

The Effects of Electronic Games on Students' Academic Achievement in the United Arab Emirates from a Parental Perspective

Mastur H. Rehim¹, Khawlah M. AL-Tkhayneh^{2*}, Eman Ali Zaitoun³ & Ahmed Khaled⁴

Abstract

This study aims to examine the effects of electronic games on students' academic achievement. The study was conducted on a sample of parents in the city of Al Ain, United Arab Emirates. A questionnaire was used for data collection, with a sample of 76 parents randomly chosen, comprising 64 females (84.2%) and 12 males (15.8%). The study findings revealed that most students who preferred adventure games used electronic games on weekends for entertainment. However, excessive usage of these games had a negative impact on their academic achievement. Games tend to consume students' time, which in turn, affects their achievement. Based on the study results, the researchers recommended raising awareness among families regarding the risks of electronic games for children and their effects on their academic achievement through workshops, lectures, and seminars. Further research studies should be conducted to highlight the effects of electronic games on students' academic achievement from the perspectives of students themselves and their teachers.

Keywords: *Academic achievement, Al Ain City, electronic games, parents, students, United Arab Emirates.*

Introduction

In the twentieth century, the world witnessed significant development in information and communication technology. This emergence of newly spread communication and information phenomena in modern societies left significant impacts, not only on individuals but also on children, who are an important and sensitive group of society (Mashri, 2016). As a result of the widespread adoption of technology, many social norms and concepts radically changed the lives of people who involuntarily accepted such changes. Among those who were subjected to this technology's impact were children, who are the most affected, either positively or negatively. For children, technology has become an integral part of their daily activities, as it saves people's time and energy. The 21st-century children have enjoyed a new way of life that was not accessible to

¹Assoc. Prof. College of Education, Humanities and Social Sciences, Al Ain University, UAE, Mastur.rehim@aaau.ac.ae

²Assoc. Prof. College of Education, Humanities and Social Sciences, Al Ain University, UAE, Khawlah.altkayneh@aaau.ac.ae

³Assist. Prof. College of Education, Humanities and Social Sciences, Al Ain University, UAE, Eman.zaitoun@aaau.ac.ae

⁴Assist. Prof. College of Education, Humanities and Social Sciences, Al Ain University, UAE, Ahmed.Khaled@aaau.ac.ae

earlier generations (Hammal, 2018). Electronic games are considered a widely spread reality and one of the most popular activities for people of all ages and genders. However, the increasing number of hours children (both males and females) spend playing these games raises questions among educators and psychologists about their positive and negative effects (Abbas, 2018). Children are incredibly attracted to these games without considering the risks to their health, behavior, or intellect. This is not limited to a certain age group, but adolescents and young people are also affected (Al-Madhoon, 2019). Therefore, the purpose of this study is to examine the effects of electronic games on students' academic achievement, which leads to the research problem.

The Research Problem

During observations and while teaching undergraduate and graduate students, the researchers learned that some of their students have a limited understanding of the effects of electronic games on students' academic achievement. While searching previous research studies and related literature, the researchers found that there are many writings about the effects of electronic games on students' academic achievement. Therefore, the researchers aimed to provide a brief study on this topic.

In the United Arab Emirates (UAE), the Global School-Based Student Health Survey (GSHS, 2015) showed that 56% of school students aged 13-15 years old spend three hours or more per day playing electronic games or watching TV. This percentage increased to around 63% among 16 to 17-year-old students. Research has shown that children who overuse these games suffer from social, emotional, and behavioral issues, such as social isolation, social phobia, anxiety, and depression, in addition to poor academic performance in school. Several studies have demonstrated that children and adolescents use websites and electronic games for several reasons, the most important of which is the lack of adequate family control. These games may become a trap or a deception that could harm their users, as many games are not suitable for children's ages, but they are attracted to such games by publicity and friends. Therefore, in addition to the amount of socialization they receive through this corrupt use, they may also be distracted from their studies and homework, which is more important and should be taken care of (Bayoumi, 2019). As a result, this study attempts to answer the following questions:

The Study Questions

1. What are the effects of electronic games on students' academic achievement from the perspectives of parents in the UAE?
2. What are some of the main reasons and benefits for children to play electronic games?

