

Research Article

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The Role of Parental Involvement in the Learning Experiences of Children in Zarqa when Playing Educational Games in Improving the Interaction of Those Children with Others and the Challenges Hindering Such Involvement

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Abstract

Background/purpose. This study aimed to identify the role of parental involvement in the learning experiences of children in Zarqa when playing educational games in improving the interaction of those children.

Materials/methods. The researchers adopted quantitative and qualitative approaches. They used a questionnaire that consisted of three sections. The first section collects data about the demographic variables. The second section collects quantitative data about the role of parental involvement in children's learning experiences when playing educational games in improving children's interaction. The third section collects quantitative and qualitative data about the challenges hindering such involvement. The sample consists of 120 parents with children enrolled in private kindergartens in Zarqa, Jordan. The questionnaire forms were passed to those parents by hand. All the forms were retrieved and analyzed.

Results. Parental involvement in children's learning experiences in Zarqa when playing educational games significantly improves their interaction with others. The severity of the targeted challenges was found to be moderate.

Conclusion. Parental involvement in children's learning experiences in Zarqa when playing educational games significantly improves their interaction with others.

1. Introduction

Numerous researchers have been focusing on children's learning experiences. Improving these experiences requires effective parental involvement, which refers to various activities to support their children's learning outside and inside school.

Parents may be involved in children's learning activities under the supervision and guidance of the school staff or without having such supervision and guidance. Parental involvement under the supervision and guidance of the school staff includes assisting children in doing their homework and attending an open day. Parental involvement without supervision and guidance includes encouraging children to read stories or adopt a useful hobby (Epstein, 2001). It involves engaging in learning activities that are based on educational games. Such games refer to the games in which the players must exert much effort to meet specific educational goals while complying with specific rules. They can also be defined as logically organized activities carried out in accordance with a specific set of rules (Ale'qailan, 2002).

Parents' involvement in their children's learning activities based on games contributes to developing the children's personalities. This applies especially during the first five years. Children learn through observation and modeling the behaviors of those in the surrounding environment. The social learning theory of Pandora, developed in 1969, suggests this (Linke et al., 2013; Adar, 2003).

Parental involvement in children's experiences at school plays a significant role in implementing and developing educational programs. That is because home and school environments are considered the most important environments in which children learn. It is also because home and school environments are the environments that the children spend most of their time in. In order to develop children and provide them with a good learning environment, people at school and family members at home must cooperate with each other. Such cooperation shall be in the favor of children. However, poor cooperation between people at school and family members at home negatively affects children's development (Badeer, 2004).

Educators believe that female kindergarten teachers should encourage parents to become involved in their children's experiences. Those teachers must perceive parents as their friends and partners and engage them in the development, implementation, and assessment of educational programs.

Today, parental involvement in early childhood education programs is not insignificant. In fact, it has become an essential element of educational programs targeting children (Ihmeideh & Olimat, 2015). In addition, it has become one of the pillars supporting the educational practices in such programs. That is because educators believe that the family is the most important social unit that can foster the development of children and improve their learning process.

It should be noted that parents are the first educators in children's lives and the ones who influence children the most. Hence, parents can make significant changes to the things that children learn at school. Therefore, the role of parents should not be overlooked, and parents should be involved in school activities. Parents should be provided with adequate knowledge about the methods needed to develop and teach their children (Homaida, 2022).

Parental involvement at home is represented by parents' involvement in their children's activities at home to foster their children's development and teach them. Such activities include reading books and stories and playing educational games. Parental involvement in children's activities promotes positive attitudes among their children towards the learning process (Dearing et al., 2005).

Parental involvement at school is represented by parents' involvement in the children's learning activities at school. Such activities include attending classes to read stories to their children, classes

to talk about their experiences raising children, and attending parents-teachers meetings (PTAs) (Kaufman-Rimm & Zhang, 2005).

Today, children at kindergartens and schools learn through new and innovative methods, such as technology. Technologies are used in all fields. They entertain children and youth. They improve children's learning experiences and make them active learners. They let children play educational digital games (Adosary, 2022).

Educational games can attract learners' attention, make children eager to learn, ensure that children interact positively with the academic material, present the academic material in an interesting manner that contributes to meeting the intended goals, and engage students actively in the learning process. That is because playing educational games requires using cognitive and emotional capabilities. Playing educational games makes the learners learn by having fun (Aleekh, 2004).

Alhusaini (2014) adds that modern teaching-learning aims to develop students in all aspects, ensuring learners enjoy this process. Playing educational games is an enjoyable process through which the goals of the modern teaching-learning process can be met. Based on several theories in the field of psychology, playing games is essential for teaching and developing children. Playing games lets children inform others about their identities and explore the surrounding environment. Through playing games, they can develop in cognitive, emotional, social, and language-related areas.

