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The educational implications of children's use of electronic games from the perspective of parents of middle school students in the city of Messaad

ABSTRACT

This study aimed to examine the educational implications of electronic game use among children from the perspective of parents of middle school students in Messaad. A quantitative study was conducted using a descriptive-analytical approach. Data were collected through a validated and reliable questionnaire consisting of 28 items distributed across two dimensions: the educational implications of electronic game use and strategies to mitigate its negative effects. The instrument was administered to a sample of 300 parents selected through simple random sampling from three middle schools in Messaad. The findings revealed that parents perceived electronic games as having predominantly negative educational and social consequences. Excessive gaming was associated with late-night play, reduced academic performance, neglect of school assignments, and diminished concentration on educational activities. Parents also reported adverse effects on family relationships, including weakened communication and increased self-centered behaviors. Furthermore, concerns were expressed regarding sleep disturbances, health problems related to prolonged screen exposure, and the presence of violent and inappropriate content that may encourage aggressive behaviors. Conversely, respondents did not perceive significant benefits in terms of cognitive development, motor skills, English language acquisition, or time-management abilities. The study concludes that mitigating the negative effects of electronic games requires coordinated efforts among families, schools, regulatory authorities, and commercial establishments. Strengthening parental supervision, promoting digital literacy and responsible gaming practices, implementing regulatory oversight, and providing clear age-appropriateness information are essential measures to foster safer and more educationally beneficial gaming experiences for children.

Keywords: Electronic games, children, family, technology, education, values.

Las implicaciones educativas del uso de los juegos electrónicos por parte de los niños desde la perspectiva de los padres de estudiantes de secundaria en la ciudad de Messaad

RESUMEN

El presente estudio tuvo como objetivo analizar las implicaciones educativas del uso de videojuegos electrónicos en niños desde la perspectiva de los padres de estudiantes de educación media de la ciudad de Messaad. Se desarrolló una investigación cuantitativa mediante un enfoque descriptivo-analítico. La información se recopiló a través de un cuestionario válido y confiable compuesto por 28 ítems distribuidos en dos dimensiones: las implicaciones educativas del uso de videojuegos y las estrategias para mitigar sus efectos negativos. El instrumento fue aplicado a una muestra de 300 padres seleccionados mediante muestreo aleatorio simple en tres escuelas de educación media de Messaad. Los resultados evidenciaron que los padres percibieron principalmente consecuencias educativas y sociales negativas asociadas al uso excesivo de videojuegos. Entre ellas destacaron el traspaso frecuente, la disminución del rendimiento académico, el descuido de las tareas escolares y la reducción de la atención hacia las actividades educativas. Asimismo, señalaron efectos desfavorables en las relaciones familiares, reflejados en una comunicación más débil y en el incremento de conductas individualistas. También manifestaron preocupación por las alteraciones del sueño, los problemas de salud derivados de la exposición prolongada a pantallas y la presencia de contenidos violentos e inapropiados. En conclusión, la reducción de los efectos negativos de los videojuegos requiere acciones coordinadas entre familias, escuelas, organismos reguladores y establecimientos comerciales, fortaleciendo la supervisión parental, la alfabetización digital y las prácticas responsables de uso.

Palabras clave: Juegos electrónicos, niños, familia, tecnología, educación, valores.

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As implicações educacionais do uso de jogos eletrônicos por crianças na perspectiva dos pais de alunos do ensino secundário na cidade de Messaad.

RESUMO

Este estudo teve como objetivo analisar as implicações educacionais do uso de jogos eletrônicos por crianças na perspectiva dos pais de estudantes do ensino fundamental da cidade de Messaad. Foi realizada uma pesquisa quantitativa com abordagem descritivo-analítica. Os dados foram coletados por meio de um questionário validado e confiável composto por 28 itens distribuídos em duas dimensões: as implicações educacionais do uso de jogos eletrônicos e as estratégias para reduzir seus efeitos negativos. O instrumento foi aplicado a uma amostra de 300 pais selecionados por amostragem aleatória simples em três escolas de Messaad. Os resultados mostraram que os pais perceberam predominantemente consequências educacionais e sociais negativas associadas ao uso excessivo desses jogos. Entre os principais efeitos identificados destacaram-se as noites mal dormidas, a redução do desempenho acadêmico, a negligência das tarefas escolares e a diminuição da dedicação às atividades educativas. Além disso, os participantes relataram impactos desfavoráveis nas relações familiares, evidenciados pelo enfraquecimento da comunicação e pelo aumento de comportamentos individualistas. Também foram apontadas preocupações relacionadas a distúrbios do sono, problemas de saúde decorrentes da exposição prolongada às telas e à presença de conteúdos violentos e inadequados que podem estimular comportamentos agressivos. Conclui-se que a mitigação desses efeitos exige ações integradas entre famílias,

escolas, órgãos reguladores e estabelecimentos comerciais, fortalecendo a supervisão parental, a educação digital e as práticas responsáveis de utilização dos jogos eletrônicos.

