

Social media, along with its harms and opportunities, is evolving at the ‘speed of cyber’. What can adults do to protect the well-being of our children and youth?

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In 2018, Stats Canada found that more than 9 out of 10 Canadians between the ages of 15 to 34 used social media regularly¹. During the pandemic, people in this demographic reported a larger increase in their online activities compared to other age groups². A 2023 Canadian study, published in the journal *Frontiers of Psychiatry* found that, in a sample of youth recruited between 2021 and 2022, about half used social media for over three hours a day³.

As more young people engage with social media, mental health professionals have been able to notice certain patterns of concern, including addictive behaviours⁴. But, youth engaging in potentially addictive activities is not new.

When I was a young adult at university, several of us would occasionally gather on a Friday night for a few beers and perhaps some very small-stakes poker - \$20 for the evening. One or two people also smoked – but they’d be good enough to step outside for a cigarette. I didn’t smoke but sometimes I’d step outside too, if the conversation was good. The point of those evenings wasn’t so much about the activities – it was about catching up on the week and spending time together. Back then, everyone knew that alcohol, gambling and tobacco could be harmful to health, finances and relationships – mainly because they could all become addictions. But, gathered around the table, we also felt that the social benefits outweighed the risks – if we thought about the risks at all.

Today, we know even more about the causes and consequences of addictions. We also know that, for years, the tobacco industry kept quiet about research showing the addictive and harmful impacts of using its products⁵. For a long time, research and reporting suggested that limited quantities of alcohol might actually be good for our health. That is being contradicted by new research⁶ suggesting that consuming alcohol has no physical health benefits at all and that, theoretically, there is no completely safe amount of alcohol.

Yet, for some communities and cultures, there are social uses of alcohol and tobacco that nurture connection: wine with family dinners, religious observances, a drink to celebrate significant events, sharing a hookah (Middle Eastern tobacco water pipe), or placing a friendly bet in a hockey pool. These can all reinforce important parts of group identities. Sometimes, shared practices like these can help build solidarity and sustain a sense of community in the face of challenges.

¹ <https://www150.statcan.gc.ca/n1/pub/36-28-0001/2021003/article/00004-eng.htm>

² <https://www150.statcan.gc.ca/n1/pub/45-28-0001/2021001/article/00027-eng.htm>

³ <https://www.frontiersin.org/articles/10.3389/fpsy.2023.1029082/full>

⁴ <https://bmcp psychology.biomedcentral.com/articles/10.1186/s40359-023-01141-2>

⁵ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3490543/>

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<https://ccsa.ca/sites/default/files/2023-01/LRDG%20Lifetime%20risk%20of%20alcohol%20attributable%20death%20and%20disability.pdf>

Knowing that alcohol consumption is woven into the lives of many Canadians, the Canadian Centre on Substance Abuse and Addictions recommended people reduce and cap their weekly intakes⁷. Public health experts sometimes have to look for a balance among competing considerations: what the research shows to be the case at a population level, the knowledge that individuals can differ in big ways from population averages (some will do worse, and some will do better or experience no harms), and understanding that certain behaviours that can cause harm are also deeply held practices for individuals and their communities.

How might this help us understand and grapple with the risks and benefits of social media use?

Social Media Use

Some research is beginning to suggest that consuming social media can be harmful to some young people. Social media companies also use sophisticated behavioural and brain insights to ensure that their platforms ‘catch-and-hold’ users for as long as possible. Harvard social psychologist, Dr. Shoshana Zuboff explains how this “magnetic pull” of social media is core to the business models of these platforms⁸. The engineered attractions of social media create conditions that can make this pull stronger. Yet, social media has also been seen to have some benefits for people looking for connections and ways to mobilize around positive causes.

Let’s take a closer look at the pros and cons of social media use among young people. Keep in mind that today’s social media landscape is not the same as yesterday’s. Social media, like other information technologies, continues to evolve, ‘at the speed of cyber’.

Five characteristics of social media use by children and youth have arisen as areas of concern – not just for mental health professionals, but also for those who are interested in safeguarding the safety and social ‘glue’ of our communities and the democratic values of our societies.

