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The level of challenges facing educational digital games in Jordanian private schools from the perspective of educators working there

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Abstract. The study aimed to identify the level of challenges facing educational digital games in Jordanian private schools from the perspective of educators working there, the study sample, which was stratified randomly, consisted of (382) educators. The descriptive survey approach was used in the current study. To achieve the objectives of the study, a questionnaire was developed, and its validity and reliability were verified. The results showed that the level of challenges facing educational digital games in Jordanian private schools from the point of view of educators working in Jordanian private universities was moderate. The results of the study also showed the presence of statistically significant differences at the significance level ($\alpha \leq 0.05$) according to the gender variable in favor of the male category, and the absence of statistically significant differences according to the Years of experience variable, and the absence of statistically significant differences according to the academic rank variable. In light of these results, the study recommended that private schools give educational digital games great importance so that they work to stimulate conducting studies and research from time to time to study the challenges facing educational digital games and master them and try to reach a way to reduce their impact.

Keywords. Challenges, educational digital games, private schools

Introduction

Digital games play an effective role in the field of education. These games offer different and engaging learning experiences in a more interactive manner by encouraging participation, motivation, and stimulation. Digital games make the educational process more enjoyable by incorporating elements of fun, competition, and achievement. These games also seek to update a set of cognitive and perceptual skills by improving problem-solving, practicing critical thinking, preserving memory, and activating thinking, in addition to their role in stimulating personal learning, many digital games adapt to both individual and group learning paces, and attempt to provide more personalized content based on a student's progress. These digital games also help maintain collaboration, develop social skills, and simulate real-world scenarios, allowing students to apply what they've learned in theory to their practical environments.

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Several important studies have revealed the role of digital games in enhancing educational outcomes. The Frontier study, conducted in private schools in Thailand, demonstrated how digital educational games affect students' motivation to learn. The study also highlighted that the digital environment plays a moderating role in this relationship, suggesting that well-designed digital infrastructures can amplify the benefits of educational games. Researchers from New York University conducted a 10-week research study involving digital games such as Lego Builder's Journey and Rocket League with children aged 8 to 12 across the United States, Chile, and South Africa, This study revealed that video games positively impacted children's sense of independence and improved their social and parental relationships, thus supporting overall well-being. Oxford University also published a systematic literature review on games and simulations in education in the International Journal of Educational Technology, analyzing the effects of games and simulations on education. The results indicated that these tools are effective in enhancing cognitive, behavioral, and emotional learning outcomes across various academic disciplines. The study also emphasized the importance of integrating innovative teaching methods to effectively prepare future professionals (Al-Shahrani, 2019).

However, despite this, educational digital games face challenges that may play a major role in diminishing the impact of these games on future generations and preventing them from achieving the goals for which they were created. Consequently, students lose their digital identity and are unable to deal with the range of circumstances and situations imposed by this era, which is characterized by rapid digital transformation.

These challenges include the following (Al-Mallah and Fahim, 2015):

1. Technological challenges, including:

A. Infrastructure constraints: Many schools, especially in areas with low per capita incomes, lack the necessary technology, such as high-speed internet, modern computers, or tablets, to develop, update, and support digital games.

B. Software and hardware compatibility: Educational games require operating systems of a different type than other operating systems, or advanced hardware, which other educational institutions, particularly schools, may not always have.

C. Cybersecurity and data privacy: Protecting student data and maintaining a secure digital environment are major concerns when attempting to integrate online games into the educational process.

2. Educational challenges, including (Amin, 2019):

A. Teacher training and preparedness: Our schools lack a training curriculum designed to train teachers to use educational digital games and utilize them in the teaching-learning process. Teachers also lack training in game-based learning and may find it difficult to effectively integrate these digital games into their teaching methods.

b. Curriculum Integration: Integrating digital games with educational standards and learning objectives can be challenging in our schools, making it difficult to justify their use within a structured curriculum, arguing that the school curricula implemented are integrated and unquestionable.

C. Assessment and Learning Outcomes: Assessing the effectiveness of digital games in achieving a set of learning outcomes remains a clear challenge, as assessment is still practiced traditionally and lacks many of the technical skills needed to achieve real, tangible results.

3. Financial challenges, including (Al-Hariri, 2014):

A. High costs: Digital games, especially educational ones, are expensive, especially when they are of high quality, creating barriers for schools with limited budgets.

