals. The researcher distributed the questionnaire to the study population, which was located in (81) special education centers. Distributed into three regions: The Northern Region, the Central Region, and the Southern Region. All of the distributed questionnaires, amounting to (81) male and female directors, were retrieved.

The study tool was developed by referring to theoretical literature and some previous studies, such as the study by Al-Shalamin (2021) and the study by Siddiq (2017), in order to achieve the objectives of the study and answer its questions. The study tool consisted of (32) items in its initial form, and in its final form it consisted of (29) items distributed over three areas: leadership skill, which consisted of (13) items, decision-making skill, which consisted of (7) items, and communication skills, which consisted of (9). Paragraphs.

To verify the validity of the tool, content validity was applied, as it was presented in its initial form to (10) arbitrators specialized in educational administration, and they were asked to express their opinion on the paragraphs of the study tool in terms of the wording of the paragraphs, and the extent of their suitability to the field in which they were placed, or by approving them. Or modifying its wording or deleting it due to its lack of importance, and their comments were taken into account regarding the amendment, deletion, addition and merging of paragraphs, so that the number of its paragraphs reached (29) paragraphs.

To verify the reliability of the tool, the internal consistency coefficient was used according to the Cronbach Alpha equation to extract the stability of the study tool according to the domains. Table (3) shows the reliability coefficients of the tool's domains:

Table 2: Cronbach Alpha reliability coefficients for the areas of the study tool

Number	the field	Cronbach alpha		
1	Leadership skill	0.98		
2	Decision making skill	0.92		
3	communication skill	0.92		

It appears from Table (2) that the reliability coefficients were acceptable. To judge the level of awareness of male and female directors of Jordanian Special education schools about twenty-first century skills, the following scale was adopted: a low degree of availability (2.33 or less), a medium degree of availability (2.34-3.67), and a high degree of availability (3.68 or more).

Study results and discussion: Results related to the answer to the first question, which reads: What is the level of awareness of male and female directors of Jordanian Special education schoolsabout twenty-first century skills from their own point of view?

To answer this question, arithmetic means and standard deviations were calculated for the responses of the study sample members in general and for each field of study, and Table (3) shows this.

Table 3: Arithmetic means, standard deviations, and ranking of the level of perception of male and female directors of Jordanian Special education schools of twenty-first century skills from their own point of view

Number	the field	SMA	standard	Ranking	Degree of
			deviation		availability
3	Leadership skill	3.72	0.77	1	High
2	Decision making	3.69	0.81	2	High
	skill				
1 communication		3.36	0.57	3	Medium
	skill				
Total marks		3.59	0.71	Me	dium

It is noted from Table (3) that the level of perception of male and female directors of Jordanian Special education schools about twenty-first century skills was average, with the arithmetic mean reaching (3.59) and standard deviation (0.71). The fields were average, and the field of communication came in first place, with an arithmetic mean (3.72) and a standard deviation of (0.77), and the field of driving skill came in last place with an arithmetic mean of (3.36) and a standard deviation of (0.57). As for the items in each field, the results were as follows:

1. Communication skill field: Arithmetic means and standard deviations were calculated for the items in this field, and Table (4) shows this:

Table 4: Arithmetic means, standard deviations, ranking, and degree of availability for the field of communication skill

Number	the field	SMA	standard deviation	Ranking	Degree of availability
3	Ability to communicate with great flexibility	3.85	0.92	1	High
5	The ability to overcome communication obstacles with the center's workers	3.84	1.03	2	High
2	The ability to complete communications in the center very quickly	3.80	0.91	3	High
4	Communication channels in the center are open in all directions	3.78	1.03	4	High
1	The ability of the center's communication system to achieve educational goals	3.77	0.94	5	High
6	The information exchanged through the center's means of communication is characterized by accuracy	3.71	0.95	6	High
8	Communications between the center and Special education schoolstake place smoothly	3.64	0.97	7	High
9	The center's communication system is keen to provide the necessary information to ensure interaction between its employees.	3.61	1.00	8	High
7	It is possible to communicate with higher levels of educational administration without obstacles	3.57	1.18	9	Medium
Total marks		3.72	0.77		High

Table (4) shows that the level of perception of male and female directors of Jordanian Special education schools about twenty-first century skills in the field of communication skills was high, with the arithmetic mean (3.72) and standard deviation (0.77), and the items in the field were high with the exception of one paragraph that came in at a moderate degree. The first rank was paragraph (3), which states: "The ability to communicate with high flexibility." The last rank was paragraph (7), which states: "It is possible to communicate with the higher levels of educational administration without obstacles," to a moderate degree. This may be due to the director's confidence in the employees. In the center, their ability to interact with it, and that communication flows in all directions horizontally, in addition to the availability of a high degree of affection and familiarity between the center's director and its workers.