1. One is the prevalence of social media in the lives of young people. Canada is not the only country with social media spreading deep into the day-to-day worlds of young people. As reported earlier this year, the communication platform Snapchat reaches 90 per cent of youth and young adults and three-quarters of 13-34 year olds in the UK⁹. The same report found that users in that country open the app 50 times a day, on average. According to a recent survey conducted by the Pew Research Center¹⁰ TikTok has experienced a meteoric rise in popularity among American teenagers aged 13 to 17 since its introduction in North America several years ago. As of now, it stands as one of the leading social media platforms for teens. In the same study, YouTube emerged as the dominant force in the 2022 teen social media landscape, being used by a remarkable 95 per cent of teenagers in the US. Numbers like these mean increased exposure to potentially harmful content and online experiences. For those less at risk to begin with, repeated exposure may gradually increase risk. For those already experiencing risks for poor outcomes, the wide reach of the platforms means that vulnerable young people are more

⁷ <https://ccsa.ca/sites/default/files/2023-05/Canadas-Guidance-on-Alcohol-and-Health-poster-2023-en.pdf>

⁸ <https://profilebooks.com/?s=zuboff>

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<https://mobilemarketingmagazine.com/snapchat-reveals-it-has-over-21m-monthly-active-users-in-the-uk#:~:text=Snapchat%20has%20published%20its%20monthly,are%2025%20years%20or%20older.>

¹⁰ <https://www.pewresearch.org/internet/2022/08/10/teens-social-media-and-technology-2022/>

likely to encounter situations that could lead to harm. In fact, evidence reviewed by researchers at the Université de Sherbrooke showed that adolescents with poor mental health might even be heavier users of social media¹¹. Although the direction of cause-and-effect hasn't been confirmed, this is worth keeping an eye on.

2. The second involves the addictive potential of these platforms, which are designed to keep users engaged. Jaron Lanier is one of the early pioneers of virtual reality and one of today's sharpest critics of social media. In his widely read 2018 book, *Ten Arguments for Deleting Your Social Media Accounts Right Now*¹², he explains in careful detail how the IT algorithms that make social media work are designed to modify user behaviour. By constantly monitoring and tracking user activities, the algorithms engineer feedback designed to keep users online, so they can be exposed to additional content (including targeted ads). We've probably all wondered about the sometimes strange content that shows up after we've done a YouTube search – some of it is similar and some is a little different. Over time, the algorithm will take the user down a 'rabbit hole' that increasingly serves up similar – but sometimes more intense – content. This is often referred to as the social media "echo chamber" because the algorithms have 'learned' that the best way to keep people glued to a site is to reinforce content that gives rise to strong emotions. Lanier describes how these platforms are also based on the recognition that the more a person uses, and comes to depend on a particular app, the harder it is to leave the network of people and ideas they encounter there. He talks about this as a combination of addiction and network effects.

Over the past decade, a new issue known as 'problematic use of social media', has gained attention from mental health professionals and researchers, as a form of behavioral addiction¹³. While more research about online behavioural addictions and what they might mean for youth is required, studies summarized by Canadian researchers suggest that as many as seven per cent of youth may be struggling. Globally, the prevalence of technology-related addictions can be as high as about 11 per cent of the population¹⁴.

3. The third involves the harm to developing brains that can come from unhealthy engagement with social media. Using brain imaging, researchers at the University of Southern California found that addictions to social networking sites went along with changes in brain structure that resembled what was found in other addictions¹⁵. Social media use has also been found to have a connection to a range of mental health issues, including depression, social anxiety, sleep problems and sometimes also suicidal thoughts and behaviours¹⁶. New research from the University of North Carolina reported in the *New York Times*¹⁷ shows an association between frequent social media use and changes in the ways that teen brains respond. The study found that teens who were habitual users of social media showed brain changes consistent with being

¹¹ <https://bmcpyschology.biomedcentral.com/articles/10.1186/s40359-023-01141-2>

¹² <https://us.macmillan.com/books/9781250239082/tenargumentsfordeletingyoursocialmediaaccountsrightnow>

¹³ <https://bmcpyschology.biomedcentral.com/articles/10.1186/s40359-023-01141-2>

¹⁴ <https://www.nature.com/articles/srep45064>

¹⁵ <https://www.nature.com/articles/srep45064>

¹⁶ <https://bmcpyschology.biomedcentral.com/articles/10.1186/s40359-023-01141-2>

¹⁷ <https://www.nytimes.com/2023/01/03/health/social-media-brain-adolescents.html>

extremely sensitive to peer feedback. The much younger brains of children may be even more vulnerable to some of these effects of social media.