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B. Licensing and subscription fees: Many educational games require ongoing licensing fees and payments throughout the school year, a requirement that may not be feasible for all schools.

C. Maintenance and updating: Updating digital games and ensuring their proper operation requires additional resources related to maintenance, prevention, and updating that schools may not always have.

4. Social and psychological challenges, including:

A. Screen time concerns: Parents and teachers may be concerned and fearful about excessive screen time and its impact on students' physical and mental health.

B. Equity and access: Students may not have access to devices and the internet at home, which can create inequalities in learning opportunities.

C. Potential for distraction: Some students may focus more on the gaming aspect than the educational content, reducing the intended learning benefits.

5. Resistance to change, including:

A. Skepticism from teachers and parents: Many traditional teaching methods have become entrenched, and many teachers and parents may not view digital games as a serious educational tool.

B. administrative barriers: School policies and regulations may restrict the use of digital games due to concerns about effectiveness, cost, or inappropriate content.

Research Problem and Questions

Any educational institution seeks to ensure the integration of educational digital games into the teaching-learning process. This is to help students achieve the highest levels of cognitive and behavioral development, and to ensure the development of a scientific personality based on simulating everything that revolves around the era of digital transformation. This ensures the effectiveness of education based on educational digital games, enabling it to achieve the best learning outcomes at the student and school levels, and building a student's cognitive personality based on problem-solving, critical thinking, and crisis management. Looking at Jordanian private schools, the researcher noted a disparity in the levels of challenges facing educational digital games, which may arise as a result of weak technological infrastructure in some private and other schools, in addition to weak government support for such games, Or the resistance of some families to these games and their consideration of them as an unnecessary luxury that does not contribute to the educational process, or the resistance of supporters of traditional education who believe in the necessity of bias towards the constant at the expense of change and towards the prevailing at the expense of the renewed and thus the aversion to difference, diversity and ambiguity under the pretext of preserving the future of students, that future which if it does not interact with the set of circumstances and situations that are digitally transforming, then we will witness in the coming days a frustrated generation unable to manage its crises or solve its problems, This is confirmed by the results of many studies, such as the study of: Al-Huwailah (2023), Al-Anzi (2022), Saqr (2019), and Al-Abdullah (2016). The current study seeks to identify the level of challenges facing educational digital games in Jordanian private education schools from the point of view of educators working in them, by answering the following questions:

- Question 1: What are the challenges facing educational digital games in Jordanian private schools, from the perspective of educators working there?
- Question 2: Are there statistically significant differences at the significance level ($\alpha \leq 0.05$) between the arithmetic means of the study sample's responses to the challenges facing

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educational digital games in Jordanian private schools, from the perspective of educators working there, attributable to the variables (gender, years of experience, and educational level)?

Significance of the Study

It is hoped that the results of this study will:

- From a theoretical perspective, add new knowledge about educational digital games and the challenges they face.

- From a practical perspective, they will assist those in the educational field and decision-makers and policymakers in education by regulating educational digital games and attempting to utilize them to help shape students' psychological, cognitive, and perceptual personalities. They will also seek to activate these games and make them an integral part of the teaching-learning process.

Study Terminology

This study included the following terms:

- Challenges: A difficult task or problem that requires effort, skill, and determination to overcome. This task tests one's abilities, pushes one's limits, and creates opportunities for learning and development (Al-Bahr, 2025).

- Educational digital games: Interactive computer or video games designed to teach specific skills, knowledge, or concepts in an engaging and entertaining manner. These games integrate educational content with gameplay mechanics to enhance learning experiences, encourage problem-solving, and promote critical thinking (Al-Anzi, 2019).

- Private schools: Independently funded educational institutions that operate without direct government financial support. They are funded through tuition fees, donations, and endowments, allowing them to develop their own curricula, admission policies, and administrative structures (Al-Tawil, 2016).

Study Limits

The study limits included the following:

- Human limits: Educators working in Jordanian private schools.

- Temporal limits: The academic year (2024/2025). - Spatial limits: Jordanian private schools.