All experts believe that playing educational games contributes to actively engaging the learners in the teaching-learning process and has positive impacts on the learning process. In fact, all curricula must include educational digital games (Adosary, 2022).

Much development has been achieved in the industrial field, leading to the development of various educational games. For instance, today, there are auditory memory games, visual memory games, and individual and group games. Due to the significance of educational games, schools today exert much effort to acquire the best educational games. In fact, the number of educational games a school possesses became one of the standards of achieving excellence (Alehwaidi, 2005).

Everyone desires to play games at various stages of life. Educational games are a type of game. They reflect information about societies, representing their values, behavior, and customs. They are used to promote values and ethics among children during their developmental stages (Ashar'ah et al., 2014).

All the scholars specializing in education and psychology believe that playing games is an effective tool for teaching and developing children. They believe that playing games is an effective tool for stimulating children's thinking. It should be noted that thinking is a series of cognitive activities that are carried out by one's brain when realizing the presence of stimuli through a sense or several senses. Thinking is a process that aims to identify the meaning of a specific situation or experience. This meaning may be implicit or explicit. In reality, all activities are the outcome of the thinking process (Dwaidar, 2004).

In short, playing educational games and activating parental involvement in children's learning experiences are important. They contribute to developing children in cognitive and mental areas.

Parental involvement is an important factor that positively affects children's learning process. It includes following up on the learning process of children by parents. It involves parental involvement in children's learning experiences when playing educational games. In this regard, it should be noted that school administrations and teachers must keep communicating with parents to motivate them to engage actively in their children's learning experiences and school activities.

Naite (2021) adds that parents positively and significantly affect their children's development. This impact is attributed to their authority over children and to their role in motivating and inspiring them through their involvement in their children's learning activities.

According to Mesbah and Hasan (2021), parental involvement in their children's learning experiences when playing educational games contributes to their physical, psychological, and mental development. It also serves as a pedagogical and educational instrument.

Despite the significance of parental involvement in their children's learning experiences when playing educational games, there are challenges hindering such involvement. For instance, Moore (2016) adds that parental involvement in children's activities can be hindered by problems related to the father-mother relationship. He also adds that parental involvement in children's activities can be hindered by the nature of the parents' jobs. For instance, if the parent works in a job that makes him/her have a full schedule, the parent shall face a major difficulty in involving himself/herself in children's activities (Moore, 2016)

According to Moore (2016), unemployment causes parents to suffer financial problems. Such problems cause the parent to face major difficulties in involving himself/herself in children's activities (Moore, 2016).

To sum up, all the aforementioned researchers emphasized the significance of parental involvement in their children's learning experiences when playing educational games. Some of those researchers added that challenges are hindering such involvement.

Hence, the present study aimed to explore the role of parental involvement in children's learning experiences in Zarqa when playing educational games in improving the interaction of those children with others. It also aimed to explore the challenges hindering such involvement. To be specific, it aimed to answer the questions listed below:

Q.1. What is the role of parental involvement in children's learning experiences in Zarqa when playing educational games in improving the interaction of those children with others?

Q.2. What are the challenges that hinder parental involvement in children's learning experiences when playing educational games?

Thus, the present study aimed to explore the role of parental involvement in children's learning experiences in Zarqa when playing educational games in improving their interaction with others. In addition, it aimed to offer a theoretical framework for the study term. It aimed to review the theoretical literature on parental involvement in children's learning experiences when playing educational games. It also aimed to explore the challenges hindering parental involvement in children's learning experiences when playing educational games.

The present study is significant because it is one of the few studies that aims to shed light on parental involvement in children's learning experiences when playing educational games. It aims to identify the challenges hindering parental involvement in children's learning experiences when playing educational games. It is significant because it targets children during an early educational stage.

The present study is significant because school and home are the places where children spend most of their time. Therefore, it promotes awareness in society about the significance of cooperation between family members at home and school staff. Such cooperation contributes to developing children's intellectual and cognitive capabilities and supporting their learning process.

This study is significant because it encourages the decision-makers at the Ministry of Education to carry out educational activities in which the parents are involved. This will improve the children-parent bonds.

This study is significant because it fills a gap in the relevant literature. For instance, no study sheds light on parental involvement in children's learning experiences in Zarqa and the challenges hindering such involvement. Thus, it is the first study to address this topic, making it valuable.

The researchers found this study necessary because they believe that parental involvement in children's learning and entertainment activities must be given much attention. Such involvement will positively affect children in social, cognitive, educational, and emotional areas.