Palavras-chave: jogos eletrônicos; implicações educacionais; percepção dos pais; estudantes do ensino fundamental; educação digital.

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INTRODUCTION

In light of rapid technological advancements and continuous changes across various aspects of life, keeping pace with these developments has become increasingly important, particularly in the field of technology. Technological innovations have successfully attracted large numbers of children through what are commonly known as electronic games, which have become widely prevalent across societies. By nature, children require recreation and play, both of which constitute essential activities in their development and daily lives. In recent decades, electronic games have emerged as one of the most popular forms of entertainment among children and adolescents, attracting considerable scholarly attention due to their growing influence on young people's lifestyles and psychosocial development (Gentile, 2009; Griffiths, 2010; Przybylski, 2014).

Electronic games represent a major source of entertainment and leisure, as they transcend geographical barriers, reduce distances, and often simulate real-world environments and events. Their accessibility through various digital devices, including smartphones and computers, allows children to engage with them anytime and anywhere. Consequently, these games have become deeply integrated into children's daily routines and occupy a substantial portion of their leisure time (Przybylski, 2014; Markey, 2016).

It is therefore no longer surprising that children today are increasingly drawn to electronic games at the expense of traditional forms of play. The widespread availability of advanced computers and smartphones in recent years has significantly enhanced the role of video and online games in children's lives. Alongside accelerating technological developments and accompanying social and cultural transformations, electronic games have expanded rapidly and become increasingly available through online platforms and commercial markets. Several studies have indicated that these games now constitute a prominent component of contemporary youth culture and significantly influence children's social experiences and recreational preferences (Griffiths, 2010; Markey, 2016).

The growing popularity of electronic games has generated considerable debate regarding their effects on children's development. From a positive perspective, some scholars argue that certain video games may enhance visual attention, cognitive flexibility, problem-solving abilities, and other mental skills. Research has also highlighted potential benefits related to learning processes, emotional regulation, and social interaction when games are used appropriately and in moderation (Bavelier et al., 2011; Granic et al., 2014).

However, a substantial body of literature has documented several risks associated with excessive or inappropriate gaming. Studies have reported associations between violent video game exposure and increased aggressive thoughts, emotions, and behaviors among children and adolescents (Anderson & Bushman, 2001; Anderson et al., 2010). Additional research has identified potential negative consequences for mental health, academic achievement, and prosocial behavior, particularly when gaming becomes excessive or problematic (Ferguson, 2015; Gentile, 2009). Furthermore, prolonged gaming has been linked to sedentary lifestyles, sleep disturbances, physical discomfort, and symptoms associated with gaming addiction, a condition officially recognized by the World Health Organization as Gaming Disorder in the International Classification of Diseases (World Health Organization, 2019; Sotés Martínez & Mesa Rodríguez, 2022).

Longitudinal studies have also provided evidence regarding the relationship between exposure to violent games and aggressive behavior over time. Möller and Krahé (2009) found that exposure to violent video games predicted increased aggression among adolescents, while Coyne et al. (2018) reported long-term associations between violent gaming and externalizing behaviors during adolescence. Nevertheless, other scholars have challenged these findings, arguing that violent video game engagement may not necessarily be associated with aggressive behavior when methodological limitations are adequately addressed (Przybylski & Weinstein, 2019). These contrasting perspectives demonstrate that the educational and developmental implications of electronic games remain a complex and contested field of inquiry.

Statement of the Problem

Contemporary technological developments in computing and internet technologies have introduced new forms of experiences, ideas, and challenges into children's lives. Among the most influential of these developments is the emergence of electronic games, which have become one of the most attractive forms of entertainment for young people (Gentile, 2009; Griffiths, 2010). Within the context of ongoing technological expansion and the knowledge-based transformations associated with the digital age, researchers and specialists have become increasingly concerned about the future of childhood in contemporary society. This concern stems from the fact that children are among the social groups most responsive to cultural and social change.

The growing popularity of electronic games and the increasing amount of time children spend playing them have raised important concerns among educators, psychologists, and sociologists regarding their educational, psychological, and social consequences (Ferguson, 2015; World Health Organization, 2019; Sotés Martínez & Mesa Rodríguez, 2022). Although electronic games may provide opportunities for entertainment and the development of certain cognitive skills, excessive or inappropriate use has been associated with a range of challenges, including reduced academic performance, behavioral problems, social difficulties, and adverse health outcomes. Consequently, understanding the effects of electronic games has become an important area of inquiry within educational and social research.

