The Effects of Video Games on the Cultural Growth of Children and their Behavior *The Perspective of Algerian Parents*

Hafidi Lilia[1,*]

[1] University Oum El Bouaghi (Algeria), lilia.hafidi@univ-oeb.dz

Abstract: This article aims deals with the impact of video games on children from the perspective of Algerian parents; who happen to be the most capable of observing these effects on the behavior and cultural growth of their children. Our study relied on a descriptive approach and a purposive sample of 120 individual. An online questionnaire of 17 sections was distributed to the parents and through it, we explored their opinions on the positive and negative effects of video games on their children.

The study concluded that the negative effects are much more prominent than their positive counterparts. The reason behind that is the lack of awareness when it comes to handling this virtual world, which in itself is a combination of positives as well as negatives and dangers.

Keywords: Video Games; Behavior; Culture; Child; Family.

1. Introduction

Video games represent a form of entertainment that is favored by many children and young people. These games have reached an advanced level of technical development, and are able to imitate real life as a result of high levels of simulation, interaction, as well as visual, sound and motor. Although they provide entertainment and fun, they also come with several dangers on society if consumed without moderation.

Video games witnessed an exponential development in recent years in the whole; they became a hobby that a large segment of people of different races and ages, in Algeria and all over the world, engage in—helped by the diversity of gaming consoles and platforms such as mobile phones and social networks. There is the issue of gaming addiction; where a person spends most of his day on video games that are shared by people from all over the world. There are those who spend hours on their phones due to the abundance of games, the diversity of users, and the increase in social interaction facilitated by easy Internet access. This has led to the emergence of social and psychological problems, particularly in Algeria, that are related to video games. Most notable of these are the socio-psychological effects on children and adolescents.

This paper, through means of a field study, investigates videos game usage in the Algerian family, and examines both positives and negatives, as well as children's addiction to video games of all kinds the point of view of parents.

Based on that, our research problem exists in Western and Arab societies alike, and Algerian society in particular; it is expressed in the following question:

- What are the effects of video games on children's culture and behavior in the context of Algerian families? And how can the problem of children's addiction to gaming be addressed?

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[*] Corresponding author.

Through this descriptive study, we seek examine the following hypotheses:

- Video games come with both positive and negative effects on the cultural growth and behavior of Algerian children.
- Social institutions need to contribute through spreading awareness about video game addiction.

2. Conceptual Entry:

2.1- Video Games:

Over the last forty years, video games have evolved from video tapes to CDs and then to the Internet. New forms of games emerged and improved; three-dimensional systems of image rendering, high processing speed, high quality and realism, and complex systems of audio designed to enhance the player's experience. "Gaming is, therefore, a recreational activity that appeared in the late sixties. It primarily includes computer games, mobile games, and overall, all games of an electronic nature. This activity is different from other activities in the way it is practiced, because the means and devices it relies on are unique and designed for that end in particular; of these devices we mention: Computers, laptops, mobile phones, consoles, mini-gaming consoles, TV, and so on. Video games can also be a multiplayer experience or a single player one (Sharif, 2004, p 54)."

Jones points out that "video games for some people are the real life where they immerse themselves even more than reality. They are categorized into: adventure games, competition games, simulation games, cooperative games, programming games, puzzle games. Adding on that, we can say that there are seven genres of video games and they are as follows: Action, strategy, adventure, roleplaying, sports, arcade and old games (Brian G,2004 p 56).

Socially speaking, a video game is an interaction between man and machine for the sake of entertainment and leisure. The latter is naturally conducted digitally through many technological devices, including: mobile phones, computers, smart boards…etc

In the same vein, a very important question arises: Why do our children play video games؟

Since the latter had emerged, psychologists tried to explain the motives behind such a huge demand, especially by children, for this form of entertainment. Below we list the most prominent reasons:

- One of the main reasons is the dopamine dose of achieving things in-game (advancing to the next level or defeating an opponent).
- Gaming is a way of dealing with boredom and a form of escapism. Games immerse the player in another world of imagination that distract him/her from reality.
- Another reason is the social interaction that video games provide (Hariri, 2014, p 26).

Therefore, we can generally conclude that the individuals' love for the artistic and aesthetic appeal of video games gave the latter tremendous importance in society's interest and wants.

