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Young people in the digital era: Understanding risks and promoting well-being

Evidence brief




Knowledge Institute
on Child and Youth Mental Health and Addictions



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For information about this report, please contact info@cymha.ca

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Introduction

Digital technology has become an essential part of our daily lives, transforming the way we work, study, and communicate with others. With just a few clicks, we can access information on any topic, at any time, anywhere in the world. Technology has made it possible for us to connect with others effortlessly, fostering relationships and promoting cultural exchange.

Although using technology offers many advantages, it also poses risks. Research suggests that some individuals may be more at risk for digital harm than others, highlighting the importance of building **digital resilience** – the skills and ability to effectively manage the challenges of digital environments.

This evidence brief focuses on young people aged 12–25, as this age group may be particularly vulnerable to specific types of digital harm. The stages of development between 12 and 25 years old are marked by exploration and self-discovery. During this period, young people often use personal devices and increase their interaction with the digital world, without adult supervision. This combination of newfound independence and unsupervised access can heighten both the positive and negative experiences associated with using technology.



Technology use: The use of various devices and digital content, such as computers, tablets, smartphones, the internet, social media, gaming, and online gambling (Sampasa-Kanyinga et al., 2022).

Throughout this brief, we define digital harm as a deliberate use of technology to cause harm to others. This can include sending malicious texts, emails, messages, images, or videos and spreading misinformation and damaging gossip about someone. It encompasses harm inflicted online via platforms like social media, websites, and email services, as well as harm caused over cellular networks through Short Message Service (SMS), Multimedia Messaging Service (MMS), or direct phone calls.

Our evidence brief is designed to equip service providers in the child and youth mental health and addictions sector with the information and tools they need to help young people safely navigate the digital world. This resource explores:

- How and why young people use technology.
- The digital harms young people can face when using technology.
- The impact of digital harms on young people's mental health and well-being.
- Strategies for fostering digital resilience.

With this knowledge, we hope service providers can develop effective harm-reduction strategies to help young people build their digital resilience and leverage the benefits of technology, while safeguarding their mental health and well-being.



Digital harm caused by online content is only one factor in the continuum of risks and benefits of technology use. For more information, check out our resource, “Technology use across ages and stages of development.”

Technology use among young people

We live in a digital era where many people have access to a wide range of electronic devices, including smartphones, laptops, tablets, smart TVs, and video game consoles. Smartphones and laptops are the primary devices used by young people (MediaSmarts, 2022). However, not all young people have equal access to these technologies (Frenette et al., 2020). This can limit their ability to participate in digital spaces and develop the skills needed to navigate online environments safely.

Technology plays a significant role in the lives of young people. Nearly half report being online almost constantly (Pew Research Center, 2024). Most high school students in Ontario (94%) use social media daily, with about 1 in 4 (23%) spending 5 or more hours a day on these platforms (Boak & Hamilton, 2024). Technology is used to:



Communicate, make social connections, and self-express.

Digital tools such as texting, messaging apps, video calls, and emails allow users to stay connected with friends and family (Walker, 2022). Social media platforms like Instagram, TikTok, Snapchat, Facebook, and YouTube provide unique spaces to connect with like-minded peers with similar interests and experiences. These platforms also serve as hubs for content creation, where users can actively participate by creating and sharing videos, blogs, and other content. Digital tools and spaces can support building and nurturing relationships and expressing different aspects of identity, including race, ethnicity, gender, and sexuality (Haddock et al., 2022; Pew Research Center, 2021).



Stream and entertain. Young people use technology to enjoy and create content (Walker, 2022). Users can stream movies, watch their favourite shows, listen to music, and play online games. Entertainment and creative experiences can be enhanced by personal recommendations, making them more interactive and enjoyable.



Stay informed. The internet has become a primary source of news for many, with smartphones often used to stay updated about local and worldwide news (MediaSmarts, n.d.). Digital news platforms provide immediate access to a variety of sources, keeping users informed about current affairs.