Given the widespread use of electronic games among middle school students, educational institutions and families have expressed growing concern about their potential influence on academic achievement, interpersonal relationships, and behavioral development. Parents, in particular, play a critical role in monitoring and regulating children's gaming habits, making their perceptions especially valuable for understanding the educational implications of this phenomenon. In this context, there is a need to investigate how parents in the municipality of Messaad, located in the Wilaya of Djelfa, perceive the impact of electronic games on their children's development and academic trajectory. Such an investigation may contribute to the design of educational strategies and preventive interventions aimed at promoting a balanced and responsible use of digital games among adolescents.

Based on the foregoing discussion, the research problem can be formulated as follows:

- What are the educational implications of children's use of electronic games from the perspective of parents of middle school students in the city of Messaad?

The following sub-questions emerge from the main research question:

- What educational implications do parents of middle school students in Messaad associate with children's use of electronic games?
- What measures do parents propose to reduce the negative effects of children's use of electronic games?

Research Hypotheses

1. There are both positive and negative educational implications associated with children's use of electronic games.
2. Parents of middle school students contribute a range of proposed solutions aimed at reducing the negative effects of children's use of electronic games.

Objectives of the Study

This study seeks to achieve the following objectives:

- a. To identify the educational implications of electronic games and examine their positive and negative effects on children from the perspective of parents of students attending Sheikh Taher Middle School, Bouabdeli Dahmane Middle School, and Omar Ibn Al-Khattab Middle School in Messaad.
- b. To explore parents' perceptions regarding proposed solutions for mitigating the negative effects associated with children's use of electronic games.
- c. To formulate recommendations that may benefit families, schools, and relevant regulatory authorities.

Significance of the Study

The study is expected to provide valuable insights for stakeholders concerned with educational affairs, including school principals, teachers, educational counselors, and parents. In particular, it aims to enhance understanding of the major educational consequences associated with children's use of electronic games. These consequences include behavioral, health-related, and social effects, as well as potential positive outcomes. More specifically, the study addresses:

Health-related effects;

Behavioral and social effects;

Potential positive educational outcomes.

By highlighting these dimensions, the study may contribute to the development of more informed educational practices and family strategies regarding children's engagement with electronic games.

Review of Previous Studies

Study by Kutner, Olson, and Warner (2008)

The study found that:

Parents expressed concern about the violent and sexual content present in some video games.

They were also worried about the negative impact of excessive gaming on children's completion of school assignments and academic responsibilities.

Study by Al-Yaqoub Ali and Mona Adbis (2009)

Title: The Role of Home Electronic Games in Promoting Violent Behavior among Primary School Children in Kuwait

The study reached the following conclusions:

Electronic games contribute to the development of violent behavior among children.

The study highlighted several negative effects on children's physical and psychological well-being, including aggression, social isolation, and difficulties in adapting to others.

It also emphasized the adverse impact of these games on society and its value system.

Study by Majed Mohammed Al-Zyoudi (2015)

Title: Educational Implications of Children's Use of Electronic Games as Perceived by Teachers and Parents of Primary School Students in Al-Madinah Al-Munawwarah

The study produced the following findings:

Teachers believed that electronic games pose several risks, particularly through their contribution to various forms of school violence. They also recognized the negative health consequences associated with gaming addiction, including visual and hearing problems. Furthermore, teachers did not perceive electronic games as making meaningful contributions to the development of children's cognitive and motor skills, English language acquisition, or time-management abilities.

From the parents' perspective, the findings indicated that families experience genuine difficulties as a result of children staying up late to play electronic games, which negatively affects their academic performance. Parents also reported that these games consume a considerable amount of their children's time and attention, leading to several family-related problems, including weakened family communication and the emergence of selfish tendencies among children.

Children's attempts to monopolize game use were found to encourage individualistic and self-centered behavior.

Electronic games were perceived as reinforcing selfishness, as children become increasingly focused on satisfying their own gaming needs.

These games were found to contribute to sleep disturbances among children.

Excessive gaming was viewed as a potential threat to children's health.

Parents also expressed concern about the violent and sexually suggestive content found in some electronic games.

The study further revealed a strong degree of agreement between teachers and parents regarding measures to reduce the negative effects of electronic games. These measures included strengthening the role of governmental and specialized regulatory bodies in monitoring the games available on the market, ensuring parental supervision when selecting age-appropriate games, enhancing schools' efforts to educate children about the risks of gaming addiction and proper gaming practices, and requiring retailers to provide clear information about the nature of the games they sell and the age groups for which they are intended.

Commentary on Previous Studies

Based on the review of the literature and previous research, the following observations can be made:

The present study is consistent with previous studies in terms of its focus on electronic games and their impact on children.

