

# Parents Are Growing More Concerned About This Type of Addiction

Analysis by Dr. Joseph Mercola

November 30, 2023

#### **STORY AT-A-GLANCE**

- > Internet addiction has surpassed drug use as a top concern for parents of teens, according to an eye-opening study published in JAMA Network Open
- > In a survey of 1,005 parents, twice as many cited concerns about internet addiction compared to substance addiction among their 9- to 15-year-old children
- > More than half (51.1%) expressed concerns about how internet usage may affect social development, while 46.2% were concerned about cognitive development effects and another 46.7% worried about its effects on physical development
- > Access to inappropriate content and cyberbullying were noted as top reasons behind parents' concerns, while internet addiction was also a common theme
- > Research shows 12- and 13-year-olds who check social media more than 15 times a day become more sensitive to social feedback, including changes in how the brain processes social rewards and punishments

Internet addiction has surpassed drug use as a top concern for parents of teens, according to an eye-opening study published in JAMA Network Open.<sup>1</sup> In a survey of 1,005 parents, twice as many cited concerns about internet addiction compared to substance addiction among their 9- to 15-year-old children.

With excessive internet use linked to a range of problems, including alcohol dependence, depression, anxiety and insomnia, along with socialization issues and

difficulty coping with risk,<sup>2</sup> youth may be at increasing risk of harm from the negative effects of internet use.

# Parents Are Worried About Internet's Effect on Adolescent Development

While 71.6% of survey respondents felt their children could use the internet responsibly, this didn't allay their fears about the effects of internet usage on development. More than half (51.1%) expressed concerns about how internet usage may affect social development, while 46.2% were concerned about cognitive development effects and another 46.7% worried about its effects on physical development.

Access to inappropriate content and cyberbullying were noted as top reasons behind the development concerns, while internet addiction was also a common theme. Among the parents, 32.9% expressed feeling equally worried about internet and substance addiction in their children, but 22.4% were only concerned with internet addiction – more than twice as many as the 9.8% who reported their sole concern was substance addiction.<sup>3</sup>

Some parents also expressed that internet use had some benefit on family connectedness, but this was tempered with concerns over adverse effects on development and addiction:<sup>4</sup>

"Perceived benefits of internet use were balanced by parental concerns about the potential of social networking platforms to contribute to internet addiction, echoing recent warnings by the US Surgeon General.

Parents also endorsed overriding concerns about the risks for cyberbullying and exposure to inappropriate or harmful content. Previous work found that these dangers are particularly relevant to specific age and social contextual factors.

The benefit-risk balance was particularly evident for immersive virtual reality technologies, which were simultaneously perceived as having a positive effect

on family connectedness and increasing the risk of PIU [problematic internet use]."

### **Surgeon General Warns About Youth Internet Use**

Internet usage increased dramatically during the COVID-19 pandemic, more than doubling the time teens spent in front of screens not related to school, from 3.8 hours a day to 7.7 hours. Further, in 2020, 81% of youth between the ages of 14 and 22 said they used social media "daily" or "almost constantly."<sup>5</sup>

In an advisory aimed at protecting youth mental health, the U.S. surgeon general warned that technology companies are in business to maximize usage without regard for what's best for the user:<sup>6</sup>

"In these digital public spaces, which privately owned and tend to be run for profit, there can be tension between what's best for the technology company and what's best for the individual user or for society.

Business models are often built around maximizing user engagement as opposed to safeguarding users' health and ensuring that users engage with one another in safe and healthy ways. This translates to technology companies focusing on maximizing time spent, not time well spent."

The advisory points out researchers have linked digital technologies to bullying, obesity, eating disorders, depression, anxiety and self-harm, while interfering with sleep and encouraging children to negatively compare themselves to others. Passive social media use, such as scrolling through posts and watching videos on auto-play, may also harm well-being.

