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**Examining the Impact of Electronic Game Usage on
Kindergarten Children's Behavior in the Sharazur District:
Insights from Parental Perspectives**

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Abstract

This study explores the impact of electronic game use on kindergarten children in Sharazoor, focusing on gender differences as perceived by parents. Using a sample of 160 children from four kindergartens, the researchers employed a 32-item survey with three response options. Statistical analysis, including arithmetic mean and various coefficients, revealed a significant gender

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disparity in electronic game usage. The findings highlight a higher prevalence of electronic game addiction among boys (90%) compared to girls (75%). The study concludes with recommendations for gender-sensitive interventions to mitigate the negative effects of electronic game use on kindergarten children's behavior.

Abstrak

Penelitian ini mengeksplorasi dampak penggunaan game elektronik pada anak-anak taman kanak-kanak di Sharazoor, dengan fokus pada perbedaan gender seperti yang dirasakan oleh orang tua. Dengan menggunakan sampel 160 anak dari empat taman kanak-kanak, para peneliti menggunakan survei sebanyak 32 item dengan tiga pilihan respons. Analisis statistik, termasuk mean aritmatika dan berbagai koefisien, menunjukkan adanya disparitas gender yang signifikan dalam penggunaan game elektronik. Temuan ini menyoroti prevalensi kecanduan game elektronik yang lebih tinggi di kalangan anak laki-laki (90%) dibandingkan anak perempuan (75%). Studi ini diakhiri dengan rekomendasi intervensi sensitif gender untuk mengurangi dampak negatif penggunaan game elektronik terhadap perilaku anak TK.

***Keywords:** Electronic game usage, Kindergarten children, Behavior, Gender disparities, Parental perspectives*

Introduction

Electronic games have become a pervasive concern within many families, creating an environment that facilitates their usage without due consideration for health guidelines or the well-being of children. The substantial growth in communication technology has led to a significant portion of children's free time being occupied by electronic games, currently one of the most popular and competitively addictive pastimes. Children immerse themselves in these games, attempting to navigate levels and attain higher excitement, yet failures in these virtual endeavors often result in heightened aggression (Hiratan, 2002).

Parents and educators, perceiving increased violence as a consequence of game design, emphasize the negative impact of electronic games on children. Academic failure, marked by a decline in cognitive abilities, and social isolation are identified as notable repercussions. The immersive nature of electronic games leads to time distortion, causing children to lose track of hours and limiting their social interactions. Furthermore, physical complications, including weight gain, arise due to excessive electronic game use (Shaigh and Bahrami, 2002: p. 93).

Electronic games are one of the worst problems that many families have provided a favorable environment for the use of electronic games without regard to health guidelines and the condition of their children. And due to the significant growth of communication technology in recent years, it occupies a significant portion of children's free time. Electronic games are the most popular games of today, It is also considered one of the most important pastimes due to its competitive addiction and excitement (Al-Aydi et al., 2023).

The child tries to pass the levels and reach the higher levels of excitement, and failure makes children aggressive. One of the biggest problems with electronic games is that children are immersed in their environment and eventually harmed (Hiratan, 2002). Electronic games have a negative impact on children from the perspective of parents and educators who believe that increased violence in individuals is the most important thing in the design of games that are sometimes overused in electronic games.

Many factors also lead to academic failure, things that make the mind fail. One of the most obvious signs of electronic games is the delay of the individual in academia and education. Another negative effect is isolation due to applications: When children are busy with electronic games, their time is wasted and they do not realize that when they come to their senses, many hours have passed.

This causes them to limit their social contacts and isolate them. Weight gain is one of the physical complications caused by excessive use of electronic games among children and users (Shaigh and Bahrami, 2002: p. 93).

