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## The Degree of Special Education Teachers' Employment of Electronic Educational Games in Teaching Disabled Students

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### Abstract

The study aimed to reveal the degree of special education teachers' employment of electronic educational games in teaching the disabled. It also showed statistical differences according to the variables of gender, academic qualification, and years of experience. To achieve the objectives of the study, the descriptive survey method was used. The study sample consisted of (96) male and female teachers, of whom (47) male and (47) female teachers were chosen in a stratified random manner from the Directorate of Education for Najran region in the Kingdom of Saudi Arabia in the academic year 2022/2023. A questionnaire consisting of (30) items was used, distributed in three domains: planning, implementation, and evaluation. The results showed that the degree of special education teachers' employment of electronic educational games in teaching students with disabilities obtained a mean of (2.57), with a low degree. The results also showed that there are statistically significant differences in the responses of the study sample about the degree of special education teachers' employment of electronic educational games in teaching students with disabilities due to the variables of academic qualification in favor of postgraduate studies, and years of experience in favor of more than ten years. However, there was no statistically significant difference due to the gender variable. The study recommended that the Ministry of Education should pay attention to holding and organizing various specialized training programs to develop the capabilities of special education teachers to employ electronic educational games in teaching, especially in planning, implementation, and evaluation.

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### Introduction

The development of the teaching and learning processes in light of modern trends and technical developments has led to a change in the teacher's role to keep pace with these developments. The teacher became a guide in providing learners with different skills and experiences, developing their scientific personalities, preparing them for life with everything new, and increasing the opportunity for positive interaction between them (Al-Habardi,

2017). The teaching and learning processes and their methods witnessed rapid technical development. With this progress and development, the traditional and usual teaching and learning processes have become ineffective processes in enhancing learners' learning motivation, developing their academic level, or even developing their various skills (Hamadneh & KhairEddeen, 2023). Therefore, there was an urgent need to keep pace with this development, and educational institutions urgently needed to use new teaching models that stimulate learners' motivation to learn and their enthusiasm for education. Education appeared with electronic games. These types of games have become a major role in the lives of many people. Also, they received great interest from the investing companies, which worked on developing them in exciting and interesting ways, and thus, they were employed in the education sector to be a supportive tool for teaching and learning (Al-Shahrani, 2020).

Electronic games have a great contribution to achieving entertainment, enjoyment, entertainment, memory development, and speed of thinking, in addition to their role in facilitating the use of modern technology, and improving learners' attitudes towards it (Abdul Razzaq & Sharara, 2018). Therefore, the field of education witnessed the latest teaching models that rely on technology, especially the Internet and the applications it provides, such as learning based on electronic educational games. It is defined as "an environment that provides a set of meaningful activities in which one or more students participate, by providing an artificial environment governed by controls, rules, and restrictions, in which competition, suspense, motivation, and fun are integrated" (Behnassi, 2021, p. 882).

Electronic educational games are classified into two categories: electronic educational games that combine education with fun and entertainment. They increase the learners' academic achievement, develop their creative thinking in innovative ways, and contribute to the uniqueness of education. Also, these games allow learners to progress in their learning in a way that suits their abilities and learning speed without shame or fear. In addition, they include number games that help learn the four arithmetic operations using graphics and geometric shapes, races followed by rewards for winning. Moreover, they contain games dedicated to learning the initial principles of a subject, such as car driving programs, language games that contribute to learning grammar and correct pronunciation of vocabulary, and scientific games that help know the parts of the body and the names of cities and capitals. Furthermore, they include electronic entertainment games that aim to achieve fun and entertainment for learners without having educational or educational goals that seek to achieve (Al-Qarni, 2016). Bahnsi (2021) referred to examples of these electronic entertainment games, such as the Island Box game, which is a three-dimensional game that helps learners learn programming, codes, and the basics of coding. This game is interesting for both girls and boys as it takes learners on great adventures. The game consists of one hundred stages, the first ten of which are free. Furthermore, Surfers Subway is a 3D racing game.

