This document does not represent an official policy position of the Government of Canada. Instead, it records the work of a sub-group of new public servants who participated in Canada Beyond 150, a professional development program co-championed by the Privy Council Office and Policy Horizons Canada. The program was designed to support the development of new public servants, and to drive a culture change within the public service. The participants were invited to use foresight, design thinking and engagement tools to explore policy issues relating to diversity and inclusion.
INTRODUCTION

In an age where we are more digitally connected than ever before, why do so many Canadians feel lonely? This was a key theme as we explored social changes that could shape the wellbeing of Canadians over the next 15 years. Our analysis of weak signals of change, research, future scenarios, and consultations with stakeholders led us to look at social connection as an important part of mental wellness. In particular, we see a rise in social isolation rates among Canadian youth as a major public health issue and a challenge to Canadian communities.

While there are many factors to youth social isolation, there are signs that new digital media habits are an area to monitor. Personal digital devices have become widespread in Canadian society, yet Canada lacks a public health approach to digital media. As we expect digital interfaces to enter into more aspects of life, we must better understand their possible impacts on mental and physical wellness. It is time to consider the topic of digital media health.
There is growing concern that mental wellness challenges are significantly on the rise in the last few years, particularly among youth and young adults. In 2017, Canadians aged 15 to 24 were most likely to have experienced mood disorders or major depressive episodes, and 63% of millennials were classified as ‘high risk’ of a mental illness.

Many factors may contribute to these growing challenges, including academic pressure, job uncertainty, high student debt loads and high housing costs. Our stakeholder engagements found a dual challenge to youth connecting socially. Their online activity provides an important means of social connection, but also disconnection and mental health impacts, particularly for those with high screen use. Meanwhile, fewer youth employment opportunities, as well as transportation and scheduling barriers, limit their ability to see friends and participation in the community.

We must understand and address the varied causes of mental wellness concerns among youth, as earlier onset of mental illness can lead to greater risk in future adult populations. Looking ahead, a potentially turbulent future of work suggests personal adaptability will be important. A resilient population with strong coping skills and social supports may matter more than ever. Unfortunately, international experts claim loneliness (social isolation) to be a global epidemic, not only for seniors, but increasingly for youth. Loneliness can raise the risk of mortality as much as smoking 15 cigarettes a day. It can also lead to psychiatric disorders, problematic substance use, and suicide.

In this context, the team chose to delve into the role of youth screen habits to understand their sense of social connection and mental wellness.
POLICY CHALLENGES AND OPPORTUNITIES

THE ROLE OF DIGITAL MEDIA USE AND POSSIBLE FUTURE IMPLICATIONS

It is commonly assumed that our new technologies and devices increase connection, to the benefit of economies and communities. Digital media have indeed opened up enormous possibilities in education, creating online options for skill-building and interactive media to support children’s early literacy.

Digital media enables a more inclusive society in other ways, such as expanding access to health information and services, and ways to participate in culture. It helps marginalized populations find peers and role models that they may not meet in person. In some cases, screens benefit people with a disability by offering alternative communication options.

For many, social media is useful for organizing and enhancing in-person experiences and networks. For teenagers at a fundamental stage of personal development, digital devices and media also help them experiment with identity and test boundaries. The i-generation – those born after 1995 – largely grew up with no memory of the world before smartphones.
When used mindfully and in moderation, digital connectivity can be a powerful tool for connection and wellbeing. But a number of developments suggest that healthy digital media use is not a given, and we need to monitor, educate and discuss the following topics:

**Youth feel peer pressure to participate online, maintain their profiles and be “liked”.** Our discussions with stakeholders showed that young people are often aware of these pressures and that they would like to improve their digital habits. Technology and social media companies also build addictive elements into algorithms that gamify aspects of self-identity and social standing.

The rise of both personal devices and social media in recent years may be contributing to social isolation for youth. **Perceived social isolation** is reported more among youth who use social media more than their peers. The direction of causality isn't clear, as lonely youth may be more likely to use social media to excess. This can affect valuable in-person social interactions and stir feelings of exclusion and envy when looking into the lives of others. Social media can also contribute to negative self-image and form a substitute for effective coping strategies. The shared digital norms of the i-generation are worth watching as today’s teens spend less time with friends, date less, sleep less, and are less likely to drive than the generations before them.