Responses to the study questions would support examining the effects of electronic games on students' academic achievement and may resolve some problems caused by the excessive use of electronic games by schoolchildren in the UAE. It may also reveal other issues related to the length of time spent on electronic games, which can give special significance to this study.

Study Significance

The significance of this study lies in its focus on the effects of electronic games on students' academic achievement. This phenomenon has become widespread due to the rapid development of technology and its extensive use by all members of UAE society, especially students. Electronic games feature great designs and state-of-the-art technologies, which have become attractive to students. This study can serve as a starting point for other studies, such as those investigating the social and psychological effects of electronic games on students. The theoretical research is also significant in terms of raising parents' awareness of the effects of electronic games. This study may increase awareness of the impact of electronic games on school achievement and draw attention to other issues related to their excessive use. Teachers, parents, educators, and stakeholders may benefit from the findings of this study, as well as from reviewing related literature and the responses of study participants.

The study limits

This study has several limitations that need to be considered. Firstly, the spatial limits of the study are limited to the United Arab Emirates. Secondly, the study only includes a sample of parents from the city of Al Ain in the UAE. Thirdly, the study's temporal limits are restricted to the first semester of the academic year 2021-2022. Finally, the study's objective is limited to examining the effects of electronic games on students' academic achievement. Despite these limitations, the study provides valuable insights into the impacts of electronic games on academic performance and contributes to the ongoing discussion on this topic.

Literature review

This section provides an analysis of previous research studies in chronological order. Al Shahri (2019) conducted a study on the effects of electronic games on primary school students' behavior and their relationship with social and academic status. The study found that electronic games had negative effects on students' academic achievement, as they were more likely to neglect their homework and prioritize playing games over studying. The study also found a statistically significant relationship between electronic games and poor academic performance. Wu, Tzeng, and Huang (2020) conducted a study that identified emotional well-being and increased interest as the primary benefits of learning through digital games (DGBL) compared to traditional e-learning methods.

Abbas (2018) examined the effects of electronic games on academic achievement among middle school students. According to the study results, students played electronic games for less than an hour daily on weekends because their parents prohibited them from playing during school and examination days. As a result, electronic games had no impact on their academic achievement. Furthermore, there was a statistically significant difference in academic achievement between male and female students, with male students performing better. This difference is attributed to parents' monitoring and supervision of male students' academic performance, in addition to their attention to the amount of time their children spend studying and playing games to ensure that academic achievement is not negatively affected.

Mikdad (2018) conducted a study on the effects of the game "PUBG" on the academic achievement of students in Sami Al Ilmi High School for Boys in Gaza. The study found that playing PUBG for short periods of time had a positive impact on students' academic performance. On the other hand, Al Sawalha et. al (2016) conducted a study that showed a statistically significant relationship between violent electronic games and aggressive behaviors among kindergarten children according to their parents' perspective. However, the study found no statistically significant differences in the relationship between violent games and the social behaviors of kindergarten children from the parents' perspective.

The gender was also a research interest for another researcher who studied the effect of electronic games on the academic achievement of Algerian students through smartphones. She conducted a field study on a sample of parents in the city of Oum El Bouaghi in Algeria. The findings of her study showed that most students used electronic games daily for entertainment purposes and

preferred adventure games. The excessive use of games through smartphones affected students' academic achievement (Mashri, 2016). In another study by Chang and Hwang (2017), the findings indicated that the educational game with the mission synchronization-based peer-assistance mechanism not only benefited the students in terms of promoting their learning achievements and attitudes but also improved their collaboration skills by encouraging them to help their peers actively during the gaming process.

Abu Odeh (2011) conducted a study in Ramallah and Al Bireh in Palestine to identify the impact of using electronic games on the academic achievement of fifth-grade students in science during the 2010/2011 academic year. The study results showed statistically significant differences ($\alpha \leq 0.05$) in students' achievement, which was attributed to the methods of teaching used by the experimental and control groups. The difference was in favor of the experimental group, which studied the unit using educational electronic games. The results did not show any statistically significant differences in achievement due to gender or the interaction between teaching methods and gender.