2.2- Culture and Human Behavior

2.2-1Culture

"The word culture was used in the mid-nineteenth century as that universal human capacity to learn, transmit, and use knowledge in life. Hence, defining culture became one of the central concepts addressed by anthropology in the twentieth century. It includes all phenomena of human life. One of the oldest and most entrenched definitions of culture was that given by Edward B Taylor in his 1871 book "Primitive Culture"; it reads as follows: "a

complex whole which includes knowledge, beliefs, arts, morals, laws, customs, and any other capabilities and habits acquired by [a human] as a member of society" (Maliki, 2015, p 25).

Multiple other definitions of culture were given through the years. American scholars A.L. Cropper and Clyde Cloken demonstrated in their book "Culture" presented a critical review of concepts and definitions ranging from "cultured behavior" to "thoughts in the mind" to "logical structure," but their preferred definition is that culture is an "abstract process," that is, that is to say abstractions derived from behavior but not behavior" (Maliki, 2015, p 28).

Hence, culture is that part of the environment that man himself has created, represented by ideas, ideals, knowledge, beliefs, skills, ways of thinking, habits, ways of living, their stories and games, their themes of beauty, as well as the tools and their means of production and evaluation and the music they play.

2.2-2 Human Behavior

It is defined as "the multiple activities that man carries out in his life in order to adapt to the requirements of the environment and life around him, it is thus a practice performed by man in the form of physical or psychological movements or activities intended to satisfy and fulfill his needs" (Atef, 2001, p 67).

It is also "motor and glandular responses coming from the muscles of the organism or from the glands in the body; so human behavior consists of many activities that an individual performs in his daily life to carry out on living" (Dabbagh, 1986, p31).

There is no doubt that satisfying needs through the process of human behavior depends on the abilities of the individual to achieve said needs. Furthermore, each individual has his own psychological needs, abilities, and motivations to achieve and satisfy those needs.

Human behavior is closely related to social life: "It is based on man's action at a practical level, and these actions directly influence the environment in which individuals live. Moreover, social life acquires its image from a sum of behavioral activities. Human behavior, in its different types, purposes, and descriptions, is a series of successive processes, which the sum of is a single emotional formula that performs its purpose after a behavioral reality is embodied in actual life". (Abd al-Rahman, 2004, p. 47).

From the above, when the individual engages in any behavioral activity, this activity impacts public life. It makes him a social phenomenon performing actions in various social aspects and in the totality of these different phenomena, whether positive or negative, we eventually find ourselves in front of a life imposed by the collective of these phenomena. In a way, we can say that that the nature of life in any society is formed and carried out by existing phenomena and behaviors.

2.3 Violence

Violence is defined as: "Applying physical force to a particular target and causing it harm; this damage may be physical, psychological, or both. Violence is an inherently negative act and a relatively common behavior among humans. A violent person may be of any age although adults and young adolescents tend to be more violent in general." (Abdel Dayem, 2001, p 102)

Violence is different from aggressive behavior in that it is more general and has a number of negative effects its victims, especially children. Several global organizations have tried and partially succeeded in preventing and reducing violence.

2.3-1 Types of Violence:

Many academics in the field of violence and deviant behaviors have confirmed that violence comes in several types:

- Physical violence: one of the methods that can take several forms: slapping, beating, punching, kicking, hair-pulling, arm twisting, applying forceful restriction and also throwing objects at the person.
- Psychological violence: Psychological violence comes in a large number of shapes: insulting or humiliating someone whether in secret or in public, attacking someone's qualities or personality, doxing, chasing and harassing, devaluation of the person, his achievements, or challenging his successes.

Domestic violence: It is the physical or verbal abuse between members of the same family. It results in obvious visible injuries such as the destruction of personality in the long term. Other forms of domestic violence include tyrannical control of the person's behavior. It can also include discrimination based on sex, verbal abuse using methods of blame, threats, coercion, social isolation, and control of the individual through manipulation of economic resources" (Badr, 2012, p. 15).

3. Methodology

3.1- Method and Approach:

This study falls within the framework of descriptive research, which is an approach aimed at analyzing and evaluating the characteristics of a particular group, or social situation, and studying current facts related to a given phenomenon. It is an approach that serves as a resort for researchers aware of the dimensions or aspects of the phenomenon they want to study due to the availability of knowledge on it due to exploratory or descriptive research previously conducted. Nevertheless, since the researcher desires accurate and detailed knowledge of the elements of the phenomenon in question, and since the aim of the study is the extent to which video games impact the culture and behavior of the child, we believe the descriptive approach to be the most appropriate because we are in the process of describing and analyzing the current phenomenon.