Explore and learn. Technology can enhance learning experiences. Through online learning platforms, educational apps, and other digital resources, young people can explore their interests and learn new subjects. Technology has also been adapted to the classroom setting, providing personalized learning experiences and enabling young people to engage with educational materials remotely and in new and exciting ways (Haleem et al., 2022).



Maintain health and wellness. Technology provides users with a variety of resources to support their physical and mental health, as well as overall well-being. Applications and online platforms offer valuable resources for managing stress and anxiety, and for accessing mental health supports remotely (Mental Health Commission of Canada [MHCC], 2024; MHCC, n.d). Fitness apps can help users to monitor activity levels and physical health, while meditation apps provide guided practices to promote relaxation and mindfulness (Walsh et al., 2019; Zhang & Xu, 2020).

Digital harms

As technology is ever-changing and access to the internet is rapidly increasing, the safety and well-being of young people online is an ongoing concern. Recent studies revealed that in Canada (Boak & Hamilton, 2024; Statistics Canada, 2023):

- 1 in 4 young people have experienced cyberbullying.
- 16% have been threatened or insulted online or by text.
- 13% have been intentionally excluded from an online group.
- 9% had hurtful things posted about them online by others.

Young people increasingly face various forms of discrimination as they navigate the digital world. This includes gender-based discrimination, transphobia, homophobia, racial discrimination, harassment, and physical and mental ableism (Abreu & Kenny, 2018; Charmaraman et al., 2022; Government of Canada, 2022; Hango, 2023; Hinduja & Patchin, 2020; Joseph, 2022; Lozano-Blasco et al., 2023; Tao & Fisher, 2022).

Unconscious biases and stereotypes can result in unfair treatment and prejudice in online interactions. These discriminatory views and voices can be easily accepted, promoted, and amplified in online spaces. They can take on many different forms, both active and passive, including verbal abuse and threats, spreading harmful stereotypes, sharing offensive images, and promoting harmful ideologies (Abramson, 2022; Canadian Anti-Hate Network, n.d.; Joseph, 2022).

Unequal access to technology can worsen these issues for young people. Those who rely on shared devices may experience reduced privacy and an absence of appropriate safety settings, increasing their risk of exposure to harmful content (Frenette et al., 2020; Tech Safety Canada, 2024).

Once created, harmful content can exist and circulate in digital spaces indefinitely. Even when not actively engaging with others online, young people can stumble upon or be directed to harmful content by algorithms.



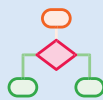
For more information about identifying and understanding specific types of harmful digital content, see the glossary in the [Appendix](#).

The role of algorithms in shaping online experiences

Algorithms have a significant role in enhancing online experiences, by personalizing content based on user preferences and behaviours. However, algorithms can perpetuate biases, impacting the content that users access while using technology (Brisson-Boivin et al., 2021; Joseph, 2022). Here's how.

- The design and training of algorithms often include biased data reflecting societal inequities and biases related to race, gender, sexuality, and ethnicity (Brisson-Boivin et al., 2021; Epps-Darling, 2020; Friis & Riley, 2023; Joseph, 2022).
- Algorithms can profile individuals based on their demographic characteristics by analyzing data such as personal information, location, and online behaviours related to social media activity and search terms (Brisson-Boivin et al., 2021;).
- Algorithms prioritize user engagement over safety. They are designed to promote content that drives engagement, including controversial and harmful posts (Brisson-Boivin et al., 2021; Joseph, 2022).

Algorithms can create “filter bubbles,” which limit exposure to diverse perspectives and reinforce harmful beliefs or stereotypes (Brisson-Boivin et al., 2021; Pariser, 2012). For example, platforms like TikTok can steer individuals into “echo chambers.” These are online spaces where users come across content similar to what they have previously interacted with, creating an environment where diverse perspectives are minimized. This can reduce opportunities for learning about and empathizing with diverse cultures and ideas (Epps-Darling, 2020). Targeted individuals may find themselves in echo chambers where harmful content is suggested to them and amplified over and over again.