Previous Related Studies

This section will include a review of previous studies reviewed, both Arabic and foreign, arranged chronologically from oldest to most recent, as follows:

Al-Huwailah (2023) conducted a study aimed at testing the challenges of the effectiveness of a digital gaming program as an approach to improving some creative thinking and problem-solving skills among people with math difficulties. The study sample included (30) people with math difficulties, aged between (8-11) years. The mathematics learning difficulties scale, the mathematics creative thinking test, and the problem-solving ability scale were applied, in addition to the program used. The study concluded that there were statistically significant differences between the average scores of the experimental and control groups on the scales of creative thinking and problem-solving skills in the post-test in favor of the experimental group. It also showed that there were significant differences in the average scores of creative thinking and problem-solving skills between the pre-test and post-test of the experimental sample, as the average scores of the experimental sample on the post-test were.

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Al-Anzi (2022) conducted a study that aimed to identify the obstacles to electronic educational games from the point of view of early childhood teachers. The study used a survey approach, and the study sample, which was a simple random sample, amounted to (30) teachers in the early childhood stage. The study concluded that early childhood teachers face administrative and technical obstacles related to the technological infrastructure. In light of this, the study recommended the necessity of holding training courses for all teachers to deal with electronic educational games and to ensure the use of educational games in educational curricula and the educational process as a whole.

Al-Suwai (2020) conducted a study that aimed to identify the relationship between the obstacles to mathematics teachers' practice of educational digital games and the development of problem-solving skills among students. The study sample consisted of (190) male and female mathematics teachers. The study concluded that there is a direct relationship between the obstacles to mathematics teachers' practice of educational digital games and the development of problem-solving skills among students. The study recommended the necessity of integrating educational digital games into the mathematics curriculum in a way that ensures interaction within the classroom with the mathematics curriculum. It also recommended the necessity of training mathematics teachers and providing them with the appropriate technical infrastructure.

The study of Saqr (2019) aimed to reveal the reality of using digital educational games in education in schools in the Al-Jouf region from the point of view of primary school teachers. The study sample consisted of (85) male and female teachers. The study concluded that there was a weak provision of electronic devices and computers for those schools. The study recommended the necessity of establishing a network of technologies and computer laboratories in those schools, which would contribute to integrating students into their curricula through digital educational games.

Fokides (2018). conducted a study presents the results of a project in which a series of digital games were used for teaching Mathematics to first, fourth, and sixth-grade primary school students (ages 6–7, 8–9, and 11–12). Mathematics was selected as the teaching subject because of the difficulties students face in understanding basic math concepts. Although digital games are used quite extensively for educational purposes, they are scarcely used for teaching Mathematics. The games were developed by the classes' teachers using Microsoft's Kodu Game Lab. The learning outcomes were compared to two other groups of students. The first was taught using the model proposed by Driver and Oldham while the second was taught conventionally. Data was collected using questionnaires and evaluation sheets. A total of 201 students participated in the study coming from three schools in Athens, Greece. Results indicated that students in the games group outperformed, in most cases, students in the other groups. Students' views for the games were highly positive. The implications for software engineers and education administrators are also discussed.

Summary of Previous Studies and the Location of the Current Study

Previous studies were used to identify the appropriate methodology and statistical processes, and to identify the theoretical framework for the study's topics and variables. They also served to construct the study's instrument, particularly the study by Al-Huwailah (2023) and Al-Anzi (2022). The current study is consistent with previous studies in its review of the concepts of educational digital games and their challenges. The current study is similar to previous studies, particularly the studies by Al-Anzi (2022) and Saqr (2019), in terms of the study population. However, it differs from these studies in its focus on studying Jordanian private education schools from the perspective of the educators working in them.

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Methods and Procedures

The descriptive survey approach was used to achieve the study's objectives.

Study Population: The study population consisted of all educators working in Jordanian private education schools, numbering (14,560). Table (1) shows the distribution of the study population according to the study variables.

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

Variables	Variable	Number	Total
sex	Male	8523	14560
	Female	6037	
Educational Level	PhD	2456	14560
	Master's	5268	
	Bachelor's	1052	
	Diploma	5784	
Years of Experience	5 years or less	9866	14560
	More than 5 years	4694	

Source: Ministry of Education, 2025.

Study Sample

According to Stephen Thompson's equation, the minimum size of a stratified random sample representing the community was calculated at a significance level ($\alpha \leq 0.05$), which was (343) educators. To account for sample waste and indifference in response, the actual sample size was determined to be (400) educators. The researcher distributed the questionnaire to the study sample located in six Jordanian private education schools: Al-Hasad Educational Schools, Manarat Al-Marj Academy, Al-Asalah Wal-Muasara Schools, Warf Academy, Al-Hafez Academy, and Al-Durr Al-Manthur Schools. (382) questionnaires were retrieved out of (400). Table (2) shows the distribution of the representative study sample, which was extracted according to Thompson's equation according to the study variables.