3.2-Population and Sample:

3.2-1- Limitations of the Study:

- Setting: The study was conducted in the online page known as **Les Familles de Constantine.** It is a designed for the inhabitants of the wilaya of Constantine, and offers a platform in which all news and concerns of families regarding their social and economic conditions are presented, discussed and shared. Most notable of these issues is raising children, educating them, and caring for their physical, psychological, and intellectual health. This site is famous for having a large number of visitors and subscribers— around 4 million subscribers at the moment.

- **Time:** The study was conducted in August 2021.

3.2.2- Sample:

The study is moving towards revealing the reality of the impact of video games on the culture and behavior of children from the point of view of parents. Moreover, given the conditions experienced by the world in general and Algeria in particular—Covid-19 spread— the researcher decided to rely on a non-random "purposive" sample, from the research community consisting of all visitors to the site **Les familles de Constantine**, both subscribed and unsubscribed. Accordingly, the sample of the study included 120 individuals, among which a closed electronic questionnaire that included 17 paragraphs was distributed. 120 questionnaires were retrieved, which constitutes the study's sample.

The Google Drive service was used. The link was shared via the researcher's Facebook account and sent to the subscribers of the page **Les Familles de Constantine**, with the help of the page's administrator. The analysis was conducted using SPSS21.0.

3.3- Data Gathering Tools:

Data was collected using the closed questionnaire, which contained 17 paragraphs showing the negative and positive impact of video games on children and the role of social institutions in reducing their negative effects on children and society alike. The answers to the questionnaire were distributed into three levels as shown in the following table:

Table 01: Distribution of Degree/Value

Value	Degree
High	3
Moderate	2
Weak	1

The psychometric characteristics of the survey are measured as follows:

- **Validity:** The questionnaire was presented to a group of arbitrators, numbering seven so that they may express their opinion on its content, wording, and the appropriateness of the questions. Validity was measured by the Lawshe equation.
- The arbitrators emphasized the necessity of excluding the word murder, and some phrases that have the same meaning.

The validity values ranged from [0.62-1] and therefore, generally valid.

- **Reliability:** It was calculated based on internal consistency using the Cronbach's alpha:

Fig 01:The Equation for calculating Cronbach's alpha

$$\alpha = \frac{N \cdot \bar{c}}{\bar{v} + (N-1) \cdot \bar{c}}$$ (Bouhafs, 2011, p. 23)

It was valued at 0.89, which is a high value, and on the basis of which the resolution is considered stable.

3.3.1- Statistical Methods of Data Analysis:

To statistically process the data, we use the weighted arithmetic mean and percentage by weight as follows:

- Weighted mean of paragraph = Σ Scores for paragraph/number of respondents
- Weighted mean of the section = Σ Scores for the domain/number of respondents x Number of section paragraphs
- Total weighted mean = Σ Total scores/number of respondents x total number of paragraphs

Percentage weight is calculated as follows: Percentage Weight = Weighted Mean/Maximum Value x 100 (Baillargon, 2000, p36)

Its values are labelled as:

[1-1.60] Low score

[1.60-2.20] Average score

[2.20-3] High score

-we used in the search Likert triple scale (agree, neutral, oppose).

4. Results and Discussion:

The results showed variation in terms of response to the questionnaire in favor of females by 61% while males represented only 39%. This shows that the largest category of viewers and participants in the channel are females.

4.1- The negative and positives of video games on the behavior and culture of children and ways to reduce their impact

4.1.1- Negative impact of video games on the behavior and culture of children:

Table 02: Value of the weighted mean and percentage weight of "negative effects"

Number	Items Video games	Weighed Mean	Weighed Mean
01	Adversely impact the health of children	98,56%	3,07
02	Stimulates the development of violent behavior	97,89%	2,95
03	Develops isolation in the child	62,01%	2,19
04	Negatively effects the child's scholarly achievement	97,84%	2,85
05	Negative impact on the child's psychology	97,12%	2,71
06	Teaches the child Western culture	74,11%	2,25
Total		**81.53%**	**2.74**

Concerning the negative impact of video games on children, the table shows that the values of the paragraphs' medians range between 2.19 and 3.07, which is rather high. Moreover, the value of the weighted mean was 2.74 and a percentage weight of 81.53%; this is also considerably high. Based on that, we can say that the majority of the respondents agreed that video games have negative effects. Most notable of which are the lack of physical activities, risk of obesity, weakened muscles and joints due to sitting for long periods of time.