2. Decision-making skill field: Arithmetic means, standard deviations, and ranks were calculated for the items in this field, and Table (5) shows this:

Table 5: Arithmetic means, standard deviations, rank, and score in the field of decision-making skill, ranked in descending order

Number	the field	SMA	standard	Ranking	Degree of
			deviation		availability
1	The ability to make decisions in	3.79	1.01	2	High
	partnership with the center's				
	workers				
2	The ability to link decisions to	3.78	0.84	1	High
	the center's objectives				
3	The ability to determine	3.75	0.98	5	High
	appropriate decision-making				
	methods for the academic				
	courses applied at the center				
4	The ability to consolidate the	3.74	1.01	6	High
	decisions taken at the Center				
	for friendly relations.				
5	The ability to make objective	3.61	1.00	7	High
	decisions				
6	The ability to exercise majority	3.60	1.00	3	High
	voting when making decisions				
7	The ability to provide space for	3.63	1.09	4	Medium
	participation in decision-				
making related to the center					
Total marks		3.69	0.81		High

It is noted in Table (5) that the level of awareness of male and female directors of Jordanian Special education schools of twenty-first century skills in the field of decision-making skills was high, with the exception of one item that was average, as the arithmetic mean was (3.69) and a standard deviation (0.81), and the items in the field were high. The arithmetic means ranged between (3.79 - 3.63), and paragraph (2) came in first place, which states "the ability to make decisions in partnership with the center's workers," with a high degree.

The last rank was paragraph (4), which states: "The ability to provide space for participation in making decisions related to the center." This may be due to sound thinking among the center's employees and their enjoyment of a high level of job maturity stemming from their ability to achieve and bear responsibility, which was reflected in This positively affected their ability to make decisions, which generated a deep belief among the center director in the importance of decision-making skills and their ability to achieve the desired goals.

Table 6: Arithmetic means, standard deviations, ranking, and degree of availability in the field of driving skill

Number	the field	SMA	standard	Ranking	Degree of
			deviation		availability
1	Ability to represent the center	3.61	0.89	6	Medium
	in external meetings				
2	The ability to interact with the	3.57	1.01	7	Medium
	center's workers				
3	The ability to deal with the	3.55	0.89	8	Medium
	center's instructions				
	dynamically				
4	The ability to retain all (powers	3.49	0.96	9	Medium
	and authorities) when				
	exercising leadership				
5	Taking into account (the	3.49	1.03	9	Medium
	capabilities and capabilities) of				

	the center's workers when				
	distributing duties				
6	The possibility of providing	3.47	0.96	11	Medium
	feedback to center workers on				
	educational issues				
7	The possibility of taking into	3.45	0.97	12	Medium
	account the points of view of				
	the center's workers when				
	solving problems				
8	Ability to meet the center's	3.43	1.06	13	Medium
	needs positively				
9	The possibility of providing	3.41	1.16	6	Medium
	opportunities for the center's				
	workers to develop their				
	capabilities				
10	The ability to delegate (powers	3.41	1.05	7	Medium
	and authorities) to facilitate the				
	performance of tasks				
11	Possibility of meeting with the	3.39	1.21	8	Medium
	center's workers individually to				
	learn about its problems				
12	Relying on the participatory	2.86	1.30	9	Medium
	method in dealing with				
	employees				
13	The ability to constantly	2.66	1.36	9	Medium
	consult with workers at the				
center					
	Total marks	3.36	0.57	N	<b>Iedium</b>

It is noted in Table (6) that the level of awareness of male and female directors of Jordanian Special education schools about twenty-first century skills in the field of leadership skills was average, with the arithmetic mean reaching (3.36) and a standard deviation (0.57). The arithmetic means ranged between (3.61 - 2.66). In the first rank, paragraph (6), which stipulates "the ability to represent the center in external meetings," and this may be due to the weak ability of the center's management to influence the center's employees to work willingly with it, which had a negative impact on leadership skill, and it came in the rank The last paragraph (3) stipulates "the ability to consult continuously with the center's workers." This may be due to the low level of competence and job maturity among the center's workers, which affected the ability of the center's management to exercise leadership skills effectively.