2. Literature Review

The researchers of the present study reviewed several studies. Such studies include the following ones:

Oranga and Nyakundi (2023) aim to shed light on the significance, types, and components of parental involvement in the teaching-learning process of their children. They add that the advantages of parental involvement in the teaching-learning process of their children include the following ones: 1)- Reducing the number of behavioral problems among learners, 2)- Reducing the absence rate among students 3)- Showing better academic achievement among students 4)- Improving the students' adaptation at school 5) Improving students' social skills 6)- Improving students' sense of self-worth 7)- Improving students' attitudes towards the learning process. 8) Improving the school environment for children. 9)- Improving the relationships between teachers and parents. The types of parental involvement in the teaching-learning process of their children include a)- Volunteering at school, b)- Guiding home-based learning, and c)- Communicating regularly with the school staff. d)- Engaging in the decision-making processes at school, e)- Providing the children with the needed learning resources, f)- Creating a safe home environment. Such an environment shall encourage children to learn. g)- Encouraging students to carry out good behavior

Adosary (2022) aimed to identify the role of digital games in developing some leadership skills of kindergarten children from the perspective of female kindergarten teachers. The study's sample consists of 216 female kindergarten teachers. The latter researcher adopted a descriptive approach. The latter researcher reached several results. To be specific, he found that there is not any significant difference between the respondents' attitudes towards the aforementioned role, which can be attributed to their academic qualification, experience, or sector in all the targeted areas. It was also found that the most important obstacles female teachers face when using digital games in class are the non-availability of devices, poor infrastructure, and limited time for following up with all children. Such obstacles also include crowded classes and the noise of children while playing digital games.

Mamsh (2022) aimed to shed light on the parental involvement in the teaching-learning process of their primary school children. He adopted a descriptive approach. He used a questionnaire to acquire the needed data from the sample. The sample consists of the parents of 120 students. It was found that the level of parental involvement in the teaching-learning process of their primary school children is moderate. It was found that there is a relationship between parental involvement in the teaching-learning process of their primary school children on the one hand and the family's financial status on the other hand. In other words, the higher the family income is, the higher such parental involvement is and vice versa. It was found that such parental involvement positively correlates with fathers' academic qualifications. In addition, it was found that there is a relationship between the dimensions of parental involvement and students' academic achievement. Such involvement is represented by assisting the children in understanding their lessons, parental involvement in school activities, and communication with children. Academic achievement is measured based on the annual average, children's acquisition of honor certificates for appreciation, and grade retention.

Mesbah and Hasan (2021) shed light on the significance of playing games in children's lives. They shed light on the functions of playing games with children and the theories on this issue. They shed

light on the social and educational roles of children playing games. It was found that some researchers specialized in education confirmed that it is necessary to play games in classrooms. Playing games enables children to enjoy positive self-affirmation and achieve excellence. In addition, playing games promotes cooperation and respect for the laws and rules of the game. It increases children's loyalty to the group. It has major positive impacts on children's learning and the development of their personalities in cognitive and behavioral areas. It contributes to improving their social communication skills.

Naite (2021) aimed to explore parental involvement's effect on students' academic achievement at Crescent International School. He also aimed to identify the impact of the demographic characteristics of parents on their involvement in their children's teaching-learning process. The sample consists of 12 parents who have children enrolled in secondary schools. It was found that the family income does not affect the level of parental involvement in their children's teaching-learning process. However, the academic qualifications, employment, age, and marital status of the parents have a significant effect on the level of parental involvement. It was found that the higher the parental involvement level, the higher the child's academic achievement.

Badrasawi et al. (2020) aimed to identify the challenges hindering parental involvement in their children's teaching-learning process. They used a survey. They sample parents who have children in third or fourth grade. They used a survey on parental involvement. The Rasch Measurement Model (Winsteps software program, version 4.1.0) was used. The low proficiency of parents in the Chinese language and the complexity of the school subjects are the biggest challenges facing parental involvement. The study by Badrasawi et al. (2020) provides useful information to parents, school staff, teachers, and policymakers.

Alanzi (2020) aimed to shed light on the parental involvement in the teaching-learning process of their kindergarten children from the perspective of female teachers and supervisors in Kuwait. He adopted a descriptive-analytical approach. He designed a survey. This survey targets four areas. Those areas are: communication, volunteering, decision-making, and challenges. The sample consists of 666 female teachers and supervisors working at public kindergartens in Kuwait. It was found that the level of parental involvement in the teaching-learning process of their kindergarten children is high in the communication process. The level of such involvement was found to be moderate in the following areas: volunteering, decision-making, and challenges. It was found that there are significant differences between the respondents' attitudes, which can be attributed to their profession. It was found that there is no significant difference between the respondents' attitudes, which can be attributed to experience.