Dr. Devi Sridar, chair of global public health at the University of Edinburgh, agrees that social media apps can be bad for children. In a July 2023 article reviewing the latest research on the harms of social media¹⁸, Dr. Sridar quoted US Surgeon General, Vivek Murthy who issued an advisory¹⁹ in June of this year on the impacts of social media on youth mental health:

“...we don’t have enough evidence to say [social media is] safe, and in fact, there is growing evidence that social media use is associated with harm to young people’s mental health. We are in the middle of a national youth mental health crisis, and I am concerned that social media is an important driver of that crisis.”

In his report, *Social Media and Youth Mental Health*, Dr. Murthy found that teens consuming more than three hours per day of social media have twice the risk of depression and anxiety²⁰. Remember this number from the Canadian study mentioned at the top of this piece. Other concerns cited by Dr. Sridar reflected survey research by the US Centers for Disease Control (CDC) showing negative impacts on body image and being exposed to content involving hate. Reflecting the addictive potential of social media use, the CDC survey also showed children and teens feeling caught in the web of social media, expressing how hard they thought it would be to try to give it up.

4. A fourth characteristic of social media involves the content of postings, which is increasingly vulnerable to manipulation and misdirection. New technologies, powered by artificial intelligence, can make it easy for almost anyone to manufacture digital content that looks realistic but is, in fact, bogus. More and more, artificially generated text, voices and images are expected to litter the social media landscape, making it hard to distinguish fact from fakery²¹. Fake content could be used by an individual to cyber-bully a classmate. It can be used in an organized way by criminal groups or extremist movements to target segments of populations at a wide scale, in order to manipulate thinking and behaviour. In some cases, the purpose might be to groom unsuspecting children and youth for sexual exploitation. In other cases, the purpose might be to radicalize vulnerable social media users and recruit them to anti-social movements. At a broader level, real “fake news” could be used to plant the seeds of distrust in elected leaders and public institutions, undermining social cohesion and confidence in our democracies.
5. A final feature of today’s social media environment is the relative lack of guardrails to protect vulnerable users from exposure to unverified, and potentially harmful, online content. This is becoming a growing concern among those who see the recent launch of Chat GPT and other so-called generative AI tools as the beginning of a rapid advance of both opportunities and

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<https://www.theguardian.com/commentisfree/2023/jul/04/smoking-gambling-children-social-media-apps-snapchat-health-regulation>

¹⁹ <https://www.hhs.gov/sites/default/files/sg-youth-mental-health-social-media-advisory.pdf>

²⁰ <https://www.hhs.gov/sites/default/files/sg-youth-mental-health-social-media-advisory.pdf>

²¹ <https://ninaschick.org/deepfakes/>

dangers for young people²². This spring, a bill was proposed in the US Senate that would create a minimum age of 13 for social media usage, mandate parental consent for children aged 13 to 18, and prohibit platforms from employing specific algorithms targeting young users²³. Canada's privacy commissioner has also called attention to the risks to the personal data of young people who are using social media²⁴. In September, Ireland's main privacy regulator technology companies were set to fine TikTok a half-billion dollar fine for previously failing to provide adequate privacy safeguards for younger users²⁵. These are not easy issues to grapple with from a policy perspective – for example, how might some of these proposed remedies be enforced? How will adequate regulation be managed, without creating pressure on caregivers, schools and other institutions? However, these are important conversations that are starting to happen.

Balance

So, is using social media *always* harmful?

Not so long ago, the answer was “not necessarily”.

There have been plenty of examples of the ways that engaging with social media has helped young people – and others – connect with the broader world. Social media has been used to break down social isolation and reach other like-minded youth – whether to mobilize as part of a shared cause, to seek out a sense of solidarity as an antidote to social isolation or social exclusion, to understand the world better, or to be exposed to new ideas and diverse ways of being. For example, a recent survey²⁶ conducted by the McKinsey Health Institute found that, while the involvement of GenZs in social media can elicit negative feelings at times, it can also serve as a valuable resource for fostering connections and discovering mental health support.