Video games rely on the extensive use of fingers and hands for very prolonged periods of time, and that tends to make the susceptible to numbness and burnout. In the same context, many children's health experts agree poor eyesight and eye-related problems are a direct consequence of gaming without moderation.

Our results also showed that the excitement and dopamine doses offered by video games are in stark contrast to the commitment need for success in school. This could easily lead to boredom with productive work and bad performance in their education. Furthermore, staying up at night causes fatigue and oversleeping issues. A neglection of homework and apathy towards tests are also very common.

The majority of respondents stressed the negative impact of video games on children in terms of behavior; as some video games contain excessive violence, which causes behavioral issues in the child. Profanity and non-restricted sexual content, although rare, are still a problem. Some games also contain words in various languages that the child may repeat without understanding. Older children may even be influenced. There are games that incite racism, extremism, homosexuality, and other abnormal tendencies that a child may not grasp, but may emulate.

In recent times, some extremely harmful video games emerged; namely, the Blue Whale, Momo, and Mary. These games are based on coercing the child into performing strange and dangerous acts in real life that could eventually lead to severe depression and suicide. There had already been documented cases of suicide and self-harm among children and adolescents because of these games.

The participants stressed out that video games are the basis for inciting violence and aggressive behaviors. Since, they argued, that many video games revolve around committing

violent acts and this aspect, they added, may impact the player, especially on children, by unleashing their aggression and acts of violence. In a way, the damage targets the subconscious mind significantly according to some studies.

On a similar note, although there are several cooperative games, most children end up sitting in their rooms alone anyway. Such introversion cripples their skills and capacity to deal with real life. Some children fail to create conversations with others or respond to them due to that. It can even, if it goes too far, lead to autism or depression.

4.1-2 The positive effects of video games on the behavior and culture of children

Table 03: Value of the weighted mean and percentage weight of the "positive effects"

Number	Items Video Games	Weighed Mean	Percentage by Weight
01	Develop the child's imagination	2,25	69,78%
02	Deepen the values of the sense of heroism	1,15	27,59%
03	Increase the cognitive performance of the child	2,19	62;01%
04	Develop children's intelligence and enhances their creativity and innovativeness	2,85	78,19%
05	Generate positive emotions in children	1,07	36,86%
	Help integrate marginalized children into society	2,01	2,01
Total		**2,11**	**56,98%**

Table 03 shows that the values of the median of the paragraphs are moderate. The value of the weighted mean was 2.11 with a percentage weight of 56.98%. Consequently, we can say that the majority of parents agree that video games have positive effects but think them very few compared to their negative counterparts.

Most participants confirmed that video games are fun and entertaining, especially when they can be engaged in cooperatively with friends and family, as they allow for communication, participation and social interaction—whether it is with friends, siblings or even between parents and children.

They also help develop the intellect and the mental capacities of the child, particularly when the right type of games is chosen. In addition to that, they can assist in enhancing their decision-making skills—multiple-choice games or puzzle games. According to a study published in the Journal of Neuroscience in 2015, certain video games are good for enhancing the memory capacity of children, and increasing the size of certain areas of the brain; namely, areas responsible for strategic planning and delicate motor skills.

Video games also promote creativity through their reliance on artistic imagery to convey their story. Some even include tasks that require the player to be highly creative; that especially useful for children

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4.1.3 The role of social institutions in reducing the damage caused by video games on the culture and behavior of children

Table 04: Value of the weighted mean and percentage weight of "The role of social institutions in reducing the phenomenon"

Number	Items Video Games:	Weighed Mean	Percentage by Weight
01	The family contributes to educating children about the dangers of video games	2,18	67,53%
02	Schools contribute to educating students about the dangers of video games	2,07	61,34%
03	The kindergarten contributes to educating children about the dangers of video games	1,12	51,37%
04	Mosques contribute to spreading awareness and educating the community on the dangers of video games	2,05	56,29%
05	Civil society contributes to raising awareness about the dangers of video games	1,05	42,67%
Total		**1,98**	**49,99%**

Table 04 shows that the values of the weighted means of paragraphs range between 1.05 and 2.18. That is medium to low. Overall, it amounted to 1.98 and with a percentage weight of 49.99%. We can conclude that the majority of the respondents agree that the social institutions in Constantine do not contribute as much as they ought to in this particular matter.