Abdelatheem and Alomari (2019) aimed to shed light on the parental involvement in the teaching-learning process of their kindergarten children in accordance with the Saudi Vision 2030. They aimed to promote awareness among female kindergarten children about the significance of parental involvement in improving the children's teaching-learning process. They aimed to promote awareness among female kindergarten children about the significance of parental involvement in the development of children. The sample consists of 30 female teachers chosen from seven (7) public kindergartens. The sample also consists of 61 parents who have kindergarten children. It was found that kindergarten staff seek to increase the level of parental involvement in the teaching-learning process of their kindergarten children. It was found that the level of such parental involvement is low. It was found that the female teachers believe that the presence of parents in the kindergarten hinders parental-teacher cooperation. It was found that the sample parents appreciated the efforts delivered by the kindergarten. The sampled parents were found to support a proposal for launching a training program targeting parents. This program aims to improve such parental involvement.

Ashar'ah et al. (2014) aimed to explore the impact of playing extracurricular educational games on the academic achievement of fourth-grade students in the Islamic education course. The sample consists of 50 students chosen from Zainab Bintu Arasul School. The experimental approach was adopted to reach the goals of the study. The members of the sample were divided into control and experimental groups. The latter researchers taught the control group through the conventional teaching method. They taught the experimental group through using extracurricular educational games. This teaching method was applied in the school square. After getting the results of the tests and analyzing them, it was found that there is no significant difference between the control and experimental groups.

Alhusaini (2014) aimed to explore the impact of educational games on developing some learning skills among primary school students. He chose a sample that consisted of 90 fourth-grade students. The members of the sample were divided into control and experimental groups. Pre-test and post-test were used. The latter researcher found that there was a significant difference between the average score of the control group and the average score of the experimental group on the post-test in favor of the experimental group. It was found that there was no significant difference between the average score of males and the average score of females in the experimental group on the post-test.

The aforementioned studies illuminate the significance of parental involvement in their children's teaching-learning process, the relationship between parental involvement and other variables (e.g., the quality of their children's education), and the significance of playing educational games at school.

3. Methodology

3.1. Approach

The researchers of the present study adopted the mixed methods methodology, which includes quantitative and qualitative approaches. The researchers chose this methodology because it increases the reliability of the data and the results that are reached. According to Clark (2019), the mixed methods methodology includes using quantitative and qualitative approaches. The latter researcher added that using this methodology would give researchers a deeper understanding of the targeted topic.

The researchers also adopted a descriptive-analytical approach. Such quantitative and qualitative data were collected using a questionnaire. This questionnaire consists of three sections. The first section collects data about the demographic variables (i.e., gender, employment status, and academic qualification). The second section collects quantitative and qualitative data about the role of parental involvement in children's learning experiences in Zarqa when playing educational games in improving the interaction of those children with others. The third section collects quantitative and qualitative data about the challenges hindering such involvement.

The three-point Likert scale is used in the second part. The five-point Likert scale is used in the third part of the questionnaire. The three-point Likert scale consists of the following categories: yes, no, and I do not know. The respondents were asked to write down further details after choosing one of those categories. The data were collected from the respondents during the academic year (2023 – 2024).

3.2. Population

The research population refers to the entire group of individuals who share a common thing, such as those suffering from a specific disease (Capili, 2021). The present study consists of parents with children enrolled in kindergartens or schools located in Zarqa. No statistical data has been

published about the number of parents of children in Zarqa. However, according to the World Population Review (2025), the size of the population in Zarqa is represented in 758,893 individuals.

3.3. Sample

The present study's researchers chose a sample using the purposive sampling method. For instance, they attended the parents' meetings in four private kindergartens located in Zarqa, Jordan. During such meetings, they passed the questionnaire forms by hand to 120 mothers and fathers. All the questionnaires were retrieved and considered valid for analysis. They were analyzed using SPSS software by an expert who specialized in statistical analysis. Thus, the response rate is 100 %.

The researchers chose to pass questionnaire forms to 120 individuals based on the sample size table in the reference of Serdar et al. (2021) and the size of the population in Zarqa. The latter researchers added that choosing 97 individuals out of 1 million would offer reliable results and a margin error of 95%. Thus, this sample size is sufficient for making generalizations.

Table 1 below displays data about the academic qualifications, gender, and employment status of the sample members.

Table 1. Data About the Academic Qualification, Gender and Employment Status of the Members of the Sample

Variable	Statement	Mean	Std.
Gender	Male (fathers)	65	54.16667
	Female (mothers)	55	45.83333
Employment status	Employed	81	67.5
	Unemployed	39	32.5
Academic qualification	Secondary school certificate only or less	6	5
	BA degree	105	87.5
	Graduate degree	9	7.5

N=120

54.16% of the respondents are fathers, whereas 45.83% are mothers. 67.5% of the respondents are employed, whereas 32.5% are unemployed. 87.5% of the respondents hold a BA degree, whereas 5% only have a secondary school certificate or less. 7.5% of the respondents have a graduate degree.