The examination of the impact of electronic game usage on kindergarten children's behavior in the Sharazur District has become an increasingly pertinent area of research, as the ubiquity of electronic devices continues to grow. Understanding how such technological exposure influences the behavior of young children is crucial for educators, parents, and policymakers. This literature review aims to synthesize existing knowledge on the subject by delving into research studies that investigate the relationship between electronic game usage and kindergarten children's behavior. Drawing insights from parental perspectives adds a valuable dimension to the analysis, considering that parents play a pivotal role in shaping children's early experiences with technology. The five references contributing to this literature review encompass seminal works such as Anderson and Dill's (2000) examination of video game effects on

children and adolescents, as well as recent studies like Kucirkova et al.'s (2019) exploration of parental attitudes towards digital technology in early childhood. Additionally, the review incorporates cross-cultural perspectives through research by Nikken and Schols (2015) on parental mediation of young children's media use, providing a comprehensive overview of the existing body of knowledge on the topic. Conducting any research will have its own importance at the individual and community levels. The importance of this study is an attempt to understand the causes of children's problems in using electronic games in families. Because children play an important role in building society, they must be guided correctly, because the future of society depends on them.

This study, like any other, is important in two aspects: the theoretical aspect, which adds some information about the subject to the research that has been requested in the past. This study also provides an understanding of the causes and problems of children among families in how they use electronic games that affect children's future. In the field, the importance of this research for educational institutions, families, kindergarten teachers and schools, to become more familiar with the situation of children and present the problems of children addicted to electronic games and raise awareness among children's authorities.

This research object is to identify the negative effects of electronic games on children's personalities from the perspective of parents and determine the gender ratio (boys and girls) in the use of electronic games and their effect on children's behavior.

Electronic games: Since 1983, they have become popular, especially in Europe. These games have been released digitally since the 2000s. These games are available for free or as a commercial product and usually come from a CD or DVD and work with an internet connection.

(Ammar, Mohammed, Fathil, 2015, 106). Electronic games: Games that are available electronically and include computer games, mobile phones and handheld devices, online video games and Internet games. (2004 ,121 Zimmerman, & Salen). Electronic games: All games that are electronic, including computer games, the Internet, PlayStation, mobile games and handheld devices. (Al-Hadlq, 2013, p. 2). Can be concluded that the games that appear through the screen of mobile phones, tablets, computers and televisions and leave a positive or negative effect on their minds and bodies.

Behavior is the response of organisms to an external stimulus, in other words, a reactionary behavior to an external action (Qarachetani, 2007: p. 128). Behavior is all human activities that can be observed by others or the results of what the researcher obtains by special methods and tools (Ezaddin, 2011, p. 26). Behavior is an action that is attached to habit (Sheikh Mohammed, 1960-1976, p. 31). Can be concluded that behavior is the movements and activities that people perform for a specific purpose and goal at an appropriate time.

Child is a stage of life that begins at birth and ends at adulthood (Al-Rimawi, 2010, p. 46). Children is the creature from the beginning that has morality, can distinguish between good and evil. Children are naturally good at birth and can learn better if they are given the opportunity to develop freely and according to their natural needs (Awaz, 2012, p. 15). Can be concluded that children is the creation of God that comes into the world in purity and simplicity, influences the environment and people around him, takes actions and behaviors from them.

Electronic games are known to be a leisure activity that appeared in the late 1960s. Or a brain activity basically includes: private video games, computer games, mobile games and generally all electronic games that are information programs. This activity is trained in a way that is different from the way other activities are trained (Al-Esami, 2023). According to psychologists and sociologists, game and games, which are deeply connected to children's lives, leave a profound impact on their morale and personality development and make children more familiar with the patterns and forms of society. Many preschool children's interpersonal interactions occur in the context of play, and children's relationships with parents, siblings, and peers change significantly during the preschool period. "The game phenomenon has taken various shapes in terms of structure, content and function (effect) at different times and places according to reasons, contexts and circumstances (Güneş, 2018, p. 80). Children are drawn to electronic games and television in such a way that they are no longer unfamiliar. Other games: The proliferation of computers, video games and television in recent years has made its role in children's lives more obvious. These are fun games and programs for the new generation. The modern games that children have started are better than the traditional games that they are always used to and impose on themselves.

As a result of the multiplicity and diversity of electronic games, different effects on children's behavior have been demonstrated. Experts from a variety of quarters have contributed to calling for research into this phenomenon to determine the different behavioral, health, and social effects on children.

