

The effectiveness of electronic games in developing children's cognition

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ABSTRACT

The person in charge of the educational process must pay attention to the methods that lead to investing in the scientific and entertainment aspects at the same time. This process includes several aspects related to knowing the extent of the importance of these two aspects and the moral return that results from their success, the fruit of which is returned to the student, his family, and the educational institution represented by the school. From this standpoint, the researcher saw that there is a relationship linking development The current research aims to shed light on a type of games, which is the electronic one, provided by technological progress and the spread of devices that help the student to play these games and the extent of their importance in the development of children's awareness. The research included three chapters, the first of which included the research problem represented by the question: What is the The effectiveness of electronic games in developing children's perception, and the research objective is determined by revealing the effectiveness of electronic games in developing children's perception, in addition to the definitions that are useful in the research content. The second chapter is the theoretical framework, which addressed the most important topics that are directly related to the content of the research topic. In the third chapter, the research procedures were included, which relied on the experimental design, to reach its results 1- The effectiveness of electronic games made students more excited and motivated, developing their awareness and desire to learn. Electronic games helped students participate and realize the importance of positive support, which boosted their self-confidence

The researcher came up with recommendations including: 1- Focus on the necessity of choosing games that develop children's abilities and contribute to stimulating their perceptions. And suggestions that contribute to achieving the research objective

KEYWORDS: Effectiveness - Electronic Games - Children's Cognition.

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INTRODUCTION

Research Problem: Childhood is a critical stage in human development, as it forms the foundation upon which an individual's future personality is built. If this foundation is solid and sound, the individual will grow up enjoying physical and mental health and balanced social behavior. However, if this foundation is flawed or disturbed Its negative effects may accompany the individual and affect various aspects of his life later on.. (Rabi, 2008, p. 11) For example, a child who is rarely spoken to or read to in the early years may find it difficult to master language skills later on, and a child who rarely plays with others will find it difficult to adapt socially in his future life and develop Life towards a future that carries within it horizons beyond the current perspective, as cultures are embodied that produce new data on society, including our Iraqi society, especially what revolves around technological development and keeping pace with the world, including what is related to electronic games that have become the sole concern of individuals at various levels, whether the level Whether it is scientific, age, or gender, electronic games have affected children's behavior, reality, and reasons for their spread in this amazing way, because they have become a source of entertainment and amusement for this group because they have begun to spend significant amounts of time playing. Therefore, the research problem was represented by the following question: What is the effectiveness of electronic games in developing children's awareness?

RESEARCH OBJECTIVE

To explore the effectiveness of video games in developing children's cognition.

Research boundaries:

Objective boundaries: The effectiveness of video games.

Spatial boundaries: In developing the cognition of fifth- and sixth-grade primary school students.

(Al-Hikma School as a model)

Timeframe: Academic year (2021-2022)

Definition of terms /

Effectiveness / Language: It is the ability, influence, (Dictionary: Al-Raed)

Effectiveness / Technically: It is the ability to achieve the desired, desired, and expected result. (2011. Web. 28, (Dictionary.com

Electronic games: Technically: Video and computer games are types of electronic games that are displayed on television or computer screens, and aim to provide fun and entertainment to the individual by stimulating multiple skills, such as coordination between hand and eye movement (visual-motor coordination), or by stimulating mental and cognitive abilities, and this is achieved through electronic programs designed specifically to develop these

Aspects. (Al-Shahruri, 2008, p. 31). Another definition: This promotional activity is one of the mental activities that appeared

in the late 1960s, and includes all forms of electronic games such as video games, computer games, smartphone games, and electronic board games. It essentially represents an information program that is practiced. Similar to other activities, but with its own specific media, such as laptops, desktops, smartphones, and television screens, these games can also be played individually (or collectively over the Internet (Al-Alaq, 2006, p. 286

THEORETICAL FRAMEWORK

The First Section: Play and its Role in a Child's Life

Play originated with the beginning of creation and expanded with the growth of civilization and the movement of the senses toward opening horizons of knowledge. Nations advance through their children, as they are the generation of the future. Therefore, modern civilized nations are keen to give childhood the importance of care. Allowing a child to enjoy all the means of happiness and well-being increases their ability to give and develop their ideas. In the United States of America, the interest in children was clear in their view of childhood as the cornerstone in building society. In Russia and so in Britain, play is considered one of the most important reasons for forming the child's personality (In our country, with its games and privileges, we no longer have emperors or tsars, but we always emphasize that in our country there is one tsar and he will continue to enjoy all privilege and appreciation, and that is the child. (Abdul Hamid, 2011, pp. 29-30 Play is an important educational medium that works to form the child in this important and decisive stage of his development, because it contributes an important role in the psychological formation of the child, and the activity that he enjoys controls and controls the child's emotions and behavior in his school life, as the child begins to satisfy his needs through play (the dimensions of the social relationships that exist between people open up before him. (Sawaleha, 2014, p. 14 Play in its various forms is one of the most powerful and enduring intellectual tendencies in a child's various stages of development across different ages. This may be due to the fact that play is a spontaneous activity (Al-Khafaf, 2010, p. 31). It stimulates children's self-esteem after each achievement and also enables them to adapt to new worlds And attention to behavior, as (our children need games that fill their free time, create a spirit of fair competition between them, sharpen their spirits, ignite their determination and simulate the challenge in them. (Salama, 2009, p. 5). Children's play behavior is affected by a large group of factors, including: what is related to the person himself, represented by genetic data, data from the natural and social environment, and mental, psychological and health conditions For the individual himself, add to this the attitudes and views of adults regarding play behavior, especially parents, and the methods of socializing and raising (children. (Sawaleha, 2014, p. 14

