

Digital Screen Time: The New Social Addiction

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For more than two millennia, the abuse of and addiction to alcohol was called a “social disease.” Now, as so much has changed in the 21st century, another social addiction of our age is screen addictions, affecting every demographic, including health care professionals. Only after astute observations and initial data collection from experts from the allied health professions are we beginning to realize the extent to which this phenomenon has become an addictive force to be reckoned with. Technology has become the primary portal of information, communication, and even entertainment for people all over the world. Because of this dramatic portal, behaviors have changed if not adapted, and not all for the better. To paraphrase Karl Marx, “Technology is the opium of the masses.” In this article, I will address some of the known facts about screen addictions and also suggest some actions that can help bring balance to our distraction with devices.

Health Care Professionals and Screen Time

First, it should be said that technology is not bad; it is the use and specifically the overuse of it that is the concern here. Second, it is important to realize that not everyone who uses smartphones, laptops, or tablets has an addiction. Moreover, complicating this dynamic considerably, many health care professionals must use screen devices at work for both diagnosis and treatment of disease and illness.

Health care workers are particularly inundated with screen time usage as a function of their responsibilities, from technological advances to abundant record keeping, making healthy boundaries with screen time all the more imperative. Marlene is a technician at a hospital in Colorado. Lying on the cot as she prepped my chest for a routine echocardiogram, she asked me if I like to read books. “Yes,” I replied and shared a few of my most recent favorite titles. Looking at the computer screen and using her right hand to manipulate the cursor for an ejection fraction estimate, she paused and said, “I look at a screen all day. When I leave work, I make a concerted effort to avoid screen time. I avoid social media altogether. Instead I listen to audiobook podcasts and books on CD driving back and forth to work. It’s the only thing that keeps me sane.” She

is not alone in her efforts to find balance. Others describe the need for healthy boundaries outside the work environment. In fact, one new buzz word in work–life balance for health care practitioners is “diastole”—code for complete relaxation.

Mechanisms of Screen Time Addiction

Neuroplasticity, a concept used to describe the complex physiological process of neurological wiring and functions of brain synapses, has been understood for decades—particularly with elite athletes, musicians, and stroke victims. More recently—through findings such as that of mindfulness meditation research by Richard Davidson, PhD, from the University of Wisconsin-Madison for the past decade—neuroplasticity has revealed the remarkable ability to rewire the brain, based on specific thought processes. Neuroplasticity is not solely affected by a dedicated meditation practice,¹ it can occur through a variety of repeated routine cognitive activities, including prolonged Internet surfing, video gaming, and countless hours spent on social media. Susan Greenfield, a professor of synaptic pharmacology at Oxford University has concluded that people today are wiring their brains for stress with abundant screen time use.

Exactly how is screen time so addictive? Like all addictions, the answer is complex, and involves more than just a physiological mechanism. Sherry Turkle, PhD, author of the best-selling book, *Alone Together*, notes that for many people who are prone to screen addiction, a release of dopamine occurs each time a text alert, smartphone illumination, or email alert signals. Dopamine is a neurotransmitter associated with both substance and process addictions. Turkle notes that even when people think a text alert happens, but does not (a phenomenon known as “phantom pings”), this desire can also elicit a dopamine release, strengthening the physiological pathway of screen addiction.² However, screen addictions are based on more than just brain chemistry.

Anyone who has ever surfed through Facebook postings will quickly realize that the ego plays a big role in the popularity of selfies, and selfies play a dramatic role in the content of social media. The ego also plays a significant role in the addiction process. Sociologists are seeing a rise in narcissism with

increased use of screen time, and with it, a compromise to the health of the human spirit, thus linking the mind–body–spirit to this addictive process in a very unique way.³

Adam Alter is an associate professor of marketing, serving on the faculty of New York University. In his acclaimed book, *Irresistible*, he outlines the addictive process of “smart technology.” According to Alter, people are not addicted to the technology, rather the content provided by the technology, what he calls “a bottomless pit of gratification,” accessible 24/7. Calling this phenomenon, “Internet heroin” and the smartphone the needle, Alter identifies three aspects that lay the foundation for the addiction to occur: (1) boredom, (2) loneliness, and (3) a lack of purpose in one’s life.⁴ Adding to the complexity of smartphone addiction are the companies who hire behavioral psychologists to help create software and apps to strengthen the addiction process. Anderson Cooper broadcasted a *60 Minutes* segment on this content called “Brain Hacking,” where the *60 Minutes* team interviewed programmers and video game creators who explained, on camera, how they specifically design games to keep people online for unreasonable amounts of time. In gaming lingo it is called “The Hook.”⁵