Filter bubbles are unique types of echo chambers that occur when algorithms personalize the content that users see based on their past interests and interactions, leading them to see only content that matches their existing beliefs (Pariser, 2012).

The impact of harmful online content on mental health and well-being

A recent study by Davis and Goldfield (2024) found that limiting social media use to just 1 hour a day led to a significant reduction in anxiety and depression symptoms among young people facing emotional distress.

Technology offers numerous benefits, but it also comes with risks that can affect young people's mental health and well-being. It is important to understand and appreciate the context surrounding each risk outlined below.

- **Mental health problems:** Social media platforms allow users to portray an idealized version of life, leading to comparisons among users. Excessive use of social media and continual comparison to idealized portrayals can lead young people to feel dissatisfied with their own lives, making them feel like they are not good enough, not accomplished enough, or not living up to unattainable standards. This can contribute to mental health challenges such as depression and anxiety (Nesi, 2020). Research also suggests a link between social media and increased mental distress, self-harm behaviours, and suicidal thoughts (Abi-Jaoude et al., 2020; Nesi, 2020). In light of studies showing that social media use can contribute to poor mental health and worsen existing mental health challenges, it is important to recognize that these issues are influenced by multiple factors (Odgers & Jensen, 2020).
- **Eating disorders:** Digital media's portrayal of ideal body standards can lead people to develop distorted perceptions of their bodies, resulting in dissatisfaction with physical appearance and, in some cases, unhealthy eating and exercise habits (Mento et al., 2021; Nesi, 2020). Many images on social media are fake or heavily edited, setting unattainable body standards (Holland & Tiggemann, 2016). Additionally, young people can come across harmful content, such as that related to pro-ana (promoting anorexia) and pro-mia (promoting bulimia), as well as communities that promote and normalize disordered eating (Mento et al., 2021).
- **Normalizing violence:** Consistent, long-term exposure (several times per week over a year or longer) to violent content on social media, TV shows, or movies can result in people becoming less sensitive to violence and perceiving aggressive behaviours as acceptable. The risk is greater with ongoing, unmonitored exposure to violent content (Prescott et al., 2018; The Lancet, 2023).

- **Social isolation:** Using social media primarily to build and maintain relationships rather than for entertainment can limit opportunities for meaningful in-person interactions and inadvertently lead to feelings of loneliness and social isolation. Those who rely on social media to stay connected often find these virtual interactions less fulfilling than in-person encounters, as they lack the meaning and emotional depth of face-to-face interactions (Bonsaksen et al., 2023; Twenge et al., 2019).
- **Sleep deprivation:** Exposure to blue light from screens like smartphones, tablets, and computers before bedtime can reduce the body's production of the sleep hormone melatonin, making it difficult to fall and stay asleep. This can lead to sleep disruptions and result in young people not getting enough sleep (Abi-Jaoude et al., 2020; Twenge et al., 2017).

Recognizing and acknowledging the negative effects that technology can have on young people's mental health and well-being emphasizes the need to adopt a harm reduction approach to its use. By actively addressing the existing risks and supporting them in building their digital resilience, we can leverage the benefits of technology and increase positive digital experiences.



Many young people engage in “**doomscrolling**,” endlessly scrolling through negative news and social media updates to stay informed about the challenges and risks in the world. This behaviour is often driven by a desire to be prepared for potential threats. However, while paying attention to negative information can be seen as adaptive, excessive doomscrolling can lead to increased anxiety and negative affect (Buchanan et al., 2021).

Digital resilience

What is digital resilience?

Digital resilience refers to the ability to cope effectively with challenges faced in digital environments. It involves having essential social, emotional, and digital skills to manage risks while using technology (UK Council for Internet Safety, 2019).

Digital resilience can improve self-awareness and critical thinking skills, helping individuals evaluate digital environments and make responsible decisions to protect their well-being. Those with robust digital resilience are better equipped to:

- Make strong choices for their own health and well-being.
- Handle difficult content and situations.
- Take the time and actions necessary to fully recover from challenging or harmful online experiences (UK Council for Internet Safety, 2019).