Play is an essential element in a child's development, especially with regard to the cognitive aspect. Through engaging in various activities, the child gains increasing life experiences and develops the ability to think and solve problems Daily problems. Play is also considered a means to fulfill one's desires and meet one's psychological and social needs, as through it one imitates the characters one admires, expressing one's aspiration to become like them. Furthermore, play is an important expressive tool for the child, through which one expresses one's thoughts and feelings, especially at stages when one is unable to express oneself ,(. (....(directly verbally (Al-Anani, 2010, p. 26

Classifications of play theories and their relationship to cognitive development:

First: Cognitive Theory

This theory is one of the most prominent cognitive development theories. It was founded on the method of sequential and continuous observation, as developed by the biologist Jean Piaget (born in 1896). His scientific background in biology and his interest in philosophy, particularly epistemology, guided him toward studying mental development in children Children. He believed that the logical analysis of cognitive experiences can be reached through understanding how children develop their abilities to think logically. (Susannah Miller, 1987: 53) Piaget considered play to be part of the child's overall effectiveness stemming from his mental abilities and mental activity, assuming: two basic processes for every situation that the child practices in play and that are completed in an internal organic connection (Al-Khafaf, 2010, p. 8) They are representation and accommodation, which work together to achieve adaptation:

A-Assimilation: This is the activity a child undertakes to transform the objects or information they receive into their own structures that form a part of their self.

B-Adaption: This is the activity a child undertakes to adapt or conform to the external world around them. (Abdullah, 2017, p. 65) Children's mental development is the result of an integrated and continuous interaction between the processes of representation and accommodation. An individual reaches a state of mental accommodation when a balance is achieved between these two processes. However, if this balance is disturbed, the process of accommodation becomes more active than representation, leading to behaviors such as imitation and simulation. Piaget believes that play represents a pure form of representation, in which New ones are adapted to meet the individual's needs and desires. Thus, both play and simulation are .(essential elements in a child's mental development process (Abdullah, 2018, p. 64

The concept of mental imagery in Piaget's theory is closely linked to the processes of representation and accommodation, as mental representations are one of the distinguishing characteristics of the structure of cognitive relationships within the framework of the interconnectedness of various actions When a number of diverse actions are repeated and share similar characteristics, common perceptions arise between them, upon which knowledge is built. Since mental activity consists of a set of actions, it is necessarily based on a number of interconnected perceptions. In this sense, every mental act essentially includes two elements of intelligent activity: comprehension (representation) and adaptation (adaptation) (Abdul Bari, 2010, p. 102) Piaget's cognitive theory, in explaining the phenomenon of play, attributes a biological function to it, describing play as a repetition of activity and training, which leads to the mental representation of new situations and experiences. Therefore, he emphasizes the importance of play in the field of education and learning, as when a child engages in play behavior, he transforms the information received from the game into an integral part of his cognitive structureIt strengthens and supports this cognitive structure, and thus play serves

.(as a teaching and learning tool of primary interest to teachers (Salha, 2014, p. 44
The idea of cognitive and post-cognitive strategies stems from cognitive psychology theories related to how the mind works and
:how information is acquired, according to cognitive learning strategies, which are divided into four categories
.A- Narrative and memorization strategies. These include concentration, repetition, narration, and memorization
.B- Organization strategies: These include organizational methods such as: can, ask, read, remember
C- Elaboration and clarification strategies. These include similarities and contrasts
D- Post-cognitive strategies, which refer to the learner's awareness of their thinking. They include self-awareness, awareness of
the task, performance and its nature, evaluation, and modification.

