

EDITORIAL

The good, the bad and the ugly of children's screen time during the COVID-19 pandemic

The name of the famous 1966 western, *The Good, the Bad and the Ugly*, is a great way to describe the pros, cons and risks of children using modern devices for learning and recreation. The time they spend in front of televisions, computers, tablets, gaming consoles, smartphones and other digital devices has rapidly increased over the past few years. More children own digital devices with almost continuous access to the Internet and users are getting younger. This use, together with improved algorithms that constantly provide new, and individually targeted, content, makes it challenging to shift the focus to non-digital alternatives.

One study of more than 1600 children in the USA tracked screen use trends from 2015 to 2019. It found that children aged 8–12 years used screens for entertainment for an average of 4 h and 44 min a day. The figure for those aged 13–18 was 7 h and 22 min a day.¹ Screen time for schoolwork and homework was added to those figures. The data that are available also suggest that a significant proportion of toddlers uses digital devices for more than an hour a day. This goes against the World Health Organization recommendation of no screen time for children under 2 years of age and less than an hour a day for those aged 2–4 years.² Interestingly, a 2014 study estimated that parents use digital media for an average of 9 h/day.³ It also raises concerns about how technology may interfere with interpersonal interactions or the time parents spend with their children.

Today's children are growing up in a world that is saturated by digital media. Their recreational screen time consists of wide-ranging content, including watching television and videos, gaming, browsing websites, reading e-books, video chatting and using social media.¹ Children also actively produce digital content themselves, such as videos and live streams on the Internet. Screen time is spent both alone and together with peers and adults.

In this issue of *Acta Paediatrica*, McArthur et al report data from a longitudinal Canadian study that investigated how much recreational screen time children aged 9.5 years spent during the pandemic.⁴ They then compared this with their pre-pandemic use at 8 years of age, before the pandemic. The cohort was mainly white, middle-class children, and screen time was measured by retrospective self-reports and maternal reports, instead of time-use diaries or digital monitoring. When the screen time spent on homework was excluded, the average weekly screen time was 24 h at 9.5 years of age. This was nearly 11 h more than the time the same children spent

on screens at the age of 8 years. The observed increase in recreational screen time was significantly greater than the previous trend of one additional hour for each additional year of age.⁴

The fact that children's recreational screen time has almost doubled during the pandemic urges us to reflect on the underlying reasons. McArthur et al observed that there was a particular increase in screen time if families had difficulties meeting financial and/or essential needs during the pandemic.⁴ The psychological stress experienced by the mothers was also linked to increased screen time. In contrast, the children's weekly screen time was 3.5 h less when families enforced rules about screen time than when no rules were applied. The impact of socioeconomic factors may play a distinct role, since recreational screen time has previously been reported to be higher in children from low-income families.¹ A high-income family may also be able to provide more alternatives to digital media.

The ongoing pandemic has been challenging for parents, especially those who take care of children alone. It may also have been difficult for parents to stick to the rules and monitor their child's screen time. Letting children entertain themselves can give an adult respite during their stressful everyday life, especially if they have to work from home. On the other hand, it is possible that the parents' own screen time has increased and that some screen time was spent together with the child. Obviously, some screen use is GOOD, for example necessary contacts with friends and relatives.

Screen time can also be a coping strategy in a difficult life situation. This solution may be helpful in the short term, but can turn out to be inappropriate or even BAD in the long run. Previous research has suggested that increased screen time in poorer families may be an attempt to protect their children from unsafe neighbourhoods, because they spend more time at home.⁵ However, this strategy might be short-sighted, because just about anything can be found on the Internet, including content that is considered inappropriate for children. During the pandemic, concerns have been expressed about increases in online child sexual abuse crimes and cyberbullying.⁶ These include cancel culture on Twitter groups that attract children, namely individuals being excluded by numerous people. There have been several troubling reports that unkind TikTok challenges, including dangerous choking games, have spread among children. They take part in challenges because they want to be noticed. An emerging body of evidence suggests that adolescents are more

sensitive to online peer rejection and acceptance than other age groups.⁷ Data further suggest that adolescents are willing to take more risks when they are with, and being encouraged by, peers. This makes adolescents a particularly vulnerable group for social media phenomena like TikTok games and cancel culture and the consequences can be detrimental and even lethal. This can make the way children and adolescents use the Internet seem UGLY.

Recreational screen use may be good for children, to a certain extent, during this difficult pandemic. However, using social media has been linked to symptoms of anxiety, depression, sleep and attention problems.⁸ Excessive screen time can also result in people becoming addicted to social media and online gambling.⁹ In addition, extensive screen use by preschool aged children has been reported to result in developmental difficulties related to their language, cognitive, motor and social skills.¹⁰ Screen time also takes them away from physical activity and that increases the risk of them becoming overweight. This is a serious concern, because COVID-19 lockdowns, and other restrictions, have increased the proportion of children classified as physically inactive.

Screen time is here to stay. Therefore, it may be more important to consider the specific content of screen-based activity rather than just the amount of time children spend on their digital devices. Further multi-level longitudinal studies on different aspects of screen time are warranted. Qualitative and interdisciplinary studies could provide additional valuable information on the role of digital media during global crises like COVID-19. Getting children to participate in research can be helpful when it comes to pinpointing relevant research questions, study designs and methods for collecting and analysing data. This would be a good way to ensure that research and development activities are in line with the United Nations' Convention on the Rights of the Child. These state that every child has the right to express their views, feelings and wishes in all matters affecting them.

As well as carrying out further research, it is important to inform parents about the importance of controlling their child's screen time and content. Children need real-life interplay with adults and peers if they are to develop self-control, emotional and behavioural regulations and social skills. Therefore, parents should establish sufficient screen free periods each day and ensure that children get the recommended amount of sleep and physical activity.

ACKNOWLEDGEMENTS

Thank you to junior high school student Linnéa Lindholm for sharing her insightful thoughts about screen time among children.

CONFLICT OF INTEREST

The author has no conflicts of interest to declare.

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How to cite this article: Korhonen L. The good, the bad and the ugly of children's screen time during the COVID-19 pandemic. *Acta Paediatr*. 2021;110:2671–2672. <https://doi.org/10.1111/apa.16012>