


## Risky behaviors during children's use of screens

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### ABSTRACT

The ubiquity of digital technology has significantly transformed children's interaction with the contemporary world. Excessive screen time is a problem of increasing relevance, due to the impacts on physical and mental health. Considering that there are many challenges being faced by the new generations in the face of the digital age, there was a need to carry out a study to assess risks arising from the digital environment. The focus of this discussion is on screen time, unmonitored use by parents, cyberbullying, the habit of talking to strangers, exposure to inappropriate challenges, violent and sexual content, based on and highlighting the recommendations of the Brazilian Society of Pediatrics (SBP). This discussion, in addition to enriching the existing literature on the subject, aims to present in a theoretical way the fundamental data for the identification of risks and for the future adequacy and security of the digital environment for children. More in-depth studies on the subject become essential for the improvement of children's health and well-being, in addition to subsidizing the development of interventions more appropriate to the reality of children and adolescents, through a deepening of knowledge about the challenges faced by this age group in the digital environment.

**Keywords:** Children, Risk behavior, Screens, Internet.

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## INTRODUCTION

In contemporary times, digital technology has significantly transformed ways of life, directly impacting the way children and adolescents interact with the world around them. An emerging phenomenon of growing concern is the exaggerated and/or inappropriate use of screens by this age group, which includes devices such as smartphones, tablets, and computers. This topic gains relevance as children and adolescents, from a young age, are exposed to a variety of digital content that sometimes exceeds the limits recommended by health professionals and child development specialists.

Data from the ICT Kiks Online - Brazil survey (2018), conducted by the Brazilian Internet Steering Committee (CGI.br), revealed that children are exposed to sensitive content about food or sleep; ways to hurt yourself; sources that report on ways to commit suicide and experiences with drug use. In addition, about 26% of participants have already been treated in an offensive way (discrimination or cyberbullying); and 16% reported access to sexually explicit images or videos. Another 25% assumed that they were unable to control their screen time, even though they tried to spend less time on the internet (SOCIEDADE BRASILEIRA DE PEDIATRIA, 2019).

Considering that there are many challenges being faced by the new generations in the face of the digital age, there was a need to generate discussions that would lead to awareness about the safe use of screens and the internet by children, with a language adapted to their understanding. As part of the discipline Extension as a Curricular Component (ECC), an educational work on the safe use of screens was carried out in the year 2023 and, through it, we identified behaviors with potential risk to the health of the little ones. Based on this work, it was found that there is a need to discuss the health risk behaviors presented by children who are exposed to screens and the internet.

It is of utmost importance to investigate the risk behaviors associated with the use of screens by children between the ages of 8 and 12, given the significant influence that the abuse of electronic devices can have on the health and well-being of this public.

With the increased availability of digital technologies and children's increasing exposure to screens and the internet, it is essential to understand the behaviors that can put them in dangerous situations in order to develop appropriate preventive measures and interventions.

On the other hand, another problem that arises when allowing children to access digital content online is that the content they are able to access is often varied and highly inappropriate for their age. This age group may not be mature enough to decide what is good for them, and so they are at risk of being exposed to violence, pornography, dangerous challenges, and having interactions with strangers. Another difficulty concerns the lack of parental supervision and control, which subjects them to *cyberbullying*, and they can become victims of sexual exploitation, and so on.



## THEORETICAL FOUNDATION

### IMPACT OF SCREEN AND INTERNET USE ON CHILDREN'S HEALTH

According to Santana, Ruas and Queiroz (2021), health professionals around the world have debated the repercussions of excessive use of electronic devices on the growth and development of children without, however, defining what its long-term repercussions would be. In the context of the modern world, screens, once restricted to television, have evolved into pocket-sized, mobile, and portable devices. Therefore, cell phones, tablets, smartphones, due to their portability, have been incorporated into the routine of people from different social backgrounds and age groups, including children. Screen time, which is understood as the total time for which the child remains exposed to all screens, has increased (NOBRE et al., 2021).

We are currently witnessing the proliferation of the use of technology in the daily lives of families, for various purposes, from work to entertainment, communication and personal organization. Children grow up familiar with technologies such as computers, the Internet, video games, tablets and mobile phones, using them to play, learn and communicate. Digital language is part of the lives of these digital natives, and can even alter their thought patterns and the way they learn (PRENSKY, 2001 apud SANTANA; STREETS; QUEIROZ, 2021).

Interactive time in front of a screen works as a stimulant for the central nervous system, whose effects compromise different body and brain processes (DUNCKELY, 2019 apud SANTANA; STREETS; QUEIROZ, 2021). Specialists in the diagnosis and treatment of child and adolescent developmental disorders call "electronic autism" the automation of people's behavior, especially children's, which deprives them of the properly human relationship, of the exchange of looks and words, turning them into a kind of "Pinocchio in reverse", a puppet that has become humanized with experience (PAIVA; COSTA, 2015 apud SANTANA; STREETS; QUEIROZ, 2021).