Second- Excess Energy Theory: This theory is based on the premise that play exists to relieve the individual of the excess energy
stored in his body, an energy shared by all of humanity. When an individual has stored energy in excess of his needs, he resorts
(to To practice play to release that energy. (Al-Khafaf, 2010, p. 79

Third - The summative theory: This theory goes back to the philosopher Stanley Hall and states that play is an activity that
summarizes the past. That is, the games that people have played at various stages of life and age are easy and concise. That is,
the games that individuals play in our current era are inherited and acquired from generations The previous ones are the same
ones that humans practiced in the past, such as running, jogging, climbing trees, playing in water and mud, riding a bike, and
hunting... primitive humans practiced and enjoyed them just as individuals enjoy them in our current era. (Susannah Miller, 1987,
p. 13) Fourth - The theory of preparing for the future: This theory is known as the "skills training theory," and researchers attribute
it to the scientist Carl Gross, who considered play to be a biological function of great importance to the organism. He believed
that play contributes to training the body's organs, enabling the child to gain complete control over them and qualifying them to
(use them efficiently in serious and beneficial activities throughout life The next one. (Abu Al-Eid, 2006, p. 30

Fifth - The balance theory (compensation theory): This theory is attributed to the philosopher (Conner Edlang), as he explained
the individual's tendency towards play because it provides him with a type of feedback he needs because his life is full of tasks
that require satisfaction and the fulfillment of his desires and inclinations. For example, if a child does not have siblings or friends,
he compensates for that by During play, the child uses the doll as a brother, sister, or friend, addressing and interacting with it as
(if it were his own brother or friend. This achieves a balance in his psychological strength. (Sawaleha, 2014: 40

Sixth - Behavioral Theory: This theory is considered an important one because it is based on the premise that learning is the
change in behavior that occurs as a result of the existence of relationships and connections and their continuous repetition Between
Stimulus and Response in the Environment Surrounding the Individual and the Animal (Abdullah, 2018, p. 65). Among its
.founders are philosophers (Pavlov, Thorndike, Watts) and other pioneers of the behavioral school

Seventh - The Theory of Catharsis or Anxiety Relief: This theory is a product of the psychoanalytic school founded by Sigmund
Freud, who used its concepts in the early twentieth century to treat psychological and mental disorders. Freud believes that Human
behavior is determined by the feelings of pleasure or pain that accompany it. Individuals naturally seek to repeat experiences that
bring them pleasure and avoid those that cause them pain. Based on this perception, children create their own imaginary world,
where they freely engage in pleasurable experiences, free from the interference of others, which might disrupt their enjoyment
and weaken their sense of pleasure (Sawaleha, 2014, p. 38) The previous theories approach the topic of play from multiple angles,
differing in detail, methodologies, and objectives, but they intersect in providing complementary visions of this phenomenon.
Despite the methodological differences between Freud's and Piaget's theories, each can be considered complementary in
understanding the developmental process. While Freud's theory focuses on the relationship between imaginative play and
emotions, Piaget Play is seen as an expression of mental development. Ethnologists, in contrast, are interested in the biological
and evolutionary significance of play, emphasizing its causal dimensions, despite its apparent lack of purpose. Learning theories,
on the other hand, view play as a means of enhancing learning and selective responses based on external stimuli. It is noteworthy
that questions related to emotional arousal, cognition, and learning Likewise, the perspectives of biological and evolutionary
.development are no longer separate or isolated from one another, but rather intertwine to form a comprehensive, integrated vision
We note from the above that modern psychological theorists have agreed that play is an educational activity and that the laws of
.learning govern play behavior, not play itself

:Section Two: Electronic Games and the World of Children Electronic games

Al-Shahruri defined them as: games displayed on television screens (video games) or computer screens (computer games), aiming
to provide enjoyment by challenging hand-eye coordination (visual-motor coordination) or by stimulating mental abilities. This
is achieved through the development of specialized electronic programs. (Sarah Hamdan, 2016, p. 8) Another definition: These
games are among the most popular modern games worldwide. They are displayed on television (video games) or computer screens
(computer games), and are also played using dedicated controllers or in arcades. These games provide an entertaining experience
based on challenging hand-eye coordination (visual-motor coordination) or testing abilities Mental development, through the
development of advanced electronic programs. (Maryam Qwaider, 2012, p. 1)

The benefits of playing electronic games for children are evident in multiple aspects, including entertainment and relaxation,
developing thinking skills, increasing response speed, enhancing the ability to set goals, and stimulating attention. Also These
games help stimulate the coordination between the visual and motor senses, develop planning and logical thinking skills, and
(train children to use modern technological devices. (Sarah Hamdan, 2016, p. 8)

Electronic games have captured the interest of children so much that they have begun to boast about the number of games they
have played They play it, the levels they complete, and even play the same game simultaneously over the internet. This type of

gaming began in limited form, requiring large computers operated only by specialists. Computers later evolved to become available for home use. This created a gap between the child and his or her family, presenting families with real challenges in how to deal with the electronic games the child plays. Most electronic games are characterized as mind games, and they are a diverse type of game depending on the type of goal they aim to achieve, which is to develop learners' mental skills and abilities by stimulating their thinking processes (Faisal, 2017, p. 22, p. 28), especially in this era that has become known as the era of virtual worlds that have a negative or positive impact on the child's personality. Play is also a functional gateway to the world of childhood and an important educational medium that contributes to shaping and building a child's personality through sensory, motor, social, emotional, mental, and cognitive aspects. On the one hand, it leads to qualitative changes in a child's development, and it also serves as a starting point for the educational and pedagogical activity that will prevail in the child in the later stages of his or her life.