For example, weaknesses in making decisions on control and censorship of shops selling electronic games (Al-Issami, 2023, 623). Researchers believe that the lack of family supervision to know what their children watch in games and the lack of parental awareness about the dangers of electronic games is an urgent need to know the behavior, health and social impact of electronic games on children, is considered an important duty of the family and educational and social institutions.

Dr. Leila Mohammadi, a clinical psychologist, explains why children are addicted to these games. The first part of the causes of addiction relates to the psychological characteristics and life circumstances of children. These factors include; Dependence patterns in children that lead to excessive reliance on others and technology, Depressed and isolated children who are tired of communicating in the real world, Children with low self-confidence whose parents reprimand them a lot, involve them in their own problems, and are emotionally neglected in some way, Children who use escape to cope and solve their problems, Sometimes parents themselves encourage their children to watch different programs and games because of conflict with their personal issues and to get rid of child rearing problems (Bkar, 2019, p. 39).

The negative effects of electronic games on children's mental health are the psychological damage discussed in this chapter.

1. Dependency

Attractiveness of computer games, lack of parental supervision, experiencing exciting moments, loneliness and uncontrollability of extremes in computer games.

Although some children may avoid play in the early stages of games, especially in violent modes, due to fear and stress; But over time they get used to it and rely on it (Masood, 2012, p. 12). Most of the children addicted to the game play without paying attention to the passage of time and neglecting their natural needs (hunger, thirst, sleep), and only stop when they are physically and mentally tired (Masood, 2012: p. 14).

2. Isolation

The use of electronic games increases children's feelings of loneliness and reduces interaction with family because they lose the experience of virtual emotions in real relationships with their surroundings, causing the child to withdraw from groups. Therefore, it can be argued that “e-games reduce the rate of volunteerism and blur the values based on cooperation” (Jamaal, 2006, p. 71).

3. Stress and anxiety

The child experiences physical tension and excitement during play.” By stimulating the sympathetic nervous system, this can gradually sensitize and prepare this system to react to constraining stimuli. It can also cause anxiety symptoms in the person and increase symptoms such as nervousness, feelings of pressure and tremors in the limbs and sudden panic, feelings of panic and anxiety, eating disorders (Sherzad, 2013, p. 23).

4. Violence

The element of violence is one of the most important factors in the appeal of computer games, especially when playing violent fighting games, etc. which is very harmful to children's behavior and reactions; Because according to ecological theory: “The display of aggressive behavior in electronic games leads to the recognition of aggression and is an important factor in the occurrence of violence in children (Güneş, 2018, p. 81).

Al-Aidi, (2023) Mothers' attitudes towards their children's use of electronic games and their effects on them. The aim of the study was to determine the impact of the rate of pursuit and use of electronic games on children aged (6- 15) years from the mothers' point of view to find some negative and positive aspects. This study used a descriptive method and relied on the use of a survey form that contains 17 questions to discuss the impact of the use of electronic games on children in Damascus. The researcher had finally reached the following conclusions:

While females use mobile phones more than males and do not tend to use PlayStation. While neither gender uses the Xbox, males are also the most likely to sit on various electronic devices and prefer to use adventure and action games and then educational games. Therefore, they are more likely to be negatively affected by violence and delay their academic achievement than females. However, females prefer adventure games, educational games and then understanding and are constantly sitting on various devices as men. Therefore, the transaction rate is less violent and there is less delay in academic achievement.

Males prefer to use scary games than females and the results indicate that negative gaming negatively affects children in treating others in a violent manner and the child's academic achievement is delayed.

Sakamoto et al have been studied the Effects of video games on aggressive behavior and social behavior in children. The aim of the study was to determine the effects of video games on children's aggressive behavior and social behavior. The researcher distributed two survey forms to the children in the study sample, one of which measured the amount of video game use and certain types of video game scenes (Sakamoto, et al., 2016).

Their other survey measured children's levels of aggressive behavior and prosocial behavior. The results of the study were that: Boys in the study are less social and more failed in social relationships than girls. This is because boys are more likely to be directly affected by video games and video scenes. They also had more aggressive behavior because they were exposed to multiple scenes of violence in some video scenes. The arithmetic mean and value (t.test) is extracted for the number of days per week participants use video games during a month along with the number of hours spent per day.