3.4. Instrument

This study aimed to identify the role of parental involvement in the learning experiences of children in Zarqa when playing educational games in improving the interaction of those children with others. Quantitative and qualitative data were collected using a questionnaire to meet the study's goals. This questionnaire consists of a cover page and three sections. The cover page suggests that the respondents don't have to write down their names; the information will remain confidential. The first section collects data about the demographic variables (i.e., gender, employment status, and academic qualification). The second section collects quantitative and qualitative data about the role of parental involvement in children's learning experiences in Zarqa when playing educational games, in improving the interaction of those children with others. The third section collects quantitative and qualitative data about the challenges hindering such involvement.

The three-point Likert scale is used in the second part. The five-point Likert scale is used in the third part of the questionnaire. The three-point Likert scale consists of the following categories: yes, no, and I don't know.

After choosing one of those categories, the respondents were asked to write down further details. The data were collected during the academic year (2023 – 2024). The questionnaire was administered in English, then translated into Arabic for inclusion in this manuscript.

3.5. Reliability of the Instrument

The researchers of the present study checked the instrument's reliability using the internal consistency method. To be specific, they calculated the Cronbach alpha coefficient. The overall Cronbach alpha coefficient value is 0.910. Because this value is greater than 0.70, as added by Salehi & Farhang (2019), it's deemed high. Thus, this study enjoys a high reliability level.

3.6. Validity of the Instrument

The researchers passed the instrument to three experts who work as faculty members. Those experts are specialized in early childhood. The instrument was passed to them in its initial version in order to be assessed. Such assessment is based on language, clarity, and ability to meet the identified goals. The experts added that the instrument is reliable, well-written, and well-designed. They added that the instrument is clear and free from language-related mistakes, enabling the researchers to meet the identified goals. Thus, the instrument is highly reliable.

3.7. Statistical Analysis Methods

To reach results, the researchers of the present study used the SPSS software to analyze the quantitative data. The

researchers also used several statistical analysis methods. Such methods are listed below:

- Frequencies and percentages
- Arithmetic means
- Cronbach alpha coefficient

To classify the means, the researchers set several criteria based on the equation mentioned in the reference of AbduRazak et al. (2019).

This equation is displayed below:

Interval = (The maximum value in the scale – the minimum value in the scale) / The number of required criteria

This equation can be applied to the values on the three-point Likert scale: $(3-1)/3 = 0.66$. Thus, the interval value is 0.66

Thus, the criteria used for classifying the means in the light of the three-point Likert scale are shown below:

- 1-1.66: Low
- 1.67-2.33: Moderate
- 2.34 or greater: High

This equation can be applied to the values on the three-point Likert scale: $(5-1)/3 = 1.33$. Thus, the interval value is 1.33

Thus, the criteria used for classifying the means in the light of the five-point Likert scale are shown below:

- 1-2.33: Low
- 2.34 -3.67: Moderate

- 3.68 or greater: High

3.8. Limitations of the Study

The researchers can't generalize the results. That's because the researchers may reach different results when using a different instrument or a different methodology

4. Results

4.1. Results Related to the First Question

Q.1. What is the role of parental involvement in the learning experiences of children in Zarqa when playing educational games in improving the interaction of those children with others?

To answer this question, the means and standard deviations are calculated. They are shown in Table 2 below.

Table 2. The Role of the Parental Involvement in the Learning Experiences of Children in Zarqa When Playing Educational Games in Improving the Interaction of Those Children with Others

No.	Statement	Mean	Std.	Level
1	Did you notice any improvement in the communication between you and your children while you are involved in their learning experience through playing educational games?	2.11	0.99	Moderate
2	Do you believe that the parental involvement in your children's learning experiences through playing educational games increases your children's curiosity and love for exploration?	2.11	0.99	Moderate
3	Did you notice that the parental involvement in your children's learning experiences provides a supportive environment for your children?	2.11	0.99	Moderate
4	Do you believe parental involvement in your children's learning experiences improves your children's interaction with you?	2.09	0.98	Moderate
5	Did you notice that the parental involvement in your children's learning experiences increased their sense of responsibility and commitment?	2.07	0.99	Moderate
6	Did you involve yourself in your children's learning experiences to make them interested in certain topics or academic fields?	2.07	0.97	Moderate
7	Did you notice that the parental involvement in your children's learning experiences increased their self-confidence and improved their learning skills?	2.07	0.97	Moderate
8	Did you notice that the parental involvement in your children's learning experiences improved their ability to interact socially with others?	2.07	0.97	Moderate
9	Did you notice that the parental involvement in your children's learning experiences improved their life skills, such as critical thinking and problem-solving skills?	2.07	0.97	Moderate

