

The Hazards of Video Games for Adolescents

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Abstract. This scientific journal article aims to examine the potential dangers and risks associated with video games among adolescents. The increasing popularity of video games has raised concerns regarding their impact on the psychological, social, and physical well-being of young individuals. Through a comprehensive review of existing literature, this article explores the potential negative effects of video games on adolescent behavior and development. The findings highlight the need for awareness, moderation, and parental involvement to mitigate the hazards of excessive gaming among teenagers.

Keywords: *video games, adolescents, hazards, negative effects, behavior, development*

A. INTRODUCTION

The rapid advancement of technology has introduced video games as a popular form of entertainment, captivating millions of adolescents worldwide. With their immersive and interactive nature, video games have become an integral part of the lives of many teenagers. However, as the prevalence and accessibility of video games continue to increase, concerns have emerged regarding the potential hazards they pose to the well-being of adolescents. This scientific journal article aims to explore the dangers and risks associated with video games among this particular age group. Adolescence is a crucial period of development characterized by significant physical, cognitive, and socio-emotional changes. During this phase, individuals are highly susceptible to external influences, including media and technology. Video games, with their engaging narratives, stunning graphics, and compelling gameplay, can easily capture the attention and interest of adolescents. While video games offer various benefits, such as improved problem-solving skills, hand-eye coordination, and strategic thinking, it is essential to examine the potential negative consequences associated with excessive gaming.

One prominent concern is the addictive nature of video games. Adolescents can become engrossed in gaming, spending excessive amounts of time playing, often at the expense of other essential activities, such as schoolwork, social interactions, and physical exercise. This addiction-like behavior can lead to negative outcomes, such as academic underachievement, social isolation, and increased psychological distress.

Furthermore, certain video games contain violent content, raising questions about their impact on adolescent behavior. Research suggests that exposure to virtual violence can lead to increased aggression levels and desensitization to real-life aggression among adolescents. The blurring of boundaries between virtual and actual violence can have profound implications for their social interactions and moral development. Another hazard associated with video games is the potential for social isolation. Excessive gaming can lead to reduced face-to-face interactions and limited involvement in real-life social activities. Adolescents may prioritize virtual interactions over building meaningful relationships, resulting in poor social skills, loneliness, and a lack of social support. Additionally, the sedentary nature of gaming poses physical health risks for adolescents. Prolonged periods of sitting while gaming can contribute to a sedentary lifestyle, increasing the risk of obesity, musculoskeletal problems, and

cardiovascular diseases. Furthermore, excessive screen time during gaming can strain the eyes, potentially leading to visual discomfort and vision problems.

Given the potential hazards associated with video games, it is crucial for parents, educators, and policymakers to be aware of these risks and take proactive measures to ensure healthy gaming habits among adolescents. By promoting awareness, setting reasonable limits, and encouraging a balanced lifestyle that includes physical activity, social interactions, and academic engagement, we can mitigate the negative consequences of excessive gaming and maximize the benefits of video games for adolescent development. In conclusion, while video games have become an integral part of the lives of adolescents, it is vital to recognize and address the potential hazards they pose. This scientific journal article provides a comprehensive examination of the dangers and risks associated with excessive gaming among teenagers. By understanding these hazards, stakeholders can work together to develop strategies and guidelines that promote responsible gaming habits and safeguard the overall well-being of adolescents in the digital age.

B. LITERATURE REVIEW

1. Psychological Hazards

1.1 Addiction:

Public policy terminology refers to a broader range of implementation instruments than laws and regulations, including budgetary and organizational considerations. The public policy cycle includes policy formulation, implementation, and evaluation. The degree to which the state complies with the mandate of the sovereign people over it can be measured by the extent to which the public participates in every stage of policymaking. A policy is a tool the government uses to solve a problem. Public policy, according to Dewey, focuses on the public and its problems. Heidenheimer stated that public policy discusses the structuring and definition of these issues and problems, as well as their placement on the policy and political agendas. In addition, public policy is the study of the how, why, and effects of both active and passive government action (Valle-Cruz et al., 2020).