At the end of the study, boys used their video games more than four days a week, and girls used their video games more than two days a week. Boys also spend more than an hour a day playing video games, while girls spend less than an hour playing video games. Therefore, boys use their video games significantly more than girls (Ihori , 2003, Pp.221-230).

Al-Sayed (2021) studied Effects of playing electronic games on human memory among primary school children), conducted in Egypt at Mansouria University, College of Education), is a descriptive analytical study. The aim of this study was to investigate the effects of playing electronic games on human memory in primary school children. The sample consisted of 124 boys and girls in the fourth and sixth grades of primary school.

The study was conducted on children's memory and began to extract the arithmetic mean scores and consistency and "F" value at the level of evidence (0.01) for the types of electronic games and their effects on students' memory. "Tukey" test was also used for comparison between male and female students in fourth and sixth grades.

The outcome of the study was to compare the gender of the user of electronic games, which also found significant differences between the time spent playing electronic games and their effect on the memory of its users. That was in favor of the boys. This means that boys in the study community spend more time playing electronic games than girls (Al-Sayed: 2021). The significance of this study lies in its exploration of the specific context of the Sharazoor district and its insightful investigation into the gender disparities associated with electronic game usage among kindergarten children. By focusing on parental perspectives, the research not only adds nuance to our understanding of the impact of electronic games on behavior but also recognizes the socio-cultural influences that shape these dynamics. The identified discrepancy in electronic game engagement between boys and girls, with a higher prevalence among boys, emphasizes the need for targeted interventions and raises questions about potential gender-specific factors contributing to this trend. As electronic game use becomes increasingly prevalent in early childhood, the findings of this study hold crucial implications for educators, parents, and policymakers seeking effective strategies to address and mitigate the potential negative consequences. The recommendations provided in the conclusion offer practical insights for developing interventions that are sensitive to gender differences, thereby contributing to the development of tailored approaches for fostering healthy electronic game habits among kindergarten children in the Sharazoor district and potentially informing broader educational practices.

Methods

According to the nature of the research topic and the objectives of the descriptive analytical method used to conduct the research:

The study population: consisted of parents of kindergarten children in Sharazoor district, which consists of four public kindergartens (for the academic year (2022-2023), which were randomly selected by the researchers. The choice to conduct this research in the Sharazoor district is motivated by the need for context-specific insights into the impact of electronic game usage on kindergarten children, considering the potential influence of cultural and regional factors on behavior. By focusing on this specific district, the study aims to provide nuanced findings that can inform targeted interventions and policies tailored to the unique socio-cultural landscape of Sharazoor, enhancing the relevance and effectiveness of recommendations for local communities.

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Sample of the study: Due to the large number of children in the study community, which consisted of (634) boys and girls. According to the kindergarten registry and the general registry of the Sharazoor Education Directorate. They were divided into different groups by the kindergarten manager in a random manner. The researchers selected several children from each group according to a simple random method, with an average of 160 children. As an example of the research experience and Table (3-1) explains their details:

Table 1. Number of parents of the sample children

Names of k.gartens	Number of children in the study sample				sum
	Parents of boys	%	Parents of girls	%	
mastan	20	%25	20	%25	40
Chro	20	%25	20	%25	40
sara	20	%25	20	%25	40
papula	20	%25	20	%25	40
sum	80		80		160

In order to achieve a balance among the children in our study sample regarding variables that may have positive or negative effects on the results of the study, controls were initiated as follows:

- In order to determine the level of use of electronic games by kindergarten children for our research example.