Characteristics of Electronic Games:

Electronic games are characterized by a set of elements that distinguish them from other media, including interactivity, the level of activity they require, and the audio and visual effects they provide. These games also contain specific goals and rules governing the flow of the game, in addition to a degree of realism. The integration of these elements, combined together, make games more exciting, fun, and sometimes addictive. These games are based on real rules that the player actually interacts with, with winning or losing the game being a real event.

For a successful gaming experience, the player must interact with these rules. The combination of these rules creates a world of imagination, which is one of the most prominent features of video games. This interaction is evident in the game's design and the way the player perceives and uses it, allowing them to choose whether to visualize the game world or simply observe it.

Interaction is one of the most effective elements in games, as it gives the player the ability to control the game character through physical movements, creating a strong relationship between the player and the game character. Some players become immersed in the game. The game affects them physically and emotionally, and their cognitive skills are reflected in the character's performance within the game. A player's success or failure depends entirely on their skills and performance.

Play helps children gain knowledge about the outside world and discover their environment and its components. Multiple, in addition to learning his social roles and the roles of others, and acquiring the culture, language, values, and morals of his society (Razan Awis, 2005, p. 369). Play represents the child's life, which gives him a sense of happiness, and pushes him to create a world of illusion and imagination where he practices his experiences that arouse in him a sense of pleasure and confidence, away from the interference of others, according to what is stated in the theory of psychoanalysis. Play can also be a means to explore and treat psychological disorders, it is not only a recreational activity, but also an entertaining process that helps relieve stress and emotions (Jibreen Muhammad and Louay Obeidat, 2010, p. 645). It is no longer surprising that children of the new generation are turning to electronic games at the expense of other traditional games, as the spread of computers, video games, and the Internet in recent years has contributed to strengthening their presence. This is evident in children's lives. Children have come to prefer these games and become accustomed to playing them, to the point that they have become an integral part of their daily lives ((Majid Al-Zawi, 2015, p. 16).

Several studies have indicated the many positive aspects of electronic games, including stimulating children to utilize their higher-order thinking skills, improving their technological skills, and offering numerous other benefits. The Impact of Video Games on

: Children

Games in general have a powerful effect that makes the user fully engage with the game's events. Video games, in particular, feature animated images and characters that attract players with their bright colors and sounds, as well as the story and events they contain, which often aim to attract audiences and sell the product. Entertainment. These games reflect a specific reality or specific situations for marketing purposes by the producing companies.

It is natural that the appeal of video games has a significant impact on a child's personality, as this effect refers to changes in the child's behavior, whether as a viewer or participant in the game. This effect stems from the dynamic interaction between the characteristics of video games and the characteristics of their users. A study conducted in the United States of America showed that games that include violent scenes contribute to an increase in violent behavior among adolescents by a percentage ranging between 4% and 13%, and this percentage may rise to 22% in some cases. (Abdul Rahman Al-Ghamdi, 2011, p. 3) Children are influenced by those around them and what they see, but in the early stages of childhood, they may lack the ability to verbally express their feelings. Therefore, Children's drawings are a means of expression that precedes verbal language. This is a very important aspect for educators, helping them detect problems early before they escalate (Abdul Rahman Al-Ghamdi, 2011, p. 4). Some studies have indicated that some parents suffer from their children's addiction to video games, which leads to associated health and educational problems, such as watery eyes, poor vision, headaches, and dizziness. This can lead to a decline in academic achievement, social isolation, and the spread of obesity due to lack of exercise and a lack of sports activities. However, many parents see these toys as having some benefits, such as reducing the child's time outside the home or as an alternative to outdoor outings, especially given parents' busy schedules and numerous commitments (Nimrod Bashir, 2008, p. 74).

From the beginning of childhood, the child begins to build a visual repertoire that includes shapes, sizes, lines, and visual appearances in the surrounding environment. This repertoire has expanded significantly in our current era with the proliferation of visual media. The visual image constitutes a prominent area in the child's imaginative activity during the early and middle stages of childhood, before moving towards abstract imagination based on symbols and the formation of Electronic games:

Electronic games have a number of negative effects that have repercussions on children's health, psychological, social, and cultural aspects, as follows

First: Health and physical aspects:

Mansi (2012) indicates that children spending long hours a day playing video games leads to many negative effects on their health, such as weight gain, osteoporosis, spinal deformities, hand pain, eye problems, and a decline in their social behavior.