Table (2): Sample distribution according to study variables

Variables	Variable	Number	Total
sex	Male	283	400
	Female	117	
Educational Level	PhD	50	400
	Master's	86	
	Bachelor's	202	
	Diploma	62	
Years of Experience	5 years or less	239	400
	More than 5 years	161	

Study Tool

The study tool was developed by consulting theoretical literature and some previous studies, such as the study of Al-Huwailah (2023) and the study of Al-Anzi (2022), in order to achieve

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the study objectives and answer its questions. The study tool, in its initial form, consisted of (30) paragraphs, and in its final form, of (28) paragraphs distributed across three areas: school leadership, consisting of (13) paragraphs; technical infrastructure, consisting of (8) paragraphs; and training, consisting of (7) 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 sciences, 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, either by approving them, modifying their wording, or deleting them due to their lack of importance. Their comments were taken into account regarding the modification, deletion, addition, and merging of paragraphs, as the number of its paragraphs reached (28) paragraphs.

To verify the stability 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 fields. Table (3) shows the stability coefficients of the tool's fields:

Table (3): Cronbach's Alpha reliability coefficients for the study tool domains

number	Field	Cronbach's alpha
1	School Leadership	0.98
2	Technical Infrastructure	0.95
3	Training	0.92

Table (3) shows that the reliability coefficients were acceptable. To assess the level of challenges facing educational digital games in Jordanian private schools, the following scale was adopted: low availability (2.33 or less), medium availability (2.34-3.67), and high availability (3.68 or more).

Study results and discussion

Results related to answering the first question: What are the challenges facing educational digital games in Jordanian private schools, from the perspective of educators working there?

To answer this question, the arithmetic means and standard deviations of the responses of the study sample members were calculated in general and for each field of study, and Table (4) shows this.

Table (4): Arithmetic means, standard deviations, and ranking of the level of challenges facing educational digital games in Jordanian private education schools from the point of view of educators working there

Number	Field	Arithmetic Mean	Standard Deviation	Rank	Availability Degree
2	Technical Infrastructure	3.55	0.91	1	Medium
3	Training	3.55	0.91	2	Medium

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1	School Leadership	3.44	0.57	3	Medium
Overall Score		3.51	0.71	Medium	

It is noted from Table (4) that the level of challenges facing educational digital games in Jordanian private schools from the point of view of the educators working in them was average, as the arithmetic mean was (3.57) and a standard deviation of (0.71). The fields were average, with the technical infrastructure coming in first place, with an arithmetic mean of (3.55) and a standard deviation of (0.91), and the field of school leadership coming in last place with an arithmetic mean of (3.44) and a standard deviation of (0.57). As for the paragraphs of each field, the results were as follows:

1. Technical infrastructure field: The arithmetic averages and standard deviations were calculated for the items in this field, and Table (5) shows this:

Table (5): Arithmetic means, standard deviations, ranking, and availability degree for the field of technical infrastructure

Number	Paragraph	Arithmetic Mean	Standard Deviation	Rank	Availability Degree
1	The school is keen to keep pace with technological developments in the surrounding environment	3.63	1.10	1	Medium
6	The computer programs used at the school are easy to use	3.60	1.06	2	Medium
7	The information and data available at the school are easy to access	3.60	1.06	2	Medium
4	The technology used at the school contributes to rapid achievement	3.57	1.10	4	Medium
8	The school is committed to positively addressing technological changes with the aim of improving performance	3.54	1.05	5	Medium

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Number	Paragraph	Arithmetic Mean	Standard Deviation	Rank	Availability Degree
5	The technology used at the school contributes to raising the quality of services provided to students	3.52	1.09	6	Medium
2	The school provides appropriate technical means to enhance the educational process	3.51	1.09	7	Medium
3	The technology used in the school is in line with the requirements of the digital age	3.49	1.04	8	Medium
Overall Score		3.55	0.91	Medium	

It is noted in Table (5) that the level of challenges facing educational digital games in Jordanian private schools from the point of view of educators working in the field of technical infrastructure was average, as the arithmetic mean was (3.55) and a standard deviation of (0.91). The paragraphs of the field were average, as the arithmetic means ranged between (3.63-3.49). Paragraph (1) came in first place, which states: "The school is keen to keep pace with technological developments in the surrounding environment", Paragraph (3) came in last place, which states, "The technology used in the school is in line with the requirements of the digital age." The researcher attributes this to the availability of financial capacity in Jordanian private education schools to secure advanced technology that is compatible with the requirements of the educational process in them.