The researchers made the following hypothesis:

There is no statistically documented difference at the level of (0.05) between the kindergarten children in our study sample. On the use of electronic games. To prove the hypothesis, a measure of electronic games and their negative role on kindergarten children's behavior was applied to our study sample. On 10/12/2022, the arithmetic mean, the discriminant value, the calculated T value for the data were found using the t.test for two independent samples, as follows It is explained in Table 3-2

Table 2. Calculated arithmetic mean, distinguish and t values for electronic games and their negative role on kindergarten children from the perspective of parents.

group	no	The Accounting Center	distinguish	T value		Number of Freedom	Statistical evidence (0.05at the level of)
				countred	Tabular value		
mastan	40	39.7	4,18	0,18	2000	158	Null
chro	40	39.1	1,85				
sara	40	38,9	3,35				
papula	40	39,3	2,76				

As can be seen from Table 2, the calculated value of t is equal to 0.18, which is lower than the table value which is equal to 2000 According to the number of freedom (158) at the level of evidence (0.05).

Therefore, there is no difference between children using electronic games in our study community. In the kindergartens of Sharazoor district from the perspective of parents in terms of this variable and to further ensure that there were no differences between the scores of the children in the study group according to the gender variable (boys and girls). As for this variable, the arithmetic mean value, difference and calculated (T) value have been extracted, through the use of (t.test) for their scores, as explained in Table (3-3):

Table 3.

Example Of The Study	Gender	Number	Accounting Center	Distinguishing	T Value		Number Of Freedom	Statistical Evidence At The Level Of)(0.05
					Counted	Tabular Value		
Mastan	Boy	20	126	48	1.445	2.048	78	Null
Chro	Boy	20	122	43				
Sara	Boy	20	128.5	44.13				
Papula	Boy	20	124.35	50.23				
Mastan	Girl	20	125.43	47.45	1.460	2.048	78	Nul
Chro	Girl	20	125.87	46.5				
Sara	Girl	20	121.5	44				
Papula	Girl	20	123.59	46.2				

The arithmetic mean, discrimination and calculated and tabulated t values for the variable (electronic games and their negative role on kindergarten children) were found among the study samples according to gender variables. As shown in Table 3, the value of t for the boys' scores in all four groups is equal to 1.445. For girls, the score of both groups is equal to (1.460) and both are lower than the table value which is equal to (2.048).

According to the number of freedom (78) and at the level of evidence (0.05), there is little statistical difference between the children in our study sample in terms of the use of electronic games according to the gender variable. And so we can say that students in all four examples use electronic games.

Preparation of a measure on electronic games and their negative role on the behavior of kindergarten children. To develop a scale to measure the negative effects of electronic games on kindergarten children. Researcher After searching the literature in this field from various sources, a special criterion prepared for this purpose by researchers (Asuda Soran Hama Amin, Shima Hama Hama Ali) in the College of Basic Education, Sulaimani University in the academic year (2018-2019). We chose it for our research experiment because of the appropriateness of the measure for the purpose of our research in this area.

Consists of preparing a survey form to determine the level of electronic games and their negative role on the behavior of kindergarten children from the perspective of parents.

The scale consists of 32 items, including all negative items. The scale has three answer options, including: (Yes, sometimes, no) and the marks allocated to the items are (3,2,1). Despite the fact that the criterion passed the scientific methods by the researchers, however, for more certainty, the researchers extracted the psychometric measures of the scale as follows:

Accuracy of the measurement The integrity of the measurement was brought about as follows:

1. Apparent honesty (الصدق الظاهري): Our survey form was distributed to a number of experts in the fields of education, psychology, measurement, evaluation and Kurdish linguistics. In order to obtain their opinions on the linguistic and scientific provisions of the measurement. All items of the scale were approved by the experts, except for the correction of items number (6, 8, 12, 17, 19, 23, 27, 32) in terms of structure and linguistics according to their comments.

2. Correctness of internal adjustment: In order to determine the validity of the internal fit of the scale, ie to find the relationship between each item of the scale and the overall score, Practice was conducted on a sample of parents of kindergarten children of Sharazoor Education Directorate.

They were a small sample of kindergartens in our study community. For each kindergarten, we identified 25 parents as our research sample. In other words, we received an average of 100 parents for all four kindergartens on two different dates within a week. On (26/ 11/ 2022) and (29/ 11/ 2022) the researchers distributed the forms to the parents. Then, the correlation coefficient between each item and the total score of the scale was found using the person coefficient as shown in Tables 4.

