

TECHNOLOGY DEPARTMENT

Editor: Karen Goldschmidt PhD, RN



Karen Goldschmidt PhD, RN

The Toll of Too Much Technology on Teens' Mental Health



Susan Solecki MSN, DrPH (c), FNP-BC, PPCNP-BC*, Theresa Fay-Hillier MSN, DrPH (c), PMHCNS-BC
Drexel University, College of Nursing and Health Professions, Three Parkway, Philadelphia, PA

Received 5 August 2015; accepted 5 August 2015

"I'd rather give up a kidney than my phone" Philippa Grogan, 16 (Henley, 2010).

"THE EASE OF accessibility along with the use of multiple electronic devices adds to a growing concern for potential harm for children from media exposure" (Solecki, McLaughlin, & Goldschmidt, 2014, p. 2). Media violence is one of the key social determinants of mental health harming individuals' psychological health causing negative consequences of fear, aggression, and desensitization (Begum, Khowaja, & Ali, 2012). Sixty percent of mental health providers reported having treated at least one patient with a concerning Internet experience in the past 5 years with over 50% of those being ≤ 18 years of age (Assem. Bill H-R, 1966, 2009). Offline bullying doubles the risk of suicide attempts by youth; however, cyberbullying triples the risk which may be the contributor to suicide being the third leading cause of death in adolescents (Boschert, 2013a, 2013b). The more teens report being addicted to the Internet or smartphones, the greater the correlation for psychopathology and problematic behavior such as depression, anxiety, and aggression (Boschert, 2013a, 2013b).

The Neurobiology of Technology Use

Within the past 20 years, violent behavior has been associated primarily with the social learning process in addition to hereditary factors (Cohen, 2011). In more recent studies, in addition to environmental and genetic factors, excessive exposure to aggressive and violent media has been

linked to violent behavior in children (Anderson et al., 2003; Caban, 2008; Daly & Perez, 2009). Violence in the media has been shown to have biosocial effects on children. Violent media can impact a child's heart, brain, and central nervous system, subsequently effecting cognition which in turn can have untoward effects on the child's attitude and social behavior (Caban, 2008; Jarrett, 2005). Studies have been conducted on the effects of violent video games on the brain waves and central nervous systems (CNS) of adolescents while interacting with violent video games (Caban, 2008; Jarrett, 2005). The results of magnetic resonance image (MRI) brain scans conducted while teens played violent video games revealed suppression of certain physiologic chemistry in the anterior cingulate cortex and the amygdala, which are the regions of the brain regulating emotion. Adolescents who showed changes on MRI scans also demonstrated diminished positive emotion, empathy, rational cognition, and human reasoning (Caban, 2008; Jarrett, 2005). Of most concern, suppression of chemicals governing cognitive rationale and human reasoning predisposes the child to little or no empathy toward either individuals and/or to society. Youth excessively exposed to violent video games are singularly similar to soldiers engaged in battle potentially impacting children's social role within society (Caban, 2008; Jarrett, 2005; Jigguep & Phillip-Sanders, 2003).

The more that teens reported being addicted to the internet or their smartphones, the greater the correlation for psychopathology and problematic behavior.

Sleep Disruption

According to one study, 80% of teenagers sleep with their cell phones or place them in proximity to their beds and use

* Corresponding author: Susan Solecki, MSN, DrPH (c), FNP-BC, PPCNP-BC.

E-mail address: sms46@drexel.edu.

the device as an alarm (Samakow & Leibovich, 2013). On average, teens send 34 text messages after getting into bed for the night (Samakow & Leibovich, 2013). Some sleep specialists warn that teens' sleep can be interrupted by the shining light of the cellphone screens preventing teens from achieving deep sleep (Samakow & Leibovich, 2013). Since our circadian rhythm cannot discern between the sun and a computer screen, the light can confuse the brain resulting in sleep loss (Samakow & Leibovich, 2013). Technological devices contribute toward 45% of teens getting less than the recommended 8-hours of sleep (Samakow & Leibovich, 2013). Sleep deprivation has a psychological effect on teens including irritability, poor social skills, and a negative impact on memory which in turn can diminish academic performance (Samakow & Leibovich, 2013) (Figure 1).



Figure 1 Illustration by Kristen Solecki (Kristen Solecki (www.kristensolecki.com)). Reprinted with permission.

Facebook Depression

Facebook depression refers to the phenomena that result when teenagers spend excessive amounts of time on social networking sites (Samakow & Leibovich, 2013). In well-adjusted kids feelings of social connectedness can be heightened with the use of Facebook©, but have a negative effect on those teens who are prone to depression (Tanner, 2011). Even adolescents and young adults who appear to be

well-adjusted are at risk for having a decrease in their mood and life satisfaction due to large amounts of time spent on Facebook© (Kross et al., 2013). There are particular characteristics of Facebook© that can make it particularly tough to socially maneuver for kids already dealing with poor self-esteem (Tanner, 2011). Facebook© provides a skewed view of what is really going on because when online, there is no way to see facial expressions or read body language that provide context (Tanner, 2011). With in-your-face friends' accounts, status updates and photos of happy-go-lucky people having great times, Facebook© pages can make some kids feel even worse if they think they do not measure up (Tanner, 2011).

The Selfie Syndrome

A *selfie* is a picture taken of oneself that is often shared through social media (Neuman, 2014). A recent PEW study found that 91% of teens have reportedly posted a photo of themselves online (Pew Research Center, 2013). Previous studies have linked heavy Facebook© use with low self-esteem and narcissism (Gregoire, 2015). Something as simple as a selfie may lead to depression and self-harm due to wanting to get that "perfect" selfie. Narcissism reflects a grandiose self-image often disguising an underlying insecurity (Gregoire, 2015). Adolescents continuously trying to define themselves seek positive feedback to help them see how their identity fits into their world (Savage, 2013). With the increasing use of social networks, individuals are more focused with their appearance meaning self-objectification may become a bigger problem (Gregoire, 2015). Many teens will continue to take selfies until they get one that they like. One teen who reportedly became obsessed with taking the perfect selfie dropped out of school and lost thirty pounds. He did not leave the house for 6 months because he was occupying 10 or more hours a day to taking pictures. Eventually, he attempted suicide by overdose (Woda, 2014).

In addition to the desire for the "perfect" selfie, many adolescents have either sent a nude photo or sexually suggestive selfie to someone or received a sexually explicit photo from someone (Englander, 2012; Peek, 2014). In addition to legal consequences that can result from adolescents who send or receive explicit photos called *sexting*, it can also place some adolescents in a vulnerable position to become the victim of violence (Englander, 2012; Peek, 2014). The implications of sexting in adolescence could also have future implications into adulthood. It is not uncommon for the media to uncover photos of individuals or stories that occurred during the adolescent years of an adult.

Communication and Concentration

Among other risks associated with extensive amounts of time spent online is the difficulty for some adolescents who may struggle with the nuances of communication and the emotional understanding that happen during in-person (live) communication (Swick & Jellinek, 2014). Teenagers are losing their skills for real interactions and social skills that

Download English Version:

<https://daneshyari.com/en/article/2663746>

Download Persian Version:

<https://daneshyari.com/article/2663746>

[Daneshyari.com](https://daneshyari.com)