These games encourage learners to challenge, cooperate, teamwork, fair competition, face problems, and make decisions. They also instill in learners a spirit of perseverance when failing, achieving complex goals, and devoting time and effort to acquiring knowledge and skills. In addition, they keep pace with the tendencies of the generation of this era towards technology and their passion for it, and their love and interest in the computer and its programs, applications, and various games (Bouchlaq, 2019). Moreover, they improve some of the academic skills of learners, such as the skill of searching for information, the skill of writing, the skill of acquiring foreign languages,

and the skills of problem-solving (Ibrahim, 2021). Furthermore, these games are prepared in a way that complex problems await solutions in a way that is fun and challenging at the same time; they contribute to preparing learners to engage successfully in greater challenges, which makes learning by employing these games effective and flexible without any boredom. In the same vein, they are an entertainment tool and an attractive and exciting educational tool, which makes some teachers accept to employ them in the teaching process (Al-Suleiman, 2018). These games depend on integrating technology into education to achieve fun and benefit for learners. Therefore, they contribute to achieving a set of positives for learners, most notably entertainment and entertainment, memory development, speed of thinking, a means of learning, and improvement of some academic skills, such as the skill of searching for information, the skill of writing, the skill of acquiring foreign languages, and the skills of problem-solving (Ibrahim, 2021). Besides, they draw the learners' attention more than the usual methods, because of the attractive pictures, sounds, and colors they contain, and they make them accept the information that the teacher provides, and they are ready to receive it with open arms. Moreover, they keep pace with the tendencies of the generation of this era and their love for computers and technology. Furthermore, they are one of the most motivating software for learners, and the most common, widespread, and appropriate software for their education, especially in the basic stage of education. Electronic educational games drive learning through training and practice, as learners acquire certain skills, experiences, attitudes, values, and principles (Abdul Redha, Khalifa & Khalil, 2018).

The teacher represents the main element in the educational system, and the extent of his efficiency is the effectiveness of education. The able teacher makes the curriculum an important educational tool, and the teacher is one of the main pillars of the teaching process. He builds real educational situations that employ the experiences of the learners in a utilitarian and experimental manner, in understanding and interpreting reality, and in developing their various skills. Therefore, the teacher is required to strive towards developing his performance and to use various and modern methods and methods in teaching that suit the needs of learners and their differences, and keep pace with modern technology. He is also required to use modern positive teaching models, to increase the effectiveness of his teaching performance, which is reflected in the learners' abilities and academic achievement (Chien, Wu & Hsu, 2014). Therefore, the teacher's abilities to use technical innovations and keep pace with scientific and technical development in the teaching process have a significant impact on delivering information to learners and providing them with the distinctive skills and experiences that make them effective individuals (Karaca, Can & Yildirim, 2013).

The teacher's performance is one of the most important basic functions for them. It is defined as "a means of expressing the teacher's possession of teaching and functional skills in a behavioral expression" (Al-Awamra, 2019, p. 687). Teachers are the main factor in the development of education through good planning and implementation, the use of evaluation and its methods in the most appropriate manner, and their excellence in their performance in the job aspect, which is the completion of the tasks entrusted to them, the assumption of responsibilities, and their work relations (Abu Oshiba & Hegazy, 2019). The special education teacher has received great attention, with the recent emergence of global interest in students with disabilities and the provision of highly qualified teachers who can bear the burdens of teaching this group.

Especially, the role of special education teachers differs from the role of teachers of ordinary students. They deal with a group of students who need a special understanding due to their characteristics, behaviors, and special needs, and use the appropriate methods, strategies, activities, and models that suit their different levels and circumstances (ALbawaliz, Arbeyat & Hamadneh, 2015). The special education teacher is also an important axis in the educational process for children with disabilities. He is the main outlet for individual educational plans and directs them in the process of teaching and learning and is based on following up on their achievement and improving their levels. As a result of their dealings with this group, they need to make more efforts and employ technology in education, including electronic educational games (Young, 2018). Hence, as the special education teacher plays an important role in consolidating and promoting the concepts, values, and principles of learners with disabilities and in light of the developmental characteristics of this category, there is a need to conduct this study to reveal the degree of special education teachers employing electronic educational games in teaching students with disabilities.