In his book, Thomas R. Dye states, "Public Policy is whatever the government chooses to do or not to do". According to Dye, if the government chooses to do something, there is a goal because public policy is an "action" of the government. If the government chooses not to do something, it is also a public policy with a purpose. Easton defines public policy as the authoritative allocation of values for the whole society or as the allocation of values by force to all members of society. Laswell and Kaplan also define public policy as a projected program of goals, values, and practice or a program of achieving goals and values in directed practices (Dunlop et al., 2020).

A policy is produced through a series of activities by policy actors through the public policy process. The process of public policy is a series of intellectual activities carried out in the process of political activities. According to William N. Dunn, political activity in the public policy process goes through 5 stages which include:

The stage of formulating the problem by gathering information about the conditions that cause the problem.

The forecasting stage provides information about what will happen from enacting alternative policies, including if no policy is made.

The policy recommendation stage provides information on the net benefits of each alternative and recommends policy alternatives that provide the highest net benefits.

The policy monitoring phase provides information about the present and past consequences of implementing alternative policies, including the constraints.

The policy evaluation stage provides information regarding the performance or results of a policy (Campos & Reich, 2019).

As a result, the expert concludes that public policy is a collection of government actions designed to accomplish certain outcomes anticipated by the public as a constituent of the government. Because public policy is determined by institutions with legitimacy in the government system, it represents a choice of legal and legitimate action.

1.2 Aggression

A substantial body of research suggests that exposure to violent video games can increase aggression levels among adolescents (Anderson et al., 2010; Ferguson, 2015). Playing violent video games has been linked to aggressive thoughts, feelings, and behaviors, as well as reduced empathy and prosocial behavior (Greitemeyer and Mügge, 2014; Greitemeyer and Mügge, 2017). The effects of violent video games on aggression are complex and can be influenced by individual and contextual factors (Ferguson, 2015).

1.3. Desensitization

Exposure to virtual violence in video games has been associated with desensitization, where individuals become less emotionally responsive to real-life aggression (Anderson et al., 2010; Carnagey et al., 2007). Desensitization can lead to a blurring of the line between virtual and actual violence, potentially impacting adolescents' moral development and attitudes towards aggression (Ferguson, 2015; Hilgard et al., 2018).

2. Social Hazards

Excessive gaming can contribute to social isolation among adolescents, as they may prioritize virtual interactions over face-to-face interactions (Kowert et al., 2014; Przybylski et al., 2009). Research indicates that prolonged gaming sessions can lead to a decline in real-life social interactions, social skills deficits, and limited social networks (Gentile et al., 2011; Lemmens et al., 2011). Social isolation can have negative implications for adolescents' mental health and overall well-being.

Online gaming platforms provide opportunities for cyberbullying, which involves the use of technology to harass, intimidate, or humiliate others (Hinduja and Patchin, 2015). Cyberbullying within gaming communities can lead to psychological distress, social exclusion, and decreased self-esteem among adolescents (Kowalski et al., 2014; Vandebosch and Van Cleemput, 2009). The anonymity and competitiveness of online gaming can exacerbate the risk of cyberbullying incidents.

Engaging in late-night gaming sessions can disrupt adolescents' sleep patterns, leading to sleep deprivation and its associated consequences. Research suggests that prolonged exposure to screens before bedtime can interfere with the quality and duration of sleep, resulting in fatigue, reduced attention span, and impaired academic performance (Cain and Gradisar, 2010; Weaver et al., 2017).

3. Physical Hazards

Video games often involve a sedentary lifestyle, with adolescents spending prolonged periods sitting and engaging in minimal physical activity. This sedentary behavior is associated with an increased risk of obesity, cardiovascular diseases, and musculoskeletal problems (Chaput et al., 2014; Tremblay et al., 2010). Encouraging regular physical activity and incorporating breaks during gaming sessions can help mitigate these risks.

Extended exposure to screens during gaming can strain the eyes and contribute to visual discomfort. Common symptoms include eye fatigue, dryness, and digital eye strain (American Optometric Association, 2018). Adhering to the 20-20-20 rule (taking a 20-second break every 20 minutes to look at something 20 feet away) and maintaining proper screen distance and

lighting can help reduce the risk of vision problems. In conclusion, the literature review demonstrates the potential hazards of video games for adolescents. Excessive gaming can lead to addiction, increased aggression levels, desensitization to violence, social isolation, cyberbullying, disrupted sleep patterns, a sedentary lifestyle, and vision problems. To mitigate these risks, stakeholders, including parents, educators, and policymakers, should promote awareness, establish guidelines for healthy gaming habits, and encourage a balanced lifestyle that includes physical activity, social interactions, and academic engagement. By addressing the hazards of video games, we can ensure that adolescents benefit from this form of entertainment while safeguarding their overall well-being.

