

DIGITAL SCREEN SYNDROME

Effects on children's brains and development

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"No computer experience or intervention can or will ever replace the unique value of interaction between human beings.

No computer program will ever teach lasting wisdom, compassion, empathy, nor provide meaning and purpose.

No pleasure provided by virtual reality will ever rival the struggles, depths, and heights of human striving and human intimacy.

No digital mind, with whatever resources, will be able to expand upon the core civilization values of reason, science, humanism, and progress.

Your actions, not any digital experience, mobilize you. Only committed actions will bring about constructive and substantive societal progress."

Ron Bashian, M.D., March 4, 2018, www.validationcoaching.com

The purpose of this statement is to make parents and educators aware of **the effects of prolonged screen use on children**.

As a pediatrician, I **coach** children and teens affected by prolonged, unhealthy, and addictive screen use.

As a pediatrician, I **educate** children and teens on the healthy uses of screens, including recreation – with the goal of self-determined, self-regulated, and balanced developmental goals.

As a pediatrician, **my structured program** helps families **to** establish clear boundaries and consistent expectations, so as to choose decisions and actions which reflect individual and family values.

Understanding the facts provided below is a first step to make decisive changes.

SCREENS AND...

Screen time

Gray matters – too much screen time damages the brain. Victoria Dunckley, MD, with linked references. Psychology Today, Feb 27, 2014

<https://www.psychologytoday.com/blog/mental-wealth/201402/gray-matters-too-much-screen-time-damages-the-brain>

Kids and screen time – what does the research say, UCLA. Adverse effects on social interaction. nprED, August 28, 2014

<https://www.npr.org/sections/ed/2014/08/28/343735856/kids-and-screen-time-what-does-the-research-say>

Video gaming

Recent evidence shows effects on the *brain and its connectivity*, including lower verbal IQ, and changes in white matter tracts by diffusion tensor imaging in various regions of the basal ganglia (affecting executive functions and emotions) and the orbital frontal cortex. Children, 6 to 18 years old, Japan (Molecular Psychiatry, 2016 Jan 5), <https://www.nature.com/articles/mp2015193>

Internet addiction disorder (IAD) imaging studies showing dysfunction in dopaminergic brain systems, and sharing neurobiological abnormalities with other addictive disorders (adults). J Biomed Biotechnol, 2012 Mar 13 (<https://www.ncbi.nlm.nih.gov/pubmed/22505818>)

Social media

Can social media shrink young brains – Gray matter decreases in anterior cingulate cortex (reward anticipation, decision-making functions) and nucleus accumbens (part of the reward system). Chinese university students, WeChat app (Scientific Reports, a Nature research journal) online 01 February 2018. (<https://www.nature.com/articles/s41598-018-19904-y>)

Risk of teen depression and suicide linked to smart phone use. Data from studies of Jean Twenge, Ph.D. NPR, December 17, 2017. <https://www.npr.org/2017/12/17/571443683/the-call-in-teens-and-depression>
Also see *The Atlantic*, Sept 2017, <https://www.npr.org/2017/12/17/571443683/the-call-in-teens-and-depression> on apps, Facebook, depression, and suicide rates in teen girls.

-Health experts ask Facebook to shut down messenger kids Wired, 1.30.18.
<https://www.wired.com/story/health-experts-ask-facebook-to-shut-down-messenger-kids/>

Why many tech moguls send their children to anti-tech schools. Sherry Turkle, MIT psychologist.

Nov 7, 2017, <http://www.businessinsider.com/sherry-turkle-why-tech-moguls-send-their-kids-to-anti-tech-schools-2017-11>

Parenting

YouTube's dark side could be affecting your child's health, CNBC. 13 Feb 2018
<https://www.cnbc.com/2018/02/13/youtube-is-causing-stress-and-sexualization-in-young-children.html>

Their tube – what happens to childhood when every moment can be recorded and shared? Parents, examples, boundaries, and financial incentives. Washington Post, December 7, 2016
http://www.washingtonpost.com/sf/style/2016/12/07/when-every-moment-of-childhood-can-be-recorded-and-shared-what-happens-to-childhood/?utm_term=.a8fdd2f95408

The hidden costs of having our child be raised by screens and smart devices.
CNBC, 22 Feb 2018
<https://www.cnbc.com/2018/02/22/the-hidden-costs-of-letting-your-children-be-raised-by-screens-and-smart-devices.html>

Disruptive mood dysregulation disorder –

Dr. Ronald Bashian, Nov 2016, www.academia.edu

Association of DMDD with electronic screen syndrome and video game addiction – a family centered program

http://www.academia.edu/32522265/Disruptive_Mood_Dysregulation_Disorder_Electronic_Screen_Syndrome_and_Video_Game_Addiction_FAMILY_CENTERED_PROGRAM

I offer a complimentary consultation, at which I can also provide links to other studies and details about my program.

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