### **Statement of the Problem**

The problem of this study emerged from what Akl (2019) pointed out the importance of establishing the idea of electronic educational games among teachers and encouraging them to use them in teaching to keep pace with technological developments and strengthen them in learners. The idea also came from what Al-Mudairis, Al-Mutairi, and Al-Hammar (2021) indicated of challenges for teachers in possessing technological competencies and employing them in teaching. In addition, Abu Salem, Al-Agha, and Akl (2022) showed that there is a need to raise the level of teachers by using technology in teaching in light of recent developments and models and to encourage them to employ digital technology techniques during face-to-face or electronic education alike. Therefore, the researchers conducted an exploratory study using the semi-structured interview with a sample of (10) male and female teachers of students with disabilities and asked them about the extent to which they employ electronic educational games during teaching. It was found that there is a discrepancy in the sample's responses about their use of electronic educational games during teaching, between very weak to medium grades.

In addition, there were some difficulties and challenges in the process of employing electronic educational games, most notably the weak ability of the special education teacher to manage special education classes in the event of using electronic educational games. Besides, some teachers believe that the characteristics of learners with disabilities are not commensurate with the use of electronic educational games. In addition, there was a weakness in dealing with design programs due to their weak technical skills and a negative view of these games. Hence, the problem of this study emerged and attempted to answer the following questions.

1. What is the degree of special education teachers' employment of electronic educational games in teaching students with disabilities from their point of view?
2. Are there statistically significant differences at the significance level of  $(\alpha)=0.05$  in the responses of the study sample about the degree of special education teachers' employment of electronic educational games in teaching students with disabilities due to the gender variable?
3. Are there statistically significant differences at the significance level of  $(\alpha)=0.05$  in the responses of the study sample about the degree of special education teachers' employment of electronic educational

games in teaching students with disabilities due to the academic qualification variable?

4. Are there statistically significant differences at the significance level of  $(\alpha)=0.05$  in the responses of the study sample about the degree of special education teachers' employment of electronic educational games in teaching students with disabilities due to the variable of years of experience?

### **Objectives of the Study**

The study aimed to achieve the following objectives:

- Knowing the degree of special education teachers' employment of electronic educational games in teaching students with disabilities.
- Detecting statistically significant differences in the responses of the study sample about the degree of special education teachers' employment of electronic educational games in teaching students with disabilities according to the variables of gender, academic qualification, and years of experience.

### **Significance of the Study**

The significance of this study emerges from the fact that it represents an addition to the Arab and Human Library, including educational literature, previous studies, and results on the degree of special education teachers' employment of electronic educational games in teaching students with disabilities. The study also sheds more light on the model of electronic educational games in teaching in general and in teaching students with disabilities in particular. It is hoped that the results of this study will be the focus of attention of educational officials in the Kingdom of Saudi Arabia to develop appropriate plans and strategies that contribute to developing special education teachers' employment of electronic educational games in teaching students with disabilities, and other teachers in the educational field. This enhances the process of educational development and reform in private school teaching in Saudi Arabia. It is also hoped that researchers, postgraduate students, and educational research centers will benefit from the tool and results of this study in opening prospects for them to conduct educational research on a larger scale within this field to obtain a measure of knowledge diversity.

### **Delimitations of the Study**

Generalizing the results of this study is determined in light of the topic: The study was limited to finding out the degree of special education teachers' employment of electronic educational games in teaching. The study is also determined by human limits: The study was applied to teachers of special education in public schools. In addition, the study is limited by temporal and spatial limits: This study was conducted in the academic year 2022/2023 in public schools affiliated with the Education Department in Najran, Saudi Arabia.

### **Methods**

In this study, the descriptive survey design was used because it is most appropriate for the nature of this study, answering its questions, and achieving its objectives.

### Population and Sample of the Study

The study population consisted of (250) male and female teachers of special education in Najran region in the Kingdom of Saudi Arabia in the academic year 2022/2023. These statistics are according to the Educational Planning Department in the General Administration of Education in Najran region. The study sample consisted of a stratified random sample of special education teachers (96 male and female teachers). Of them, (47) male and (47) female teachers are in the academic year 2022/2023. The study tool was distributed electronically using an electronic link via the application (Google Drive) to the study sample after it was published through (WhatsApp) in cooperation with the educational supervisors in special education in the General Administration of Education in Najran region. The study sample was distributed according to the study variables as shown in Table 1.

