We are living in a time where there is convenient and simple access to a constant stream of information generated from all over the world that is literally within reach instantly. Scientists who study earthquakes and their effects use data collected from Twitter in addition to standard sensors to help them “identify earthquakes felt by humans” and “trigger an alert typically in under two minutes.”¹ Doorbell cameras allow people to see and speak to someone who has knocked without ever walking to the door, regardless of where they happen to be at the time. Digitized billboards serve up live-action advertising, but they aren’t just relegated to giant structures we pass by along the side of the road anymore; they’re often in the palm of our hands. Amazing, isn’t it? What’s the common link between them all? Screens and technology.

Believe it or not, smaller tablets have only been around for a decade and smartphones, or rather mobile phones with touch screens, were available beginning in 2007. Today, reaching for a device is now almost automatic. At the same time, there’s growing concern about how these technological marvels are seemingly affecting our every move and interactions, with some people showing signs of struggling to disconnect that are similar to drug and alcohol abuse. Is technology addiction worthy of panic, or are concerns unfounded? It depends on who you ask. While it’s agreed that our lives are forever changed by the brilliant hand-held computers nearly everyone carries, one researcher argues that “technology addictions generally are symptoms of other, underlying disorders like depression, anxiety, and attention problems.”² We’re going to examine the fine line between habits and cause for alarm, look at tools you can use to audit yours and your family member’s relationships with technology, and explore some methods you can use to improve the quality of your interactions. Essentially, it’s about finding the right balance.
Technology & Screen Time

Before and after 2010

Apparently, as a species, humans had better concentration, focus, and longer attention spans before 2010. Time Magazine famously published a story in 2015 congratulating readers on being able to make it to the end of a 220-word article. While it would only take about a minute to read, at that time a study purported that people’s attention spans had dropped by four seconds in five years, which was “now...a shorter attention span than a goldfish.”

Incidentally, that study also revealed some interesting observations:

- People who use screens a lot have a hard time filtering out distractions.
- Our attention spans are evolving to become shorter because of the influence of mobile devices and ready Internet access.
- Just over ¾ of young adults (18-24) look at their phones when they have nothing to do. By comparison, only 10% of people over age 65 do the same.

Fast forward to 2020, and we’re even more conditioned to stay connected to our screens. Whether it’s because we’re glued to online shopping, or worried that we’d miss out on something important, also known as FOMO (fear of missing out), on average, we check our smartphones every 12 minutes. Still, while devices may not be getting any less expensive, service providers have introduced more flexibility by integrating the cost of the technology with a wider variety of plans to meet people’s needs. Manufacturers also do what they can to ensure people feel they should upgrade their devices frequently. Alarmingly though, it’s created interesting playground conversation where tweens, age 9-12, chatter eagerly anticipating a new rite of passage: the age they will get their first phone – that is, if they don’t have one already.

Screens are here to stay. They’re hard to avoid. In 2019, YouTube shared a startling statistic: more than 500 hours of new content is uploaded each minute. Doing the math, that equates to over 82 years of video each day being consumed on T.V. screens, computers and mobile phones. Live streaming is also on the rise. When you think about it, there’s so much available content that you could do nothing else but watch it and still not catch up.

How much is too much?

Unfortunately, the way screens are so ingrained in our lives is having a significant effect on our physical, mental, and even our financial health. With everything so accessible, delayed gratification has nearly disappeared. You can probably think of someone you know whose screen time has gone past what might be described as a bad habit and is verging on addiction. They may have even expressed their use in those terms. The reality is that when technology usage is starting to interfere with the activities of daily life, it’s a problem.

Similar to drug or alcohol addiction, screen addiction changes brain structure and makes it more difficult for people to remember details, pay attention, participate in planning and prioritize tasks. People can become lost in what they are doing on their devices to the point where they lose sleep, develop unhealthy eating habits, and end up with little to no physical activity in a day. Psychologically, they can be so engrossed in consuming content that they don’t see how damaging it can be. Viewing can trigger anxiety and become a contributing symptom of depression. People can be more vulnerable to harmful or toxic interactions with both people they know and people they aspire to know – like celebrities, or even strangers. Technology addiction can be further broken down into categories such as Internet addiction and Internet gaming disorders. Additionally, persons with technology addiction are more likely to exhibit symptoms of Body Dysmorphia.