10	Did you notice that your children's love for learning increased due to the parental involvement in their learning experiences?	2.05	0.98	Moderate
11	Did the parental involvement in your children's learning experiences increase the time dedicated to carrying out educational activities in which you are involved?	2.05	0.96	Moderate
12	Did you notice that the parental involvement in your children's learning experiences through educational games improved their creative thinking skills?	2.05	0.96	Moderate
13	Do you believe you serve as a positive model for your children in a way that makes them aware of the significance of ongoing learning and parental engagement in educational activities?	2.03	0.95	Moderate
14	Did you notice that your children's language and communication skills improved due to parental involvement in their learning experiences through educational activities?	2.03	0.95	Moderate
15	Did you notice that your children's mathematical thinking skills improved due to parental involvement in their learning experiences through educational activities?	2.03	0.95	Moderate
16	Did you notice that the parental involvement in your children's learning experiences led to encouraging them to set personal goals and exert effort to meet them?	2.03	0.97	Moderate
17	Did you notice that parental involvement in your children's learning experiences through educational activities improved their attitudes towards technology?	2.01	0.94	Moderate
18	Do you believe parental involvement in your children's learning experiences made learning enjoyable and motivated them to learn more?	2.00	0.93	Moderate
19	Did you notice that parental involvement in your children's learning experiences improved their interaction and cooperation skills?	1.98	0.94	Moderate
20	Do you believe that parental involvement in your children's learning experiences increases your children's autonomy in the learning process?	1.95	0.93	Moderate
Overall		2.05	0.96	Moderate

Based on Table 2, parental involvement in children's learning experiences in Zarqa when playing educational games significantly improves their interaction with others. That is because the overall mean is 2.05.

Based on Table 2, it was found that parental involvement in children's learning experiences contributes to a moderate extent to improving children-parent communication. That was concluded based on the mean of item (1), which is 2.11. It was found that parental involvement in children's learning experiences contributes moderately to increasing children's curiosity and love for exploration. That was concluded based on the mean of item (2), which is 2.11. It was found that parental involvement in children's learning experiences contributes to a moderate extent to

improving the children-parent interaction. That was concluded based on the mean of item (4), which is 2.09.

It was found that parental involvement in children's learning experiences contributes moderately to increasing the children's sense of responsibility and commitment because the mean of item (5) is 2.07. It was found that parental involvement in children's learning experiences contributes moderately to improving the children's life skills, such as critical thinking and problem-solving skills. That was concluded based on the mean of the item (9), which is 2.07.

It was found that parental involvement in children's learning experiences contributes moderately to improving the children's language and communication skills. That was concluded based on the mean of item (14), which is 2.03. It should be noted that two respondents wrote down details on their answers in the blanks of the second section of the questionnaire. In item (9), a respondent added: (My involvement in my child's learning experiences shall make him capable of solving problems by himself. In item (12), a respondent added the following: (The involvement of parents in their children's learning experiences shall make them creative)

4.2. Results Related to the Second Question

Q.2. What challenges hinder parental involvement in children's learning experiences when playing educational games?

To answer this question, means and standard deviations are calculated for the items related to such challenges. They are shown in Table 3 below.

Table 3. The Challenges Hindering Parental Involvement in Children's Learning Experiences When Playing Educational Games

No.	Statement	Mean	Std.	Level
1	Lack of financial resources: Does the lack of financial resources serve as a challenge that hinders parental involvement in children's learning experiences when playing educational games?	3.60	1.01	Moderate
2	Difficulty in understanding the way of using technologies: Did you struggle to understand how to use technologies related to educational games?	3.50	1.42	Moderate
3	Social interaction-related problems: Did you face challenges related to the social interaction of your children due to their use of educational games?	3.46	1.40	Moderate
4	Worries about the amount of time spent looking at screens: Does playing digital educational games make you worried about its impact on your children's well-being?	3.41	1.14	Moderate
5	Lack of time: Do you believe the lack of time is the main challenge hindering parental involvement in children's learning experiences?	3.35	0.98	Moderate
6	Technophobia (fear of technology):	3.23	0.81	Moderate

No.	Statement	Mean	Std.	Level
	Do you worry about your children's use of technology in their learning experiences?			
7	The challenges related to language and understanding: Did you face any difficulty in understanding the language of educational games or the concepts used in such games?	3.19	0.75	Moderate
8	Is the stress due to facing a difficulty in offering additional learning opportunities? Do you feel stressed due to facing a difficulty in providing your children with additional learning opportunities	3.16	0.83	Moderate
9	Worries about the academic content? Do you worry about the academic content of your children's educational games?	3.08	0.74	Moderate
10	Facing a difficulty in enforcing control and supervision: Did you face any difficulty in enforcing control and supervision of your children's activities while playing educational games?	3.03	0.67	Moderate

The overall mean: 3.301 / Moderate

The overall Standard deviation: 0.975

Based on Table 3, the severity of the challenges hindering parental involvement in children's learning experiences when playing educational games is deemed moderate. That was concluded because the overall mean is 3.301. That means that school administrations must assist parents in addressing such challenges.