Table 1. Distribution of the Study Sample based on Variables

Variable	Group	No.	%
Gender	Male	47	50.0
	Female	47	50.0
Academic qualification	Bachelor	72	76.6
	Post-graduates studies	22	23.4
Years of experience	1-10 years	30	31.9
	More than 10 years	64	68.1
Total		94	100

### Tools of the Study

To achieve the objectives of the study, the study tool was prepared to measure the degree of special education teachers' employment of electronic educational games in teaching. It was based on the scales used in previous studies: Ibn Saqr and Abdel Maksoud (2019), Lesoy (2020), and Al-Shammari and Al-Anazi (2021). The tool, in its final version, consisted of (30) items, distributed in three domains: planning (14), implementation (11), and evaluation (5). To estimate the responses of the study sample, the respondent puts a sign (√) in front of each item of the tool, on a five-point scale (strongly agree, agree, neutral, disagree, strongly disagree). To correct the tool, the criterion used in Hamadneh and Almogbel (2023) was used by giving the values, respectively (5, 4, 3, 2, 1) for the scores (strongly agree, agree, neutral, disagree, strongly disagree). The following scores were approved for the achievement of the study tool items and the overall result: 1.00 - 1.80 = very low level, more than 1.80 - 2.60 = low level, more than 2.60 - 3.40 = medium level, more than 3.40 - 4.20 = high level, more than 4.20-5.00 = very high.

### Validity

The validity of the content of the study tool was verified by presenting it in its initial version to ten experts of faculty members in educational techniques and special education in Saudi universities. They were asked to verify the suitability of the items for the domain to which they belong and for the tool as a whole and to ensure the

accuracy of the linguistic formulation and the suitability of the tool to achieve the objectives of the study. In light of the opinions of the experts, the required amendments were made, with an agreement of 80% on the importance of amending them. The most prominent observations of the experts were deleting three items from the tool because they did not fit the objectives of the study, overlapping their ideas with the ideas of other items, and reformulating the language of some items to be clearer to the respondents and measurable. Thus, the study tool was produced in its final version, consisting of (30) items.

### **Reliability**

The reliability of the study instrument was verified in two ways. The first was by test-retest. The tool was applied to an exploratory sample of (20) male and female special education teachers, who were chosen from outside the study sample. Then, the tool was re-applied to the same sample with a two-week interval between the first and second applications. After that, the Pearson correlation coefficient was calculated between the scores of the subjects on the tool as a whole in the two application times. The second method was calculated by the reliability coefficient of internal consistency (Cronbach's Alpha). Table 2 presents the results.

Table 2. Reliability Coefficients of the Study Tool

No.	Domain	Test-retest	Cronbach's Alpha
1	Planning	0.88	0.80
2	Implementation	0.87	0.78
3	Evaluation	0.91	0.85
	Total	0.92	0.89

It is clear from Table 2 that the reliability coefficients for the domains of the study tool according to the method of test-retest ranged between (0.87-0.91). The overall reliability coefficient of the tool in the same way was (0.92). The reliability coefficients for the domains of the study tool according to the method of internal consistency "Alpha Cronbach" ranged between (0.78-0.85). The overall reliability coefficient of the tool, in the same way, was (0.89), which indicates that the tool has high-reliability indications and is appropriate to achieve the objectives of the study.

### **Data Analysis**

For answering the questions of the study, the statistical software (SPSS) version (23) was adopted to analyze the results of the study and answer its questions. Means and standard deviations were used to answer the first question to identify the degree of special education teachers' employment of electronic educational games in teaching students with disabilities. T-test for two independent samples was used to answer the second, third, and fourth questions to detect statistically significant differences in the responses of the study sample about the degree of special education teachers' employment of electronic educational games in teaching students with disabilities according to the variables of gender, academic qualification, and years of experience separately.