They suggested a ban on auto-play functions and limits on scrolling capabilities for youth, but are largely relying on Big Tech to make changes to safeguard against harms – a classic example of the fox guarding the henhouse. The advisory noted:<sup>7</sup>

"There is a clear need to better understand the impact of technologies such as social media on different kinds of users, and to address the harms to users most at risk.

We need more research using strong data and research methods, such as longitudinal and experimental designs, behavioral (as opposed to self-reported) measures of time spent online and types of content engaged with, as well as data on subgroups of users (e.g., boys vs. girls).

Most importantly, technology companies must step up and take responsibility for creating a safe digital environment for children and youth. Today, most companies are not transparent about the impact of their products, which prevents parents and young people from making informed decisions and researchers from identifying problems and solutions. At a minimum, the public and researchers deserve much more transparency ...

Senior technology executives should acknowledge that their products can harm some young people and take material and measurable steps to prevent and mitigate these harms, even at the expense of engagement, scale, and profit."

### **Constantly Checking Social Media May Harm Brain Development**

Parents are right to worry about internet usage, and not only due to addiction concerns. Research published in JAMA Pediatrics found habitually checking social media in early adolescence may alter brain development.<sup>8</sup>

Social feedback in the form of likes and comments can prove to be irresistible to youth, with 78% of 13- to 17-year-olds saying they check their cellphones hourly, while 35% of teens say they use at least one social media platform almost constantly.<sup>9</sup>

The study, conducted by researchers at the University of North Carolina at Chapel Hill (UNC), found that 12- and 13-year-olds who check social media more than 15 times a day become more sensitive to social feedback, including changes in how the brain processes social rewards and punishments.

"Most adolescents begin using technology and social media at one of the most important periods for brain development during our lifetime," study author Mitch Prinstein, the chief science officer for the American Psychological Association, said in a UNC news release, adding:<sup>10</sup>

"Our research demonstrates that checking behaviors on social media could have long-standing and important consequences for adolescents' neural development, which is critical for parents and policy-makers to consider when understanding the benefits and potential harms associated with teen technology use."

# More Than Half of Teens May Be Dependent on Social Media

According to Prinstein, more than half of teens report one or more symptoms of clinical dependency on social media, demonstrating that "children may not have the ability to restrain themselves" when it comes to using the platforms.

He compared social media to the "empty calories of social interaction," which "appear to help satiate our biological and psychological needs, but do not contain any of the healthy ingredients necessary to reap benefits."<sup>11</sup> In written testimony to the U.S. Senate Judiciary Committee, Prinstein highlighted the poor state of children's mental health, which internet usage may be contributing to.

Rates of depression in teens doubled from 2009 to 2019, while suicide is the No. 2 cause of death for U.S. youth, trending 4% upward since 2020.<sup>12</sup>

Noting that humans are social beings whose development is intricately intertwined with interactions with peers, Prinstein points out that these experiences influence brain structures, neural pathways and the way the nervous system responds to stress later in life. But with the last two decades, social media has radically changed the way these social interactions occur:<sup>13</sup>

*"Our brains, our bodies, and our society have been evolving together to shape human development for millennia, influencing our communities, our culture, and* 

our society. Within the last twenty years, the advent of portable technology and social media platforms is changing what took 60,000 years to evolve. We are just beginning to understand how this may impact youth development."

Internet usage prior to adulthood may be particularly harmful because it could alter the brain during a highly critical period of neural development. These occur during the first year of life and again from puberty to early adulthood, between the ages of 10 and 25.

Initially, around the ages of 10 to 12, brain regions associated with a need for social rewards, such as positive attention from peers, develop, but the regions that regulate the ability to resist temptations do not develop for another 10 to 15 years. Prinstein explains the serious ramifications this has for youth mental health:<sup>14</sup>

"Adolescence is thus a developmentally vulnerable period during which youth may be especially motivated to pursue social rewards, and not yet fully capable of restraining themselves. Research suggests that technology and social media use may exploit this biological vulnerability among youth.