Table 4. The value of the correlation coefficient between each item of the scale and the overall score of the scale

Number of paragraphs	Communication Co-Column	Level of statistical evidence	Number of paragraphs	Communication Co-Column	Level of statistical evidence	Number of paragraphs	Communication Co-Column	Level of statistical evidence
1	0,183	0.05	12	0,713	0.01	23	0,793	0.01
2	0,223	0.01	13	0,149	0.05	24	0,216	0.01
3	0,181	0.05	14	0,214	0.01	25	0,254	0.01
4	0,558	0.01	15	0,183	0.05	26	0,174	0.05
5	0,354	0.01	16	0,204	0.01	27	0,184	0.05
6	0,167	0.05	17	0,163	0.05	28	0,157	0.05
7	0,159	0.05	18	0,456	0.01	29	0,166	0.05
8	0,737	0.01	19	0,780	0.01	30	0,191	0.05
9	0,159	0.05	20	0,352	0.01	31	0,153	0.05
10	0,162	0.05	21	0,456	0.01	32	0,198	0.01
11	0,256	0.01	22	0,202	0.01			

The tabular value for the correlation coefficient at the level of evidence (0.05) is equal to (0.148).

The tabular value for the correlation coefficient at the level of evidence (0.01) is equal to (0.194).

Table (3-5) shows that (15) items of the scale are documented at the level of (0.05).

and (17) items at the level of (0.01), thus proving the internal consistency of the scale.

In order to ensure the stability of the measure, the researchers after applying the measure to the initial sample consisting of (100) breeders (fathers), and analyze the data by giving scores (1,2,3) to the answers to the items, extracting the correlation coefficient of the scale by the method of semi-distribution. In other words, between the responses to even and single items, using Jetman's coefficient for semi-

distribution, the coefficient of correlation was 0.64. The value was then corrected using the Spearman Brown coefficient. As a result, the correlation value reached (0.78) and this is a reasonable result to achieve the stability of the measure.

The following statistical equations were used to analyze the data:

1. Cooper Statistical Coefficient

In order to determine the satisfaction rate of experts, the research tools were used:

$$\text{Satisfaction Rate} = \frac{\text{Number of consents}}{\text{number of dissatisfactions} + \text{number of dissatisfactions}} \times 100$$

(Cooper,1974:27).

Statistical correlation (t-test) for two related examples is used in order to find the results of the research hypotheses.

$$t = \frac{\text{مجم (س-ص)}}{\frac{\text{ع (الفرق)}}{\sqrt{\text{ن (س-ص)}}}}$$

مجم (س - ص) = Arithmetic mean for the difference between two variables

ع = Statistical deviation for the difference between two variables

ن = the number of individuals in the sample

(Albayati and Appanasios, 1977, p. 263)

2. T-test statistical correlation for two independent samples

It was used to control for variables between children in both study groups and to extract the study results.

$$t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\left(\frac{1}{n_1} + \frac{1}{n_2}\right) \times \frac{s_1^2 (n_1 - 1) + s_2^2 (n_2 - 1)}{n_1 + n_2 - 2}}}$$

(س₁): The arithmetic center of the first example

(س₂): The arithmetic center of the second example

(ن₁): Number of individuals of the first example

(ن₂): Number of individuals of the first example

(ع₁): The distinction of the first example

(ع₂): Discrimination of the second example

(Al-Bayati and Apnadius, 1977: p. 260)

3. Jetman statistical equation for half distribution

In order to determine the stability of the intelligence criterion of error, the following was used:

$$\left(\frac{R_{xx} = 2 \frac{S_1 S_2}{S_{2x}} \right)$$

R_{xx} = Level of correlation and differentiation of clauses

S_1 = The vicarious item score value of individual questions.

S_2 = Vice-score value of the paired items of the questions.

S_{2x} = Vice value of the overall score of the questions

4. Spearman Brown statistical correlation

To correct the value of the person correlation coefficient

$$R_x = \frac{2r}{1r}$$

R_x = Level of correlation and differentiation of clauses

$2r$ = Jetman result for differentiation of clauses.