Obesity, overweight, metabolic syndrome, insomnia, introspection are some of the comorbidities associated with prolonged exposure to electronic devices (DUNCKELY, 2019 apud SANTANA; STREETS; QUEIROZ, 2021), which, once established, will have repercussions for life.

Research related to the consumption of television and computers has shown harmful impacts on children and adolescents, both due to excessive exposure and absorbed content. Television media contributes to the shaping of opinions, stimulating consumerism, shaping concepts and influencing behaviors. However, the frequent and prolonged use of television leads to a series of problems at school and in adolescence, including sleep disorders, isolation, academic difficulties, and even attention disorders (PEDROSO, 2023 apud CRUZ et al., 2024).

Nunes et al. (2023) highlight that the use of video games and other screens carries a series of concerns, including delayed communication development, learning difficulties, attention and concentration problems, increased risk for obesity and other diseases related to the absence of



physical activities, inadequate sleep, elevation and risk of vision problems, such as myopia and risk of violent behavior.

According to Jonathan et al. (2023) in a study with a diverse cohort of children aged 9 to 11 years in the United States, it was observed that the increase in time spent in front of electronic screens was prospectively associated with suicidal behaviors and that, specifically, activities such as texting, video chatting, watching videos, and playing video games were more strongly correlated with suicidal behaviors at a two-year follow-up.

Children who have a high exposure to electronic screens at an early age are more susceptible to developing emotional and behavioral problems. Specifically, prolonged exposure to high amounts of screen time is identified as a risk factor for behavioral problems. Therefore, both parents and educators should be aware of the need to limit children's screen time (LIU, 2023 apud CRUZ et al., 2024). Excessive use of screens can have a negative impact on children's mental health, influencing factors such as sleep, cognitive development, and emotional well-being.

It is important to note that the consequences of excessive exposure to screens in childhood include delayed cognitive and language development, social delays and lack of emotional control, as well as aggressive and anxious behaviors and sleep disorders (ARANTES; MORAIS, 2021).

It is extremely important to approach and disseminate the indicative classification and the screen time limit, since excessive use is associated with several health risks, among them: digital dependence, irritability, anxiety and depression, attention deficit hyperactivity disorders, sleep disorders, overweight/obesity and anorexia/bulimia, sedentary lifestyle, risks of sexuality, nudity, sexting, sextortion, sexual abuse, virtual rape, self-injurious behaviors, suicide induction and risks, increased violence, abuses and fatalities, visual problems, myopia and computer visual syndrome, hearing problems and NIHL noise-induced hearing loss, postural and musculoskeletal disorders, nicotine use, vaping, alcohol, marijuana, anabolic steroids and other drugs. (BRAZILIAN SOCIETY OF PEDIATRICS, 2019).

## RECOMMENDATIONS OF THE BRAZILIAN SOCIETY OF PEDIATRICS ON THE USE OF SCREENS

The Brazilian Society of Pediatrics (SBP) is an entity whose mission is to promote the health and well-being of children and adolescents in Brazil, in addition to defending their rights. To meet this objective, it relies on scientific research in order to identify risk situations. In this sense, in view of the persistent presence of screens in the current reality, it was necessary to create guiding manuals for pediatricians, parents, educators (due to the presence of technologies and applications in schools) and for children and adolescents themselves. This need is explained by the importance of identifying



risk factors for the health of children and adolescents associated with the use of screens, whether in terms of quantity of time or quality of content.

The World Health Organization (WHO) has defined health as "a state of complete physical, mental and social well-being and not merely the absence of disease" (WHO, 2007, p. 1). In view of the above and based on the scientific literature, the Health Guidance Manual explores this broad concept #MenosTelas #Mais of health by identifying different risk situations among the various aspects of the lives of children and adolescents in relation to the use of screens, through some guidelines, such as: prohibits, for all ages, the use of screens during meals and asks for disconnection 1-2 hours before bedtime, Between the ages of 6 and 10, screen time should be limited to a maximum of 1 - 2 hours per day and between the ages of 11 and 18 this time extends by 1 hour (2 - 3 hours per day). However, during this time of use, the Manual highlights the need for the supervision of parents or guardians, whose presence and contact in a timely manner, in addition to being essential for the development of their children, is necessary to prevent harmful behaviors, such as isolating children in their rooms or "spending the night" playing. Many of these behavior patterns prevent the establishment of a routine and an adequate night's sleep, which are essential for the expected development for each age (SOCIEDADE BRASILEIRA DE PEDIATRIA, 2019, p. 07).

