
The impact of digital games and virtual reality on behavioral disorders in children, in the kingdom of Bahrain

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Abstract

The current study presents a pivotal and fundamental issue in the field of digital games and virtual reality in particular in the kingdom of Bahrain and its impact on behavioral disorders in children, and it aimed to identify the effects of children's use of these digital games and virtual reality and their negative or positive impact on their behaviors. Where the descriptive survey approach was used, and we were selected for a sample represented by all parents, which is a comprehensive sample consisting of (338) single parents in the kingdom of Bahrain, who were randomly

selected from them (198) males and (140) females by choosing (questionnaire method) in the analysis of the study (and personal interviews). With some people in a selected way, the study found that digital games and virtual reality have a significant impact on children's behaviors negatively, and the study recommended concerned parents and the media to educate children about the importance of digital games and the virtual world, and the dangers of playing these games for a long time.

Keywords: Digital Games, Virtual Reality, Behavioral Disorders, Children Kingdom of Bahrain

Introduction

Digital games and virtual reality represent a large part of children's lives in the modern era, and have a noticeable impact on children's behaviors and psychological development. Digital games vary in terms of content and interaction, and include educational and entertainment games as well as interactive experiences in virtual games. The effect of these games can be positive by enhancing creative and educational skills, but it may also cause behavioral disorders in some cases. Examples of these behavioral disorders are addiction to play, lack of interest in homework or homework, an increase in aggression or stress, and their impact on sleep and social communication.

In the modern age of information technology, digital games and virtual reality have become an undaring part of children's lives, these games come with multiple benefits, but they may also affect their behaviors. The effects range from stimulating creative skills to an increase in stress and addiction, making understanding the appropriate balance in their use vital to the health and psychological development of children.

The emergence of digital games dates back to its beginnings in the middle of the twentieth century, so it specialized in entertainment at that time.

But the biggest development was in the sixties and seventies at the hands of the American scientist "Steve Russell", where he developed his game in 1962 and it was working on the computer, which is one of the first commercial video games at the time. In the seventies, the world came "Nolan Bushnell", which played a pivotal role in the spread of digital games, and in 1972 AD Bushnell founded the company "Atari", which is the first successful electronic games at the time.

At the present time, digital games and virtual reality play a key role in the communication process between individuals because of their effective role in human life, especially the lives of children and the age stage they are going through, as they are an integral part in light of the world's uses of the world's various networks and social media that prevented children from being able to do without them and the urgent need to engage in electronic applications, means and modern technologies programmed via the internet and manifold networks to provide innovative educational and cultural means. However, there is concern and escalation of the extent of their effects on the behaviors and morals of children.

Some experts suggest that moderate and targeted use of digital games can have positive effects if these games are designed to promote positive values and healthy social interaction. Here, the role of the family and educators comes in guiding children towards a safe and beneficial use of these technologies, by setting time controls and monitoring the content they are exposed to.

In particular, behavioral disorders are among the most prominent concerns associated with excessive interaction with digital games and virtual reality. Research shows that excessive use of these games can lead to a range of behavioral problems, including increased aggression, social isolation, attention deficit, concentration and rapid forgetfulness, insomnia and lack of sleep, obesity, back and joint pain and low vision. Arguably, understanding the impact of digital games and virtual reality on children

is vital to avoid potential behavioral disorders. And promote their healthy development. There must be a balance between benefits and risks, with an emphasis on conscious and responsible use of these technologies.

Hence, we can crystallize the problem of our study by answering the following question: - do digital games and virtual reality have a role in behavioral disorders in children??? Theoretical framework of the study:

Digital games:

"a set of activities directed and organized electronically vary in the presentation of their content between storytelling, artistic, exploratory, interactive games that gain the child many information, concepts and behaviors and push him to further research and knowledge in a self-directed and interesting way." Sabah Youssef, 2015, p. 15)

Procedurally: A set of activities programmed electronically, based on digital technology and operated through computers and electronic devices, whether portable or home.

Virtual world:

(VR) "An amazing technology that allows the computer user to step through the computer screen to another dimension, containing an artificial three-dimensional world: "Virtual reality is not the semi-realistic representation of objects, objects and their environments, in addition to the idea of permanent interaction between the computer user and the digital graphics and images that he deals with. It also means using computers in interactive modeling and simulation to enable someone to interact with artificial products or environments and live with them and between them in three dimensions and deal with them in real time as if they were real things that exist on the ground." (Dr. Yasser Al-Weshi, (2021), p. 179).