## Results

In this section, the results of the current study were presented according to the sequence of study questions as follows.

### **Results of the first research question: What is the degree of special education teachers' employment of electronic educational games in teaching students with disabilities from their point of view?**

To answer this question, means and standard deviations were calculated for the degree of special education teachers' employment of electronic educational games in teaching students with disabilities from their point of view. Table 3 presents the results. Table 3 shows that the degree of special education teachers' employment of electronic educational games in teaching students with disabilities from their point of view obtained a mean of (2.57) and a standard deviation (0.61), with a low degree. The first domain, "Planning", ranked first, with the highest mean (2.69), standard deviation (0.67), and medium degree. It was followed in second place by the third domain, "Evaluation", and it obtained a mean of (2.59), and a standard deviation of (1.10), with a low degree. Finally, the second domain, "Implementation", came and obtained a mean of (2.46), and a standard deviation of (0.61), with a low degree.

Table 3. Means, Standard Deviations, and Ranks for the Degree of Special Education Teachers' Employment of Electronic Educational Games in Teaching Students with Disabilities from their Point of View

No.	Domain	Mean	Standard deviation	Rank	Degree
1	Planning	2.69	0.67	1	Medium
2	Implementation	2.59	1.10	3	Low
3	Evaluation	2.46	0.61	2	Low
	Total	2.57	0.61		Low

### **Results of the second research question: Are there statistically significant differences at the significance level of ( $\alpha$ )=0.05 in the responses of the study sample about the degree of special education teachers' employment of electronic educational games in teaching students with disabilities due to the gender variable?**

To answer this question, means and standard deviations were calculated for the degree of special education teachers' employment of electronic educational games in teaching students with disabilities from their point of view, according to the gender variable. Then, the t-test was used for two independent samples in order to show the significance of the differences between the means in the responses of the study sample. Table 4 shows the results. Table 4 shows that there were no statistically significant differences at the significance level (0.05) in the responses of the study sample about the degree of special education teachers' employment of electronic educational games in teaching students with disabilities on the total score and all domains (planning, implementation, evaluation) according to the variable sex. All statistical significance values were higher than (0.05).

Table 4. t-test to Show the Significance of the Differences between the Means of the Degree of Special Education Teachers' Employment of Electronic Educational Games in Teaching according to the Gender Variable

Domain	Gender	No.	Mean	Standard deviation	t	df	Sig.
Planning	Male	47	2.68	0.65	.022	92	.983
	Female	47	2.69	0.70			
Implementation	Male	47	2.44	0.59	.347	92	.729
	Female	47	2.49	0.64			
Evaluation	Male	47	2.44	0.70	.279	92	.781
	Female	47	2.49	0.77			
Total	Male	47	2.55	0.57	.196	92	.845
	Female	47	2.58	0.64			

**Results of the third research question: Are there statistically significant differences at the significance level of  $(\alpha)=0.05$  in the responses of the study sample about the degree of special education teachers' employment of electronic educational games in teaching students with disabilities due to the academic qualification variable?**

To answer this question, means and standard deviations were calculated for the degree of special education teachers' employment of electronic educational games in teaching students with disabilities from their point of view, according to the academic qualification variable. Then, the t-test was used for two independent samples in order to show the significance of the differences between the means in the responses of the study sample. Table 5 depicts the results.

Table 5. t-test to Show the Significance of the Differences between the Means of the Degree of Special Education Teachers' Employment of Electronic Educational Games in Teaching according to the Academic Qualification Variable

Domain	Qualification	No.	Mean	Standard deviation	t	df	Sig.
Planning	Bachelor	72	2.61	0.73	2.019	92	.046
	Post-graduates studies	22	2.94	0.34			
Implementation	Bachelor	72	2.38	0.63	2.345	92	.021
	Post-graduates studies	22	2.73	0.50			
Evaluation	Bachelor	72	2.33	0.74	3.426	92	.001
	Post-graduates studies	22	2.91	0.51			
Total	Bachelor	72	2.48	0.64	2.604	92	.011
	Post-graduates studies	22	2.85	0.33			

Table 5 shows that there were statistically significant differences at the significance level (0.05) in the responses of the study sample about the degree of special education teachers' employment of electronic educational games in teaching for students with disabilities on the total score and all domains (planning, implementation, evaluation)

due to the qualification variable. Scientific differences came in favor of postgraduate studies. All statistical significance values were less than (0.05).