Results related to the answer to the second question, which reads: Are there statistically significant differences at the significance level ( $\alpha \le 0.05$ ) between the arithmetic averages of the responses of the study sample members regarding the level of awareness of male and female directors of Jordanian Special education schools of twenty-first century skills due to the variables (gender and years of experience), and academic qualification)?

#### This question was answered as follows:

a. Gender variable: Arithmetic means, standard deviations, and a t-test were calculated according to the gender variable, and Table (7) shows that.

Table 7: Arithmetic means, standard deviations, and t-test according to the gender variable

the field	Sex	the number	SMA	standard	T value	Significance
				deviation		level
	Male	43	3.48	0.57	1.975	**0.049
Leadership skill	Female	38	3.35	0.56		
	Total	81	3.41	0.56		
	Male	43	3.86	0.77	2.745	**0.006
Decision making	Female	38	3.61	0.86		
skill	Total	81	3.73	0.81		
	Male	43	3.85	0.75	1.145	0.253
communication	Female	38	3.75	0.81		
skill	Total	81	3.80	0.78		
Total marks	Male	43	3.63	0.82	2.559	**0.011
	Female	38	3.43	0.83		
** The difference is at	Total	81	3.53	1.65		

<sup>\*\*</sup> The difference is statistically significant at the significance level ( $\alpha \le 0.05$ )

To determine whether the differences between the means were statistically significant at the significance level ( $\alpha \le 0.05$ ), a t-test was applied, as the results in Table (7) indicate the presence of statistically significant differences at the significance level ( $\alpha \le 0.05$ ) depending on the gender variable. Based on the calculated T value of (2.559) with a significance level of (0.011), The difference was in favor of males, as evidenced by their higher arithmetic averages. This is due to women's limited ambition and weak desire to practice leadership skills, especially in centers that witness a high percentage of male workers at the expense of female workers. This was confirmed by Al-Khashani's study (2019), and it also constitutes the value aspect derived from Ideology and customs of Eastern society are an obstacle that prevents females from interacting significantly with their workers, especially males, and learning about the economic, social, and psychological pressures and problems that they experience inside and outside the boundaries of work. This was confirmed by Al-Ghamdi's study (2021), and the results also showed that there were no statistically significant differences. In the field of (communication skill), this may be due to the male's attraction to the female according to the psychological Oedipus complex, as well as the female's attraction to the male according to the psychological Electra complex, which makes the process of communication and interaction at work desirable and enters into the innate structure of both sexes.

B. The academic qualification variable: The arithmetic means, standard deviations, and t-test were calculated according to the college type variable, and Table (8) shows that.

Table 8: Arithmetic means, standard deviations, and t-test according to the academic qualification variable

the field	Qualification	the	SMA	standard	T value	Significance
		number		deviation		level
	Bachelor's	36	3.42	0.57	-0.834	0.405
Leadership skill	Postgraduate	45	3.47	0.56		
	Total	81	3.44	0.56		
	Bachelor's	36	3.73	0.77	-1.777	0.076
Decision making	Postgraduate	45	3.88	0.86		
skill	Total	81	3.80	0.81		
	Bachelor's	36	3.77	0.75	-1.499	0.135
communication	Postgraduate	45	3.89	0.81		
skill	Total	81	3.83	0.78		
Total marks	Bachelor's	36	3.53	1.64	-1.284	0.200
	Postgraduate	45	3.63	1.67		
	Total	81	3.58	1.65		

<sup>\*\*</sup> The difference is statistically significant at the significance level ( $\alpha\!\!\leq\!0.05)$ 

To determine whether the differences between the means were statistically significant at the significance level ( $\alpha \le 0.05$ ), a t-test was applied, as the results in Table (8) indicate that there were no statistically significant differences at the significance level ( $\alpha \le 0.05$ ) depending on the variable. Type of college based on the calculated (t) value, which amounted to (-1.284) with a significance level of (0.200), as the difference was in favor of postgraduate studies as evidenced by the increase in their arithmetic averages.