A 2004 study found that approximately 16% of children in the United States, or more than 9 million children between the ages of 6 and 19 are overweight or obese, a rate that has tripled since 1980. This is largely due to the extensive use of electronic devices. This weight gain leads to serious health problems, as many of these children become more vulnerable. They are at increased risk for type 2 diabetes, asthma, sleep apnea, high cholesterol and blood pressure, and are also more likely to be subjected to special treatment due to these health issues.

:Family Harms of Video Games for Children

The harms resulting from video games are determined by the following:

First: Psychological and Social:

Over the past three and a half decades, playing video games has been linked to a significant increase in violent behavior, as well as rising rates of murder, rape, and serious assaults in many societies. Most of these cases agree that the violence depicted in the media and video games is presented to children and adolescents as a form of entertainment and pleasure.

In addition, these games may sometimes contribute to children's feelings of isolation. Social disintegration within the family—whether between spouses, between parents and their children, or even between siblings—is a significant factor in this social context. (Maryam Qwaider, 2012, p. 149)

Second: Educational Harm:

Several studies have shown strong evidence that children who spend long periods playing video games, particularly those containing violent scenes, suffer from lower academic achievement. This decline is manifested in lower grades and lower evaluations from teachers compared to their peers who play less violent games or do not play them. Less violent games or no video games at all.

Third: Cultural Harm:

The impact of video games on children's learning of many Western customs and values, as well as civilizations alien to our Arab culture, such as the use of profanity, gambling, and gambling. Most of these games also seek to convey negative and dangerous messages that children desire.

Its designers aim to deliver it to experienced gamers. One of these messages is the inclusion of Western music and songs, or sometimes international music, within the game's content, with the goal of accustoming players to playing and enjoying themselves by listening to this music. This leads to children growing up with a love for types of music and songs that may be forbidden or morally inappropriate (Maryam Qwaider, 2012, p. 149). Research studies have become increasingly interested in the effects and repercussions of contemporary technology on the culture and values of societies. Al-Reemawi (2010) pointed to notable observations, including the increase in the time children spend watching television programs directed at them and adults, which include electronic games, and exposure to films that carry foreign cultures that may conflict with our children's culture, (which pushes them to Taste and acquire values and behaviors foreign to their society. (Majid Al-Zayoudi, 2015, p. 18)

:Positives of electronic games:

Regarding the positive effects of these games on children, as addressed by some specialized research in this field, the most important of them can be reviewed below:

First: The social aspect: Some studies have confirmed that video games contribute to strengthening the relationship between parents and children, and recommend encouraging their use within the family. A study conducted by the Entertainment Computer Software Association showed that 35% of participants, or one in three parents, are fully engaged in the games. In playing these games, 80% of them play with their children. Two-thirds of the study participants believe that games have strengthened bonds (and communication between family members. (Majid Muhammad Al-Zayoudi, 2015, pp. 16-17)

Second: The health aspect

Electronic games have positive aspects that directly impact an individual's health. Many modern devices have contributed to stimulating the body and improving the health of many players. This has shown. A recent study conducted by the Indiana University School of Medicine in Pennsylvania, USA, found that computer and video game addiction may represent a fun and effective treatment for some incurable diseases, such as cerebral palsy, multiple sclerosis, and stroke patients, who require long (therapy sessions to improve their health (Mariam Qwaider, 2012, p. 143)

On the other hand, another study conducted at the University of Rochester in the United States confirmed that children who played video games for a few hours a day over the course of a full month saw their vision improve by up to 20%, as a result of the impact these games have on the way the brain processes visual information. Dr. Davine Bavelier, a professor of brain and cognitive sciences at the university, explained that the children included in the study showed a significant increase in their visual analysis abilities after playing games for 30 intermittent hours, as they were able to accurately recognize symbols and letters in (vision tests (Majid Muhammad Al-Zayoudi, 2015, p. 16)

Third: The educational aspect:

Modern educational methods for teaching academic subjects, including the use of educational computer games and programs, are among the innovations in educational technology that can help overcome many of the difficulties facing the teaching process and solve some of the real-life problems in the educational environment. One of the positive aspects of electronic games is that educators have introduced them into the field. Educational games have replaced traditional and popular games. The term

"computerized educational games" has become popular in educational institutions due to its positive impact on enriching the learning environment.

One of the most prominent features of electronic educational games is their ability to stimulate learners' motivation to study and increase their comprehension of the subject matter. Thanks to their diverse audio and visual effects, these games also contribute to capturing the learner's attention, this helps alleviate boredom and monotony in daily lessons (Sarah Hamdan, 2016, p. 3). As for the relationship between playing video games and cognitive and educational outcomes, studies have yielded mixed results. Some have shown improvements in cognitive skills, particularly reading skills, in children who suffer from weaknesses in these skills, particularly when using games.

Online Games (Majid Al-Zawi, 2015, p. 16).