In addition, the same Manual guides the use of appropriate filters, passwords, moments of family life away from the networks and that parents or guardians establish rules for the use of equipment and applications. In addition, it describes the responsibility of caregivers regarding the type of content the child is accessing, with whom they are exchanging messages and whether they have disrespectful content – situations that constitute a risk behavior for health – in addition to observing if the use is excessive and if it is generating behavioral, physical and mental disorders. Regarding the films, series and other content accessed, it is important to consider the Indicative Classification of the Ministry of Justice and Citizenship, whose criteria are determined as free for all audiences or unsuitable for children under 10, 12, 14, 16 or 18 years of age (SOCIEDADE BRASILEIRA DE PEDIATRIA, 2019, p. 06).

The Health Guidance Manual of #MenosTelas #Mais Brazilian Society of Pediatrics (2019) also highlights noise-induced hearing loss (NIHL) as a result of excessive use of headphones, in addition to the appearance of symptoms of attention deficit hyperactivity disorders. In this sense, the SBP recommends balancing online activities with outdoor activities, encourages family interaction and encourages parents to teach their children to block inappropriate and offensive messages.

The recommendations for pediatricians are the evaluation of the child's and adolescent's screen time, sleep quality, diet, physical exercise, behavior and school performance. It is recommended that professionals observe joint injuries, postural problems, changes in vision and other changes already demonstrated in scientific studies. Other guidelines are: evaluate signs of self-



harm, bullying, cyberbullying, participation in potentially dangerous online challenges, and discuss changing harmful habits and lifestyles (SOCIEDADE BRASILEIRA DE PEDIATRIA, 2016, p. 04).

In this regard, among the recommendations for parents are: talking to their children about the internet and social networks, about appropriate websites, establishing rules and limits in common agreement regarding the use of electronic devices, discussing unpleasant, obscene messages, warning about scams – such as offering fake gifts and gifts – and warning them not to give in to blackmailing and threatening messages. It also advises parents to dedicate quality time to spend with their children and to remember that their behavior is a reference for them. Therefore, there are many guidelines that are available as a form of prevention, because "as always, risk prevention is the best investment for the social protection of the digital generation", according to the Brazilian Society of Pediatrics (SOCIEDADE BRASILEIRA DE PEDIATRIA, 2016, p. 04).

Finally, the 2016 document provides recommendations for children and adolescents themselves. It advises on not sharing passwords, not confusing the virtual world with the real world (the digital world is based on fantasy), blocking offensive messages, and being respectful online. It also advises not to talk to strangers or meet them face-to-face, remember that the internet is an uncontrollable and public environment and, therefore, that the consequences of your actions can have endless repercussions. In addition, it advises on the need to take care of physical and mental health, on remembering that, as human beings, they need socialization and to meet their biological needs, such as hunger and sleep, so that they grow and develop in an adequate and healthy way. As a result, the SBP sought, through these recommendations, to fulfill its role as a promoter of health and well-being (SOCIEDADE BRASILEIRA DE PEDIATRIA, 2016, p. 07).

## FINAL GUIDELINES

Mapping the dangers to which children are subject can generate valuable *insights* for the development of prevention and intervention strategies, on the mappings the following stand out:

- Find out the average daily hours that children spend in front of screens, allowing us to assess whether this time exceeds the recommendations of the Brazilian Society of Pediatrics (SBP) and whether there is a link between screen time and possible risky behaviors.
- Analyze behaviors when using electronic devices. This data may reveal how often children use electronic devices during meals and before bedtime, and whether there is any change in sleep pattern after using these devices. This will help us better understand how technology habits can influence children's routine and well-being.
- Check the exhibition online. Through this analysis, it will be possible to assess whether children access the internet without parental supervision, whether they have had



interactions with strangers online, and whether they have been exposed to inappropriate content. The surveys could generate *insights* into children's online safety and the importance of protective measures, such as the use of parental control tools.

- Analyze the impact on behavior and well-being and identify if there is any negative impact on children's behavior in relation to time spent in front of screens. This will help to understand how caregivers perceive the possible effects of technology use on children's mental and emotional health.
- Determine adherence to the age rating, which will indicate whether children follow age recommendations when watching movies and series, allowing us to assess whether parents are aware of and monitoring the content consumed by their children.
- Check whether children have experienced risky online situations, such as cyberbullying, accessing inappropriate content, participating in online challenges, and other similar experiences. This information is key to understanding the specific dangers children face in the digital world.

The discussion on the subject can not only enrich the existing literature on the subject, providing updated and contextualized data on the reality of children between 8 and 12 years old in relation to the use of screens, but can also be a basis for future research.

Through a deeper understanding of risk behaviors, it will be possible to devise more effective digital education and intervention strategies, promoting a healthier and safer use of digital technologies by children.

Thus, it is concluded that, for the protection and healthy development of children, parents, educators and health professionals should be instructed with fundamental data for the identification of risks related to the use of screens, to promote the adequacy and safety of the digital environment for children.





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