

Chapter 9 – Screen time vs. other activities

Today's children and young people are called digital natives because of their dexterity in the digital world and social networks. This use of digital content has given rise to a new index of consumption of time in front of screens called screen time.

Although the use of online platforms had been increasing for years, it increased exponentially during the Covid 19 pandemic. This phenomenon led to an increase in screen time due to home office and home schooling, adding to concerns about the effects of excessive screen time. Experts called for limiting screen time and leading a more active lifestyle.

What exactly is screen time?

Screen time is the time we spend using electronic and digital devices with screens such as computers, tablets, smartphones or television. The concept is being studied and researched in terms of its impact on the physical and mental health and behaviour of children and young people. Studies show that screen time directly affects children and



young people's development in a number of areas, from language to socialisation and behaviour. While it is true that screen time can have positive and negative effects on development, there is no doubt that screen time has a direct impact on health. The longer the screen time, the greater the negative impact, especially if the content is not educational.

According to the European Commission, "the digital world can also bring some threats, such as abuse, cyberbullying, hate speech, harmful content and misinformation. Excessive screen use can lead to health problems."



things.

Chances and risks

The online world offers many opportunities for learning, social interaction, skill development, play and everyday life. Electronic devices and programmes help children with disabilities to connect with their peers and participate in class, among other

However, there are still some challenges to overcome, in addition to the consequences that overuse has on physical and mental health:

- sleep
- influences on physical health
- brain development

Sleep



In recent years, the connection between screen time and sleep quality has been proven. The more time spent in front of a screen, the shorter the sleep duration, the worse the sleep efficiency and the longer the sleep onset is delayed. The blue light from the screen affects the body's melatonin (the pineal gland), causing changes in the biological clock (circadian rhythm). The screens emit a light spectrum similar to that of the sun, so the sleep disturbance in turn leads to changes in the natural production of body hormones at bedtime.

Screen use in the hour before bedtime can stimulate the brain. Blue light from televisions, computer screens, phones and tablets can suppress melatonin levels and delay sleepiness.

Effects on physical health

Physical health is also related to the number of hours spent in front of a screen. Studies have shown that less screen time reduces the likelihood of childhood and adolescent obesity. The studies are based on the type of electronic activities and their correlation with the number of hours in front of screens, as this implies a more sedentary life.

In addition, screen time was observed to have a negative impact on physical health, regardless of physical activity levels and dietary habits. This was evidenced both by physical posture when using and interacting with digital devices (computer, smartphone and tablet), but also by the advertising consumed.

“ One possible explanation for the link between television and obesity is the number of commercials for sugary and unhealthy foods. These advertisements can have an

influence on what is bought and consumed in a household. The effect of advertising was demonstrated in a study in which children were shown cartoons with and without food advertising. “ - Harvard T.H. Chan School of Public Health

Development of the brain

Screen time also affects the cerebral cortex during brain development. This part of the brain generally thins as people mature, but the accelerated decline could possibly be related to the amount of screen time.

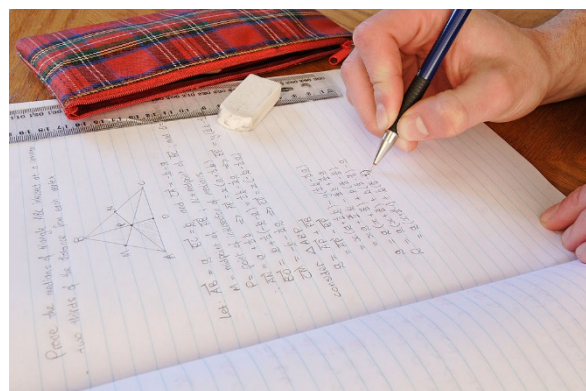


Several international studies have found that children who spend more time in front of a screen at a younger age (between 0 and 5 years) have slower brain development. This suggests an impairment of imagination, mental control and self-regulation. In addition, other negative effects were also observed, such as a delay in language acquisition, school readiness tests that included vocabulary, numerical knowledge and classroom participation.

Among other negative effects, excessive use of screens at a young age affects the development of language acquisition and participation in class.

What impact does it have on academic performance?

It's not all bad news, however, as screen time affects academic performance in different ways. In a positive sense, it can be beneficial for children under 0 to 2 years of age, depending on the duration and content, if they are exposed to the right content. In a negative sense, too much screen time is distracting for older students.



Therefore, it is very important that parents limit screen time and control and monitor screens and the content they consume. Although there is no evidence of a direct link between screen use and improved academic performance, it is possible to improve the habit of doing homework more regularly in this way, limiting distraction and thus improving academic performance.