Data reveal that social media stimuli, such as receiving "likes" or followers activates the social reward regions of the brain. In other words, these features of social media capitalize on youths' biologically based need for social rewards before they are able to regulate themselves from over-use."

# Four Ways Social Media May Damage Youth Brains

Prinstein detailed four significant implications that social media and internet usage could have on youth:<sup>15</sup>

- Increased loneliness, as the platforms lead youth to get "likes" and followers in other words, metrics – instead of form relationships with people themselves; research shows teens report increased loneliness after social media use
- **2. Heightened risk for negative peer influence** In addition to coming across content depicting dangerous or unethical behaviors, seeing "liked" posts containing such

content may change adolescents' perceptions of the behavior; it may give them the idea, for instance, that their peers accept binge drinking, which could promote the behavior

- 3. Risks for addictive social media use Social media use activates many of the same areas of the brain that are activated in additions to drugs and alcohol. Not only do many adolescents report near constant usage of social media, but many also report an inability to stop sing it, making remarkable efforts to gain access to social media and using social media to regulate their emotions
- 4. Alterations in brain development Citing the University of North Carolina at Chapel Hill study, he noted that technology and social media use change the way the brain works, especially with high usage.

Data from teens' phones reveal that usage is, indeed, high, with sixth graders picking up their phones more than 100 times a day, and some picking them up more than 400 times daily. Adolescents also spend an average of 8.2 hours on devices each day, with some spending twice that amount

Digital stress, which occurs from connection overload, fear of missing out on online conversations or feeling the need to be always available online, along with anxiety over gaining approval online, is another significant issue. Close to 50% of youth on social media suffer from digital stress, which is associated with increases in depressive symptoms.<sup>16</sup>

# **Should Social Media for Kids Be Banned?**

Proposed legislation would block children under the age of 13 from using social media, while also prohibiting Big Tech from using algorithms to target content to users under 18.<sup>17</sup> "I certainly don't think anyone under 13 should be using it," Prinstein told CNBC. "Unfettered access, without any screen controls or [parental] monitoring, that should probably be delayed for as long as possible — certainly, until at least 16."<sup>18</sup>

You don't have to wait for legislation to take action to protect your children, however. Unplugging from social media and excessive internet usage — a so-called digital detox — may benefit your and your child's mental health. Encouraging youth to turn off electronics and spend time outdoors engaged in sports, gardening, walking the dog or just being in nature should be a priority.

Whenever you have an opportunity to get off of screens and outdoors, do it. Meal times, family gatherings and even washing your car are all opportunities to break free from problematic internet usage and reconnect with the real world around you.

#### **Sources and References**

- <sup>1, 2, 3, 4</sup> JAMA Netw Open. 2023;6(10):e2339851. doi:10.1001/jamanetworkopen.2023.39851
- <sup>5, 6, 7</sup> U.S. Surgeon General Advisory, Protecting Youth Mental Health, page 25
- <sup>8</sup> JAMA Pediatr. 2023;177(2):160-167. doi:10.1001/jamapediatrics.2022.4924
- <sup>9, 10</sup> The University of North Carolina at Chapel Hill January 3, 2023
- <sup>11</sup> American Psychological Association February 14, 2023
- <sup>12</sup> American Psychological Association, Written Testimony Before the U.S. Senate Committee on Judiciary February 14, 2023
- <sup>13</sup> American Psychological Association, Written Testimony Before the U.S. Senate Committee on Judiciary February 14, 2023, Page 5
- <sup>14</sup> American Psychological Association, Written Testimony Before the U.S. Senate Committee on Judiciary February 14, 2023, Pages 6-7
- <sup>15</sup> American Psychological Association, Written Testimony Before the U.S. Senate Committee on Judiciary February 14, 2023, Pages 8
- <sup>16</sup> American Psychological Association, Written Testimony Before the U.S. Senate Committee on Judiciary February 14, 2023, Pages 13
- <sup>17</sup> AP May 4, 2023
- <sup>18</sup> CNBC May 26, 2023