

Digital Screen Time: The New Social Addiction

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For more than two millennia, the abuse and addiction of alcohol was called the “social disease.” While alcoholism is still considered an addictive behavioral health issue, it no longer holds this title. As so much that has changed in the 21st century, the new social disease of our age is screen addictions. Perhaps like the introduction of alcohol to the masses ages ago, there is no control group, with this vast experiment being played out over the world with the use of screen technology. Only after astute observations (and now some initial data collection) from experts from several of the allied health professions are we beginning to realize the extent to which this phenomenon has become an addictive force to be reckoned with. 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. Secondly, it is

important to realize that not everyone who uses smart phones, laptops or tablets has an addiction.

Those in the recovery moment know that addictions fall in two categories; substance and process. Process addictions constitute daily behaviors, that like substance addictions, the individual has no control over; include eating, exercise, even sex. What makes process addictions challenging to confront and treat is that they are tightly woven into our society with some behaviors quite necessary for daily living, like the consumption of food. The use of technology, like the use of a public utility (e.g., electricity or water), is considered no different, in that it’s use is considered essential to function in our world today. Technology has become the

primary portal of information, communication and even entertainment for people all over the world (1). Because of this dramatic portal, behaviors have changes if not adapted, and not all for the better. To paraphrase Karl Marx, "*Technology is the opium of the masses.*"

Neuroplasticity has become a popular buzzword, based on the mindfulness meditation research of Richard Davidson over the past decade. Neuroplasticity, the remarkable ability to rewire the brain, based on specific thought processes, is not solely the result of a dedicated meditation practice (2). It can be programmed through a variety of repeated routine cognitive activities, including prolonged internet surfing, video gaming and countless hours spent on social media. The amount of time people spend online is remarkably trackable-with each APP and device. Data from the Kaiser Family Foundation (2017) reveals that children ages 11-14 spend as many as 12 hours per day on their smart phones (3). Millennials (a demographic which has never known life without smart phone technology) spend between 8-10 hours. Susan Greenfield, a professor of synaptic pharmacology at Oxford University has concluded that these children are wiring their brains for stress (4). Neuroplasticity gone rogue.

Exactly how is screen time so addictive? Like all addictions, the answer is complex, and involves more than just a physiological mechanism. Sherry Turkle, author of the best selling book, *Alone Together*, notes that for many people who are prone for screen addiction, a release of dopamine occurs each time a text alert, smart phone 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 doesn't, (a phenomenon known as "phantom pings"), this desire can also elicit a dopamine release,

strengthening the physiological pathway of screen addiction (5). 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 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. (6).

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 27/7. Calling this phenomenon, "Internet heroin" and the smart phone 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 (7). Adding to the complexity of smart phone addiction are the companies who hire behavioral psychologists to help create software and APPs to strengthen the addiction process. Anderson Cooper broadcast 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 ungodly amounts of time. In gaming lingo its called "The Hook." (8). Another addictive behavior: many teens now choose to wear adult diapers, so they don't miss a moment of their video game.

The issues of loneliness have not gone unnoticed in the insurance business. In 2019, Cigna released a report titled, *The US Loneliness Index*. Loneliness (alienation) and isolation are considered to be two of the biggest unaddressed health issues of the digital age (9).

Digital toxicity (being overwhelmed by excessive screen time and content) may be grabbing the headlines, but also a concern is what the addiction to screen technology is doing to our memory. Anyone who has ever used a GPS device to arrive at a new destination, only to need it once again the next day on the same route, will quickly realize one's reliance on additional tech memory. In a study reviewed by Ron Friedman, it was revealed that people who have screen devices (nearby, but not on) were more likely to compromise their performance of a task by 20 %, when compared to those with no smart phone device nearby. It was concluded that the device was a "mental distraction." Particularly interesting was Friedman's assessment of the transfer of information from short term memory to long term memory. For the transfer of information to occur into long term memory, there must be a period of rest (lack of stimulation). When people are spending countless hours on their devices, with no pauses to process and retain information, there is no transfer to long term memory (10). In essence, we are outsourcing our memory capacity to our technology, which has its own set of problems, now called digital dementias (11).

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 hypervigilant with one's smart device? The answer many be 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 (12).

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 over 50% of Americans citing chronic sleep deprivation. More than simply 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 (13).

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 domesticate the ego (14).

References

1. Richtel, M. "Growing up Digital, Wired for Distraction." *New York Times*. Nov 21, 2010. <https://www.nytimes.com/2010/11/21/technology/21brain.html>
2. Davidson, R. The Neuroscience of Meditation. *Scientific American*. November, 2014.
3. Tsukayama, H., Teens spend nearly 9 hours every day consuming media. *Washington Post*. Nov 3, 2015.
4. Swain, F., Susan Greenfield: Living Online is Changing Our Brains.. *New Scientist*. July 27, 2011
5. Turkle, S., *Alone Together*. Basic Books. New York. 2017.
6. Seaward, B.L., "Screen Addictions and the Human Spirit." *WINN* Sept. 28, 2019. <https://winnpost.org/2018/09/28/screen-addiction-and-the-human-spirit/>
7. Alter, A., *Irresistible*. Penguin Press, New York. 2018.
8. Cooper, A., *Brain Hacking*. 60 Minutes. June 11, 2017. <https://www.youtube.com/watch?v=ML55uumQgzA>
9. Cigna
10. Friedman, R., Is Your Smart Phone Making You Dumb? *Psychology Today*. January 6, 2015. <https://www.psychologytoday.com/us/blog/g-lue/201501/is-your-smartphone-making-you-dumb>
11. Dossey, L., FOMA, Digital Dementia, and our Dangerous Experiment. *Explore*. April, 10(2) 69073, 2014.
12. Johnston, K., Burned Out? You're not Alone. And the world is finally Paying attention. *Boston Globe*, July 8, 2019.

<http://www.nytimes.com/2010/11/21/technology/21brain.html?pagewanted=all>

13. Seaward, B.L., *A Good Night's Sleep*. WELCOA. Omaha, NE 2016.

<https://winnpost.org/2018/09/28/screen-addiction-and-the-human-spirit/>

14. Harris, D., *10% Happier*. Dey Street Books. New York. (Reprint Edition) 2014.

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