In summary, the previous studies discussed in this section focused on the effects of electronic games on students' academic achievement, behaviors, and social status. Descriptive, experimental, and survey methodologies were used to explain and describe this phenomenon. Similarly, this study aims to investigate the effects of electronic games on students' academic achievement and gender differences in these effects using a questionnaire to collect data from a sample of 76 parents. Based on the reviewed quantitative studies, the researchers chose a quantitative approach for this study.

Research Methodology

The study adopted the descriptive approach which employs social surveys to achieve the study objectives and examine the effects of electronic games on students' academic achievement. The descriptive methodology is a suitable method for studying a phenomenon as it occurs in reality and involves presenting a precise description and expressing the phenomenon quantitatively (Shahateh & Al Najjar, 2003).

Research Instrument

This study used a questionnaire for data collection that was prepared by the researcher. It consisted of 13 statements and included several themes such as demographic information and other themes related to the subject of the study. The questionnaire was designed electronically and distributed using a snowball sampling method through social media websites, friends, and family members. The collected questionnaires were then analyzed using the statistical methods of this research, and the findings were compared in light of the study's purpose and questions upon receiving the responses from the study sample.

The validity and reliability of the study instrument

The content validity of the study instrument was verified by applying it to a pilot sample consisting of 30 parents. The paragraph correlation coefficients ranged from 0.65 to 0.87 with the total degree of the instrument. The results showed that the Pearson correlation coefficient between the items' scores and the total score for the axes was statistically significant at $\alpha \leq 0.05$. The instrument's reliability was verified using Cronbach's alpha. The test showed that the total Cronbach's alpha coefficient value for the study instrument was 0.866.

The study sample

The sample for this study consisted of 76 parents of school students from the city of Al Ain, comprising 64 females and 12 males. Data was collected using a questionnaire. Table 1 shows the demographic characteristics of the participants, including their gender, age, social status, and educational level.

Table 1

Frequency and percentage of the sample according to gender, age group, social status, and educational level

		Frequency	Percentage (%)
Gender	Male	64	84.2
	Female	12	15.8
Age Group	18 - 25	21	27.6
	26 - 35	18	23.7
	36 - 45	30	39.5
	45 &above	7	9.2
Social Status	Married	72	94.7

	Divorced	1	1.3
	Widowed	3	3.9
Educational Level	Primary school	4	5.3
	Middle school	1	1.3
	High school	24	31.6
	Graduate	43	56.6
	Post-graduate	4	5.3

Table (1) above shows that 84.2% of the participants were females, while males represented the lowest percentage at 15.8%. The majority of respondents fell within the age range of 36-45 years old, representing 39.5% of the sample. A small percentage of respondents (9.2%) were above the age of 45, indicating that the majority of respondents were young, while a small percentage were in the middle age. Furthermore, the table shows that the highest percentage of respondents were married (94.7%), with divorced (1.3%) and widowed (3.9%) participants representing a smaller proportion of the sample. Table (1) also indicates that the respondents with a university degree represented the highest percentage of the sample at 56.6%, while those with a middle school degree represented the lowest percentage at 1.3%. Respondents with high school degrees represented the second-highest proportion of the sample at 31.6%.

The findings of this study will be presented as shown in the questionnaire. First, it is important to note that school children played electronic games during the school week for a certain number of hours. Table (2) displays that 38.20% of parents reported their children played electronic games for 3-4 hours daily, while 18.40% reported their children played for 5+ hours daily, which is excessive. Additionally, 35.50% of parents reported that their children played electronic games for only 1-2 hours daily, and 7.90% of parents reported that their children played for less than 1 hour.