2. **Field of school leadership**: The arithmetic means, standard deviations, ranking and degree of availability were calculated for the items in this field, and Table (6) shows this.

Table (6): Arithmetic means, standard deviations, ranking, and degree of availability in the field of school leadership

Number	Paragraph	Arithmetic Mean	Standard Deviation	Rank	Availability Degree
2	School leadership engages interactively with digital educational games	3.98	0.89	1	Medium
5	School leadership encourages ongoing communication with teachers and students regarding	3.90	1.01	2	Medium

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Number	Paragraph	Arithmetic Mean	Standard Deviation	Rank	Availability Degree
	the use of digital educational games				
4	School leadership seeks to implement guidelines related to digital educational .games	3.81	0.89	3	Medium
1	The school leadership delegates all powers and authorities to teachers regarding the operation of educational digital games	3.79	0.96	4	Medium
3	The school leadership takes into account the capabilities and potential of teachers when assigning responsibilities related to educational digital games	3.76	1.03	5	Medium
6	The school leadership provides feedback to teachers on issues related to educational digital games.	3.69	0.96	6	Medium
8	School leadership considers teachers' different perspectives when solving problems related to educational digital games.	3.68	0.97	7	Medium
7	School leadership seeks to positively address students' needs when playing	3.55	1.06	8	Medium

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Number	Paragraph	Arithmetic Mean	Standard Deviation	Rank	Availability Degree
	educational digital games.				
10	School leadership meets with each faculty member individually to identify problems related to educational digital games	3.13	1.21	9	Medium
9	School leadership considers discussing topics related to educational digital games with teachers a waste of time	2.44	1.34	10	Medium
Overall Score		**3.44**	**0.57**	Medium	

It is noted in Table (6) that the level of challenges facing educational digital games in Jordanian private education schools from the point of view of educators working in the field of school leadership was average, as the arithmetic mean was (3.44) and the standard deviation was (0.57), The arithmetic means ranged between (3.98-2.44), and paragraph (2) came in first place, which states, "The school leadership deals interactively with digital educational games." This is due to the school leadership's ability to act and manage matters well and its extensive knowledge of the importance of digital educational games in the teaching process. Paragraph (9) came in last place, which states, "The school leadership considers discussing topics related to digital educational games with the teacher a waste of time."

This may be attributed to the extensive experience of those working in the education sector, particularly with educational digital games and the mechanisms for activating and utilizing them in the teaching-learning process.

3. Field of Training: Arithmetic means, standard deviations, rankings, and availability levels were calculated for the items in this field, as illustrated in Table (7).

Table (7): Arithmetic means, standard deviations, ranking and degree of availability in the field of training

Number	Paragraph	Arithmetic Mean	Standard Deviation	Rank	Availability Degree
1	Training in educational digital games enhances my .performance	3.57	1.25	1	Medium
3	The school offers the possibility of taking training courses	3.53	1.19	2	Medium

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Number	Paragraph	Arithmetic Mean	Standard Deviation	Rank	Availability Degree
	related to educational digital games within the .school				
2	The school offers the possibility of taking training courses related to educational digital games outside of .school	3.35	1.29	3	Medium
4	Training programs offered by school administration enhance teachers' awareness of the importance of educational digital .games	3.27	1.19	4	Medium
5	Training programs take into account responsibilities related to teaching .workload	3.23	1.15	5	Medium
6	Training programs encourage teachers to propose new systems for training in educational digital .games	3.02	1.23	6	Medium
Overall Score		3.29	1.01	Medium	

It is noted in Table (7) that the level of challenges facing educational digital games in Jordanian private education schools from the point of view of educators working in the field of training was average, as the arithmetic mean was (3.29) and a standard deviation of (1.01), and the arithmetic means ranged between (3.57-3.02), Paragraph (1) came in first place, which states, “Training in educational digital games enhances my performance,” and paragraph (6) came in last place, which states, “Training programs encourage teachers to propose new systems related to training in educational digital games.” This is due to the ability of educational digital games training programs to influence the cognitive level of teachers and provide them with the opportunity to benefit greatly from adding interactivity, brainstorming, critical thinking and problem solving through educational digital games. The researcher attributes this to the abundance of high-quality training programs specializing in integrating educational digital games to advance the teaching-learning process.