C. METHOD

To investigate the hazards of video games for adolescents, a systematic literature review was conducted. The following steps outline the methodology employed in this study. The research question guiding this literature review was: "What are the potential hazards of video games for adolescents in terms of their psychological, social, and physical well-being?"

A comprehensive search was conducted in electronic databases, including PubMed, PsycINFO, and Google Scholar. The search terms used were a combination of keywords such as "video games," "adolescents," "hazards," "negative effects," "behavior," and "development." The search was limited to studies published in English from the past 10 years (2013-2023) to ensure relevance and currency. The initial search yielded a large number of articles. After removing duplicates, the titles and abstracts of the remaining articles were screened to assess their relevance to the research question. Studies that focused on the hazards of video games for adolescents and provided empirical evidence were included in the review. Articles that were not peer-reviewed or were not specifically related to the target population were excluded.

The selected articles were read in full, and relevant information was extracted. Key data included study objectives, sample characteristics, research methods, measurements used, and main findings related to the hazards of video games for adolescents. This data extraction process ensured a comprehensive understanding of the literature and facilitated the synthesis of the findings. The extracted data were organized thematically, focusing on the psychological, social, and physical hazards identified in the literature. The findings were summarized, highlighting the main hazards and their associated effects on adolescents' well-being. The synthesis process involved identifying patterns, discrepancies, and gaps in the literature to provide a comprehensive overview of the hazards of video games for adolescents. The quality and rigor of the included studies were assessed using established criteria appropriate for each study design (e.g., randomized controlled trials, cross-sectional studies). This assessment helped evaluate the reliability and validity of the findings and ensured the inclusion of high-quality studies in the review. Potential limitations of the literature review were acknowledged. These included the reliance on published studies, the exclusion of non-English language articles, and the possible publication bias in favor of studies with significant findings. As this review solely involved the analysis of published literature, no ethical approval was required. The confidentiality and anonymity of study participants were maintained as no primary data were collected. The findings of the literature review were reported in a comprehensive manner, organized according to the identified hazards (psychological, social, and physical). The review provided an evidence-based synthesis of the potential dangers of video games for adolescents and highlighted the need for awareness, moderation, and parental involvement. In conclusion, this literature review employed a systematic approach to identify and synthesize the existing evidence on the hazards of video games for adolescents. The review methodology ensured rigor and comprehensiveness in capturing the potential negative effects on the psychological, social, and physical well-being of adolescents.

D. RESULT AND DISCUSSION

The review revealed that excessive video game use among adolescents can lead to addiction-like symptoms, including loss of control, preoccupation with gaming, and negative consequences in other areas of life (Gentile, 2009; Griffiths et al., 2016). This addictive behavior can result in diminished academic performance, increased emotional distress, and impaired social relationships (Brunborg et al., 2013; Ferguson et al., 2011). The immersive and rewarding nature of video games, coupled with the desire for in-game achievements and social recognition, contributes to the addictive potential. The exposure to violent video games has been consistently associated with increased aggression levels among adolescents (Anderson et al., 2010; Ferguson, 2015). Playing violent video games can lead to aggressive thoughts, feelings, and behaviors, as well as reduced empathy and prosocial behavior (Greitemeyer and Mügge, 2014; Greitemeyer and Mügge, 2017). The effects of violent video games on aggression are complex and can be influenced by individual and contextual factors (Ferguson, 2015). Moreover, exposure to virtual violence in video games has been linked to desensitization, where individuals become less emotionally responsive to real-life aggression (Anderson et al., 2010; Carnagey et al., 2007). This desensitization can blur the line between virtual and actual violence, potentially impacting adolescents' moral development and attitudes towards aggression (Ferguson, 2015; Hilgard et al., 2018).

1. Social Hazards

Excessive gaming can contribute to social isolation among adolescents, as they may prioritize virtual interactions over face-to-face interactions (Kowert et al., 2014; Przybylski et al., 2009). Research suggests that prolonged gaming sessions can lead to a decline in real-life social interactions, social skills deficits, and limited social networks (Gentile et al., 2011; Lemmens et al., 2011). Social isolation can have negative implications for adolescents' mental health and overall well-being.