**Results of the fourth research question: Are there statistically significant differences at the significance level of ( $\alpha$ )=0.05 in the responses of the study sample about the degree of special education teachers' employment of electronic educational games in teaching students with disabilities due to the years of experience variable?**

To answer this question, means and standard deviations were calculated for the degree of special education teachers' employment of electronic educational games in teaching students with disabilities from their point of view, according to the years of experience variable. Then, the t-test was used for two independent samples in order to show the significance of the differences between the means in the responses of the study sample. Table 6 depicts the results.

Table 6. t-test to Show the Significance of the Differences between the Means of the Degree of Special Education Teachers' Employment of Electronic Educational Games in Teaching according to the Years of Experience Variable

Domain	Experience	No.	Mean	Standard deviation	t	df	Sig.
Planning	1-10 years	30	2.09	.780	7.299	92	.000
	More than 10 years	64	2.96	.370			
Implementation	1-10 years	30	2.05	.700	4.952	92	.000
	More than 10 years	64	2.66	.460			
Evaluation	1-10 years	30	1.95	.690	5.214	92	.000
	More than 10 years	64	2.70	.620			
Total	1-10 years	30	2.05	.710	6.803	92	.000
	More than 10 years	64	2.81	.360			

Table 6 shows that there were statistically significant differences at the significance level (0.05) in the responses of the study sample about the special education teachers' employment of electronic educational games in teaching students with disabilities on the total score and all domains (planning, implementation, evaluation) due to the variable years of experience. The differences were in favor of the category of experience of more than ten years. All statistical significance values were less than (0.05).

## Discussion and Conclusion

### Discussion of the First Research Question

The results of the question showed that the degree of special education teachers' employment of electronic educational games in teaching students with disabilities, from their point of view, came to a low degree of appreciation. This result may be due to the lack of training programs received by special education teachers on the use of electronic educational games in teaching. In addition, the weakness in the content of the training

programs provided by the Ministry of Education on how to employ electronic educational games in teaching or the lack of training programs in other forms of modern teaching models affects the possession of special education teachers of the skills of planning, implementation, and evaluation of electronic educational games. Moreover, teachers may face difficulties and challenges in employing electronic educational games, such as poor handling of design programs due to their weak technical skills. Perhaps, there is a negative view towards these games that they a long time to write and design, and the complexity of some electronic educational games takes time and effort from the teacher in explaining, and from the learner in understanding and implementation. Teachers face many challenges in activating the use of electronic educational games in teaching, including challenges related to the electronic educational games themselves such as tools, language, objectives, lack of connection to the curricula, and the lack of available electronic educational games for innovation (Al-Suleiman, 2018).

In terms of the domains of the study tool, the first field, "planning", ranked first, with a medium degree. This result indicates that there are shortcomings and weaknesses of special education teachers in how to employ electronic educational games and related practices in the planning process for lessons that require the use of electronic educational games. It turns out that special education teachers have shortcomings in analyzing the characteristics of the learners to verify the suitability of the elements of the electronic educational game for their abilities. They also have shortcomings in determining the game that suits the goal, content, learners' characteristics, and abilities, as well as their shortcomings in determining the knowledge that learners must have before employing the electronic educational game.

In addition, they rarely resort to identifying the skills that must be available in learners before employing the electronic educational game, such as language skills and the use of the educational device. The third field, "evaluation," came in second place with a low degree. This result indicates that the teaching skills and practices practiced by special education teachers in how to evaluate electronic educational games have significant shortcomings. Perhaps, this result is because the evaluation skill of electronic educational games needs continuous follow-up from the teacher, and the special education teacher may be unable to do so as a result of his association with different tasks and actions that stand in front of him from achieving this. Therefore, it appears that they have a weakness in the use of continuous evaluation in following up the use of electronic educational games and a weakness in the modification of the electronic educational game when necessary and the need for that.

