

## Screen use among children: families should find a balance between quality and quantity

The use of information and communication technologies is disruptively changing what it means to communicate, work, and learn, as they not only influence the lives of adults, but also the lives of children and adolescents. They are digital natives in a world that is highly influenced by technological innovation. The study by Garcia and Dias de Carvalho sought to provide a current view about the effect of early exposure to screens on the comprehensive development of children and parents' perceptions.<sup>1</sup>

They proposed that there was an association between the use of screens by adults and the decrease in interaction with children under their care, and this may not only have consequences on child development, but also predispose them to the habit of using electronic devices in the future.

Currently, there is an increase in the availability of electronic devices at home; the use of these devices is part of daily family life and is disruptive to daily dynamics. Electronic messaging, social media, and electronic games are part of the lives of children and adolescents, and a rational and adequate use of these technologies can improve connectivity and communication and also be used as support tools for education. In addition to international recommendations, the *Sociedad Argentina de Pediatría*<sup>2</sup> has also issued recommendations regarding the use of screens in children and adolescents. However, children use screens from before the age of 2, and most children and adolescents use screens more than what the recommendations suggest, despite parental concerns about excessive screen use.<sup>3</sup> Parents' and caregivers' concern is valid because different studies have established an association between an excessive screen use and obesity / overweight, cognitive problems, attention and hyperactivity problems, sleep problems, poor academic performance, unhappiness, and suicidal ideation.<sup>4</sup>

It has been proposed that increased parental involvement, together with reduced parental stress, could contribute to less screen time for children. The pandemic not only added stress, but also a need for communication through screens, in the face of the isolation imposed by the health situation. It is estimated that screen

time increased by more than 3 hours per day during the pandemic compared to before the pandemic, and was longer in children whose parents reported high levels of stress.<sup>5</sup>

This phenomenon has been taking place in the past 15 years; therefore, such rapid growth has not been accompanied by a large number of publications that comprehensively analyze the relationship between the family context of screen use and its impact on socio-cognitive outcomes.<sup>6</sup>

In a recent systematic review that included 622 publications, it was found that only a small percentage of articles provided a complete description of the measures used to assess screen time. The authors did not find sufficient evidence to be able to establish whether screen time in young children causes harm or benefits.<sup>7</sup>

This is why it is necessary to have good quality methodological evidence that measures whether the incorporation of screens in daily life has a negative impact on children and adolescents, in order to develop practical approaches that may warrant an adequate screen use for the younger generations and for society as a whole.<sup>8</sup>

Orben has proposed the concept of "digital diet"<sup>9</sup> by making a comparison based on the parallelism between food and information technologies and thus being able to measure their impact on development. In this regard, Orben proposes that, if a healthy diet requires choosing not only what to eat, but also considering the amount, different food groups, differences among individuals, and differences in population, it is necessary to do the same to understand what a digital diet is. To meet this objective, Orben proposes to address 6 concepts by way of metaphor:

- Type: just as all foods are not the same, some are healthier or less healthy than others, the same applies to the type of digital content consumed.
- Amount: just as the volume of what you eat is important, the same applies to the number of hours spent in front of a screen.
- Balance: just as an unbalanced diet is not beneficial, the same applies when seeking a balance between the use of electronic devices for education and leisure.
- Individual: most people can eat anything

without developing health problems, but not everyone is the same and, in the consumption of digital content, not everyone reacts in the same way.

- Utility: it is necessary to recognize the importance of studying the use of digital devices in context, since the purpose for which the device is used can determine its impact.
- Type of population: just as malnutrition and obesity associated with socioeconomic conditions coexist all over the world, in the digital world, certain parallels can be drawn with digital inequality, where equity today also involves access to digital technologies in education.

In their article, Garcia and Dias de Carvalho proposed to consider how to manage the digital life of children because screens cannot be considered good or bad by themselves, but their use, and to reflect on how and why parents introduce their children into a technological culture from a very early age, and how they can protect them from potential harmful effects.<sup>1</sup>

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## REFERENCES

1. García SV, Dias de Carvalho T. El uso de pantallas electrónicas en niños pequeños y de edad preescolar. *Arch Argent Pediatr*. 2022;120(5):340-5.
2. Subcomisión de Tecnologías de Información y Comunicación. Bebés, niños, adolescentes y pantallas: ¿qué hay de nuevo? *Arch Argent Pediatr*. 2017;115(4):404-6.
3. Pedrouzo SB, Peskins V, Garbocci AM, Sastre SG, Wasserman J. Uso de pantallas en niños pequeños y preocupación parental. *Arch Argent Pediatr*. 2020;118(6):393-8.
4. Jackson DB, Testa A, Fox B. Adverse Childhood Experiences and Digital Media Use Among U.S. Children. *Am J Prev Med*. 2021;60(4):462-70.
5. Seguin D, Kuenzel E, Morton JB, Duerden EG. School's out: Parenting stress and screen time use in school-age children during the COVID-19 pandemic. *J Affect Disord Rep*. 2021;6:100217.
6. Barr R, Kirkorian H, Radesky J, Coyne S, et al. Beyond Screen Time: A Synergistic Approach to a More Comprehensive Assessment of Family Media Exposure During Early Childhood. *Front Psychol*. 2020;11:1283.
7. Byrne R, Terranova CO, Trost SG. Measurement of screen time among young children aged 0-6 years: A systematic review. *Obes Rev*. 2021;22(8):e13260.
8. Kaye LK, Orben A, Ellis DA, Hunter SC, Houghton S. The Conceptual and Methodological Mayhem of "Screen Time". *Int J Environ Res Public Health*. 2020;17(10):3661.
9. Orben A. Digital diet: A 21<sup>st</sup> century approach to understanding digital technologies and development. *Infant Child Dev*. 2022;31(1):e2228.