Many studies pay great attention to the impact of technology in education on developing children's logical, mathematical, social, and linguistic abilities. It provides them with a variety of creative gaming software that enhances their mastery of learning skills, improves their ability to solve problems, and communicates with Others. These software programs also provide children with control over the pace and method of their performance, with the ability to repeat activities as desired, and provide opportunities for collaboration and participation in exchanging information, discoveries, and decision-making through these applications. (Ben Youssef Ben Khedda, 2012, p. 2).

The role of the family in dealing with electronic games played by children:

The family is the first line of defense in protecting children from the negative effects of technology use. Parents must therefore be aware of the risks of their children owning certain electronic games, and they must examine their content and control their exposure to them. Parents should also focus on instilling values and principles in their children through conscious upbringing and continuous monitoring. They must also pay attention to what Children watch it on television, especially news broadcasts that include scenes of violence that may frighten them more than other programs (Ben Youssef Ben Khedda, 2012, p. 35).

The main problem lies in the absence of a clear and specific plan for managing children's free time, which places the burden The family must be responsible for avoiding the harmful effects of video games. Families cannot fully control what their children play, so parents should choose games that are age-appropriate and do not conflict with their religion or their physical, psychological, or social health. They should also limit their playtime to no more than an hour per day, while encouraging the child to spend the rest of the time engaging in other daily activities. Playing should only be allowed after homework is completed, and should not take place during mealtimes.

(Maryam Qwaider, 2012, p. 124)

Children certainly do not understand the dangers and consequences of electronic games, but the responsibility for this remains with adults, especially parents. It is their duty to instill in their children a love of reading, reading books, and practicing some of the above Hobbies, whether indoors or outdoors, in addition to practicing organized sports activities, therefore the family's role is significant in guiding and directing children's free time so that it is specific and balanced, including the time allocated for games. (Nimrod Bashir, 2008, p. 75).

Barakat and Tawfiq (2009) presented a set of principles that contemporary families can rely on to fulfill their role in confronting the hopes and dangers of the virtual worlds their children face. Among the most important of these principles are: (Majid Al-Zayoudi, 2015, p. 18).

-1 Supporting children in distinguishing between reality and fantasy, and teaching them that the world of violent games and films does not reflect reality Real.

2- Accompany children as they use computers, the internet, and electronic games, and guide them toward utilizing these tools for useful and purposeful entertainment.

Parents should monitor their children's internet use, placing computers in open areas of the home rather than in closed rooms, -3 to ensure family supervision of their use 4- Set a specific time for children to use the internet or electronic games, preferably no more than one hour per day, while encouraging them to engage in active games and physical activities, avoiding prolonged sitting in front of devices.

Families should rely on protection and monitoring programs that prevent access to inappropriate materials and websites, in -5 addition to using the control commands available within internet browsers or devices Games.

Regularly discuss with children what they watch or play, and provide them with information that helps them deal positively -6 with the content they are exposed to, which promotes their informed and beneficial use of games and television.

Ensure the safety and strength of the child's eyesight through a comprehensive eye examination to detect any health problems -7 early, with the possibility of using glasses or contact lenses that protect the eyes 8- Schedule regular breaks while playing or using the computer, so that your child takes an eye break every hour to prevent eye irritation and the development of any visual problems.

Adjust the position of the computer screen and keyboard to suit your child's size, so that the screen is at a comfortable viewing -9 level without strain. Use an adjustable chair that supports your child's comfort while using it, in addition to providing adequate foot support 10- Pay attention to reducing computer screen flickers and radiation by using anti-flicker devices, and avoid exposing your child to direct sunlight or any other strong light sources while sitting in front of a screen.

Adjusting room lighting to a comfortable level is important when using video games, which are a double-edged sword, as -11 they can have a positive or negative impact on children's lives. These games are reflected in Especially those with content alien to our culture, it has a profound impact on a child's intellectual, cultural, and educational development. Nevertheless, video games offer benefits for educators, parents, and teachers, particularly on the educational and pedagogical levels, through what are known as educational computer games, which are an effective means of stimulating learners' motivation To ensure optimal use of these electronic games and frame them in a positive light, away from their negative effects that could harm children, the researcher believes that families have a fundamental role in fostering childcare and protecting them from electronic dangers. This includes

monitoring children while they play, determining appropriate times for play, and selecting games that do not negatively impact the child's health Psychological and physical, in addition to instilling awareness about the correct and proper use of these games Perception is the process by which an individual receives a set of sensory stimuli, then organizes and interprets these stimuli to form an understanding that adds to their experience of the surrounding environment. Although multiple people may receive the same stimulus, their responses and actions to it vary from one person to another. It is considered The interpretation stage of the cognition process is one of the most important stages, as it allows the individual to make judgments and decisions based on what (he perceives. (<https://mqaall.com/research-cognition>