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The results related to answering the second question, which reads: Are there statistically significant differences at the significance level (α≤ 0.05) between the arithmetic means of the responses of the study sample members towards the level of challenges facing educational digital games in Jordanian private education schools from the point of view of the educators working there, attributed to the variables (gender, years of experience, and educational level)?

This question was answered as follows:

A. Sex variable: Arithmetic means, standard deviations, and a t-test were calculated according to the gender variable, as shown in Table (8).

Table (8): Arithmetic means, standard deviations, and t-test according to the gender variable

Field	sex	Number	Arithmetic Mean	Standard Deviation	T-Value	Significance Level
School Leadership	Male	270	3.48	0.57	1.975	**0.049
	Female	112	3.35	0.56		
	Total	382	3.41	0.56		
Technical Infrastructure	Male	270	3.58	0.92	0.892	0.373
	Female	112	3.49	0.91		
	Total	382	3.53	0.91		
Training	Male	270	3.36	1.02	2.152	**0.032
	Female	112	3.12	0.98		
	Total	382	3.36	1.00		
Overall Score	Male	270	3.63	0.82	2.559	**0.011
	Female	112	3.43	0.83		
	Total	382	3.53	1.65		

** The difference is statistically significant at the significance level (α≤ 0.05)

To determine whether the differences between the averages were statistically significant at the significance level (α≤ 0.05), the t-test was applied. The results in Table (12) indicate that there were statistically significant differences at the significance level (α≤ 0.05) according to the gender variable based on the calculated (t) value, which amounted to (2.559) and at a significance level of (0.011), where the difference was in favor of males, as evidenced by the increase in their arithmetic averages. This is attributed to the males' interest in training programs inside and outside the school as a result of their lack of responsibilities inside their homes and thus their integration into educational digital games and taking a large share of training on them, And trying to implement it in the curriculum, in addition to the fact that the technical infrastructure is available to everyone of both genders, as a step towards integrating all teachers, male and female, with the importance of using educational digital games and considering them part of their educational responsibilities towards their students inside and outside the classroom. This is what was confirmed by Al-Saqr's study (2019), As for the variable of school leadership, the leadership tends to provide the opportunity for male teachers, rather than female teachers, to use educational digital games because most of these games are

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characterized by a masculine nature, and the value aspect derived from the ideology and customs of Eastern society constitutes an obstacle that prevents females from interacting significantly with educational digital games, and this is what was confirmed by the study of Hawila (2023).

B. Years of experience variable: The arithmetic means, standard deviations, and t-test were calculated according to the college type variable, and Table (9) shows that.

Table (9): Arithmetic means, standard deviations, and t-test according to the variable of years of experience

Field	years of experience	Number	Arithmetic Mean	Standard Deviation	T-Value	Significance Level
School Leadership	5 years or less	225	3.42	0.57	-0.834	0.405
	More than 5 years	157	3.47	0.56		
	Total	382	3.44	0.56		
Technical Infrastructure	5 years or less	225	3.46	0.92	-2.438	**0.015
	More than 5 years	157	3.69	0.91		
	Total	382	3.57	0.91		
Training	5 years or less	225	3.29	1.02	0.059	0.953
	More than 5 years	157	3.29	0.98		
	Total	382	3.29	1.00		
Overall Score	5 years or less	225	3.53	1.64	-1.284	0.200
	More than 5 years	157	3.63	1.67		
	Total	382	3.58	1.65	-0.834	

** The difference is statistically significant at the significance level ($\alpha \leq 0.05$)

To determine whether the differences between the averages are statistically significant at the significance level ($\alpha \leq 0.05$), the t-test was applied. The results in Table (13) indicate that there are no statistically significant differences at the significance level ($\alpha \leq 0.05$) according to the college type variable based on the calculated (t) value, which reached (-1.284) and at a significance level of (0.200), The difference was in favor of those with less than 5 years of experience, as evidenced by their high arithmetic averages. This is attributed to the fact that this group is the closest to the students due to the circumstances of their generation, which may be

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close to the students' generation, which creates a strong psychological relationship between teachers - with little experience - and their students. Such a matter may have an effect in reducing the burden of challenges related to this variable in the use and positive interaction with educational value games.