$1r$ = Same result as Jetman differentiating clauses

(Hassan, 2005: p. 22)

Result and Discussion

The outcome of this objective was to “know the impact of the use of electronic games and their negative role on kindergarten children, by testing the hypotheses” as follows: The result of the first hypothesis: "There is no statistically significant difference at the level of (0.05) between the mean scores of the study sample for the level of the electronic games scale and their negative role on kindergarten children's behavior.

To prove the truth of this hypothesis, the arithmetic mean and statistical deviation, and the value (T) for the scores of the study sample by using the test (t-test) for the two related groups, As explained in Table 5:

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Table 5.

Sample of the study	number	Accounting Center		Center of Difference Count	deviation Statistics difference	T value		Free number	Level of statistical evidence
		Boys	Girls			accounted	tabular		
Children of kindergartens	160	126.9	123.2	8.56	7.46	8.75	2.31	158	Documented at the (0.05) level

The results of the t-test for the difference between the scores of the study sample for the level of use of electronic games and their negative role on the behavior of kindergarten children.

As shown in Table 5., the calculated T value is equal to 8.75, the tabular value at the level of evidence is 0.05, and the free score 158 is equal to: (2.031). And because the calculated T value is larger than the table value, the children in our study sample use electronic games and have a negative impact on their behavior.

To determine the extent of the impact of the use of electronic games and their negative role on the behavior of kindergarten children, which includes a variety of electronic games through devices such as (mobile phones, tablets, computers, PlayStation, television). As it was established and used in a specific scale, it was then distributed through a survey form to parents of children aged between (4 years and above to about 6 years).

In other words: the children of the kindergartens belonging to the Sharazoor Education Directorate ,The data were then extracted and solved using Eq) .(Eta Squared 2η) for the effect size and the results are as shown in Table 6.

Table 6. The magnitude of the effect of electronic game use and their negative role on kindergarten children's behavior

symbol	Free number	Accounted T value	Value: Eta Squared 2η	Effect value of D	value of Measurement	Effect volume
Used Criteria	158	3.08	0.165	0.784	0.14	huge

As shown in Table 8, the calculated Eta Squared value is equal to 0.165 and the effect size value (d) is equal to 0.784, which is greater

than the criterion value of 0.14 according to Cohen's interpretation of size Effect.

Thus, we can conclude that the magnitude of the effect of the use of electronic games and their negative role on the behavior of kindergarten children is large. This result is similar to the results of the studies of (Al-Aedi: 2023), ((Al-Sayed: 2021), (Sakamoto, Shibuya, Yukawa, 2016), in which electronic games affect the study sample.

The results of this objective were: Which gender of children uses electronic games the most and affects their behavior was obtained by testing the following hypotheses:

The result of the second hypothesis was that there was no statistically significant difference at the level of (0.05) between the two arithmetic centers of the differences in scores of boys and girls for the electronic games scale and their negative impact on kindergarten children's behavior. To prove the truth of this hypothesis, the arithmetic mean, statistical deviation and T-value were extracted. By using the t-test for two independent groups, as explained in Table 4-3 and Figure 5.

Table 7.

Group	number	Central Accounting	differnciate	T value		Free number	level Statistical Documentation
				accounted	tabular		
boys	80	11.56	55.57	3.02	2.000	158	Documented at the level (0.05)
girls	80	17	42.17				

Results (t-test) for the difference between the two arithmetic centers of the differences in scores of both practices of boys and girls in terms of the use of electronic games and the impact on their behavior

As shown in Table 3-4: The calculated (T) value is equal to (3,02) and the tabulated value at the level of evidence is (0.05), and the free score (158) is equal to (2.000). And because the calculated (T) value is larger than the tabulated value, there is a difference between boys and girls in terms of the use of electronic games and the effect on their behavior and in the interest of the boys in the study.

This result is similar to the results of the studies of Sakamoto, Shibuya, Yukawa, 2023, in which electronic games have more negative effects on males than females.