Perception: A cognitive mental process that helps us interpret everything around us. There are factors that influence it. Perception is a basic and fundamental process in human life, as it is a mental process that includes memory and preservation, upon which everything is based, such as learning and social interactions. It depends on The five senses receive information, then enter it into the brain to be linked to prior knowledge, to obtain interpretations and make decisions. It is the primary factor in understanding and managing human behavior and its relationship with the surrounding environment in society and life. It is influenced by the events around it, finding a logical explanation for them through perception. Thus, it enables one to make decisions based on behaviors governed by the situations they encounter Perception is the process of receiving sensory stimuli, interpreting them, and assigning them meanings and concepts that humans rely on to choose appropriate behavior. Perception is also defined as the process of selecting and interpreting sensory inputs received through the five senses (sight, hearing, touch, taste, and smell) with the aim of understanding and organizing the world around an individual. The function of perception is to distinguish between the stimuli received by the senses, as each sense.

Its own limitations in receiving information.

Perception is essentially the brain's processing of information received from the senses. The complex central nervous system organizes and interprets this information to understand the surrounding environment. These processes typically occur outside of a person's awareness. Due to the individual nature of this process, people encounter the same situation but perceive it in different .ways

Perception helps us form a stable picture of the world despite the constantly changing and sometimes incomplete sensory information we receive. People have studied perception in response to life needs and problem-solving, as well as their intellectual curiosity to understand themselves and the world around them. Knowing the limits of the perceptual demands that can be placed on human senses without impairing mental health is essential When a particular event is perceived, the brain selects, organizes, and integrates sensory information to construct the event. From this raw data, it creates faces, melodies, and illusions, as explained by Gestalt theory. Perception is a vital tool for humans in confronting potentially dangerous environmental situations, which can affect the senses and limit the ability to make sound decisions Perception is closely linked to sensation, forming an inseparable, continuous process. The senses are stimulated and translated into organized experiences within consciousness. By capturing environmental stimuli, a person becomes able to accurately describe the sights, smells, and sounds that form part of their conscious . experience

The perception process goes through several main steps, including:

1. Stimulation: The surrounding environment contains numerous stimuli that attract the attention of the senses, whether visual, auditory, tactile, olfactory, or gustatory. The senses have the ability to receive these stimuli.

.2 Interpretation: After sensing stimuli, signals are sent to the brain, which interprets them and understands their meaning.

3. Processing: The interpreted signals undergo neural processes in the brain. Processing pathways vary depending on the type of signal, whether auditory, visual, or other.

After receiving sensory stimuli, electrical signals travel through an interconnected network of neurons spread throughout the body, reaching the brain. Through this process, the individual becomes aware of and aware of stimuli in the environment.

Perception is not limited to simply being aware of stimuli. It requires the mind to categorize and interpret them, assigning them specific meanings—a process known as "recognition." This is followed by the "action" stage, which represents a response to environmental stimuli, which may manifest in various forms of motor or behavioral activity.

Types of Perception Perception is divided into several types that influence how we interact with the environment: Spatial perception: The ability to perceive distances and separations between objects in the real world, such as knowing the distance between one person and another or between different objects. It also includes perceiving the movement of moving objects, such as cars on the road. Kinesthetic perception: Related to understanding movement and change in the surrounding environment, it is essential for survival, as It enables us to perceive surrounding dangers and threats. One phenomenon associated with this perception is the optical illusion that makes stationary objects appear to move, such as when we see trees moving while riding in a car, even though they are stationary. Formal perception: This is the human ability to recognize objects in a specific way within their environment, and is based on a set of laws identified by Gestalt scientists.

Psychologists include: The Law of Proximity: whereby objects or elements that are close together are viewed as a whole rather than as separate parts. The Law of Similarity: whereby similar elements are grouped together perceptually, with color playing an important role in this grouping. The Law of Closure: whereby the mind completes incomplete shapes to form a complete image, such as perceiving a triangle.

From incomplete circles. The Law of Portrait Shape: This states that some shapes stand out in the visual field, while others recede into the background, such as focusing on a person near a lake while the mountains and sky recede in the background.

Theories of Visual Perception:

There are several theories that explain how perception occurs, the most important of which are the theories of visual perception,

which attempt to explain how perception is shaped by the physical energy received from the senses: Bottom-up processing theory: which was proposed by James Gibson within the framework of "direct realism," and which views perception as a constructive process that begins with information Direct sensory processing: We perceive things as they really are, without the need for complex cognitive processes or internal representations. This theory is based on the premise that visual information from the environment is rich enough to be directly understood. Top-down processing theory: (This will be supplemented based on what you want to add.

"It is a constructive cognitive process based on top-down processing, where reality is interpreted by integrating current environmental data with prior knowledge and information stored in memory. This method is essential for understanding ambiguous stimuli in the environment, as they cannot be accurately interpreted without relying on prior experiences or previously acquired knowledge." (<https://mawdoo3.com>).