However, the current study differs from previous research in several respects. Earlier studies examined topics such as attitudes toward electronic games, their positive and negative effects, their relationship with violence and aggressive behavior, and their educational implications for child users. The methodologies employed in these studies varied and included descriptive-analytical, survey, and experimental approaches. Their samples also differed, encompassing students, parents, and teachers. Likewise, the data collection instruments ranged from questionnaires to interviews.

The present study is distinguished by its specific focus on the educational implications of children's use of electronic games from the perspective of parents. The study sample consists

of parents of first-year middle school students enrolled in three middle schools—Sheikh Taher Middle School, Bouabdeli Dahmane Middle School, and Omar Ibn Al-Khattab Middle School—in the municipality of Messaad, Wilaya of Djelfa. The study adopts a descriptive-analytical approach and uses a questionnaire designed according to a five-point Likert scale as its primary data collection instrument.

Scope and Delimitations of the Study

Subject Delimitation

This study is limited to examining the educational implications of electronic game use among middle school children from the perspective of parents of students enrolled in Sheikh Taher Middle School, Bouabdeli Dahmane Middle School, and Omar Ibn Al-Khattab Middle School in the city of Messaad.

Time Delimitation

The study was conducted during the first semester of the 2025–2026 academic year.

Geographical Delimitation

The application of the research instrument was restricted to a sample drawn from three middle schools in Messaad: Sheikh Taher Middle School, Bouabdeli Dahmane Middle School, and Omar Ibn Al-Khattab Middle School.

Human Delimitation

The study sample was limited to parents of first-year middle school students enrolled in the schools under investigation. The sample included male parents only and excluded female parents. Participants were required to have home computer access and possess an educational qualification.

Study Concepts

The Nature of Electronic Games

Play

According to Good, play is defined as a directed or non-directed activity undertaken by children for the purpose of enjoyment and recreation (Al-Huwaidi, 2012, p. 27).

Game

A game is defined as an activity in which players engage in an artificial conflict governed by specific rules and leading to quantifiable outcomes (Salen & Zimmerman, 2004, p. 80).

Electronic Games

Electronic games are games that exist in digital form and are typically operated through computers, the internet, television and video game consoles such as PlayStation, mobile phones, and handheld digital devices (Salen & Zimmerman, 2004, p. 86).

Operational Definition

For the purposes of this study, electronic games refer to all types of games available in digital formats, including computer games, online games, video games, mobile phone games, and handheld gaming device applications.

Educational Implications

Operationally, educational implications refer to the moral, value-based, cultural, religious, psychological, health-related, and social effects experienced by children as a result of their use of electronic games, whether these effects are positive or negative.

Research Methodology

The present study adopted the descriptive-analytical approach, as it was considered the most appropriate methodology for addressing the objectives and nature of the research.

Study Population

The study population consisted of all parents of students enrolled in the following middle schools in the city of Messaad:

Sheikh Taher Middle School;

Bouabdeli Dahmane Middle School;

Omar Ibn Al-Khattab Middle School.

The total number of parents in the study population was approximately 1,200.

Study Sample

The study sample consisted of 300 parents, selected through simple random sampling.

Table 1

Distribution of the Study Sample

Middle School	Number of Parents
Sheikh Taher Middle School	100
Bouabdeli Dahmane Middle School	100
Omar Ibn Al-Khattab Middle School	100
Total	300

Source: The Researchers.

Research Instrument

The researchers designed a questionnaire comprising two sections:

Section One: This section was developed to measure the educational implications of children's use of electronic games as perceived by parents of middle school students in Messaad. It consisted of 18 items.

Section Two: This section aimed to assess parents' perceptions regarding ways to reduce the negative effects of children's use of electronic games. It consisted of 10 items.

Validity and Reliability of the Instrument

Face Validity: To establish the validity of the instrument, the questionnaire was submitted to a panel of six expert reviewers from the faculty of Ammar Thliji University of Laghouat. Based on their observations and recommendations, several items were added, modified, or removed to improve the quality of the instrument.

Reliability of the Instrument: The reliability of the questionnaire was assessed using Cronbach's Alpha Coefficient. The results are presented in Table 2.

Table 2

Cronbach's Alpha Reliability Coefficients

Dimension	Cronbach's Alpha	Reliability*
Educational implications of children's use of electronic games as perceived by parents of middle school students in Messaad	0.986	0.992
Parents' perceptions regarding the reduction of the negative effects of children's use of electronic games	0.986	0.992
Overall questionnaire	0.986	0.992

* Reliability = the positive square root of Cronbach's Alpha coefficient.

Source: The Researchers.:As shown in Table 2, the Cronbach's Alpha coefficient reached 0.986 for the dimension measuring the educational implications of electronic game use and 0.986 for the dimension measuring parents' perceptions regarding strategies to reduce negative effects. The overall questionnaire achieved a reliability coefficient of 0.992, which is considered exceptionally high in social science research and indicates a strong level of internal consistency and stability of the instrument.

