

Addiction to electronic games and its behavioral effects on the child

A field study on a sample of children in Algeria

Feyrouz Kashi^{(1)*}. Chafik Ikoufane⁽²⁾

⁽¹⁾Algiers 3 University (Algeria), kashi.feyrouz@univ-alger3.dz

⁽²⁾Tizi ousou university (Algeria), ikoufane@yahoo.fr

Received: 20/08/2022 Accepted: 05/12/2022 Published: 31/12/2022

Abstract:

This study deals with the Algerian child's use of electronic games, and the behavioral effects they produce on him. In the field study, we relied on the analytical descriptive approach. In addition to the observation, we also used the questionnaire as a tool for collecting information.

Our study sample consisted of 200 children distributed across different regions. We asked them a set of questions to understand their habits of using electronic games and its effects.

Our study reached a set of results, the most important of which is that the child is highly addicted to electronic games, and he prefers games that contain scenes of violence, and he repeats these scenes his behavior with others in his daily life.

Keywords: Electronic games; children; behavior.

1. INTRODUCTION

Studies related to the use of technological games and their impact on the child are considered among the most important studies at the global level. There are many new behaviors that children have

acquired due to their addiction to electronic games, some of which have reached the level of behavioral deviation.

That is why this study comes to reveal the nature of the child's use of these electronic games and the resulting behaviors

2. The theoretical side of the study

Electronic games are defined as a technological commercial good, as they are a small part of the new world emerging from modern digital culture, although they are fun and entertaining, but they affect the individual and society in a variety of ways.

Electronic games began between 1967 and 1969 AD, after the American engineer Ralph Baer decided to find a way to play games on television, and with the help of his friends Bill Harrison and Bill Roche, the first model of electronic games was made, which they called the brown box. This model is considered the first multi-player video game system, which was then taken over by Magnavox Corporation which in turn released this design as « Magnavox Odyssey » Which paved the way for the development of video games until they reached this progress.

2.1 Advantages of electronic games

Electronic games have a great impact on the general culture of individuals, due to their wide spread among them, and the benefits of electronic games can be limited to the following:

- Electronic games increase cognitive performance: Some studies indicate that children who play video games often have high intellectual performance and high academic efficiency, relative to those who did not play these games.

- Electronic games improve hand-eye coordination: most video games require players to use precise commands that affect hand-eye coordination.

- Electronic games improve decision-making: most video games rely on the development of certain strategies during the game, which

helps to make decisions better and faster.

- Electronic games encourage reading: It is possible that electronic games encourage reading, so that it attracts the dialogue between players and reads it and develops their reading skills.

- Electronic games help marginalized people in society: Socially marginalized people are able to communicate with people through the virtual world, and they are gradually accepted among people through multiplayer games, as they can communicate with new people and make new friends as well.

- Electronic games are used as teaching tools: some educational institutions have included educational materials in electronic games, as they develop and improve various life skills, in addition to making the educational process more enjoyable.

2.2 Disadvantages of electronic games

Electronic games may cause players obesity, laziness, social diseases, physical and mental health problems due to the frequent use of these electronic games, and the following are some of the damages of electronic games:

- Encouraging violence Video games affect the behavior of individuals in real life, as some studies have indicated that playing violent electronic games for a certain period of time may lead to an increase in the amount of violence in players, and may lead to the generation of other dangerous behaviors.

- Wasting time : The time a player spends playing these games replaces other more important activities, such as spending time with family or friends, doing school responsibilities, participating in recreational activities .

- Impact on health: Electronic games can affect the physical health of players, as they can cause Joint pain: Playing electronic games may lead to joint pain in the neck, hand, wrist, or forearm, as this pain may result from continuous playing for long periods without rest. Vitamin D deficiency: Playing electronic games for long periods may lead to a deficiency of vitamin D, which a person obtains from

exposure to sunlight, as vitamin D deficiency leads to rickets, which weakens the bones, and causes flexion in the spine and legs.

Obesity: Video games associated with eating unhealthy foods and fatty and sugary snacks often lead to obesity.