Chapter Three: Research Methodology and Procedures

This chapter includes an overview of the research methodology, starting with the experimental design, the research population and sample, sample equivalence, research requirements and tools, and experimental implementation procedures.

Research Methodology:

The methodology is the plan the researcher follows to answer the study's questions, clearly defining the methods and procedures for collecting and analyzing data (Al-Najjar et al., 2009: 18). In this study, the partially controlled experimental approach was adopted as the basic framework for conducting the research.

Experimental Design: Experimental research is considered one of the most appropriate types of research for solving problems in a scientific manner, and it is the most appropriate approach for addressing theoretical and applied educational issues, in addition to developing the educational environment and its various systems (Malham, 2002: 388).

Choosing an appropriate experimental design is a crucial step in any experimental study, providing the researcher with the necessary tools and mechanisms to achieve the desired results and obtain accurate answers to the research questions, thus paving the way for testing the proposed hypotheses. Since the current study addresses a specific variable and focuses on monitoring learning skills and their relationship to cognitive development, this is illustrated in the following table.

Research Community

Experimental	Pre-application Learning Effectiveness	The group is divided according to levels:	Equivalence	Independent Variable	Dependent Variable	Post-application
Control group (males and females)	Scale Cognitive Effectiveness	Superficial	- By months - Previous achievement - Current achievement - Attention and response		Resulting Variable Mental Skills	A scale for play - skills and their relationship to .mental skills
		Medium				
		Deep				
group (males and females)	Scale with Play Skills	Surface			Follow-up Individual	
		Medium				
		Deep		Playing Skills		

The research community consists of students at Dar Al-Hikma Elementary School located in the city of Baghdad. Given the large number of students in the school's educational levels, amounting to (655) male and female students, the researcher determined the number of students who underwent the experiment to be (120) students in the fifth and sixth grades.

Research sample: Since the community studied in this research is broad in scope, making it difficult to encompass its components, and since studying it is costly in terms of effort and money, the researcher had to take a representative sample of the community to be studied and generalize its results to the community. "This generalization is acceptable to the extent that it succeeds The

researcher in selecting the sample, therefore the fifth and sixth grades of primary school were chosen intentionally, and the selection was done by simple random method, section (A) to represent the experimental group, while section (B) was chosen to represent the control group after the researcher excluded the students who failed from the previous year, as in the table below: Research sample in terms of the experimental group and the control group.

group	Division	number	Sex	number	Number Excluded students	Final number	the total
Experimental	A	20	Males	15	1	14	18
	B	30	Females	5	1	4	
Control			Males	19	2	17	27
			Females	11	1	10	
group		50			5	45	

Main group	Subgroup	number	Sex	number	the total
Experimental group	Surfactant	12	Males	6	36
			Females	6	
	Average	12	Males	6	
			Females	6	
	The deep	12	Males	6	
			Females	6	
Control group	Surfactant	13	Males	6	39
			Females	7	
	Average	13	Males	6	
			Females	7	
	The deep	13	Males	6	
			Females	7	

RESULTS

By presenting and statistically analyzing the research results, the results demonstrated that students in the experimental group outperformed students in the control group. This superiority can be attributed to one of the following reasons:

- 1- The effectiveness of electronic games made students more excited and motivated, developing their awareness and desire to learn.
- 2- Electronic games helped students participate and realize the importance of positive support, which boosted their self-confidence.
- 3- Students' participation in electronic games stimulates their awareness of the importance of skill development.
- 4- Electronic games are considered one of the learning methods for developing abilities, providing students with the opportunity to delve deeper into the information they learn as a supplement. As a new addition that stimulates their thinking.
- 5- Electronic games helped improve the level of fifth and sixth grade primary school students in expanding their horizons.

CONCLUSIONS

In light of the research results and their interpretation, the researcher concluded the following:

- 1- Electronic games are one of the methods that align with educational requirements to develop awareness, which contributes to scientific and technological aspects.
- 2- Electronic games can be considered one of the means of developing students' skills in various sciences that require attention and stimulate the thinking process in the scientific material.
- 3- Students need to develop various skills, and video games play a role in this, in one way or another.
- 4- Video games have enhanced awareness and instilled social values, the themes of which are addressed in most games, and the application of these skills in other areas.

RECOMMENDATIONS

Based on the research findings and conclusions, the researcher recommends the following:

1. Focus on selecting games that develop children's abilities and contribute to stimulating their cognitive abilities.
2. Train students on how to utilize electronic games to enhance academic achievement, not just for the enjoyment of playing.

SUGGESTIONS

The researcher proposes the following:

1. Conduct a comparative study between electronic games and specific academic subjects.
2. Conduct a study of the impact of electronic games on student relationships with peers.

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