How is digital resilience developed?

According to the [Digital Resilience Framework](#) (UK Council for Internet Safety, 2019), four elements are essential to developing digital resilience:

- **Understanding** when a risk is present.
- **Knowing** how to get help.
- **Learning** from experiences.
- **Recovering** with appropriate support.

Building digital resilience is not a linear, step-by-step process. Each of these elements is equally important and can be applied continually, and to different degrees depending on the situation.



Online communities can help young people develop digital resilience by providing support and resources that may not be readily available offline. These communities offer a sense of belonging, promote positive behaviour, and can help young people navigate digital spaces with confidence (Haddock et al., 2022).

Service providers are in a unique position to help young people develop the skills, knowledge, and confidence to navigate the online world safely and to recover from unexpected, challenging, and harmful digital experiences. To do this effectively, service providers need to maintain their own digital literacy and resilience, and approach conversations with understanding, self-awareness, and openness. The following strategies can be used to help build digital resilience (Alon et al., 2023; Durand-Bush & DesClouds, 2018; Sage et al., 2020):



Create a safer and supportive environment.

Ensure young people feel comfortable discussing their digital experiences. Approach conversations about technology in a nonjudgmental and non-critical way without making assumptions about its impact on a young person's life.



Conduct a comprehensive assessment.

Assess digital experiences in concert with mental health needs. This can help you identify any areas of concern and inform personalized treatment plans. Be mindful of the potential for stigma or shame that young people may have related to certain digital experiences, as well as the critical role technology can play in the lives of some young people.



Support the development of coping strategies.

Support young people in developing self-regulation and mindfulness skills to help cope with stress, anxiety, and emotional challenges, and help them develop the self-awareness and self-control needed to prepare for digital environments. Service providers can help young people validate their emotions related to digital experiences and identify coping strategies that work best for them.



Promote digital literacy by staying well informed and up to date on digital skills.

Help young people use their devices and online platforms safely and effectively. To open conversations and encourage healthy habits, it is crucial for service providers to stay informed on how to use privacy settings, protect online identity, and leverage built-in features like focus modes and usage limits. Supporting digital literacy also includes guiding young people on how to make the most of these features to support them in setting and staying accountable to usage limits and boundaries.



Collaborate with caregivers. Create a coordinated support network for young people's digital well-being that emphasizes the importance of trust, respect, and empowerment. Provide guidance and resources to caregivers on developing their own healthy digital habits and supporting their children's healthy habits and coping mechanisms. This can be done through modeling strong usage boundaries, aligned usage behaviours, and open conversations related to digital media experiences. Service providers should also stay aware of potential cultural or generational differences in attitudes towards technology and online behaviour.



Having a strong support network and being able to confide in and seek help from a trusted adult is essential in helping a young person develop digital resilience. It provides a safer space to deal with harmful experiences, reflect on them, and learn how to overcome them.

Caregivers play a significant role in providing this type of support, as they can:

- Encourage open discussions about the use of technology, offering space to discuss any positive or negative experiences and providing guidance when needed.
- Model healthy technology use and usage boundaries.
- Monitor use of digital devices and ensure devices are secure.
- Support young people in understanding, developing, and nurturing healthy social relationships and building a strong social network, as well as providing space for in-person social experiences.
- Ensure time away from devices is purposeful and filled with meaningful activities.

Additional resources



- [Digital media literacy](#): MediaSmarts offers comprehensive resources to enhance digital media literacy skills, empowering individuals to critically engage with and navigate the complexities of the digital world.
- [Digital resilience toolkit](#): This toolkit, developed by Internet Matters, offers practical tips and resources to help parents support their children in navigating online challenges safely and confidently.
- [Develop a digital resiliency plan](#): This resource from TechnoKids guides you in creating a strategy to help children stay safe online and recover from digital harm.
- [Family engagement toolkit](#): This toolkit from Common Sense Education provides strategies to effectively engage family members in children's digital lives while promoting safe and responsible use of technology.
- [Digital citizenship resources for family engagement](#): Common Sense Education offers a collection of tools and resources to help families navigate digital environments safely.
- [The 3 M's of digital parenting](#): This resource helps families navigate technology use through education and practical guides, emphasizing the principles of modelling, managing, and monitoring digital behaviour.