Study Results: To interpret the responses, the researchers adopted the criterion presented in Table 3 as a reference for evaluating the educational implications of children's use of electronic games as perceived by parents of middle school students in Messaad.

Table 3.

Interpretation of Responses According to the Likert Scale

Mean Score Range	Level
1.00 – 1.80	Very Low
1.81 – 2.60	Low
2.61 – 3.40	Moderate
3.41 – 4.20	High
4.21 – 5.00	Very High

Range: $5 - 1 = 4$

Class Interval Length: $4 \div 5 = 0.80$

Standard Mean Adopted in the Study: $(1 + 5) \div 2 = 3$

Source: The Researchers.

Results of the First Research Question

Table 4

presents the responses of the study participants regarding the educational implications of children's use of electronic games from the perspective of parents of middle school students in the city of Messaad.

No.	Statement	Mean	SD	Rank	Trend
1	Exposes children to inappropriate and indecent scenes that violate moral values.	4.87	0.674	1st	Strongly Agree
2	Teaches children the use of inappropriate language and expressions.	4.82	0.533	2nd	Strongly Agree
3	Increases their tendency to interact with violent and aggressive content.	4.70	0.641	3rd	Strongly Agree
4	Contributes to teaching children violence through continuous exposure to aggressive scenarios.	4.42	0.828	Joint 4th	Strongly Agree
5	Leads to children being late for school the next day.	4.58	0.677	6th	Strongly Agree
6	Develops children's sense of time management, planning, and organization.	4.39	0.869	5th	Strongly Agree
7	Enhances attention, concentration, and motor skills.	4.47	0.863	Joint 12th	Strongly Agree

8	Develops their level of intelligence.	4.46	0.871	Joint 13th	Strongly Agree
9	Contributes to developing imagination and creativity.	4.57	0.668	8th	Strongly Agree
10	Causes children to adopt unhealthy lifestyles.	4.57	0.594	9th	Strongly Agree
11	Exposes children to dangerous situations through simulation of violence and crime.	4.57	0.744	7th	Strongly Agree
12	Enhances responsiveness by encouraging each player to seek solutions to in-game problems.	4.34	0.953	16th	Agree
13	Contributes to developing a spirit of competition and achievement.	4.59	0.751	5th	Strongly Agree
14	Contributes to learning school-related violence.	4.51	0.729	10th	Strongly Agree
15	Helps children understand aggressive behaviors and the consequences of criminal acts.	4.48	0.734	11th	Strongly Agree
16	Develops language-learning skills.	4.33	0.958	17th	Agree
17	Causes weak communication between parents and the child.	4.62	0.734	4th	Strongly Agree
18	Affects the child's personality development and ability to interact with others.	3.44	0.419	18th	Agree

Overall Result

Overall Mean	Overall SD	General Trend
4.5017	0.72929	Strongly Agree

Based on Table (04), the educational implications of children's use of electronic games, from the perspective of parents of middle school students in Messaad (Sheikh Tahar Middle School, Bouabdeli Dahmane Middle School, and Omar Ibn Al-Khattab Middle School), were rated at a "strongly agree" level. The overall weighted mean for this dimension was 4.5017, with a standard deviation of 0.72929. The responses of the study sample ranged between "agree" and "strongly agree", with item means ranging from 3.44 to 4.87. Since the overall weighted mean for this dimension was higher than the study's hypothetical mean of (3), the general trend of responses was toward "strongly agree."

The items were ranked according to their weighted mean as follows:

Rank 1: Exposure to indecent and inappropriate visual content (Mean = 4.87, SD = 0.674), indicating a strongly agree response.

Rank 2: Learning inappropriate and offensive language (Mean = 4.82, SD = 0.533), indicating a strongly agree response.

Rank 3: Enhancing skills in dealing with modern technology (Mean = 4.70, SD = 0.641), indicating a strongly agree response.

Rank 4: Weakening communication with parents due to excessive gaming (Mean = 4.62, SD = 0.734), indicating a strongly agree response.

Rank 5: Causing sleep disturbances due to prolonged gaming time (Mean = 4.59, SD = 0.751), indicating a strongly agree response.

Rank 6: Encouraging late sleeping habits and school tardiness (Mean = 4.58, SD = 0.677), indicating a strongly agree response.

Rank 7: Endangering children's health due to prolonged screen time without movement (Mean = 4.57, SD = 0.744), indicating a strongly agree response.

Rank 8: Contributing to low academic achievement
(Mean = 4.57, SD = 0.668), indicating a strongly agree response.

Rank 9: Neglecting homework assignments
(Mean = 4.57, SD = 0.594), indicating a strongly agree response.