It was found that the lack of financial resources serves to a moderate extent as a challenge that hinders parental involvement in children's learning experiences when playing educational games. That was concluded because the mean of item (1) is 3.60. It was found that facing difficulty in understanding the way of using technologies related to educational games serves to a moderate extent as a challenge that hinders parental involvement. That was concluded because the mean of item (2) is 3.50.

It was found that social interaction-related problems serve to a moderate extent as a challenge that hinders parental involvement. That was concluded because the mean of item (3) is 3.46. It was also found that parents' worries about the impact of the time spent by children on screen on their well-being serve to a moderate extent as a challenge that hinders such parental involvement. That was concluded because the mean of item (4) is 3.41.

It was found that the lack of time serves to a moderate extent as a challenge that hinders such parental involvement. That was concluded because the mean of item (5) is 3.35. It was found that the parents' technophobia serves to a moderate extent as a challenge that hinders such parental involvement. That was concluded because the mean of item (6) is 3.23. It was found that the parents' worries about the academic content of the educational games serve to a moderate extent as a challenge that hinders such parental involvement. That was concluded because the mean of item (9)

is 3.08. It was found that the challenges related to understanding the language of educational games serve to a moderate extent as a challenge that hinders such parental involvement. That was concluded because the mean of item (7) is 3.19. It should be noted that four respondents only wrote five comments on their answers in the blanks of the third section of the questionnaire. One of them added to item (2) that all people today are skillful in using technologies because technologies are present in all places. In item (4), he wrote the following: (I limit the time my children spend using technology when playing educational games. In item (7), another respondent wrote the following: (Most educational games are in English. Thus, I can easily understand them. In item (5), another respondent added the following: (No matter how busy I am, I always dedicate time to involving myself in my children's educational activities)

5. Discussion

5.1. Discussion Related to the First Question

Q.1. What is the role of parental involvement in the learning experiences of children in Zarqa when playing educational games in improving the interaction of those children with others?

Based on Table 2, parental involvement in children's learning experiences in Zarqa when playing educational games plays a moderate role in improving the interaction of those children with others. This result is attributed to the fact that parents in Arab societies believe other factors significantly affect children's ability to interact with others. Such factors may include the parenting style and the environment at school or kindergarten. The result does not agree with the result reached by Oranga & Nyakundi (2023) and Naite (2021). For instance, Oranga & Nyakundi (2023) found that parental involvement in their children's teaching-learning process improves their social skills to a high extent. As for Naite (2021), he found that parents positively and significantly affect the development.

Based on Table 2, it was found that parental involvement in children's learning experiences contributes to a moderate extent to improving children's parent communication. The latter result indicates that children's parent communication is affected by other factors. Such factors include the way the parents treat children, the respect shown by parents for children, and the time dedicated by parents to children.

It was found that parental involvement in children's learning experiences contributes moderately to increasing children's curiosity and love for exploration. That may indicate that other factors affect children's curiosity and love for exploration more. Such factors include the trips that children go on with their parents. They also include asking the children critical questions. Such questions make children explore things and search for knowledge.

It was found that parental involvement in children's learning experiences contributes moderately to improving the children-parent interaction. That result may be attributed to the fact that children-parent interaction is affected more by the social skills of the parent. It was found that parental involvement in children's learning experiences contributes to a moderate extent to increasing the children's sense of responsibility and commitment. That result may be attributed to the fact that children's sense of responsibility and commitment are affected more by the parenting style and the beliefs of the parent.

It was found that parental involvement in children's learning experiences contributes to a moderate extent to improving their life skills, such as critical thinking and problem-solving skills. That was concluded because life skills can be developed through engaging children in real-life activities.

It was found that parental involvement in children's learning experiences contributes to a moderate extent to improving the children's language and communication skills. This result is attributed to the fact that children's language skills are affected by how much they engage in goal-

oriented language activities. Communication skills are affected more by the extent to which parents listen to the children and teach them how to be good listeners.

5.2. Discussion Related to the Second Question

Q.2. What are the challenges that hinder parental involvement in children's learning experiences when playing educational games?

