When it comes to the policies that govern the relationship between technology use and the physical and mental health of children, the most effective laws are based on data from robust, longitudinal research.

In the last year Americans have spent a record number of hours in front of screens for work, school, and fun. When these examples are negative and cause for concern, they should highlight the need for research rather than reactive regulation. If lawmakers want to pass effective and lasting policies, they should only use anecdotes to highlight areas that are also backed up by comprehensive evidence-based research.

Recent studies have shown an association between screen time and inattention problems in preschoolers, mobile device use and language delays in 18 month-olds, and screen time and poor performance in cognitive tests between the ages 2 through 5. Older studies provide stronger evidence that screens are ineffective teachers for babies and toddlers. Most troublingly, there has been a well-documented rise in depression, loneliness, and mental health problems in children and teens, with some studies showing an association between these health effects and increased screen time. However, the majority of these studies fail to show decisive evidence of a causal relationship. In Stephanie Pappas’ 2020 research review, she writes that “screen time research has been less than definitive, mainly owing to a lack of strong longitudinal studies to date.” Media psychologist Jerri Lynn Hogg agrees, writing “as psychologists, it’s really important for us to have scientific-based evidence behind what we’re recommending. We’re not there yet.” Studies that reveal causation are an essential next step.

Another area where more data is needed before making any policy changes is around video games. The public perception is that video games are harmful to physical and mental health, and there are studies that support this conclusion. Some research correlates time played with food intake, worrying parents about weight gain and obesity, and video game addiction is such a concern that the American Psychological Association has defined internet gaming disorder as a unique syndrome that could affect as many as 0.3-1.0% of Americans. However, there are also multiple studies that reveal the positive effects of video games. A 2014 research review outlines some of the benefits of gaming for kids, including improvements in learning, health, and social skills. These advantages were even documented in violent shooter video games. A study focusing on young adults found that video games that feature narrative components are associated with improved memory and increased physical activity. And a recent Oxford study even revealed benefits that gaming has for mental health, with a positive correlation between time played and reported wellbeing.

Parents’ concerns are more immediate. In a 2020 study, over 70% of parents named overuse of screens as a top child health concern, the highest percentage of all issues. Currently, widely-accepted recommendations for families with young children come from the American Academy of Pediatrics (AAP) and the World Health Organization (WHO). The AAP recommends no screen time except video calls for children until 18-24 months, and one hour or less of screen time per day for kids 2-5 years old. WHO’s nearly identical recommendations suggest no screens for kids under 2 years, and less than an hour a day for kids 2-5. With these recommendations, it’s important to acknowledge that they do not differentiate between different types of screen time. Researchers argue that
screen use is more important than screen time; school, interactive or collaborative games, opportunities to communicate or virtually hang out with friends, and video chat with family are all time using technology, but are viewed as healthier ways to use devices than passively watching a screen for hours.

The National Institutes of Health (NIH) has been one of the world leaders in research into child and teen development. One example of this is the Adolescent Brain Cognitive Development (ABCD) Study that began in 2015, which is the largest ever longitudinal study on teen brain and behavioral development in the US. More than 10,000 9-10 year-olds around the country began the study and will continue to be followed into young adulthood. Different teams are focusing on different factors, but some specific variables and outcomes include physical activity, screen time, sleep, exposure to substances, the impact of genetic vs. environmental factors, and more. This longitudinal, comprehensive study will be a strong foundation on which to build policies and laws, and researchers have already gained helpful data.

There is also a need for a more targeted study on technology use and bipartisan federal legislation aims to fill that gap. The Children And Media Research Advancement (CAMRA) Act would direct $95 million to the NIH to investigate the cognitive, physical, and social-emotional development effects of digital media use by infants, children, and adolescents. FOSI has endorsed this bill, and will continue to support efforts that produce robust, accurate data in order to better guide government policies aimed at keeping families safe online.

There are complicated problems to address around kids and teens’ online experiences and how they translate to real world physical and emotional wellbeing. And it’s a good thing that anecdotes and personal examples have become part of the public conversation. But effectively addressing these problems requires more than a knee-jerk reaction; it requires thorough research and data gathering, which must serve as the basis for thoughtful, evidence-based policies. Current research like the ABCD study and proposed research like CAMRA are promising in their ability to enable lawmakers to better craft and implement the strongest and most effective online protections for kids and teens.

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About FOSI

The Family Online Safety Institute is an international, non-profit organization which works to make the online world safer for kids and their families. FOSI convenes leaders in industry, government and the non-profit sectors to collaborate and innovate new solutions and policies in the field of online safety. Through research, resources, events and special projects, FOSI promotes a culture of responsibility online and encourages a sense of digital citizenship for all.