A careful review of social media use and well-being in teens, conducted by a UK team²⁷ concluded that, while there is a connection between the two, it is complex and relies on many different factors²⁸. The researchers found that, in some cases, social media could support the development of healthy identities and could also be a helpful addition to education and learning. Until recently, social media could be relied on as a source of breaking news or important communications from trusted sources. But, as we've seen, it isn't always easy to tell facts from fraud.

A recent New York Times article exploring what social media may or may not be doing to teenage brains offered a balanced perspective²⁹. Top psychologists and neuroscientists who specialize in the study of

²² <https://www.cnn.com/videos/business/2023/05/10/artificial-intelligence-expert-danger-kids-ai-cnntm-vpx.cnn>

²³ <https://www.npr.org/2023/04/28/1172098173/social-media-kids-senate-bill>

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https://www.thestar.com/news/canada/your-kids-need-to-understand-social-media-s-risks-canada-s-privacy-watch-dog-says/article_8ec3afa3-f34d-5ec4-aa96-ca7ae3432a87.html?

²⁵ <https://www.cbc.ca/news/canada/tiktok-canada-privacy-younger-users-1.6968536>

²⁶ <https://www.mckinsey.com/mhi/our-insights/gen-z-mental-health-the-impact-of-tech-and-social-media>

²⁷ <https://link.springer.com/article/10.1007/s40894-021-00154-5>

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<https://www.psychologytoday.com/ca/blog/evidence-based-living/202110/the-pros-and-cons-social-media-youth>

²⁹

<https://www.nytimes.com/2023/09/20/well/family/social-media-teen-brain-mental-health.html?smid=nytcore-ios-share&referringSource=articleShare>

teens said that, while social media use may impact quickly developing brains, research has not yet landed on a clear understanding of how all of these factors interact with each other, and when, exactly, problems can arise.

So, what can adults do today, when the uncertainty and potential harms of social media seem to be growing daily? How can we support our kids to lessen the risks and make the most of some of the opportunities that can come from safe social media use?

One of the things we do know is that where young people feel a sense of connection to their schools, they are less likely to fall into unhealthy patterns of screen time and social media use³⁰. This means that, whenever principals, teachers, school-based counsellors and caregivers can support safe, positive engagement with the school community, kids win.

Recognizing the need to balance the positives that kids might see in social media with the negatives that we're currently aware of, it can be helpful to establish household guidelines for social media use, based on open conversation, scaled to the age and abilities of the child. This could be done by creating positive routines or comparing social media use to having a treat, or to other activities that are best consumed in moderation.

Two other things caregivers can do are to model healthy social media use themselves, and to talk to kids openly and non-judgmentally about the pros and cons of these technologies. Talking about the ways that social media use can help to manage stress, or how other self-care activities can help people limit excessive social media use, can help young adults think about how they might like to make use of these technologies.

Some young people will be open to understanding how they can use social media more strategically and in a disciplined, goal-focused way – for example, to seek out new resources, to connect to people with shared interests and commitments, or to start to 'curate' a positive online presence for themselves related to sports, hobbies or potential careers of interest. We know, for example, that more active use of social media can be positive, whereas more passive consumption is more likely to lead to negative outcomes for users. This type of discussion can also open a door to learning how to critically assess online information, the likely sources of the information, and to compare and contrast it with reputable outlets.

At all times, it's important to acknowledge why someone might be finding these activities positive. When a child starts a conversation about social media use, taking time to listen and learn about their experiences is enormously valuable for caregivers, while also building connection and trust with the child. These social connections are a support for resilience, and the ability to cope with changing – often uncertain – circumstances.

In most people, the parts of the brain that are responsible for 'grown-up' thinking and self-control don't fully develop until around the age of 24 or 25. What this might mean for caregivers is that more detailed discussions about the harms and opportunities of social media use might miss the mark with a young person or a less developmentally mature person. Instead, it can help to focus on how the person is

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<https://www.canada.ca/en/public-health/services/reports-publications/health-promotion-chronic-disease-prevention-canada-research-policy-practice/vol-38-no-10-2018.html>

feeling and reflect observations back to them – for example, “you seemed upset yesterday after being on that app during the afternoon.”

With any luck, these steps might be the opening for a valuable conversation that day, and a lifelong capacity to talk together about the complex challenges of our changing world. More dialogue at home, in schools, and within the media will open up a wider public policy conversation that can help our elected representatives and our technology companies better understand caregivers’ and young people’s concerns about technologies that can sometimes take more than they give.

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