

# Media scientist studies benefits and risks of smartphone use among children and adolescents

March 15 2024

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Anne-Linda Camerini. Credit: SNSF

Always on their mobile phones? That can't be good for them. Media Scientist Anne-Linda Camerini is looking into how true this is. The

feared effects on young people cannot be clearly proven.

"My son is in his last year of primary school. And yes, he wants to have a smartphone! But we haven't let him have one yet." Camerini, Ph.D., a lecturer and researcher at the Faculty of Biomedical Sciences at USI Università della Svizzera italiana, laughs and shakes her head at this question. "But he's allowed to use a tablet and a computer." Keeping children off the Internet isn't the answer. After all, they're bound to see the content from their friends.

But when, objectively, is the best time to give children a smartphone? "I don't have an answer to this seemingly straightforward question," says Camerini. "Although it's not what the media, parents and teachers want to hear, we don't yet have any clear scientific proof of how [smartphone use](#) affects well-being and academic performance—despite some people's tendency to demonize it, telling of depressed young people who can't read properly because they're on their phones all the time." According to her, it is extremely difficult to provide evidence-based media education. Valid findings from robust studies on the harmful effects are rare.

## **Phone addiction is not a diagnosis**

One problem for researchers is that they can barely keep up with the pace of digital developments. By the time the data on [social media use](#) has been evaluated, people may have already moved on into the metaverse or be using virtual reality headsets rather than their phones. Even the term mobile phone addiction is problematic. "Public discourse is quick to dramatize and pathologize. But what is considered normal these days? What is worrying? We simply don't know. That's also why there is no clinical diagnosis yet."

She believes that the widespread fear in society mainly comes from the

idea that screens take something else away from children—such as time playing outside or with friends. "The fact is, though, that we also use our smartphones for useful things. And is an online game really worse than a traditional memory board game? These are the questions that we want to critically examine."

Up to now, the research on digital media in the lives of children and adolescents has mostly been based on cross-sectional surveys. In these, information is generally gathered using questionnaires on various aspects such as smartphone use and well-being at the same time, which only provides us with snapshots. The classic chicken-or-egg question remains unanswered: "Does the smartphone cause [psychological problems](#), or do I use it so much because I already have these problems?"

In studies, the measurable effects of device use are very weak: "It's generally quite difficult to examine satisfaction over time," according to the researcher. Who can say that my smartphone has anything to do with me being happy today and less happy three months later? After all, there are numerous other aspects that influence our "good feelings."

These days, scientists tend to assume that very intense smartphone use takes something away from our well-being. "However, there are some researchers who believe—somewhat caustically—that eating potatoes is just as bad for you." Camerini shrugs her shoulders.

### **Tracking young people's smartphones**

Long-term studies are a particularly good way of filling in the gaps in order to better understand the benefits and risks of smartphones in the lives of children and adolescents. One of these is also Camerini's most important work to date: For the Mediaticino project, the scientist collected [longitudinal data](#) between 2014 and 2021 in collaboration with schools in Ticino, one aim of which was to examine whether mobile,

digital media contributes to young people's well-being—including during the pandemic.

The cohort comprised more than 1,000 schoolchildren who were 10 years old when the project started. Once a year they completed a questionnaire, and at the end of the school year their answers were linked to their report grades as an indicator of their academic performance. Camerini and her team also collected longitudinal data from the children's parents in order to better understand and take account of their family circumstances.

To enable her to continue the project after 2018, Camerini then received her first project grant from the Swiss National Science Foundation. "My motto was to move out of my comfort zone and try out new methods! I thought about how we could not only investigate the technical advances, but also use it for our own research."

For the project that was ultimately renamed "Mediaticino2.0," alongside the surveys she also tracked the smartphones of the now 14-year-olds, gaining objective data on how often they were using them and for how long. This mix of methods was unique at the time in Switzerland, particularly due to the sensitive issue of tracking young people's smartphone use.

## **Digital detox brings little benefit**

So what's the conclusion? Those who use their smartphones a lot are quickly deemed problematic by our society. However, the study showed that it is not necessarily screen time that is the issue but, as the researcher says, more a case of how often it is used. You could be reading a digital book for two hours at a time. "It's more problematic when you keep looking at your smartphone at short intervals, thus interrupting other activities. Constantly checking for new messages or

social media feeds can affect your concentration and lead to conflicts with others," explains Camerini.

Her research also showed that using the Internet for a variety of purposes and balancing online and offline activities is good. During the pandemic especially, young people were able to stay in touch through the Internet and maintain a certain amount of normality outside of their family, whether by chatting in small WhatsApp groups or attending virtual classrooms—using digital devices helped them to feel better.

"I therefore don't think much of classic time limit rules," says Camerini. "The same goes for the digital detox," that is to say a strict break from your smartphone for a period of time. "A detox works for substances that you want to give up permanently, such as nicotine, alcohol or drugs. Smartphone use is something completely different."

She is therefore working with various parties to develop strategies that could lead to better self-control among children and [young people](#). This is because the primary difference between them and adults is their level of self-discipline, which can only be developed over time.

In her own family life, Camerini focuses on a small number of fundamental things in order to train this self-control with her own children. Here, she believes it is very important to set priorities: when you are talking to someone, don't be looking at your phone. Smartphones are banned at the dining table. Homework must be done before you can relax on the tablet. Parents should not leave their children to manage this responsibility alone. And they don't need to have the Ferrari of smartphones when they learn how to use it.

"When buying a child's first phone, preferably start off with a device with just a few functions." When can her son look forward to getting his own smartphone? "When I think he's ready," says Camerini. That

includes not losing the device.

Provided by Swiss National Science Foundation

Citation: Media scientist studies benefits and risks of smartphone use among children and adolescents (2024, March 15) retrieved 27 April 2024 from <https://phys.org/news/2024-03-media-scientist-benefits-smartphone-children.html>

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