Table 2

The average number of hours that your children spend playing online each day

Responses	Frequency	Percentage (%)
Less than 1 hour	6	7.90%
1-2 hours	27	35.50%
3-4 hours	29	38.20%
5+ hours	14	18.40%
Total	76	100%

On the other hand, Table (3) shows the parents' responses to questions related to their children playing electronic games every day of the week. As shown, most parents reported that their children don't play electronic games every day of the week (52.6%), while the percentage of children who played every day reached 47.4%, which is still high. These results can be attributed to some form of control imposed by parents on their children during school days. They prevent them from playing during school days and examination periods for fear of their children's academic performance deteriorating if they play for long periods and neglect their homework. However, parents allow their children to play on vacations and weekends. This is better illustrated in Table (4).

Table 3

Does your child play electronic games all days of the week?

Responses	Frequency	Percentage (%)
Yes	36	47.40%
No	40	52.60%
Total	76	100%

Table (4) below shows parents' responses to the questions concerning allowing their children to play electronic games on the weekends. It is shown that most parents (84.2%) allow their children to play electronic games on the weekends as a form of reward for studying most of the week and to maintain their academic achievement while avoiding any negligence of their schoolwork and homework. It is also evident that the percentage of children who do not play during the weekends is relatively low, representing 15.8% of the sample. This could be explained by the fact that the same children played games every day of the week. Furthermore, 84% of the parents reported a difference between boys and girls playing electronic games, while 16% did not report any difference.

Table 4

Do children play more during the weekends?

Responses	Frequency	Percentage (%)
Yes	64	84.20%
No	12	15.80%
Total	76	100%

Table (5) below shows that 86.8% of parents reported that their children use electronic games for entertainment, while a low percentage of parents (3.9%) and (9.2%) respectively reported that their children use electronic games to develop talents and to fill their free time. Parents also reported that their children are attracted to electronic games because of the thrill of winning, game designs and music, colors and image quality, and game characters, as shown in Table (6) that follows.

Table 5

Why does your child use electronic games?

Responses	Frequency	Percentage (%)
Entertainment	66	86.8
Developing talents	3	3.9
Filling free time	7	9.2
Total	76	100%

Table 6

What attracts your child to electronic games?

Responses	Frequency	Percentage (%)
Thrill of winning	45	71.1
Designs and music	3	3.9
Colors and image quality	3	3.9
Game characters	16	21.1
Total	76	100%

Parents also reported that their children experience different emotions when playing electronic games. For instance, 56.6% of parents reported that their children felt excited and happy while playing, while 44.4% reported their children felt happy and satisfied. These games make children feel content and happy because they are a source of entertainment. Furthermore, owning a device and receiving attention from parents can contribute to their happiness. However, some parents mentioned that they do not pay attention to their children's emotions while playing, possibly because they are preoccupied with other activities or unaware of the dangers of these games. Additionally, parents reported that they had instructed their children to stop playing electronic games, but they noted that their children's physical abilities were affected, as shown in Table (7).

Table 7*How does your child feel when he/ she stop playing electronic games?*

Responses	Frequency	Percentage (%)
Physically tired	12	15.8
Poor vision	3	3.9
Anxiety and tension	10	13.2
Back pain	0	0
Emotionally comfort	3	3.9
Normal feeling	39	51.3
I didn't pay attention	9	11.8
Total	76	100

Table (7) above shows what parents reported physical changes their children exhibited as a result of playing electronic games. The highest percentage of parents 51.3% showed that their children appear normal, while some parents mentioned that their children showed fatigue 15.8% and other parents did not pay attention to this issue 11.8%. A small percentage of parents 3.9% mentioned that their children exhibited poor vision as a result of playing attributed to the risks of playing electronic games. As a result, about 52.6% of parents reported that they tried to prohibit their children from playing electronic games to maintain their health and prevent them from being distracted from their education, while a small percentage of 9.2% answered "No" to the question. About 46.1% of the parents identified PlayStation as the electronic tool their children used to play, representing the highest percentage, while 31.6% of children played electronic games on the iPad. The iPad is also considered one of the most popular tools that facilitate children's access to games with less time and effort. On the other hand, a low percentage of children play electronic games using the laptop, because there are several other technologies that allow playing games easily, while it is more difficult to play using a laptop (see Table 8).