Final thoughts

The digital era has brought about opportunities and challenges for young people. While it offers unique avenues for communication, creativity, learning, and self-expression, it also poses some risks.

Exposure to harmful digital content can have profound negative effects on young people's mental health and well-being. By discussing experiences with technology and helping to develop skills for digital resilience, service providers can ensure young people have the tools and resources to navigate the online world more safely.

By working together, we can contribute to a digital landscape that promotes positive experiences and overall well-being for all young people.

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Appendix. Types of harmful digital content

This glossary provides an overview of different types of harmful digital content, organized in an alphabetical order.

Cyberbullying

Cyberbullying is a form of harassment or aggression that involves using technology, such as social media, text messages, or emails, to intentionally harm, intimidate, or embarrass someone (Public Safety Canada, 2015). Unlike traditional bullying, cyberbullying can be carried out anonymously. It often includes spreading rumours and sharing hurtful comments or images. This type of bullying can be especially distressing and harmful as it can happen any time, all the time, and it can spread widely with greater publicity. The harmful content can resurface at any time, making it harder for those who have experienced it to get closure (Abramson, 2022).

False information

In the digital age, false information is rampant and can be difficult to identify. False information comes in different forms (Gallagher & Madig, 2021):

- Misinformation is the spread of inaccurate or false information, which occurs unintentionally. This can happen due to honest mistakes, misunderstandings, or a lack of knowledge.
- Disinformation, also known as fake news, is the deliberate spread of false information with the intent to deceive or manipulate someone.

Hate speech

Hate speech refers to the use of discriminatory or derogatory language and images to target a person or a group of people based on characteristics such as race, ethnicity, religion, gender, sexual orientation, disability, or any other aspect of their identity. It aims to spread aggression, prejudice, or violence against individuals or communities. It undermines the dignity and rights of those targeted and can contribute to a hostile and unsafe environment for everyone (Joseph, 2022; United Nations, n.d.).

Idealistic content

Idealistic content in digital media portrays an excessively positive and often unrealistic view of life, relationships, achievements, and experiences. It focuses on idealized notions of success, beauty, happiness, and fulfillment, presenting an aspirational storyline that may not reflect the complexities of real life. This type of content typically features carefully selected images, videos, and narratives that depict an unattainable lifestyle (de Lenne et al., 2020).

Pro-ana and pro-mia content

Pro-ana and pro-mia are terms that describe online content which promotes harmful behaviors associated with anorexia and bulimia. This content is often found on social media platforms and is presented in a way that portrays these behaviours as lifestyle choices and not symptoms of an illness (Mento et al., 2021).

Pro-self-harm and pro-suicide content

Content that promotes self-harm and suicide refers to any digital material that promotes, romanticizes, or normalizes these behaviours. It may include vivid portrayals, instructional guides, or narratives that encourage individuals to engage in acts of self-harm or view suicide as a solution to their problems (Biddle et al., 2018).

Sexual content

Sexual content refers to any material that portrays nudity or explicit behavior. This includes graphic images, videos, sexual harassment or pornography. Young people may be exposed to unwanted sexual content online through pop-up windows, spam emails or messaging applications (Madigan et al., 2018). Additionally, sexting, where young people share explicit photos via text or messaging apps can increase exposure to unwanted and non-consensual sexual content while using technology (Johnson et al., 2018).

Violent content

Violent content refers to any material that shows physical harm, aggression, or graphic violence. This includes videos, images, texts, or even interactive content that displays acts of violence and encourage harmful behaviour (The Lancet, 2023).



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695 Industrial Avenue, Ottawa, Ontario K1G 0Z1

 – info@cymha.ca

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