While it’s challenging to gauge numbers for adults, the Canadian Pediatric Society has recognized the effect that screen time has on children’s development and mental health. They’ve established screen time guidelines to help parents determine what’s appropriate for children from ages 1 to 19, identifying both benefits and risks of different kinds of content:

- For children under two years old, screen time is not recommended.
- For children two to five years old, screen time should be limited to less than one hour a day.
- For children older than five, they recommend limiting screen time to less than two hours a day.
Technology & Screen Time

• Teens are better able to cope with the effect of more screen time, but there are also nuances that parents should be aware of.
• Teens can be both positively and negatively influenced by social media and can experience deep friendships online, but also be subject to bullying.
• Inquisitiveness and relatively easy access to adult-themed content on the Internet often exposes teens to pornography and can create socialization problems related to self-worth, body image, and social interactions.

The general advice encourages parents to distinguish between content that is age and subject appropriate and prioritize academic sites or platforms, enhancing knowledge, literacy or cooperative skills, rather than allow free recreational screen time. Further, the study recognizes that parental and family interaction can affect how well children are able to respond to screen time they receive and that things will continue to evolve based on the child and the popularity of content itself. For school-age children, the recommendations recognize that it may not be realistic to expect no screen time as a response, but instead enforce stricter limits of perhaps one hour per day if parents have cause for concern.

Remember that kids and teens existed before the ages of smartphones and tablets and survived shopping trips and long car rides without tuning into screens: they simply looked around and observed the world around them firsthand.

What’s included when we talk about screen time?

Watching T.V. or movies, working on a computer, using a tablet or smartphone, playing video games through a variety of devices are all contributing to the amount of time we spend interacting with screens. In fact, for many of us, our lives flip seamlessly throughout the day between many screens without us even realizing it.

Awareness is also at the heart of what’s being termed as “secondhand screen time,” where the actions and behaviours demonstrated by parents and caregivers as they use their devices are affecting children and, in turn, influencing their understanding of what normal technology usage is. The problem is that they are observing adult models that aren’t age-appropriate when it comes to what is being accessed and for how long.⁸

Conducting a technology-use audit

Part of the challenge with determining how much screen time is too much and being able to respond with a reduction in usage is that we don’t necessarily have good self-awareness about how much we use this technology each day. We’re also being influenced by manufacturers and developers who are purposefully creating scenarios to increase usage to meet their business objectives. And physiologically, using technology does trigger dopamine to be released, which keeps our brains trained to come back for more. Some companies have recognized that they need to improve awareness around technology usage, and they are demonstrating responsibility with respect to try to help people moderate the use of their products.⁹

Tools such as Apple’s Screen Time and Google are built into the devices that you can use to bring transparency to what your own screen time looks like. There are even ways to apply restrictions to the device or limit access to individual applications within the settings. Seeing these reports can give you a real sense of whether you could call yourself a frequent user or whether your usage is cause for alarm because it is consuming so much of your time each day. It can be shocking to see a breakdown of how much time you spent on your device each day. The reports can show the number of times you’ve picked it up, how many notifications you received that may have alerted you of something, what kinds of activities you completed based on categories such as social media, gaming, productivity, and even health and fitness.
Again, the notion of screen time extends to T.V. viewing too. Keep a log of what you watch on-demand. Streaming services have made it easy to get instant gratification by releasing full seasons of programs all at once. We don’t necessarily need to wait a week to view the next episode of an ongoing story because we can binge watch it.