Table 8*What tool or device does your child prefer to play with?*

Responses	Frequency	Percentage (%)
Laptop	1	1.3
iPad	24	31.6
Smart Phone	16	21.1
PlayStation	35	46.1
Total	76	100

Concerning the types of games children preferred to play as reported by their parents, 69.7% of them play adventure games. This is attributed to the popularity of these games, such as Subway Service and others. Children are very attracted to these games because they create an atmosphere of adventure in a virtual world and offer the excitement of exploring new things. In addition, these games are highly developed with very realistic visual and audio effects. 19.7% of parents responded with “Conflict and violence” (Table 9).

Parents also reported that their children played different games. The game Fortnite placed first at 36.8% due to its popularity among children and its connection to the Internet, which allows sharing the game with other players online. A low percentage mentioned Red Dead Redemption, which can be explained by its unpopularity, difficulty, and complication.

Table 9

What types of games does your child prefer from your point of view?

Responses	Frequency	Percentage (%)
Adventure	53	69.7
Violence and conflicts	15	19.7
Mysteries	4	5.3
Educational	4	5.3
Total	76	100

Furthermore, Table (10) shows that some parents 44.7% reported that their children did not learn anything useful from electronic games. About 23.7% of parents reported that their children learned to control Internet technologies since an Internet connection is available to children and they acquired certain knowledge about online searching and controlling online technologies, in addition to learning how to use applications without assistance. This also could develop children’s mental abilities and provides them with a lot of entertaining information. A small percentage of parents answered that their children learned new information from playing electronic games.

Table 10*What did your child learn from electronic games?*

Responses	Frequency	Percentage (%)
Controlling Internet technologies	18	23.7
Linguistic enrichment	7	9.2
Learning new information	6	7.9
Learning foreign languages	11	14.5
Reinforcing academic performance	0	0
They don't learn anything	34	44.7
Total	76	100

Table (11) below shows that 53.9% of parents reported that they controlled the time their children spent playing electronic games, the highest percentage. This can be explained by parents supervising their children's playtime and allowing them a limited time to play so that they would not neglect their education or suffer from the health damage caused by the excessive use of technology. These games can create unsociable and introverted children, unlike traditional games that involve social interaction. Furthermore, children's excessive interaction with the digital world could isolate them from the real world, depriving them of the social skills required to make friends and interact with others, making them shy and unable to express themselves. Similarly, 35.5% of parents sometimes control playtime, while a small portion of parents do not control the time their children spend playing electronic games. These parents supervise their children and allow them to play electronic games for a limited amount of time because these games pose risks to their mental abilities and could become their children's only interest.

Table 11*Do you control the time your child spends playing electronic games?*

Responses	Frequency	Percentage (%)
Yes	41	53.9
No	8	10.5
Sometimes	27	35.5
Total	76	100

As shown in Table (11) below, some parents reported that there would be consequences due to playing electronic games for long periods of time. Findings indicated that 32.9% of parents

believed that electronic games lead to addiction to playing, due to lack of parental supervision and children's lack of awareness of the repercussions of these games. When children use electronic games excessively, 30.3% of parents claimed that they lose their ability to focus on their studies. This could be due to their lack of awareness of the negative effects of excessive playing. Children also tend to stay up late playing games, leading to them arriving late to school and being unable to pay attention to their teachers, ultimately affecting their comprehension abilities and causing them to fall asleep in classrooms. A low percentage of children (7.9%) reported that playing games prevented them from waking up early for school as well.

Table 12

What does play for a long-time lead to?

Responses	Frequency	Percentage (%)
Neglecting homework	13	17.1
Staying up late at night	9	11.8
Addiction to playing	25	32.9
Inability to focus when studying	23	30.3
Inability to wake up in the morning	6	7.9
Total	76	100

Some parents also reported the effects of extensive use of electronic games on their children's grades as shown in Table (13). About 46.1% of the parents pointed out that electronic games negatively influenced their children's academic achievement while a low percentage 23.7% believe that their children's academic achievement is not affected by playing electronic games.