Rank 10: Promoting school violence
(Mean = 4.51, SD = 0.729), indicating a strongly agree response.

Rank 11: Encouraging aggressive behavior and criminal tendencies
(Mean = 4.48, SD = 0.734), indicating a strongly agree response.

Rank 12: Developing cognitive and motor skills
(Mean = 4.47, SD = 0.863), indicating a strongly agree response.

Rank 13: Enhancing intelligence levels
(Mean = 4.46, SD = 0.871), indicating a strongly agree response.

Rank 14: Encouraging reckless real-life driving behavior in the future
(Mean = 4.42, SD = 0.828), indicating a strongly agree response.

Rank 15: Developing time management awareness
(Mean = 4.39, SD = 0.869), indicating a strongly agree response.

Rank 16: Increasing selfishness and conflicts among children
(Mean = 4.34, SD = 0.953), indicating a strongly agree response.

Rank 17: Improving English language learning skills
(Mean = 4.33, SD = 0.958), indicating a strongly agree response.

Rank 18: Strengthening personality and improving social interaction skills
(Mean = 3.44, SD = 1.419), indicating an "agree" response.

The researchers believe that parents face real concerns regarding their children's exposure to indecent and inappropriate visual content presented in some electronic games, which may negatively influence moral and religious values and immerse children in alternative behavioral environments.

In the absence of parental supervision—especially as many of these games are accessible online—and with weak governmental monitoring of physical game media sold in markets, children become vulnerable to psychological shock from inappropriate content. This may extend to imitation of violent or immoral behaviors such as theft, robbery, destruction of property, alcohol consumption, and exposure to scenes of nudity and mixed-gender interactions. Such content contradicts Islamic values and the cultural traditions of Arab and Muslim societies.

The researchers also note that some games promote inappropriate language use, which diminishes children's linguistic and moral standards and contributes to reshaping their cultural identity through imitation of foreign behavioral models that conflict with local values.

At the same time, electronic games may enhance children's technological skills, which may lead to increased dependency on technology.

The researchers attribute parents' concerns to the fact that these games dominate children's time and attention, which disrupts family communication and weakens social bonds within the household.

Excessive engagement with electronic games also reduces children's interaction with their parents, as children become increasingly absorbed in digital environments where they may seek emotional compensation for perceived lack of attention. This negatively affects their academic performance and study habits.

Furthermore, prolonged gaming sessions can lead to sleep disturbances, as children become deeply immersed in gameplay, sometimes to the extent of identifying with game characters. This may also contribute to the development of aggressive and violent behavior toward siblings.

The researchers emphasize that staying up late due to gaming can result in school absenteeism or tardiness. They stress the importance of parental control, including monitoring children's activities and checking on them, especially given that games can be played anytime and anywhere via mobile devices.

Excessive gaming may also pose health risks due to prolonged sitting and lack of physical activity, raising parental concerns about conditions such as vision problems, spinal curvature, and developmental issues.

Low academic achievement is also linked to gaming addiction, as children neglect homework and revision due to excessive gaming time, resulting in poor academic performance.

Additionally, the tendency of children to monopolize games leads to selfish behavior and may contribute to aggression and violent tendencies.

On the positive side, the researchers acknowledge that electronic games may contribute to the development of cognitive and motor skills, as well as intelligence, by encouraging creativity, problem-solving, and engagement in goal-oriented activities.

Electronic games may also foster time management skills, particularly when parents regulate playtime and balance it with study and revision schedules.

They may further contribute to English language learning through exposure to spoken language within games.

Moreover, these games may enhance children's personality development and social interaction skills, including building relationships, improving self-confidence, achieving success, and developing clear communication abilities.

Overall, parents are confronted with a significant challenge posed by electronic games, which are often unregulated and do not consider age or cultural values, particularly in Arab and Islamic societies. Therefore, parents are required to strengthen supervision of their children's behaviors.

Given the importance of parental, educational, and governmental monitoring roles, the researchers believe that strengthening these roles could help prevent the spread of gaming content that not only contradicts religious and cultural values but also violates children's rights and well-being.

