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Prolonged use of Screens in Children and their Harm

By Luiz José da Rocha Neto, Mariana Isabel Alvim Costa, Isabella de Caux Saez Bragança Barros, Fernanda Ribeiro Gonçalves Bolina Batista Gabriel Plazzi Mandacaru & Luiz Eduardo Gomes de Britto

Summary- The development of a child encompasses the definition, measurement, and assessment of the expected normal patterns at each growth stage corresponding to their age. The child's passivity in response to stimuli has wide-ranging effects on a variety of domains, including communication skills and, consequently, cognitive, motor, and social development. Additionally, excessive screen time has a negative impact on the sleep-wake cycle, which in turn affects learning capacity and attention, as well as the risk of heart disease and depression. The lack of outdoor activities is closely linked to the growing trend of remote learning, which has resulted in an increased substitution of these activities with online games and video apps. Additionally, the use of electronic devices for more than three hours daily is associated with the worsening of symptoms related to ADHD, anxiety, and parental stress. However, following the COVID-19 pandemic and the widespread adoption of remote learning, screen time has significantly increased, making parental control more challenging, while the absence of physical activities has been exacerbated during this period, potentially leading to future consequences.

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Prolonged use of Screens in Children and their Harm

Luiz José da Rocha Neto [α], Mariana Isabel Alvim Costa [σ], Isabella de Caux Saez Bragança Barros [ρ], Fernanda Ribeiro Gonçalves Bolina Batista [ω], Gabriel Plazzi Mandacaru [¥] & Luiz Eduardo Gomes de Britto [ς]

Summary- **The development of a child encompasses the definition, measurement, and assessment of the expected normal patterns at each growth stage corresponding to their age. The child's passivity in response to stimuli has wide-ranging effects on a variety of domains, including communication skills and, consequently, cognitive, motor, and social development. Additionally, excessive screen time has a negative impact on the sleep-wake cycle, which in turn affects learning capacity and attention, as well as the risk of heart disease and depression. The lack of outdoor activities is closely linked to the growing trend of remote learning, which has resulted in an increased substitution of these activities with online games and video apps. Additionally, the use of electronic devices for more than three hours daily is associated with the worsening of symptoms related to ADHD, anxiety, and parental stress. However, following the COVID-19 pandemic and the widespread adoption of remote learning, screen time has significantly increased, making parental control more challenging, while the absence of physical activities has been exacerbated during this period, potentially leading to future consequences.**

I. Introduction

According to the child's age, child development establishes, measures, and evaluates the expected standards for each stage of growth while also highlighting the potential needs of this population. Pediatric professionals warn of the negative effects of prolonged use of electronic devices, which can hinder the achievement of important milestones at various stages of childhood due to indiscriminate exposure to screens such as television, smartphones, and tablets. The World Health Organization (WHO) implemented the International Classification of Diseases for Digital Addiction (ICD 11), which is directly associated with mental disorders and physiological changes, highlighting the importance of supervision and limiting exposure to electronic devices. This aims to keep children awayfrom inappropriate content that could have a negative impact on their physical and mental health.

II. Methodology

This is a bibliographic review, whose sources were predominantly extracted from the Google Scholar and PubMed data platforms but also included gray literature such as Ministry of Health manuals and websites. The search period covered July and August 2023, respecting the inclusion criteria that consisted of articles published between the years 2000 and 2023, in Portuguese and English, with online access and availability in full format. To improve the search, health descriptors from the DeCS/MeSH platform were used, namely: Child Development; Growth; Pediatrics; Television; Child Development; Growth and Development;Mental disorders.