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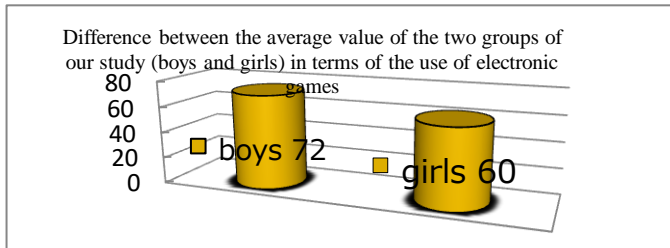


Figure 1. Difference between the average value of the two groups of the study

Figure 1. shows that 72 out of 80 boys, or 90%, use electronic games. In contrast, only 60 out of 80 girls, or 75% of girls, use electronic games. To determine the extent of the impact of electronic game use on kindergarten children, the data were extracted using the equation: (Tlass and Etd, 1982, p. 43). For the two samples related to the effect size, the results were as shown in Table 4-4

Table 8.
Effect size results of electronic game use by gender variable

Experimental examples	Accounting Center	Measurement deviation	appropriate center	The center of hypothesis	calculated effective value	Effect size
Boys	126.9	7.64	2.3	60	1.78	huge
Girls	123.2	8.55				

As shown in Table 8, the mean values of boys' counting are equal to 126.9, and for statistical deviation is equal to 7.64, and the mean value of eligibility for using electronic games is equal to (2,6) which is a large value and tells us that (yes) boys use electronic games more.

In contrast, the average value of girls' count is equal to (123.2), and for statistical deviation is equal to (8.55) and the average value of eligibility to use electronic games is equal to (2.1), which is a large value and tells us (yes), girls also use various electronic games but less than boys.

The value of the calculated effect size is equal to (1,78), and this value is larger than the index value, which is equal to (0.8), and the hypothetical mean value is equal to (60). Therefore, according to Cohen's interpretation of the evidence level of effect size, we conclude that electronic games have a significant negative impact on children's behavior compared to their directions in the learning process.

According to the results of the study, we found that the children of our experimental group, which is a small sample of the indigenous

Kurdish society, are more dependent on electronic games than any other game.

Therefore, we can say that the reasons for the use of electronic games by children are due to the following reasons: Lack of proper awareness of parents, ignoring proper education of children and neglecting them when using electronic games. Poor parental relationship Problems and conflicts between them that cause weakness and emotional gap between the child and parents. The ease and simplicity of the devices used to play these games, such as: (mobile phones, tablets, iPads, laptops, computers) and the presence of supervision between parents and children, peers, friends, neighbors and relatives. Parents taking the lead in using mobile phones. This has led to the disappearance of children and the disappearance of traditional Kurdish games.

Conclusion

In conclusion, the findings of this study underscore the detrimental influence of electronic games on the behavior of kindergarten children within the Sharazoor district, as perceived by parents. The research illuminates a clear negative impact that electronic games have on the behavioral patterns of these young children, highlighting the need for a closer examination of the role of such games in their developmental landscape. Notably, the study reveals distinct gender variations within the sample, indicating that boys exhibit a higher engagement with electronic games compared to girls, dedicating more time to these activities. This gender discrepancy raises important questions about the potential implications of varying usage patterns on the behavioral outcomes for boys and girls. The results prompt further exploration into the nuanced ways in which electronic game usage may contribute to divergent behavioral tendencies among kindergarten children, thereby offering valuable insights for parents, educators, and policymakers seeking to address and mitigate the potential negative consequences associated with the prevalence of electronic games in the lives of young children in the Sharazoor district.

In light of the study's findings, key recommendations aim to mitigate the negative impact of electronic games on kindergarten children in the Sharazoor district. Strategies include implementing proposed mechanisms within kindergartens, offering specialized training courses to enhance teachers' positive game-related skills, and educating families about potential dangers through expert-led training

courses. Tightening monitoring and control measures, selecting creative electronic programs, and emphasizing educational programs in kindergartens are crucial steps. Future studies could draw on international experiences, raise awareness within Kurdish families, equip teachers with comprehensive knowledge, collaborate with the Ministry of Education, and encourage media attention on educational issues to foster a more informed and proactive approach toward children's engagement with electronic games.

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