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Results Related to the Second Research Question

Table 5

Responses of the Study Sample Regarding Parents' Perceptions of Ways to Reduce the Negative Effects of Children's Use of Electronic Games among Middle School Students in the City of Messaad

No.	Statement	Weighted Mean	SD	Rank	Response Direction
19	The family should supervise children's electronic games because children are unable to evaluate their content independently.	4.47	0.608	2nd	Strongly Agree

20	Schools should play a role in educating children about the negative effects of electronic games and how to use them in a healthy manner.	4.45	0.670	3rd	Strongly Agree
21	Children should be encouraged to switch off the television or gaming device automatically after a specified period of time.	4.21	0.950	10th	Strongly Agree
22	Parents should stay close to their children and support them instead of neglecting them.	4.43	0.726	4th	Strongly Agree
23	Government authorities should monitor gaming shops and cafés to ensure compliance with laws and regulations governing electronic games.	4.48	0.581	1st	Strongly Agree
24	Children's gaming time should be limited before electronic games negatively affect their studies, by allocating fixed periods for daily use.	4.33	0.789	7th	Strongly Agree
25	Children should be encouraged to engage in sports, school activities, and neighborhood games.	4.35	0.819	6th	Strongly Agree
26	Electronic games should be placed in a public area of the house so that children can be monitored while playing.	4.30	0.656	8th	Strongly Agree
27	Gaming products should be required to display information about the nature of their content and the age categories for which they are suitable.	4.23	0.712	9th	Strongly Agree
28	Children should be guided toward healthy habits while using electronic devices (e.g., proper sitting posture, maintaining a safe viewing distance, etc.).	4.34	0.833	5th	Strongly Agree

Overall Results

Overall Weighted Mean	Overall Standard Deviation	General Trend
4.3590	0.70056	Strongly Agree

Source: Prepared by the researchers based on SPSS output.

It can be observed from Table (05) that parents of middle school students in the city of Messaad (Sheikh Al-Taher Middle School, Bouabdeli Dahmane Middle School, and Omar Ibn Al-Khattab Middle School) demonstrated a strong level of agreement regarding the measures that can be adopted to reduce the negative effects of children's use of electronic games. The overall weighted mean for this dimension reached 4.3590, with a standard deviation of 0.70056. Responses to the statements ranged between "Agree" and "Strongly Agree," with weighted mean scores ranging from 4.21 to 4.48.

Since the weighted mean of this dimension exceeded the criterion mean adopted in the study (3.00), respondents' overall tendency was toward strong agreement concerning the proposed measures for mitigating the adverse effects of electronic games on children.

The statements were ranked according to their weighted mean scores as follows:

First Rank: Activating the role of governmental regulatory authorities in monitoring electronic games available in markets and online platforms to ensure their compatibility with the community's culture, values, and ethical standards.

Weighted Mean = 4.48

Standard Deviation = 0.581

Response Direction: Strongly Agree

Second Rank: Parents should supervise the purchase of electronic games appropriate to their children's age and ensure that such games do not contain content harmful to their moral or psychological well-being.

Weighted Mean = 4.47

Standard Deviation = 0.608

Response Direction: Strongly Agree

Third Rank: Schools should play an active role in educating children about the risks of gaming addiction and the proper use of electronic games.

Weighted Mean = 4.45

Standard Deviation = 0.670

Response Direction: Strongly Agree

Fourth Rank: Parents should maintain close relationships with their children, provide guidance and companionship, and avoid neglecting them.

Weighted Mean = 4.43

Standard Deviation = 0.726

Response Direction: Strongly Agree

Fifth Rank: Encouraging participation in sports and traditional games at school, at home, and within the neighborhood.

Weighted Mean = 4.35

Standard Deviation = 0.819

Response Direction: Strongly Agree

Sixth Rank: Guiding children toward healthy habits while playing electronic games, such as maintaining proper posture and keeping a safe distance from screens.

Weighted Mean = 4.34

Standard Deviation = 0.833

Response Direction: Strongly Agree

Seventh Rank: Setting a specific daily time limit for playing electronic games, not exceeding three continuous hours per day.

Weighted Mean = 4.33

Standard Deviation = 0.789

Response Direction: Strongly Agree

Eighth Rank: Placing gaming devices in a common area of the home to facilitate parental supervision.

Weighted Mean = 4.30

Standard Deviation = 0.656

Response Direction: Strongly Agree

Ninth Rank: Requiring commercial stores to provide information about the nature of the games they sell and the age groups for which they are suitable.

Weighted Mean = 4.23

Standard Deviation = 0.712

Response Direction: Strongly Agree

Tenth Rank: Using automatic timer systems that turn off televisions or gaming devices after a predetermined period of use.

Weighted Mean = 4.21

Standard Deviation = 0.950

Response Direction: Strongly Agree

Discussion of the Findings

The findings suggest that parents recognize the necessity of confronting the potential risks associated with electronic games through a combination of family, educational, and governmental interventions. Respondents strongly emphasized the importance of activating regulatory oversight over electronic games offered in markets and online platforms. Parents appear to believe that monitoring game content and ensuring its compatibility with societal values and ethical standards constitute an essential step in protecting children from harmful influences.

The results also highlight the central role of parents in supervising the selection of age-appropriate games and ensuring that the content children consume does not negatively affect their psychological well-being or moral development. Parents further stressed the importance of schools in raising awareness about gaming addiction and promoting responsible gaming practices.