3. Electronic games and violence

Electronic games consume a lot of players' time and lead to addiction, as this addiction has become internationally recognized, and is equally dangerous as compulsive gambling addiction, where the player's goal is to win. The love of electronic games turns into an addiction when players spend most of their time in Playing video games at the expense of work, study, physical exercise, family events, or social activities, which may affect them negatively. There are many reasons that lead to the addiction of electronic games, including that game designers designed them in this way. To increase the number of players, as the game is designed to pose a permanent challenge to the player so that he can win, which makes him spend more time trying to win without giving up. Types of addiction to electronic games
Addiction to electronic games is classified into two types, namely:
addiction Electronic games that include only one task, and played by one player, as when the player completes this task or when he scores a certain result, the addiction to it often ends. Addiction of electronic games that do not include a single task, and have no end, and these games are played by a variety of players online, where the player builds an imaginary character, and establishes relationships with other players online through it, and this type of addiction does not end quickly, because There is a specific ending to the game, and the player may use this game as a way to escape from reality so that he feels more acceptable in his imaginary personality in this game. Signs of addiction to electronic games
Signs of addiction to electronic games include the following:

Change in behavior. A change in mood. Social isolation . Loss of interest in other enjoyable activities. anxiety or depression; Underachievement at school or work. Difficulty controlling time spent

playing. Physical effects of video game addiction The physical effects of video game addiction include pain in the wrist, neck, elbows, blisters on the skin, sleep disturbances, and long-term addiction can lead to obesity, thinness, or numbness in the hands (neuropathy). Peripheral), or blood clots. Treatment of addiction to electronic games Medications should not be used to treat addiction to electronic games, but it is preferable to follow standard psychological techniques, such as the use of cognitive behavioral therapy, which provides for modifying thinking patterns to deal with different life situations .

4. The practical side of the study

Through the field study, we first examined the behavior resulting from children through their use of electronic games and the extent of their addiction to electronic games, then understanding the relationship between children addicted to electronic games with each other and with the game itself.

4.1 Description of the field study

We chose a sample of children who use electronic games to a large extent, and identified their number to 200 children distributed across different regions of Algeria. Their ages range from eight to thirteen years old.

We used the descriptive analytical approach in our study, where we focused on the studied phenomenon, which is the addiction of electronic games and the effects of violence resulting from it, and then we linked the relationship that combines the elements of the phenomenon, analyzed it and came up with the explanatory results for it.

We used the questionnaire form as a tool for collecting information, where we directed a set of questions to the studied sample to collect the required data, in addition to the observation we used to understand the phenomenon and be able to analyze it.

4.2 Statistical data dump

Table 1: Distribution of the sample by gender variable

variable	Repetition	percentage
Male	110	55 %
Female	90	45 %
Total	200	100 %

We note from the table that the ratio of females and males is close, and we intended this convergence in order to make a comparison later on the impact of the use of electronic games on both sexes.

Table 2: The habits of children's use of electronic games and its relationship to the gender variable

Variable Usage habits	Lonely		with your friends		Total
	Repetition	percentage	Repetition	percentage	
male	30	15 %	80	40 %	110
female	80	40 %	10	5 %	90
Total	110	55 %	90	45 %	200

Through the statistics presented in the table, we note that males are the most willing to play with others via the Internet, at a rate of 40 %, which means that the gender variable is related to the habits of playing electronic games.

This may be due to the attraction of males to group games, which are mostly violent, such as Free Fire, while females are more attracted to calm and less violent games.

Table 3: The time the child spends playing electronic games and its relationship to the gender variable

Variable The time	less than three hours		More than three hours		Total
	Repetition	percentage	Repetition	percentage	
male	10	5 %	100	50 %	110
female	53	26,5 %	37	18,5 %	90
Total	63	31,5 %	137	68,5 %	200

We note that most children spend more than three hours a day playing electronic games by 68,5 %, most of them are males. This percentage shows the extent to which children are addicted to electronic games, for a period of more than three hours a day in front

of the screen is a large period, especially since the child has other obligations such as studies and necessary activities.

This great attachment to electronic games will have an impact on the child's relationship with his surroundings, especially the family and school

Table 4: The child's ability to dispense with electronic games

Variable The time	able		unable		Total
	Repetition	percentage	Repetition	percentage	
Male	00	00 %	110	55 %	110
female	13	6,5 %	77	38,5 %	90
Total	13	6,5 %	187	93,5 %	200

93.5% of the children admitted that they are unable to dispense with electronic games, most of them are males, while only 6.5% of the children answered about their ability to dispense with electronic games, all of them are female.