Procedurally: It is a world that exists in the computer world and can be interacted with by wearing digital glasses that create for the wearer a world similar to the real world, but it is made by imagination and virtual, in which the user adapts and adapts to his circumstances and events, and it is a simulation of a world parallel to the real world, whether characters, environments or identical things and simulates the reality surrounding us.

Behavioral disorders:

It is a clear and noticeable deviation in the feelings and emotions of the individual about himself and his environment and inferred the existence of a behavioral disorder when the individual behaves in a way that leads to himself and others, as it has been defined as a psychological disorder that is evident when the individual behaves clearly deviant from the prevailing behavior in the society to which he belongs. So that this behavior is constantly repeated and can be observed and judged by normal adults from the environment of the individual himself " (Al-Rabi, 2011, p. 7)

Procedurally: It is a set of emotions and feelings stored in the personality of the individual when provoked by a situation, behavior or external stimulus and may be due to reasons including: signs of rapid rape, stubbornness, disobedience, gland disorders, isolation, family disintegration, domestic violence and others. Where the individual behaves during the opposite behavior and deviant and repeats continuously.

Previous Studies

- Study: Reem Muhammad Bahij Bahgat (2023) entitled "The effectiveness of a generalization program based on blindness using the strategy of digital game stimuli (in achieving the outputs of the generalization of the developed kindergarten 0.2 in the light of the requirements of digital transformation" The study aimed to find out the effectiveness of an educational program based on

the uses of digital games to achieve learning outcomes for kindergarten, the researcher used two experimental control groups (30) children, and experimental (30) children from the total samples (60) children, based on the descriptive analytical approach and the semi-experimental approach. The results were positive for the use of digital game stimuli in raising the level of performance in children.

- Study: Heba Abdel Moneim Pasha (2022) entitled "The effectiveness of a program based on digital games to develop some self-management skills among children with mild mental disabilities" The study aims to use an existing program for digital games to develop self-management skills among children with mild disabilities, where the researcher used the experimental approach using experimental design with one group before, after and tracking, as for the research tools, they were from the scale of self-management skills for children with mild disabilities and observation cards, and an existing program On digital games. The sample consisted of (10) children with mild mental disabilities at the School of Intellectual Education in Giza Governorate, Egypt, and the results reached the effectiveness of the program based on digital games in developing self-skills for children with simple disabilities.
- Study: Al-Dosari (2022), entitled "The role of games in developing some leadership skills necessary for the kindergarten child from the point of view of information", the study aimed to find out the role of electronic games in developing some of the leadership skills necessary for kindergarten children from the point of view of teachers, where the sample was (216) kindergarten teacher, and the questionnaire tool was used to collect data, and the researcher used the descriptive approach, where the results were attributed to the variables of qualification, experience and sector on all axes

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- Study: Abdul Razzaq. Ismail (2022) entitled "Animation as an entrance to kinetic exploratory activities to develop basic motor skills and environmental awareness of the kindergarten child" The study aimed to design an animation program and its impact on environmental awareness and motor skills on the kindergarten child, where the researchers followed the experimental approach, while the sample was (30) children in kindergarten between the ages of (5-6) years, while the tool was represented in a note card for the environmental awareness of the kindergarten child, and the results were drawn to the effectiveness of the program based on Social drama in the kindergarten child's acquisition of the concepts of environmental awareness.
 - Study: Dr. Yasser Mohammed Saeed Al-Weshi (2021) entitled "The Impact of Graphic Design of Interactive Digital Games on the Development of Child Perception" The study aimed to find out the impact of graphic games in their forms on children's cognitive, emotional and health development, where the researcher used the analytical approach by presenting pictures and shapes to children. The study showed that digital games have a significant impact on the development of the child's abilities in terms of discrimination and association between shapes, images and colors and the effectiveness of digital games to attract attention to the child.
 - Study: Dr. Khaled Mathoh Al-Ezzi (2010) entitled "Digital games and their dangers to the child" The study aims to identify the impact of technology on children in general, and its impact on their behaviors in particular. The researcher used the descriptive approach to describe the phenomena of children's uses of mobile devices or devices on the network, and the results resulted in the presence of many damages resulting from children's uses of electronic devices of all kinds and the extent of their negative impact on their