Moreover, respondents emphasized the value of maintaining strong parent-child relationships characterized by communication, guidance, and emotional support. Such relationships may reduce children's excessive dependence on electronic games and help parents better understand their children's interests and needs.

Parents also viewed participation in sports, traditional games, and outdoor recreational activities as important alternatives that can reduce excessive screen time and encourage healthier lifestyles. Similarly, they emphasized the need to educate children about healthy gaming habits, including proper posture and safe screen-viewing practices.

Another important finding concerns the necessity of regulating gaming time. Parents strongly supported establishing daily limits on gaming activities and placing gaming devices in common household areas to facilitate supervision. They also endorsed the provision of clear age-rating information on game products and the use of technological controls, such as automatic timers, to regulate children's gaming behavior.

Overall, the findings reveal a broad consensus among parents regarding the importance of a shared responsibility model involving families, schools, community institutions, and governmental authorities. Respondents believe that effective regulation, parental supervision, educational guidance, and awareness programs are all essential components in reducing the negative consequences of electronic games while allowing children to benefit from their educational and recreational potential.

Study Recommendations

Based on the findings of the study, the researchers recommend the following:

Strengthening governmental oversight of electronic games distributed through online platforms and commercial outlets to ensure that they do not contain content that may negatively affect children's values, culture, or well-being.

Requiring retailers and distributors to provide clear information regarding the nature of game content and the age groups for which each game is appropriate, while enforcing penalties for violations.

Enhancing the educational and awareness-raising role of socialization institutions, including families, schools, mosques, and media organizations, in promoting responsible and balanced use of electronic games.

Encouraging parental monitoring and guidance in selecting appropriate games and regulating children's gaming time.

Promoting alternative recreational activities, such as sports and traditional games, to support children's physical, social, and psychological development.

Developing educational programs that teach children healthy gaming habits and digital responsibility.

Supporting collaboration between families, schools, and community organizations to create a safer and more balanced digital environment for children.

These recommendations are intended to maximize the educational benefits of electronic games while minimizing their potential social, behavioral, academic, and health-related risks, thereby contributing to the well-being and positive development of future generations.

CONCLUSION

Given the successive and accelerating technological revolutions characterizing contemporary society across all aspects of social, educational, cultural, and recreational life, the family, as one of the fundamental institutions of society and the first line of defense for children, is expected to progressively develop its technological knowledge and skills. This development is necessary to enable parents to educate, guide, advise, raise awareness, and supervise their children while they use modern technologies. It also allows parents to participate in their children's learning and educational experiences through these technologies, confront potential challenges and risks, serve as a protective shield for children, and promote a sound digital culture among them.

The findings of the present study revealed that parents face genuine challenges resulting from children's excessive engagement with electronic games. Such engagement negatively affects their academic efforts and performance, while these games consume a considerable amount of children's time and attention. Consequently, several family-related problems emerge, including weakened family communication and the development of selfish tendencies among children. Furthermore, parents expressed concern about the violent scenes and sexual content contained in some electronic games.

The study also revealed a consensus among parents regarding measures to reduce the negative effects of electronic games. These measures include strengthening the role of governmental and regulatory authorities in monitoring electronic games available in the marketplace, ensuring parental supervision when selecting age-appropriate games for children, enhancing the role of schools in educating children about the risks of gaming addiction and the proper use of electronic games, and requiring commercial outlets to provide clear information regarding the nature of games and the age groups for which they are suitable.

Despite the potential harms associated with electronic games, they also offer several benefits. They can stimulate children's intelligence, improve their level of understanding, and enhance cognitive skills by strengthening hand-eye coordination. Previous studies have also shown that electronic games contribute to memory development, rapid thinking, sound and quick decision-making, and the acquisition of self-defense and problem-solving skills.

Accordingly, effective monitoring and guidance mechanisms should be implemented to minimize the potential harms of electronic games. These include:

Establishing specific daily time limits for playing electronic games to prevent excessive use and gaming addiction.

Using monitoring programs to track the games accessed by children.

Encouraging children to play electronic games in the presence of one of their parents.

Allowing children to play with their friends to reduce social isolation.

Allocating sufficient time for participation in sports and physical activities.

Cultivating a love of reading among children.

Encouraging artistic activities such as drawing to channel children's energy and enhance their imagination and creativity.

Ultimately, electronic games should neither be completely prohibited nor left entirely unrestricted. Rather, a balanced approach should be adopted that maximizes their educational and developmental benefits while minimizing their social, behavioral, academic, and health-related risks. Achieving this balance requires cooperation among families, schools, community institutions, and regulatory authorities to ensure a safe and supportive digital environment for children and to promote their healthy development as future members of society.

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