**Chart 1: Percent of 8th, 10th and 12th graders who agree or mostly agree with the statement “I often feel left out of things” or “A lot of times I feel lonely”**

![Chart showing the percentage of 8th, 10th, and 12th graders who feel left out or lonely from 1991 to 2015. The chart indicates a sharp increase in the percentage of students feeling left out or lonely after 2010, coinciding with the rise of smartphone ownership.](https://www.theatlantic.com/magazine/archive/2017/09/has-the-smartphone-destroyed-a-generation/534198/)
Youth with high screen use are particularly at risk. Teens with more screen time, including television, often have poorer relationships with their parents and peers. Excess screen time may cause a range of problems for youth, including distractedness and poor sleep; at the extreme, it can resemble the mood and behaviour-altering features of an addiction. Teens who use the Internet for more than five hours a day are more likely to have at least one suicide risk factor, to feel socially isolated and to be cyberbullied. Beyond the issue of screen time duration, more research is needed to understand what types of activity youth conduct online and to differentiate positive and harmful screen uses. Further, misuses of digital media also present risks as youth encounter cyberbullying, privacy violations (e.g. sharing sexts), gaming addiction, and early exposure to online gambling and pornography.

Digital habits are formative, and Canadian children are now using screens at early ages (0-5), which can impact their development. Experts suggest that quality, age-appropriate digital media can contribute positively to brain development after age 2 (not before), though there are several screen products claiming educational benefits for babies, to the confusion of parents. Inappropriate digital media use in the early years can contribute to problems with self-regulation and cause delays in language, attention, and cognitive development. Preschoolers learn best through face-to-face interactions with caring adults, and high screen use by children or parents may interfere with this process.

As digital devices become more common, there is an inequality in parents’ ability to monitor their children’s digital media. For instance, a U.S. study finds high screen use to be more common among teens in lower income households. We must learn how diverse backgrounds contribute to different online experiences.

Screens are starting to impact relationships. “Absent presence” occurs when people are physically present but inattentive to others. Parents’ screen use around very young children can hurt healthy attachment to parents, and later others. When children use screens extensively, it can hinder their ability to read emotions. Social media also seems to change ideas of intimate friendship among young people. In adult relationships, absent presence and new online realities are already showing up as topics in couples’ counselling. When we consider the rise of social media, online gaming, dating and pornography alongside declining opportunities for in-person socialization, there may be impacts on future close relationships as today’s youth become adults.

In the future, the presence of screens can only be expected to grow. New interfaces will be available as walls and other surfaces can become screens, and as wearables and self-driving cars become more common. Screens could demand more of our attention as more services and jobs move to online platforms, and as objects are connected through the “Internet of Things”. Virtual reality may also emerge as the next form of social media, continuing to blur the digital and physical worlds.

The expected impacts for social connection are ambiguous. Virtual reality may create more opportunities to share time and ‘space’, and encourage cooperative and empathetic behaviour. On the other hand, the fully immersive experience may be an addictive refuge for those who are isolated, unemployed or marginalized, worsening current challenges of online gaming addiction. New digital interfaces may emerge faster than we can adapt to them, creating barriers to effective communication and the quality of relationships. While self-driving cars could soon help children and youth participate in community life without the need for a parent to drive them, another opportunity for conversation may be lost.
Investments in well-controlled studies and long-term research will help pinpoint causality and keep up with new digital applications. Screen research data is mostly correlational, making it difficult to clearly attribute risks by type of screen use or personal traits that predispose some users to harmful habits. We also need more information on best practices to improve digital habits.

Our stakeholders found insufficient research as a key challenge to developing effective responses to digital media. There is also the risk that new screen issues can create a moral panic if they are not understood.

A PROPOSED PUBLIC HEALTH APPROACH TO DIGITAL MEDIA IN CANADA

We must frame a health-focused approach to digital media. Canadians could learn digital media health skills much as they learn about diet, sleep, exercise and hygiene. The public health approach could be based on the scientific base of the social determinants of health framework. This is a holistic and preventive approach to health care that recognizes the importance of life circumstances and social inequities.