Since family represent the principal core of a society; if it is functional, then society, by extension, is. Unfortunately, the majority of families neglect their children's addiction to video games, because they look at it as some sort of an outlet, particularly with the spread of Covid-19 forcing quarantines. For schools, the majority of the respondents confirmed that in recent years schools have focused on the aspect of education and knowledge and has overlooked their role in raising awareness and raising future generations.

As for the role of mosques and civil society institutions, such as associations and organizations, they rarely participate in awareness campaigns concerning the subject matter.

4.2 The weighted mean and percentage by weight in general

After presenting the results of each section separately, we will try in the table below to present the overall results of our study.

Table 05: Weighted mean and percentage by weight of the overall results of the study

Scale	Indicators	Weighted Median	Percentage by Weight	Evaluation	Ranking
Negative and positive effects of electronic games on the behavior and culture of the child	Negative Effects	**2,74**	**81,53%**	**High**	**3**
					2
	Positive Effects	**2,11**	**56,98%**	**Moderate**	

	The role of social institutions in addressing the phenomenon	**1,98**	**49,99%**	**Moderate**	**2**
	Total	**2,28**	**62,83**%	**-**	

Table 05 shows that the majority of paragraphs fall between high and moderate. This means that the majority of respondents acknowledged the negative effects of video games on children and society. Although there are positives, they remain negligible compared to the negatives which could lead to serious repercussions. This is confirmed by the weighted median of the general study at 2.28 and the percentage by weight of 62.83%.

5. Analysis and interpretation of the results in the light of the hypotheses of the study:

5.1- Analysis and interpretation the results in the light of the first hypothesis:

Video games come with both a positive and negative effect on the culture and behavior of children in the Algerian family. The results of the study confirmed the validity of the hypothesis with a high level of negative effects and an average level of positive effects.

5.2- Analysis and interpretation the results in the light of the second hypothesis:

Social institutions contribute by raising awareness about video game addiction. The results showed the validity of the hypothesis with an average neighboring weak. This is because of the neglect of many institutions from schools to mosques and associations of the need to raise awareness and educate the child on the subject matter.

6. Conclusion

This study attempted to highlight the extent of the impact of video games on the culture and behavior of children in the Algerian family from the perspective of parents. It demonstrated that video games have many negative and dangerous effects on the child; even though, admittedly, there are several opinions that lean more towards video games contributing to the intellectual and creative development of children, the increase in many skills, and the enrichment of their imagination, as well as helping in the grow of their abilities. Even with that, they still come with a plethora of harms and issues, especially when it comes to the physical, psychological, mental and behavioral health of the child, and his cultural growth in general. That is mainly attributed most games drawing entertainment and enjoyment from coming acts of violence. Some games even teach children and adolescents about crime and develop in them tendencies for bullying and aggression. They are arguably more harmful than violent television films due to their interaction-based nature. Several psychologists argue that video games are among the reasons that lead to the emergence of some behavioral disorders and problems in children; namely, violence and bullying in the school environments, social isolation and introversion as well as health problems and the issue of academic achievement.

Therefore, social institutions should ought to pay more attention to spreading awareness among children and adolescents.

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- **The Questionnaire :**

Number	Ferries	Agree	Neutral	Oppose
- **The Negative impact of video games**				
01	Adversely impact the health of children			
02	Stimulates the development of violent behavior			
03	Develops isolation in the child			
04	Negatively effects the child's scholarly achievement			
05	Negative impact on the child's psychology			
06	Teaches the child Western culture			
The positive effects of video games				
07	Develop the child's imagination			
08	Deepen the values of the sense of heroism			
09	Increase the cognitive performance of the child			
10	Develop children's intelligence and enhances their creativity and innovativeness			
11	Generate positive emotions in children			
12	Help integrate marginalized children into society			
The role of social institutions in reducing the damage caused by video games				
13	The family contributes to educating children about the dangers of video games			
14	Schools contribute to educating students about the dangers of video games			
15	The kindergarten contributes to educating children about the dangers of video games			
16	Mosques contribute to spreading awareness and educating the community on the dangers of video games			
17	Civil society contributes to raising awareness about the dangers of video games			