This is due to the ability of this category of male and female managers to practice the skills of the twenty-first century in a scientific manner by virtue of the high level of their mental abilities in solving problems, making decisions qualitatively, practicing leadership with its modern data, and the ability to avoid complexity in communicating and interacting with each other on the one hand and with the center's workers on the other hand. On the other hand, this makes the center's management more aware of the level of difficulties and obstacles that employees are exposed to, and thus the ability to exercise leadership and effective communication.

3. Years of experience variable: Arithmetic means and standard deviations were calculated according to the academic rank variable, and Table (9) shows this.

Table 9: Arithmetic means and st	tandard deviations	according to the	years of experien	ce variable
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the field	Years of Experience	the	SMA	standard
		number		deviation
	Less than 5 years	13	3.53	0.65
Leadership skill	5-10 years	49	3.62	0.60
	More than 10 years	19	3.36	0.51
	Total	81	3.47	0.58
	Less than 5 years	13	3.81	0.60
Decision making skill	5-10 years	49	3.90	0.89
	More than 10 years	19	3.77	0.81
	Total	81	3.78	0.77
	Less than 5 years	13	3.88	0.62
communication skill	5-10 years	49	3.83	0.83
	More than 10 years	19	3.82	0.76
	Total	81	3.82	0.75
Total marks	Less than 5 years	13	3.61	1.59
	5-10 years	49	3.69	1.73
	More than 10 years	19	3.54	1.61
	Total	81	3.57	1.44

It is noted from Table (9) that there are apparent differences between the arithmetic averages, depending on the variable of years of experience, as those in the category (5-10 years) obtained the highest arithmetic average of (3.69), and those in the category (less than 5 years) obtained the highest arithmetic average (3.69). In second place, the arithmetic average reached (3.61), and in the last rank came those in the category (more than 10 years), as the arithmetic average reached (3.54).

To determine whether the differences between the means were statistically significant at the significance level ( $\alpha \le 0.05$ ), a one-way analysis of variance (One Way ANOVA) was applied, and the results of the analysis of variance were as shown in Table (10).

Table 10: One-way analysis of variance to find the significance of the differences according to the years of experience variable

		1				
the field	Qualification	the	SMA	standard	T value	Significance
		number		deviation		level
	Bachelor's	36	3.42	0.57	-0.834	0.405
Leadership skill	Postgraduate	45	3.47	0.56		

	Total	81	3.44	0.56		
	Bachelor's	36	3.73	0.77	-1.777	0.076
Decision making	Postgraduate	45	3.88	0.86		
skill	Total	81	3.80	0.81		
communication skill	Bachelor's	36	3.77	0.75	-1.499	0.135
	Postgraduate	45	3.89	0.81		
	Total	81	3.83	0.78		
Total marks	Bachelor's	36	3.53	1.64	-1.284	0.200
	Postgraduate	45	3.63	1.67		
	Total	81	3.58	1.65		

The results in Table (14) indicate that there are no statistically significant differences at the level of ( $\alpha \le 0.05$ ), depending on the variable of years of experience, based on the calculated P value, which reached 0.633 and at a significance level of (0.56), as well as in most fields except for the field of driving skill. This may be due to the ability of male and female managers who are in the category of less than 5 years, and the category of 5-10 years, to know the extent of the skills required in the twenty-first century by virtue of their experience that is parallel to the data of the modern era, especially since they are the ones who lived this era from its beginning, including in its aspects. From a tremendous development in the form of communication, modern leadership styles, and dealing with problems that have grown with the circumstances of the twenty-first century, which is characterized by dynamism and rapid change.

The differences were in favor of the category of male and female managers whose years of experience are more than 10 years when compared to the category of those whose years of experience range between 5-10 years in the field of leadership skills, and in favor of the category of those whose years of experience exceed 10 years compared to the category of those whose years of experience range from 5 to 10 years. 10 years in the field of decision-making skill, and for the benefit of the group of those with less than 5 years of experience when compared to the group of those whose years of experience exceed 10 years. To determine the significance of the differences according to the variable of years of experience in the fields, the Scheffé test for differences was used, as shown in Table (11).