Chart 2: Examples of how digital media impacts the social determinants of health

Source: These 12 determinants are the framework of Public Health Agency of Canada
While some governments, including the United Kingdom, France and Taiwan, have taken steps to respond to the impact of digital media on youth mental and physical health, the Government of Canada has yet to address the issue through a public health lens.

For models for a digital media health strategy, we can look to the government’s past leadership on tobacco reduction, where information campaigns and new social norm-setting (such as designated smoking areas) made a difference. The Canada Food Guide model could apply, as the goal is not to minimize digital use, but to help Canadians make healthy digital media choices.

PROPOSED POLICY INTERVENTIONS TO SUPPORT DIGITAL MEDIA HEALTH

To address knowledge gaps among governments and Canadians, we propose a two-part strategy:

1. Ongoing research to monitor the issue and explore new ways to respond; and
2. Public information to raise awareness of digital media as a health matter.

While a digital media health strategy could help Canadians of all ages, we propose two initial interventions: one supporting parents of young children, and another supporting youth.

THE EARLY YEARS ELEMENT

We know that digital media use can be harmful to children under 5 years of age, and can be particularly harmful to children aged 0–2. As part of a broader public awareness strategy, we propose that the federal government target information to parents of young children (ages 0–5). Based on recent recommendations of the Canadian Paediatric Society’s Digital Health Task Force, the campaign would include digital media guidelines and “4M” tips: Minimize, Mitigate, Mindfully use, and Model healthy
screen use. The information could be distributed through digital and non-digital platforms, including the Canadian Child Benefit mailer, to ensure we reach lower income and other marginalized parents of young children. It could also be available through a targeted social media campaign, a website, and toolkits that are developed for organizations to share within their communities.

The information would be based on wider engagements, culturally adaptable to community needs, and updated regularly. The role of technology and the potential benefits and risks differ by subpopulation, so the information would be targeted to groups of Canadians based on their largest potential risks and benefits. For example, groups who currently have limited access or rely on screens for inclusivity would see messaging on accessing the benefits of technology while lowering risks. Canadians who use technology mostly for social media would see stronger messaging about how to limit non-beneficial screen time.

THE YOUTH ELEMENT

So far, we suspect that digital media misuse increases feelings of social isolation and mental unwellness among Canadian youth. Given the limited evidence of the impacts of digital media use on Canadians other than young children, we recommend annual regional summits with youth and experts, as part of a broader digital public health research strategy. The summits would take place in communities across the country during school hours, to encourage participant diversity, with three primary goals:

1. build and continuously update qualitative research on youth experiences of digital media in order to inform future policies and programming;
2. co-develop (with youth, experts and provinces/territories) regionally based digital media health campaigns and curriculum for schools and service organizations; and
3. co-develop policy recommendations on digital media health (e.g., recommendations for platform design or regulations for marketing digital content directed at children and youth).

This approach supports ongoing research and consultation efforts. Technology and digital platforms change quickly, so the government must maintain a forum for consulting with youth on these changes and their impacts. This approach supports the spread of new, healthier social norms around digital media use, as Canadian youth are asked to be champions of their own targeted policy interventions.
OTHER POLICY INTERVENTION IDEAS

The Government could explore other research, evaluation, engagement and public awareness activities:

- Collect consistent data on youth screen use to understand time spent, activities and experiences online through a Statistics Canada household survey.
- Support data sharing partnerships to access combined user data of digital platforms.
- Use social media campaigns to promote social norms, such as taking a digital media break and alternatives to screen use (e.g. physical activity, community involvement)
- Contribute to “what works” evidence by using existing federal programs that promote in-person youth activities (e.g. in community, nature or employment) and evaluate for possible impacts on youth mental wellness and screen habits.

CONCLUSION

Poor habits around digital media, among other factors, contribute to young Canadians’ struggles with social isolation and mental wellness issues. The federal government could develop a national public health approach to digital media use. Research and public health monitoring would need significant funding to better understand technology’s possible impacts on mental and physical wellness. Our proposed early years intervention and annual regional youth summits are possible first steps in a national approach that would see the Government of Canada become a leader in supporting the health of Canadians of all ages in a digitally connected age.
THE FUTURE OF WELLBEING

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