To avoid these negative circumstances, the World Health Organization has put forward a guideline in 2019 entitled "To grow up healthy, children need to sit less and play more" to improve physical activity, sedentary behaviour and sleep in children under 5.



This incessant technological development is particularly worrying in childhood and adolescence. Experts recommend that daily screen time for children and adolescents aged 5 to 17 should not exceed 2 hours. In addition, it is advisable to follow some recommendations based on the findings of various studies to reduce screen time among children and adolescents:

So how can we avoid excessive screen time?

- Do not use devices with screens before bedtime, generally after 8pm and during meals.
- Limit the amount of time spent in front of a screen. No more than 30 minutes per day is recommended for babies, no more than one hour per day for children aged 3 to 5, and no more than two hours per day for children aged 6 to 18.
- Set rules and restrictions for the use of electronic devices for the whole family (fixed times, fixed schedule...).
- Parents must be a role model for responsible use. To set a good example, it is necessary that parents also stop or significantly reduce the use of technology.
- Accompany children and young people in their screen time and ensure more responsible use.
- Keep networked electronic devices out of the child's room.
- Do not use the mobile phone, tablet or computer as a toy or as a substitute for a leisure or social activity.

Task list as an alternative:

Educational content can be calming when it comes to screen time, but some studies have shown that there are no differences in the consequences of screen use between educational content and entertainment content.

Conducting games and activities between mothers, fathers or guardians and their children offers several benefits, such as stimulating intellectual, motor and social skills, learning language, developing their creativity, controlling frustration and internalising social skills such as support, patience and respect.

One of the most practical options is to create a list of activities as a condition for using electronic devices. Moreover, these lists can be adapted to any age, from childhood to adolescence.

TAGESLIMIT: _____ **WOCHENLIMIT:** _____

VERDIENE DEINE BILDSCHIRMZEIT

- ☀ TIER(E) FÜTTERN = 5 MINUTEN
- ☀ EIN BUCH LESEN = 5 MINUTEN
- ☀ STAUBSAUGEN = 5 MINUTEN
- ☀ STAUBWISCHEN = 5 MINUTEN
- ☀ MÜLL RAUSBRINGEN = 5 MINUTEN
- ☀ MÜLL BAD RAUSBRINGEN = 10 MINUTEN
- ☀ GESCHIRrspÜLER AUSTRÄUMEN = 10 MINUTEN
- ☀ GESCHIRrspÜLER EINRÄUMEN = 10 MINUTEN
- ☀ KÜCHE AUFRÄUMEN = 10 MINUTEN
- ☀ WÄSCHE WEGLEGEN = 10 MINUTEN
- ☀ ZIMMER AUFRÄUMEN = 10 MINUTEN
- ☀ TOILETTE PUTZEN = 10 MINUTEN
- ☀ DUSCHE PUTZEN = 10 MINUTEN
- ☀ SCHALTER DESINFIZIEREN = 10 MINUTEN
- ☀ MIT DEM HUND RAUSGEHEN = 15 MINUTEN
- ☀ WÄSCHE WASCHEN = 20 MINUTEN
- ☀ UNKRAUT JÄTEN = 20 MINUTEN
- ☀ AUTO INNEN REINIGEN = 20 MINUTEN
- ☀ AUTO WASCHEN = 30 MINUTEN
- ☀ KÜHLSCHRANK AUFRÄUMEN + PUTZEN = 30 MINUTEN
- ☀ SAUGEN + WISCHEN 1 RAUM = 30 MINUTEN
- ☀ HUNDEKACKE EINSAMMELN = 45 MINUTEN
- ☀ RASENMÄHER = 1 STUNDE

INSGESAMT: _____

FURTHER INFORMATION:

- [Digital and Information Society. EU Commission](#)
- [WHO guidelines on physical activity, sedentary behaviour and sleep](#)



- [American Academy of Pediatrics. Screen time](#)
- [Harvard. T.H chan. Obesity prevention source](#)
- [JAMA Pediatrics. Pre-scholl children and White matter](#)
- [How alternatives to screen time improves children's good habits and health](#)
- [Eco Watch. Too Much Screen Time May Be Slowing Childhood Brain Development](#)



**Co-funded by
the European Union**



Erasmus+
Enriching lives, opening minds.

This project has been funded with support from the European Commission. This document reflects the views only of the project partners, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

License: CC BY 4.0: <https://creativecommons.org/licenses/by/4.0/>