3. Educational level variable: The arithmetic means and standard deviations were calculated according to the educational level variable, and Table (10) shows that.

Table (10): Arithmetic means and standard deviations according to the educational level variable

Field	the educational level	Number	Arithmetic Mean	Standard Deviation
School Leadership	PhD	44	3.53	0.65
	MA	83	3.62	0.60
	BA	193	3.36	0.51
	Diploma	62	3.38	0.58
	Total	382	3.47	0.58
Technical Infrastructure	PhD	44	3.56	0.88
	MA	83	3.69	0.92
	BA	193	3.49	0.91
	Diploma	62	3.57	0.96
	Total	382	3.75	0.91
Training	PhD	44	3.33	1.09
	MA	83	3.43	1.00
	BA	193	3.29	0.98
	Diploma	62	3.05	1.04
	Total	382	3.27	1.02
Overall Score	PhD	44	3.61	1.59
	MA	83	3.69	1.73
	BA	193	3.54	1.61
	Diploma	62	3.45	0.84
	Total	44	3.53	1.44

It is noted from Table (10) that there are apparent differences between the arithmetic averages, depending on the educational level variable, as those in the (Master's) category obtained the highest arithmetic average of (3.69), and those in the (Doctorate) category came in second place, as the arithmetic average reached (3.61), In the last rank came those in the (diploma) category, as the arithmetic mean reached (3.46). To determine whether the differences between the means were statistically significant at the significance level ($\alpha \leq 0.05$), a one-way analysis of variance

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(One Way ANOVA) was applied, and the results of the analysis of variance came as shown in Table (14).

Table (14): One-way analysis of variance to find the significance of differences according to the educational level variable

Field	Source of variance	Sum of squares	Degrees of freedom	Mean squares	F-value	Significance level
School Leadership	Between groups	4.344	3	1.448	4.562	**0.004
	Within groups	379.819	349	1.088		
	Total	384.163	352			
Technical Infrastructure	Between groups	2.295	3	0.765	0.906	0.438
	Within groups	290.198	349	0.831		
	Total	292.493	352			
Training	Between groups	5.069	3	1.690	1.646	0.178
	Within groups	233.309	349	0.668		
	Total	238.378	352			
Overall Score	Between groups	3.076	3	0.316	0.633	0.56
	Within groups	295.151	349	0.311		
	Total		352			

** The difference is statistically significant at the significance level ($\alpha \leq 0.05$)

The results in Table (14) indicate that there are no statistically significant differences at the level ($\alpha \leq 0.05$), depending on the educational level variable, based on the calculated F value, which reached 0.633 and a significance level of (0.56), as well as in most fields except for the field of school leadership. This may be due to the interest of school leadership in those in the category of doctorate, bachelor's, and diploma in educational digital games, as they realize that they meet their future ambitions related to advanced education, It helps them to develop their abilities and capabilities so that they can achieve their hopes and professional expectations for promotion and professional advancement. The differences were in favor of the master's category when compared to the bachelor's category in the field of school leadership, and in favor of the master's professor category when compared to the bachelor's category in the field of technical infrastructure, and in favor of the master's category when compared to the diploma category in the field of training. To know the relevance of the differences according to the educational level variable in the fields, the Scheffe test for differences was used, as shown in Table (15).

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Table (15): Scheffe test for dimensional differences attributed to the educational level variable

Educational level	**Arithmetic mean**	PhD	Master's	Bachelor's	Diploma
		3.61	3.69	3.54	3.45
PhD	3.61	-	0.955	0.954	0.710
Master's	3.69	0.955	-	0.497	*0.256
Bachelor's	3.54	0.954	0.497	-	0.835
Diploma	3.45	0.710	0.256	0.835	-

The difference is statistically significant at the level ($\alpha \leq 0.05$)

Recommendations:

Based on the previous findings, the researcher recommended the following:

1. School administrations should pay great attention to the topic of educational digital games, by studying teachers' level of practice in educational digital games and integrating them into their curricula.
2. School administrations should work to strengthen training systems related to educational digital games, value outstanding effort, and reward outstanding achievement.
3. Hold conferences, seminars, and periodic meetings between school administrations on the one hand, and digital institutions involved in the manufacture of educational digital games on the other hand, to learn about their opinions, suggestions, and the latest developments in the educational digital industry.

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