Once you have had the chance to see how much screen time you accumulate, you can reflect on the repercussions and how the time is affecting your life. You may want to consider responses to questions that allow you to contemplate your relationship with technology and generate some interesting discussions:

1. How has the amount of time you spend using technology impacted your relationships?
2. How have your spending habits changed?
3. In what ways are you using technology as a distraction to avoid dealing with something difficult in your life?
4. Be honest about whether or not you are still on track to complete milestones for any personal goals you have formally or informally set for yourself.
5. What kind of physical, emotional, social or financial fulfillment are you getting from your technologically-based activities? Are these healthy?
6. How does your relationship with technology help you live your best life?
7. What would you choose to do if you replaced one hour of screen time with any non-technologically related activity?
8. How would your days be different if you didn’t use technology?
9. When was the last time you read a book – not on a screen or listening to an audiobook?
10. What do you like about your use of technology?

**Confronting the elephant in the room**

Many people aren’t happy with what a technology audit reveals; how all-consuming screens can be and how much it is affecting their lives or the lives of people they care about. They may discover deeper issues, such as Internet addiction, gaming addiction and social media addiction, or have generalized concerns about how their activities are affecting their physical and mental health. The question of whether technology is fundamentally changing our brain structure is complicated because we see that language and conversation skills, the ability to interact and collaborate with other people, and confidence, can all suffer.

Currently, researchers haven’t found enough evidence to give full support to that theory. It’s more of a case of technology use affecting “cognitive performance.”

There’s a bit of irony in the fact that, despite how technology has expanded many people’s worlds, at the same time, it has constricted others’. Many people struggle to interpret non-verbal communications in social settings. Findings reported in many studies, especially concerning the effect on children and teens, are sounding the alarm and warning of the seriousness of what is becoming “a public health issue.”

Nature Canada’s report showed:

- 87% of preschool children and 85% of school-aged children do not meet the guidelines for adequate sleep, physical activity and limits on screen time;
- Students in grades 7 to 12 are spending up to 7 hours a day on screens, more than three and a half times the recommended limit of 2 hours per day;
- Higher durations of screen time were linked with poorer behavioural conduct and lower self-esteem;
- Adolescents who spend more time on social media and smartphones are more likely to report mental health issues such as anxiety and depression.

While spending too much time interacting purely through technological means can be detrimental, like anything else, it’s not all bad. There are also some people whose lives have been affected quite positively through the use of technology. They’ve experienced increased confidence and found that they have been able to thrive and have positive and highly gratifying social interactions by joining online communities. We’re not talking about online dating. There are incredibly complex online communities that work out social-political structure, order, and collaboration within gaming communities, for example. While most people would be alarmed at the degree of personal disclosure and trust often seen here, people from all over the world join teams to play within a community that has developed a set of shared beliefs, rules and objectives. It’s also reflected in the use of apps such as “Be My Eyes” which recruits sighted volunteers with visually-impaired people or those who have experienced total vision loss, to help them through smartphones when they are in need.
It could be that they need someone to literally “be their eyes” to find a hat they dropped while working outside or help them see the direction they should be walking, for instance.

**How do you change behaviours?**

It’s important to understand that any change in behaviour regarding technology use will require conscious and dedicated effort because so much is ingrained in our daily lives. Ultimately, you want to be moving to shift usage to foster desired and healthy interactions.

- If you know you will be tempted to look at your device if it is close by while you are working, remove it from the area so that it isn’t easily accessible.

- While created as tongue in cheek, you can purchase “jail cells” with a lock and key for your phone to put it away for a while.

- When gathered with friends, make a rule that all phones must be face-down in the centre of the table so everyone can focus on enjoying social interactions.

- If you attend concerts or other live performances or events, make a point of experiencing them firsthand, not through a screen while you try to make a recording.

- Finally, allow yourself to be bored and do nothing for a while: it’s healthy for your mind.

- If you are worried about addictive behaviours, seek professional help.

- Create device/screen free activities with friends, family or peers such as any outdoor activities, board or card games, sports or even conversation or debate.

### References:


4. Ibid.


12. Ibid.