Table 13

Do you feel that electronic games affected your child's grades?

Responses	Frequency	Percentage (%)
Yes	35	46.1
No	18	23.7
Sometimes	23	30.3
Total	76	100

Likewise, parents reported the reasons for the negative effects of playing electronic games, as shown in Table (14). It displays the causes of electronic games' effects. About 56.5% of parents

believe that the excessive playing of electronic games affects children's academic achievement. The electronic game environment does not just affect its users but also their social context. It has negative effects manifested in violence, social isolation, addiction, wasting time, headaches, and dizziness. Some parents believe that their children's academic achievement is affected by using electronic games due to domestic issues or circumstances.

Table 14

Do you believe that this effect is due to...?

Responses	Frequency	Percentage (%)
Excessive playing	43	56.6
Family issues and circumstances	1	1.3
Poor comprehension of lessons	26	34.2
Lack of parental supervision	6	7.9
Total	76	100

This study yielded both overall results and responses to the study questions by the sample population. The subsequent section will focus specifically on the study's findings.

Discussion and Conclusion

This study aimed to investigate the impact of electronic games on students' academic achievement as reported by their parents. The study sample was selected from parents residing in the city of Al Ain in the United Arab Emirates. The findings indicated that 80.3% of parents reported that their children played electronic games, with only 38.2% of parents stating that their children spent between 3 to 4 hours daily playing games. Moreover, 52.6% of parents reported that their children did not play electronic games every day of the week, which can be attributed to some level of parental control exercised during school days. Parents prevented their children from playing games during school days and exam periods for fear of the negative impact on their academic performance if they neglected their homework. However, parents allowed their children to play games during vacation periods.

In addition, the study results showed that 84.2% of parents allowed their children to play electronic games during the weekends as an incentive to encourage them to maintain good academic performance and to prevent them from neglecting their homework. The study also revealed that,

according to 44.7% of parents, most children did not gain anything of value from electronic games. However, electronic games could have a positive effect on academic performance if parents supervised the time and days when their children are allowed to play.

Furthermore, the study results showed that 53.9% of parents reported that they controlled their children's playing time, as a lack of parental supervision can lead to neglect of schoolwork. The study confirmed that children's excessive use of electronic games can negatively affect their academic achievement, according to 56.6% of parents. This partially answers the first question. Parents indicated that the electronic gaming environment not only affects its users but also their social context. They listed other negative effects of electronic games, such as violence, social isolation, addiction, and time-wasting, in addition to causing headaches and dizziness. About 52.6% of parents reported that they forbid their children from playing electronic games to maintain their health and prevent them from being distracted from their education.

In responding to the second research question, parents identified several motives for their children's acceptance of electronic games. First, 86.8% of parents revealed that most children use electronic games for entertainment purposes and to break their daily routines. About 71.1% of parents confirmed that children were attracted to electronic games by the thrill of winning. On the other hand, 56.6% of parents reported that children experienced excitement and vitality. Excitement and vitality were also confirmed by 47.4% of parents who argued that their children repeat the games continuously until they win because children naturally like to face challenges and overcome obstacles.

To prevent the risks of excessive usage and attachment to electronic games, 69.7% of parents encouraged their children to stop playing them, as children may not be aware of the associated risks. Another result indicated that children showed normal feelings when they stopped playing electronic games, as reported by 51.3% of the parents. The study found that the most commonly used technology equipment by children to play electronic games was play stations, as reported by 31.6% of the parents. From the parents' perspective, 69.7% of them indicated that their children preferred to play adventure games, as they create an atmosphere of adventure and challenge in a virtual world with state-of-the-art games that have realistic visual and audio effects. On the other hand, about 48.7% of the parents believed that their children prefer the game "Fortnite," which was introduced to them through friends. In addition, 35.5% of the study sample contended that their siblings were the ones who downloaded the electronic games.