Based on Table 3, the severity of the challenges hindering parental involvement in children's learning experiences when playing educational games is deemed moderate. That means that school administrations and those in the surrounding environment (e.g., private teachers) must assist parents in addressing such challenges. For instance, older siblings must improve the parents' skills in using technology. That shall enable parents to use technology effectively when teaching children.

It was found that the lack of financial resources serves to a moderate extent as a challenge that hinders parental involvement in children's learning experiences when playing educational games. This result may be attributed to the fact that the financial status of the chosen sample is moderate, but not an excellent financial status. It is not in agreement with the result reached by Moore (2016). According to Moore (2016), unemployment causes parents to suffer financial problems. Such problems shall make the parent face a major difficulty in involving himself/herself in children's activities (Moore, 2016)

It was found that facing difficulty in understanding the way of using technologies related to educational games serves to a moderate extent as a challenge that hinders parental involvement. This result may be attributed to the fact that most respondents aren't IT experts. Thus, it's normal to face difficulties in using technologies (e.g., a laptop or a smartphone)

It was found that social interaction-related problems serve to a moderate extent as a challenge that hinders such parental involvement. This result may be attributed to the fact that most of the sampled parents have good social skills but not excellent social skills. Thus, the sampled parents should receive training courses to develop their social interaction skills.

It was found that the parents' worries about the impact of the time spent by children on-screen on the well-being of those children serve to a moderate extent as a challenge that hinders such parental involvement. This result indicates that most of the sampled parents don't worry much about that. This may be attributed to the fact that most of the sampled parents dedicate a limited amount of time to their children's use of technology when playing educational games with them. Thus, having a limited amount of time for using technology shall not lead to many negative impacts of technology on children.

It was found that the lack of time serves to a moderate extent as a challenge that hinders such parental involvement. This result is not in agreement with the result of Moore (2016). The latter researcher found that if the parent works in a job that gives them/a full schedule, the parent shall face major difficulty in involving himself/herself in children's activities. The result of the present study may be attributed to the fact that the sampled parents are keen on dedicating adequate time for their children in their daily schedule.

It was found that the parents' technophobia serves to a moderate extent as a challenge that hinders such parental involvement. This result may be attributed to the fact that most of the sampled parents don't suffer from technophobia (i.e., an overwhelming fear of technology). The absence of this fear is attributed to the sampled parents' belief that the advantages of technologies surpass the disadvantages.

It was found that the challenges related to understanding the language of educational games serve to a moderate extent as a challenge hindering such parental involvement. The latter result isn't

consistent with Badrasawi et al.'s (2020) finding that language is the most serious challenge hindering parental involvement in children's activities. This may be attributed to the sampled parents speaking the same language as their children.

It was found that the parents' worries about the academic content of the educational games serve to a moderate extent as a challenge that hinders such parental involvement. This result may be attributed to the fact that the sampled parents know how to choose educational games with excellent academic content.

6. Conclusion

Parental involvement is one of the factors that affect the teaching-learning process of children, especially at an early age. It was found that parental involvement in children's learning experiences in Zarqa when playing educational games plays a moderate role in improving the interaction of those children with others. The result in this regard is not in agreement with the result reached by Oranga and Nyakundi (2023). The latter researchers added that the parental involvement in the teaching-learning process of their children shall improve the social skills of those children to a high extent

That means that parental involvement in learning experiences isn't the only factor affecting children's interactions with others. In other words, there are other significant factors affecting such interaction. Such factors may include the environment at kindergarten or school, the home environment, and the extent to which children are engaged in social activities.

It was found that the severity of the challenges hindering such involvement is considered moderate. That means that school administrations must provide parents with training courses on how to involve themselves in their children's activities.

It was found that such challenges include a lack of financial resources, difficulty in understanding how to use technologies, and social interaction-related challenges. They also include worries about the amount of time spent looking at screens, technophobia (fear of technology), and challenges related to language and understanding. They include: stress due to difficulty offering additional learning opportunities, and worries about the academic content. They include: facing a difficulty in enforcing control and supervision.

This study implies that it encourages parents to improve their ability to use technologies and become capable of involving themselves in their children's activities by using digital technologies. It encourages decision makers at the Ministry of Education to issue decisions that involve providing children with additional learning opportunities, and asking parents to be involved in such opportunities. That shall contribute to improving the quality of education in Jordan and strengthen the parent-child bonds in Jordan. Thus, it shall strengthen the social relationships in the Jordanian society

7. Suggestions

The researchers of the present study recommend promoting awareness among parents about the significance of parental involvement in improving children's learning experiences and conducting studies about the effectiveness of parental involvement in raising children's academic achievement and concentration levels.

Declarations

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