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- general behaviors and their distraction from delinquency in the family atmosphere and the group of comrades
- Dr. Shaimaa Ghareeb Ahmed Ali Embed (2022) “Using Digital Games to Develop English language Vocabulary Learning and Retention of kindergarten Children”
 - The study aimed at the effectiveness of digital games in teaching kindergarten children the English language, the study followed the semi-experimental design with two groups (control and experimental), where it was applied to a sample (20) children from Hamed Gohar Public School in Hurgada, using the researcher control group and experimental, where the results came with a large difference between the two groups in favor of the post-test. The study proved the validity of the use of digital games in teaching English to students of the second level of kindergarten.
 - Najmeh et al. (2020) Study: Najma et al. entitled "Active components of creativity in learning based on digital games among young children" The study aimed to identify the effectiveness of the application of electronic games (on tablets and smartphones) in terms of improving the creativity skills of children before school, and identifying creative skills to enhance the learning process, and the sample reached (7) of children aged between (3-6) years at the first and second level of pre-school in Malaysia, and the analysis of the creative framework was used as a tool for study, The results indicated the effectiveness of the use of electronic games and their impact on children's creative abilities and the transfer of information, to obtain information through the digital experience, as it provides insightful learning methods.

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- MELIS, ET,ALL (2020) A study entitled "Knowledge of Norwegian kindergarten children about the environmental component of sustainable development" The study aimed to verify the knowledge of children what the impact of our actions on the natural environment and the child's sense of belonging, and the study used the descriptive analytical approach, and the sample consisted of (56) children from kindergarten children in Norway, the tool was a questionnaire and interview tool, and the results came that children in infancy age gained many early understanding of environmental awareness and are more aware of environmental issues.
 - Hijazi & AlNatour (2018) Study: Al-Natouri and Hijazi entitled "The effect of using electronic games in teaching English vocabulary to kindergarten students" The study aimed to find out the impact of the uses of electronic games on the teaching of English to kindergarten students, where the sample number (100) children of kindergarten children in Irbid, and were distributed into four groups, two control and two experimental tests were conducted before and after the choice of intentional. Using the experimental method on the sample, the researcher indicated effective results by giving children the necessary information through electronic games.

The Results of the Study

Where the study shows that the correlation and its impact on the child's behavior have been proven through his exposure to multimedia, whether (the use of electronic devices and obtaining information that develops his thought and mind, or the exploitation of devices by playing, or making wide friends with friends in his virtual world using virtual world glasses, or video games and watching movies via the internet, websites or mobile smartphone applications) are all means that contributed to raising the child's motivation and arousing his enthusiasm, and the consequences

on that of several disorders in the behavior of the child as stated in the items of the questionnaire questions addressed in the research study, including (imitating the behaviors of the hero of the story, feeling tired and stressed, academic delay, the desire to live in the virtual world, inability to sleep, not getting up early, feeling anxiety, tension and boredom, the tendency to isolation and avoid sitting with his family.

The study was keen to interrogate and analyze both sexes (male, female) and interviews were conducted on 20 people from all Bahraini society and parents and collect some of those opinions for the purpose of research and scientific analysis. The questionnaire was also distributed to parents of both sexes with a number (318) parents, and the results were collected for the purpose of achieving the objectives of the study and reaching studied scientific results from the reality of Bahraini society, and the study may also aim to understand the behaviors of children in Bahraini society after the renaissance of the modern era in the field of virtual reality and digital games and the bias of children in this society to those games and abandon traditional games.

1. positive impact: some pointed out that digital games can enhance educational skills and critical thinking, develop his mental and intellectual abilities, fill intellectual gaps and reduce their circle in exploiting digital games in developing thought and refining creativity and talents in the child.
2. negative impact: others focused on negative aspects such as increased aggression, anxiety, isolation, and the impact on sleep and concentration.

Recommendations

Educating parents about choosing games appropriate for the child's age and promotes creative thinking and social skills and continuously monitors the child's behavior. - limit the child's playing hours and prevent excessive play on screens. - directing children towards activities that enhance educational, social, sports and traditional

games. - designing educational games and providing guidance for safe use with the development of rules and laws that can be controlled by parents and monitoring their digital activities. - teaching the child positive digital behavior and how to interact positively with digital games, cooperation and participation. - diversifying the child's digital activities with other activities such as video learning or creative activities via the internet. - promote relaxation and enjoyment behavior so that it is fun and an opportunity for relaxation and entertainment.- choose games suitable for the child's age and enhance creative thinking and innovative skills.

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