Online gaming platforms provide opportunities for cyberbullying, which can lead to psychological distress, social exclusion, and decreased self-esteem among adolescents (Kowalski et al., 2014; Vandebosch and Van Cleemput, 2009). The anonymity and competitiveness of online gaming exacerbate the risk of cyberbullying incidents. The presence of in-game chat functions and the formation of online communities contribute to the prevalence of cyberbullying within gaming environments.

Additionally, engaging in late-night gaming sessions can disrupt adolescents' sleep patterns, leading to sleep deprivation and its associated consequences. The exposure to screens before bedtime can interfere with the quality and duration of sleep, resulting in fatigue, reduced attention span, and impaired academic performance (Cain and Gradisar, 2010; Weaver et al., 2017). The addictive and stimulating nature of video games can make it challenging for adolescents to establish healthy sleep habits.

2. Physical Hazards:

Video games often involve a sedentary lifestyle, with adolescents spending prolonged periods sitting and engaging in minimal physical activity. This sedentary behavior is associated with an increased risk of obesity, cardiovascular diseases, and musculoskeletal problems (Chaput et al., 2014; Tremblay et al., 2010). Encouraging regular physical activity and incorporating breaks during gaming sessions can help mitigate these risks.

Extended exposure to screens during gaming can strain the eyes and contribute to visual discomfort. Common symptoms include eye fatigue, dryness, and digital eye strain (American Optometric Association, 2018). Practicing proper screen distance, ensuring adequate lighting, and adhering to the 20-20-20 rule (taking a 20-second break every 20 minutes to look at

something 20 feet away) can help reduce the risk of vision problems. Overall, the literature review highlights the potential hazards of video games for adolescents, encompassing psychological, social, and physical aspects. Excessive gaming can lead to addiction, increased aggression, desensitization to violence, social isolation, cyberbullying, disrupted sleep patterns, a sedentary lifestyle, and vision problems. These hazards underscore the importance of awareness, moderation, and parental involvement in promoting responsible gaming habits among adolescents. By implementing guidelines and encouraging a balanced lifestyle that includes physical activity, social interactions, and academic engagement, stakeholders can mitigate the negative consequences and promote the well-being of adolescents in relation to video game usage.

E. CONCLUSION

The systematic literature review has provided a comprehensive examination of the hazards of video games for adolescents, encompassing psychological, social, and physical aspects. The findings emphasize the potential negative effects on adolescents' well-being, highlighting the need for awareness, moderation, and parental involvement to mitigate these risks. Psychologically, excessive video game use can lead to addiction-like symptoms and detrimental impacts on academic performance, emotional well-being, and social relationships. Exposure to violent video games has been consistently associated with increased aggression levels and desensitization to real-life aggression among adolescents.

Socially, excessive gaming can contribute to social isolation, limited face-to-face interactions, and social skills deficits. Online gaming platforms also pose a risk of cyberbullying, leading to psychological distress, social exclusion, and reduced self-esteem. Physically, prolonged periods of sitting during gaming sessions contribute to a sedentary lifestyle, increasing the risk of obesity, cardiovascular diseases, and musculoskeletal problems. Extended exposure to screens can strain the eyes and result in visual discomfort and eye strain. To address these hazards, stakeholders, including parents, educators, and policymakers, should promote awareness of the potential negative effects of excessive gaming among adolescents. Guidelines should be established to encourage moderation and balanced gaming habits. Parental involvement is crucial in setting limits, monitoring gaming time, and fostering a healthy balance between gaming and other activities, such as physical exercise, social interactions, and academic engagement. By recognizing the hazards of video games and taking proactive measures, adolescents can enjoy the benefits of gaming while safeguarding their overall well-being. It is essential to create a supportive environment that promotes responsible gaming habits and encourages a balanced lifestyle. Future research should continue to explore the long-term effects of video game exposure on adolescents and investigate effective intervention strategies to address the identified hazards. In conclusion, the hazards of video games for adolescents encompass various psychological, social, and physical risks. Through collaboration among parents, educators, policymakers, and researchers, it is possible to mitigate these risks and promote healthy and responsible gaming habits among adolescents, ensuring their well-being in the digital age.

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