Moreover, the study showed that most children do not imitate game characters as confirmed by the parents' point of view by 39.5%. This could be due to the fact that children are not attached to electronic games and their characters, but they only play for entertainment. The results also indicated that there is a significant interaction between children and game characters as reported by 66% of parents that their children imitate game characters in their gestures and behaviors. Each character has its own gestures and behaviors which are ingrained in the mind of the child. Last but not least, 36.8% of parents do not prevent their children from playing while eating their meals. Additionally, the study results indicated that 52.6% of the respondents contended that there is a significant difference between boys and girls in playing electronic games.

Significantly, 68.4% of parents indicated that playing electronic games did not have a negative influence on children. This answers part of the first research question. It is safe to conclude that electronic games influenced children's academic performance in a positive rather than negative way. Parents claimed that such games did not prevent their children from doing homework as parents gave their children smart devices to do their homework and sometimes play electronic games. The study also showed that children responded to their parents' orders to put down their electronic devices and do their homework according to 47.4% of respondents. Yet, about 32.9% of the respondents believed that using electronic games leads to addiction to playing them. This can be attributed to the lack of parental supervision and children's lack of awareness of the consequences of these games. Finally, 80.3% of the respondents criticized their children's teachers due to the negligence of their lessons or homework because teachers did not notify the parents regarding this matter. For further interpretations and a clear understanding of the current study results, a brief discussion of these study results in light of previous study results will be presented in the following section of discussion and conclusion.

According to the parents' perspective, 71.1% of electronic game users are attracted by the thrill of winning, which can be explained by children's nature and characteristics. They are influenced and engaged by the game's challenges and milestones to win and progress further. On the other hand, 21.1% of the children are attracted to the game heroes. Game heroes are an exciting and entertaining element of the game. They are seen as symbols of courage, power, excellence, challenge, and resistance. This motivates children to play the game to enjoy the thrill of winning, gain more courage and power, and build their desire to achieve their goals in life.

The current study suggests that children's excessive use of electronic games negatively affects their academic achievement. This finding is consistent with a previous study by Al Shahri (2019), which revealed a negative effect on children's academic achievement. They tended to neglect their homework and preferred to play games instead of completing their schoolwork.

This study's results also show that playing electronic games can be acceptable if children do not play them every day of the week. This result is attributed to some form of control enforced by the parents over their children during school days. Parents prevent their children from playing during school days and examination periods, fearing the deterioration of their children's academic performance if they play for long periods and neglect their homework. Hence, parents allow their children to play during vacations. This result is consistent with the study of Abbas (2018), which concludes that children play during weekends and are forbidden from playing during school and examination days. Therefore, playing does not affect their academic achievement.

Furthermore, the study results also indicate that most children use electronic games for entertainment purposes and to escape from their daily routines. They prefer adventure games because they create an atmosphere of adventure and challenge in a virtual world, as well as state-of-the-art games with realistic visual and audio effects. These results are consistent with the study of Mashri (2016), which concluded that most children use electronic games for entertainment purposes, and a majority of them prefer adventure games.

In conclusion, electronic games provide children with a new modern way of playing that offers learning opportunities, discovery, and adventure. They feature state-of-the-art technologies and have taken control of children's minds, leading them to addiction. In the past, playing was limited to traditional games played with friends in the streets, homes, or schools. But today, children have access to various technologies that allow them to play a new form of games known as electronic games, causing them to abandon traditional games. However, if played excessively, these electronic games can have negative effects on children's academic achievement.

Electronic games, played through modern devices such as PlayStation, are the most popular games among students. The vast majority of this study's respondents believed that electronic games were primarily used for entertainment. In summary, based on the results of this study, electronic games affect children's academic achievement. Electronic games have become the preferred

entertainment method for children; however, excessive usage leads to negative consequences due to a lack of parental supervision or lack of awareness of the damages of overusing them.

Recommendations

Based on the results of this study, the researchers recommend raising families' awareness of the risks of electronic games for children and their effects on academic achievement through workshops, lectures, and seminars. The researchers also suggest activating school programs to increase children's awareness of the negative effects of playing electronic games and their impact on academic achievement. Additionally, further research studies should be conducted to examine the effects of electronic games on students' academic achievement from the perspectives of both students and teachers. Future research may include studies on the effects of electronic games on children's behaviors and social status, as well as investigations of the relationship between electronic games and children's emotional health, with the review of additional references.