These percentages confirm the extent of children's attachment and addiction to electronic games. It was also found that females are the most able to dispense with electronic games, due to the fact that females are more realistic in life, and are more attracted to real social relationships compared to males.

Table 5: The child's preference for the virtual world compared to the real world

Child's favorite world	Repetition	percentage
Virtual world	180	90 %
Real world	30	10 %
Total	200	100 %

Most children prefer the virtual world through electronic games more than the real world, including popular and classic games, which was expressed by 90% of children.

This trend is due to what the child found in the virtual world in general and in electronic games in particular, such as excitement,

imagination and freedom to practice what the child wants, which he may not find in his real life.

Table 6: Electronic games that children like the most and its relationship to the gender variable

Variable nature of the game	educational cultural games		Pursuit and war games		Total
	Repetition	percentage	Repetition	percentage	
Male	03	1,5 %	107	53,5 %	110
Female	33	16,5 %	57	28,5 %	90
Total	63	18 %	137	82 %	200

We note that most children tend to chase and war games, with a percentage of 82 %

Most of this percentage of males is due to the nature of this gender, which tends to challenge, self-defeating and competing with difficulties and challenges, while the least percentage of females tends to educational and cultural games with a percentage of 18 %

This trend illustrates the choice toward violence that characterizes games of pursuit and war

We also note that most of the electronic games of the nature of stalking and wars, mainly directed at males, which means that these contents are studied before they are marketed.s

Table.7: Child re-practicing violent behavior through electronic games in his real life

Repetition of violence in reality	Repetition	percentage
Yes	191	95,5 %
No	19	04,5 %
Total	200	100 %

It is clear from the displayed statistics that the violence practiced by the child in the virtual space does not stop at this point, but he practices it again in his real life, through different practices with friends or brothers. This indicates that the culture of violence promoted by electronic games ultimately represents a constant

behavior of the child and is an extension of his real life, which represents a danger to the child and society.

5. Results of the field study

By displaying the most important statistical tables, some results can be shown in the following points:

- Children of both sexes tend to electronic games and consider it the perfect space for entertainment and communication

- The nature of electronic games to which the child tends varies according to gender, as males tend to games that are characterized by violence, while females prefer educational and cultural games.

- Most children prefer electronic games that are played in pairs or groups, especially by males, which are more violent games. Also, the impact of these games is more dangerous because it affects more than one person at the same time

- Most children prefer the virtual world through electronic games compared to their real world, which makes them reject their reality and resort to electronic games to escape reality and live the effects that electronic games provide.

- There is a real addiction to electronic games on the part of children, as most children spend more than three hours a day in the world of electronic games, which is a large period compared to the social obligations of the child

- Most children cannot give up electronic games, which is a clear indication of their attachment and addiction to them. It has become an important part of their lives because of the long time the child spends in these games

- The violent behavior of the child through electronic games accompanies him in his daily life with his friends and brothers, which poses a danger to the child and society

- The electronic games industry has become done on a commercial basis without taking into account the interest of the user, especially the child or the interest of society, which made the

competition to spread violence the primary goal to achieve material profit.

6. CONCLUSION

Through this presentation, we conclude that children have already become addicted to electronic games. These games are largely integrated with the manifestations of violence that affected the child, especially males, which made them practice violent behavior in the virtual world and the real world alike.

This phenomenon makes it necessary for both the family and the state to confront this danger by accompanying the family to the child and choosing the games that he can play according to specific controls. The state must also monitor electronic content that allows its circulation, and prevent those contents

7. Bibliography List:

- David Handom, Virtual Reality and Addiction, Knowledge Publishing and Distribution, Switzerland, 2018.
- Ikoufane Chafik, The Information Society from Science Fiction to the Science of Imagination, Dar Al-Amal, Algeria 2019
- Kamel Alwan, Child and Violence Through Electronic Games, Dar Al-Qalam, Egypt 2017
- Robert Brian, Game Technology in Capitalist Societies, The Higher Institute of Technology, 2017
- Samuel deL, Technology and Children, Library of the Future, Canada, 2017
- Steve Clarell: Electronic Addiction, Sun Publishing House, Ireland 2019