



Use of Digital Technologies: Family Perspectives on Children's Health

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ABSTRACT: The increasing use of digital technologies among children and adolescents prompts concerns about their impact on development and necessitates family mediation. This study explored primary caregivers' views on the effects of screen exposure on child health through a focus group with 20 caregivers (17 mothers and 3 grandmothers, aged 20 to 40) from an elementary school in Irecê, Bahia. Findings indicate that children's screen time, including TV and mobile phones, often lacks proper time and content control due to caregivers' extensive responsibilities such as remote work and household chores. Major concerns were exposure to violent games, deceptive online profiles, and potential interactions with abusers. Notable behavioral issues in children included irritability, aggression, and sleep problems. Caregivers implemented mediation strategies like setting rules, time restrictions, content filters, and discussing digital self-care. The discussion also addressed addiction mechanisms, family screen habits, gender differences in electronic device usage, and their health impacts on children. An agreement was made to limit screen use across the family, especially an hour before bedtime, aiming to enhance children's sleep quality and thereby improve their mood and academic performance. This condensed study underscores the challenges caregivers face with children's digital access and stresses the importance of effective mediation strategies. Enhanced parental engagement and school collaboration are crucial for fostering healthier digital habits that benefit children's health and family well-being.

KEYWORDS: children, digital technologies, child health, family mediation, screen use.

INTRODUCTION

In the current context, marked by the growing influence of digital technologies, the access of children and adolescents to electronic devices has become virtually inevitable. The omissions and lack of reflection on the consumption of these technologies strain the meanings of family mediation, as well as the impacts on child development (Muller & Fantin, 2022; Smith & Johnson, 2020). The proliferation of smartphones, tablets, computers, and televisions, coupled with the spread of the internet, has provided an omnipresent digital environment, directly impacting the lives of children from an early age. This reality raises significant concerns among caregivers, who face complex challenges related to the health and development of their children (Johnson et al., 2019).

The primary goal of this study is to explore, understand, and analyze the perspectives of primary caregivers—particularly mothers and grandmothers—on the impact of children's access to digital devices on their health. To achieve this objective, a focus group was conducted with relatives of school-aged children, between 7 and 13 years old, enrolled in a municipal school in Irecê, Bahia.

This study assumes that unrestricted and unsupervised access to digital technologies by children can lead to a series of challenges and consequences for their physical and mental health. Understanding the perspectives and experiences of caregivers, who play a crucial role in mediating this access, is essential for identifying effective strategies to promote a healthy and balanced use of digital technologies by children.

This research not only sheds light on the concerns of caregivers but also seeks to explore the attempts and strategies of mediation that are adopted in the family environment to mitigate the potential negative impacts of using electronic devices (Gentile et al., 2018). Furthermore, the research addresses broader issues, such as addiction mechanisms, gender differences in relation to digital technologies, and general screen use by the family (Radesky et al., 2016).

Thus, this study aims to contribute to a deeper understanding of family dynamics related to the use of digital devices by children, providing valuable insights that can inform intervention policies and practices for a more conscious and healthy use of digital technologies in childhood (Viner et al., 2019; Twenge, 2017).



METHODOLOGY

Sample

The research was conducted through focus groups with relatives of elementary school children, aged between 7 and 13 years. Participants were recruited from a municipal school located in Irecê, Bahia. The sample included a total of 20 participants, consisting of 17 mothers and 3 grandmothers.

Procedure

The dynamics of the focus groups consisted of four distinct stages:

- **Introduction:** In this phase, participants were informed about the purpose of the research, the issues to be discussed, and the general objectives of the study. Information about data confidentiality and informed consent was also provided.
- **Problematization:** Participants were encouraged to freely discuss their concerns and experiences related to the use of electronic devices by children, as well as the perceived impacts on child health and behavior.
- **Sharing:** In this stage, participants shared their specific experiences and family mediation strategies in relation to the use of electronic devices by children. Topics such as time control, accessed content, and alternative activities were discussed.
- **Family Mediation Pact:** Participants were encouraged to reach agreements and mediation strategies to promote healthier and more balanced use of electronic devices by children. These agreements included time limits, website and game restrictions, checking the sites accessed by children, and promoting digital self-care.

During the focus groups, the following discussion topics were addressed:

- **Addiction Mechanisms:** Aspects of the pathophysiology of addiction to electronic devices, as well as market strategies used to captivate children, were explored.
- **Family Screen Use:** The research investigated the general use of electronic devices by all family members and how this might influence children's behavior.
- **Gender Differences:** Possible gender differences in children's relationships with electronic devices and the associated impacts were discussed.
- **Health Impacts:** The research explored the perceived impacts on children's health, with emphasis on mood changes, aggressive behavior, quality and quantity of sleep, and school performance.