References

- Abbas, R. F. (2018). The Effects of Electronic Games on Academic Achievement of Middle School Students. *Journal of Educational and Psychological Sciences*, (59), p. 303. <http://search.shamaa.org/FullRecord?ID=248288>.
- Abu Odeh, S. (2011). *The Effects of Using Educational Electronic Games on the Academic Achievement of Fifth Grade Students at Ram Allah and Al Beereh Schools in Science*. Master thesis, Birzeitn University -Palestine, p. 1-12. <https://search.emarefa.net/ar/detail/BIM-302032-%D8%A3%D8%AB%D8%B1>.
- Al-Madhoon, A. (2019). *The Effects of PUBG on Academic Achievement*. Gaza, Retrieved April 25, 2023 from <https://www.new-educ.com>.
- Al Sawalha, A., Aloaymer, Y., Al olaimat, A. (2016). The Relationship between Tough Electronic Games and Violence and Social Behavior of Kindergarten Children. *Al Quds Open University Journal of Educational and Psychological Sciences*, 4 (16), p. 178. https://www.researchgate.net/publication/315498120_laqt_alalab_alalktrwnyt_alnyft_bal_slwk_aldwany_walslwk_alajtmay_ldy_atfal_alrwdt.
- Al Shahri, A. S. (2019). The Effects of Electronic Games on Elementary Students' Behavior and the relationship between their Social Status and Academic Achievement. *Journal of Educational and Psychological Sciences*, 3(13), p. 71. <https://search.emarefa.net/ar/detail/BIM-890133>.

- Bayoumi, A. (2019). *Electronic Games: Addiction Kidnap Children and Take Them Away from the Reality*. Emarat Al Youm, accessed on 3/1/2020.
<https://www.emaratalyoum.com/local-section/other/2019-06-23-1.1225924>.
- Chang, S. C., & Hwang, G. J. (2017). Development of an effective educational computer game based on a mission synchronization-based peer-assistance approach. *Interactive Learning Environments*, 25(5), p. 667-681. DOI: [10.1080/10494820.2016.1172241](https://doi.org/10.1080/10494820.2016.1172241).
- Hammal, F. (2018). *The Child and Electronic Games through Modern Media*. Dar Al Khalij Publishing and Distribution, Amman.
https://books.google.ae/books/about/%D8%A7%D9%84%D8%B7%D9%81%D9%84_%D9%88%D8%A7%D9%84%D8%A3%D9%84%D8%B9%D8%A7%D8%A8_%D8%A7%D9%84%D8%A7%D9%84%D9%83%D8%AA.html?id=IA1ADwAAQBAJ&redir_esc=y.
- Mashri, A. (2016). *The Effects of Electronic Games by Smart Phones on Algerian Student Academic Achievement*. A complimentary note for a master's degree in information and communication science - public communication and relations, Larbi Ben M'hidi University Oum El-Bouaghi, Algeria, 4.
<http://bib.univoeb.dz:8080/jspui/bitstream/123456789/4275/1/%D8%A3>.
- Mikdad, A. (2018). *The Effects of PUBG on High School Students Academic Achievement at Sami School in Gaza Strip*. <https://www.new-educ.com/%D8%A3%D8%>.
- Shahateh, H. & Al Najjar, Z. (2003). *Educational /Psychological Terminology Dictionary*. Al Dar Al Masriah Al Lubnaniah, Cairo.
<https://www.noorbook.com/%D9%83%D8%AA%D8%A7%D8%A8>.
- Wu, C. H., Tzeng, Y. L., & Huang, Y. M. (2020). Measuring performance in leaning process of digital game-based learning and static E-learning. *Educational Technology Research and Development*, 68(5), p. 2215-2237. <https://doi.org/10.1007/s11423-020-09765-6>.