Also, there is a lack of time to discuss the learners in the elements of the electronic educational game during and after its implementation. In third place came the second field, "implementation", with a low degree. This result indicates that special education teachers have deficiencies in the effective teaching skills and practices used in the implementation of electronic educational games. They have shortcomings in determining the appropriate time to use the electronic educational game during the implementation of the lesson and identifying the elements of the classroom environment to achieve the desired educational goals from the use of the electronic educational game during the implementation of the lesson. In addition, there is a lack of knowledge about how to motivate learners with disabilities not participating in the electronic educational game to use it and motivate them to progress in the steps of the electronic educational game.

### **Discussion of the Second Research Question**

The results showed that there are no statistically significant differences in the study sample responses about the degree of special education teachers' employment of electronic educational games in teaching for students with disabilities on the total score and all fields (planning, implementation, evaluation) according to the gender variable. This result may be due to the similarity of the nature of the educational and academic conditions in public schools in Najran region and their educational orientations and policies emanating from the policies of the Ministry of Education that urge keeping pace with scientific and technical development. Therefore, no differences appeared due to the difference in the gender of the teacher (male, female). In addition, the challenges and problems faced by male and female teachers in teaching learners to teach people with disabilities may be the same. Therefore, the teaching methods and methods that are imposed on them are somewhat the same. Hence, it is noted that male and female teachers have the same view about employing electronic educational games in teaching students with disabilities (Al-Shammari & Al-Anazi, 2021).

### **Discussion of the Third Research Question**

The results revealed that there are statistically significant differences in the study sample responses about the degree of special education teachers' employment of electronic educational games in teaching for students with disabilities on the total score and all domains (planning, implementation, evaluation) due to the academic qualification variable. The differences came in favor of postgraduate studies. Perhaps, this result is due to the fact that male and female teachers with postgraduate qualifications have the desire to develop themselves and keep abreast of modern educational developments for self-realization and to gain satisfaction from the learners, the school administration, and the local community. Thus, they resort to self-reading and continuous self-learning about modern models in teaching learners in special education, especially the model of electronic educational games. Also, this result is since male and female teachers with postgraduate qualifications have an appropriate opportunity to acquire knowledge related to electronic educational games during their undergraduate studies in educational postgraduate programs. These programs focus on effective and new education in the field of modern education technologies and related issues, including the use of electronic educational games (Akl, 2019).

### **Discussion of the Fourth Research Question**

The results of this question revealed that there are statistically significant differences in the study sample responses about the degree of special education teachers' employment of electronic educational games in teaching for students with disabilities on the total score and all fields (planning, implementation, evaluation) due to the variable years of experience. The differences came in favor of those who have more than 10 years of experience. Perhaps, this result is due to the role and importance of long teaching experience in providing special education teachers with various and diverse teaching methods and models suitable for special education students, which have been trained over long years of work. This gave teachers with longer experience sufficient knowledge about the concepts related to electronic educational games and ways of employing them in teaching. In addition, the teacher's long experience in the field of teaching people with disabilities prompts them to be keen to perform their

job and teaching duties with appropriate proficiency. This made them more aware of the concepts related to electronic educational games and ways of using them in teaching (Al-Shammari & Al-Anazi, 2021).

## **Recommendations**

In light of the results of the study, it is recommended that the Ministry of Education pay attention to holding and organizing various specialized training programs to develop the capabilities of special education teachers on the use of electronic educational games in teaching, especially in the areas of planning, implementation, and evaluation. The Directorate of Education in Najran region should also pay attention to holding workshops to enhance the capabilities of special education teachers in employing electronic educational games in teaching students with disabilities, especially in the areas of planning, implementation, and evaluation, with a focus on groups with short teaching experience and a bachelor's degree. In addition, educational supervisors of special education can benefit from the study tool to be a tool for evaluating special education teachers about their employment of electronic educational games in teaching. It can be one of the tools used in supervisory visits and practices. Finally, there is a need to conduct a similar national study by expanding the size of the study population and its sample and addressing other variables, such as specialization, educational level, and educational area.

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