III. Discussion

Child development defines, quantifies, and qualifies expected standards for each period of growth indicated by the child's age, in addition to warning about possible demands that this population needs (1-2). Pediatric care considers that the prolonged use of screens impairs the achievement of some milestones characteristic of certain stages of a child's life, resulting from indiscriminate exposure to screens such as television, cell phones, and tablets. 3

Early access to electronics is related to the high amount of screen time used by those responsible, considering that electronics are part of the routine of adults who surround them for a large part of the day, also highlighting a difficulty in controlling access to the entire work environment. The environment in which the child is inserted. Furthermore, another reason is passive distraction, that is, the exchange of stimuli that keep individuals active for videos and games that can ensure the child's fulfillment in environments that can generate possible embarrassment or difficulty in carrying out activities in the company of the individual, keeping it static in front of electronics. 4

The child's passivity in the face of stimuli causes consequences in several areas, such as communicative ability and therefore cognitive, motor, and social development. Access to screens also has an impact on the sleep/wake cycle, which directly affects learning, attention, heart disease risk, and depression. 5

In addition to the factors mentioned, the use of screens for more than 3 hours per day is related to the worsening of the prognosis of ADHD, anxiety, and stress in parents. 6 However, after the COVID-19 pandemic and remote teaching, the number of hours has become extremely greater, causing parental control to be impaired, which is also related to the absence of physical activities that were exacerbated during this period. 7

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The absence of activities in an external environment is also closely linked to the need that has become widespread recently for remote teaching and the replacement of these activities with online games and video applications. Consequently, the increase in adiposity and body mass indexes in childhood is directly proportional to the number of hours spent in front of electronic devices. Therefore, the WHO implemented the international disease coding for digital addiction (ICD 11), which is directly involved with mental disorders and related physiological changes, highlighting the need for supervision and limitation of exposure to electronic devices and keeping children away from inappropriate content that may further interfere with your physical and mental health. 8

IV. Final Comments

Child development and exposure to electronic screens are significantly interconnected. It is essential to recognize the importance of monitoring and limiting children's screen time to ensure healthy development. Digital addiction, now recognized by WHO ICD 11, highlights the serious impacts that excessive use of electronic devices can have on children's mental and physical health. To promote the healthy development of children, it is essential that parents, caregivers, and pediatric healthcare professionals are aware of the signs of digital addiction and take steps to limit access to content. Inadequate. Furthermore, encouraging outdoor activities and social interactions outside the virtual world is essential for children's balanced growth. In summary, the balance between screen use and child development is a relevant concern today, especially in the post-pandemic period, and awareness and action are essential to ensure that children grow healthily and develop cognitive, motor, and social skills suitable for their full development.

References Références Referencias

1. FRASER MUSTARD, J. Early human development-Equity from the start-Latin America. *Revista Latinoamericana de Ciencias Sociales, Niñez y Juventud*, v. 7, n. 2, p. 639-680, 2009.
2. Brasil. Ministério da Saúde. Secretaria de Atenção à Saúde. Departamento de Ações Programáticas Estratégicas. Agenda de compromissos para a saúde integral da criança e redução da mortalidade infantil. Brasília: Ministério da Saúde, 2004.
3. Strasburger V. Should babies be watching and using screens? The answer is surprisingly complicated. Acta Paediatr. 2015 Oct; 104(10):967-8. doi: 10.1111/apa.13105. PMID: 26378634.
4. International Play Association [Internet].São Paulo:IPA-Brasil;[data desconhecida; acesso em 27 ago 2023]. Artigo 31 da convenção dos direitos da criança: o desenvolvimento infantil e o direito de brincar. Disponível em: https:// www.ipabrasil.org/
5. Kokka I,Mourikis I,Nicolaides NC, Darviri C, Chrousos GP, Kanaka-Gantenbein C, Bacopoulou F. Exploring the Effects of Problematic Internet Use on Adolescent Sleep: A Systematic Review. International Journalof Environmental Research and Public Health. 2021; 18(2): 760. https://doi.org/10.3390/ijerph18020760
6. Sousa L.L., & Carvalho J.B.M.de. (2023). Uso abusivo de telas na infância e suas consequências. *Revista Eletrônica Acervo Saúde*, *23*(2), e11594. https://doi.org/10.25248/reas.e11594.2023
7. Frizzo GB. Screen use in childhood: what changed in the COVID-19 pandemic and which lessons do we still have to learn? 2022 Apr.-June; 18(2): 5-7. https://doi.org/10.11606/issn.1806-6976.smad.2022.000217
8. Organização Mundial de Saúde. Classificação internacional de doenças – CID 11 [Internet]. [Genebra]: OMS; 2018 [acesso em 28 ago 2023]. Disponível em: https://www.who.int/classifications/icd/en/

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