RESULTS AND DISCUSSIONS

The study revealed a predominant profile of caregivers, with the majority situated in the age range of 20 to 40 years. These caregivers face significant challenges concerning children's access to screens, whether through television or mobile devices, especially during times when children wake up and when they return from school. The lack of effective control over the time of exposure and the content viewed by children occurs due to the multiple responsibilities of the caregivers, who are often involved in activities such as remote work (home office), household care, attention to others, and care for their own well-being.

The study presents significant results that highlight the challenges faced by caregivers regarding the use of digital devices by children and the perceived impacts on child health and development. These results align with research from authors like Anderson et al. (2017), who emphasize the importance of limiting children's screen time and monitoring the content accessed, especially when it involves violent games or potentially dangerous online interactions.

One of the main findings is caregivers' concern about the content to which children have access. This concern is shared by authors like Gentile et al. (2018), who highlight the negative effects of prolonged exposure to violent or age-inappropriate content.

Additionally, the concern about contact with online abusers is a relevant topic, corroborating studies by Wolak et al. (2013), who warn of the risks associated with children interacting with strangers on the internet.

The behavioral changes observed in children, such as irritability and aggression, are also consistent with findings by Twenge (2017), who pointed out a possible association between increased screen time and a decline in children's mental health. The impact on the quality and quantity of sleep, mentioned in the study, aligns with research by Hale and Guan (2015), which demonstrated that prolonged exposure to electronic devices before bedtime can harm children's sleep.



The mediation strategies adopted by caregivers, such as establishing rules and time limits, are consistent with the recommendations of authors like Radesky et al. (2016), who emphasize the importance of a family environment with clear rules regarding technology use. Checking the sites accessed by children also aligns with the approach of Livingstone et al. (2017), who highlight the need for parents to be involved in their children's online supervision.

The discussion about addiction mechanisms and market strategies used by technology companies is relevant and in line with research by Przybylski and Weinstein (2017), who explored how game and app design elements can encourage prolonged use. The implementation of a limit on screen use by the entire family, especially before bedtime, is also consistent with the recommendations of authors like Orben and Przybylski (2019), who emphasize the importance of creating an environment conducive to healthy sleep and a balance between technology and family life.

In summary, the results and discussions of this study reflect the complexity of issues related to the use of digital technologies by children and the importance of mediation and awareness strategies by caregivers. The findings are in tune with existing academic research and provide valuable insights that can inform intervention policies and practices to promote more conscious and healthy use of digital technologies in childhood.

FINAL CONSIDERATIONS

This study has brought to light the complexity and relevance of the topic related to the use of digital technologies by children, as well as the challenges faced by caregivers in mediating this access. Based on the results and discussions presented throughout the article, some final considerations can be made.

It is evident that caregivers, especially mothers and grandmothers, face significant challenges concerning children's access to screens. The lack of effective control, due to multiple responsibilities such as remote work, household care, and personal well-being, makes supervising the use of digital devices a complex task.

Caregivers' concern about the content to which children have access is understandable, especially when it involves violent games and potentially dangerous online interactions. Online safety for children is a critical issue that requires constant attention.

Additionally, the study highlighted the perceived impacts on children's health and behavior, including mood changes, aggressiveness, sleep disturbances, and possible implications for mental health. These results underscore the importance of promoting balanced use of digital technologies.

The mediation strategies adopted by caregivers, such as establishing clear rules and time limits, are crucial for mitigating the potential negative effects of excessive use of digital devices. Active supervision and open dialogue are valuable tools in this process.

The discussion about addiction mechanisms and market strategies of technology companies highlighted the need for awareness of how digital devices are designed to keep children engaged. This underscores the importance of educating both caregivers and children about responsible technology use.

Finally, the implementation of a limit on screen use before bedtime, as agreed upon by the caregivers, is a positive measure that can improve children's sleep quality. Adequate sleep plays a key role in children's well-being and school performance.

In summary, this study contributes to a deeper understanding of family dynamics related to the use of digital devices by children and highlights the importance of intervention policies and practices that promote more conscious and healthy use of digital technologies in childhood. It is crucial to recognize that unrestricted and unsupervised access to digital technologies by children can pose significant challenges, and collaboration between caregivers, educators, and policymakers is essential to address these challenges and ensure a safe and healthy digital environment for future generations.

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