Technostress and Burnout

There are many kinds of stress in the world today. Technostress includes the emotional sensation of being overwhelmed with repeated screen stimulation, to the point of mental and emotional exhaustion. Does the competitive workplace culture promote or sustain this need to be hyper-vigilant with one’s smart device? The answer may be a definitive yes. Moreover, the expectation can lead to burnout, and subsequent physical health issues. In May of 2019, the World Health Organization (WHO) released a statement on the issue of workplace burnout, identifying three factors associated with this concern: (1) feelings of energy depletion, (2) increased mental distance from one’s job combined with negativity and cynicism, and (3) reduced professional efficacy. The association between abundant screen use and burnout did not go unnoticed either. The need to be accessible 24/7 in an extremely competitive world market is yet another factor noted by the WHO in this complex screen addiction equation.⁶

The screen addictive process takes its toll in many ways, not the least of which is sleep quality. Health experts are alarmed at the number of people who cite the inability to acquire adequate amounts of sleep each night, with > 50% of Americans citing chronic sleep deprivation.⁷ More than simply Internet surfing at all hours of the night, the blue hue in the screen light spectrum negatively affects the pineal gland’s ability to produce melatonin (the sleep hormone). Health experts are equally alarmed with children’s brain development affected by repeated use of screen devices as well as the interruption of quality sleep due to late night screen use.

Perhaps it is no coincidence that as screen addictions become more evident, the popularity of mindfulness meditation has increased, from the corporate boardroom to the school room to the locker room. If digital toxicity is a poison, then perhaps mindfulness is the antidote.

As a meditation practice, mindfulness (choosing to live in the present moment) is also a great mental training tool to address screen addiction and other addictions.

Finding Balance

In my “Care for the Caregiver” presentations, I am often asked for suggestions to curb screen behaviors. For those people who are required to use screen devices for their job, here are a few suggestions that may help seek a balance and minimize the risk/exposure to this new social disease:

1. Establish and maintain healthy boundaries with personal screen time. Determine a set amount of time (e.g., minutes not hours) and the time of day to check email, texts, and social media. Stick to it. You may also wish to replace your smart phone with a “dumb phone.” “Dumb phones” (also known as “flip phones” or “feature phones”) have little or no computing or Internet capacity.
2. Establish a media curfew with personal use of technology. The suggested time to power down, and if possible, turn off the Wi-Fi is 8:00 pm—two hours before going to bed. Wi-Fi microwaves compromise the pineal gland’s ability to produce melatonin.
3. Establish clear communication boundaries with patients and coworkers on your availability and unavailability (e.g., mornings before work, evenings before bed 7–8 pm).
4. Explain (perhaps several times) to loved ones the need to communicate through phone calls rather than texts or emails. Do not sacrifice integrity for immediate gratification and convenience.
5. Begin/continue a meditation practice. Carve out 30 minutes each day (mornings are best) before you start your work day (if 30 minutes sounds like a lot, start with 5 minutes each day and build up to 30 minutes for a few weeks). Sit quietly and observe your breathing. Cultivate your mind to minimize distractions and be in the present moment. Remember, it is ok to be bored during meditation. In fact, boredom is part of the meditation progression.
6. Consider using a radiation shield protection device for both personal and professional screen equipment. However, ensure that the protective device you employ shields rather than amplifies radiation.
7. Spend 30 minutes in nature (e.g., gardens, forests, lake shores, even greenhouses) each day to recalibrate your circadian rhythms. Go for a walk outside after dinner (without the smartphone).
8. Remove all technology from the bedroom, including TVs, cell phones, and tablets, for better sleep hygiene. Replace digital alarm clocks with analog alarm clocks.⁸

9. Make a list of your four closest friends that constitute your personal support group and reach out by phone or in person with a quality visit at least once a week.

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