Table 11: Scheffé test for dimensional differences due to the years of experience variable

Years	of	SMA	Less than 5	5-10 years	More than 10 years
Experience			years	·	·
			3.61	3.69	3.54
More than	10	3.61	-	0.955	0.954
	years				
5-10	years	3.69	0.955	-	0.497
Less tha	n 5	3.54	0.954	0.497	-
	years				

<sup>\*\*</sup> The difference is statistically significant at the significance level ( $\alpha \le 0.05$ )

It appears from Table (15) that the difference was: in favor of a group of those whose years of experience range from 5-10 years when compared to a group of those whose years of experience exceed 10 years.

Recommendations: Based on the previous results, the researcher recommended the following: 1. That university administrations give the issue of twenty-first century skills great importance in terms of paying attention to skills; Leadership, communication, and decision making. 2. Conducting conferences, seminars, and periodic meetings between the senior administrations of Special education schools to determine mechanisms for dealing with the twenty-first century's data, keeping pace with the conditions imposed by these data, and practicing the

skills that guarantee the success of the educational goals that arise as an inevitable result of the needs that emerge from modern-day situations.

Author Contributions: All authors contributed to this research.

Funding: Not applicable.

**Conflict of Interest**: The authors declare no conflict of interest.

Informed Consent Statement/Ethics Approval: Not applicable.

#### References

Abboud, Al-Harith (2016). Computer in Education, Amman: Safaa Publishing House

Ahonen, A & kinnunin, B (2015). How Do Student Value the importance of twenty first century skills, scand journal of education, 4 (59), 395-412

Al-Baher, I (2022). The level of cultural intelligence among faculty members in Jordanian private centers from the students' point of view, Technium Social Sciences Journal, 4(9),102-125.

Al-Baher, Ibrahim (2024). Encyclopedia of Educational Administrative Terminology, Amman: Dar Wael for Publishing and Distribution.

Al-Ghamdi, Mazen (2021). The degree to which teachers of people with intellectual disabilities possess twenty-first century skills from their point of view, Arab Journal of Disability and Giftedness Sciences, 17 (5), 189-216.

Al-Harbi, Jabr (2016). Awareness of primary school science teachers in Al-Rass Governorate about twenty-first century skills, unpublished master's thesis, Kuwait University.

Al-Khashani, Ali (2019). The degree to which Arabic language teachers in Jordan possess twenty-first century skills from the point of view of school principals and educational supervisors, unpublished master's thesis, Al Al-Bayt University, Jordan.

Al-Khatib, Jamal (2012). Modifying human behavior, Amman: Wael Publishing House.

Al-Otaibi, Mohsen (2021). Empowering leadership among leaders of Special education schools in Taif Governorate and its relationship to organizational citizenship behavior among teachers, unpublished master's thesis, King Abdulaziz University, Kingdom of Saudi Arabia.

Al-Sakran, Mahmoud (2021). The degree to which teachers of Special education schools possess twenty-first century skills from their own point of view, Al-Manar journal, 12 (3), 21-39.

Al-Zamil, Maha, and Al-Awad, Rawan (2021). Participatory leadership in Special education schools in light of the requirements for leading change, Journal of Psychological and Educational Sciences, 149 (39), 133-158.

Azmi, Safaa (2019). Twenty-First Century Skills Series, Beirut: Dar Al-Fikr for Publishing and Distribution.

Khamis, Sama (2018). 21st Century Skills: A Framework for Education for the Future, Journal of Childhood and Development, 8 (31), 149-163.

Saavedra, R. Anna and Opfer, V. Darleen (2012). Learning 21<sup>st</sup> Century Skills Requires, 21st-Century Teaching, Phi Delta Kappan, (94) 2, 8-13

Safarova, Ana (2023). The Role of Leadership in Empowering Learner with Special Educational Needs in Inclusive Education, IRCEELT Journal, 12(15), 11-29.

Shalamish, Louay (2021). The degree of awareness of secondary school principals and teachers about the skills of the twenty-first century, in the northern governorates of the West Bank, from their own point of view, unpublished master's thesis, An-Najah National University, Palestine.

Siddiq, gochyyev (2017). Learning in digital networks: A novel Assissment of student 21 century skills, computer& education journal, 9(6), 112-136.

Steaven, A (2020). The degree to which administrators of Special education schools employ twenty-first century skills within cognitive strategies in teaching through virtual classes, GGSPA Journal, 2(11), 115-142.