

BRIEF

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Background: I am a physician and pediatric psychiatrist, in practice for 24 years. I've specialized in the dysregulating impacts of screen time on the developing brain for more than 20 years, and have spoken on this topic at medical conferences and to schools, clinicians, and parents around the globe. I'm the author of *Reset Your Child's Brain* (New World Library, 2015), (French version: *Enfants difficiles, la faute aux écrans?* (Ecosociete, 2021) , and a contributing author to the textbook *Internet Addiction in Children and Adults* (Springer, 2017). I use screen fasting as an intervention to with mood, focus, behavior, sleep and learning, and to clarify diagnosis. **In virtually cases, I find that it has become impossible to treat a child successfully without addressing screen time.**

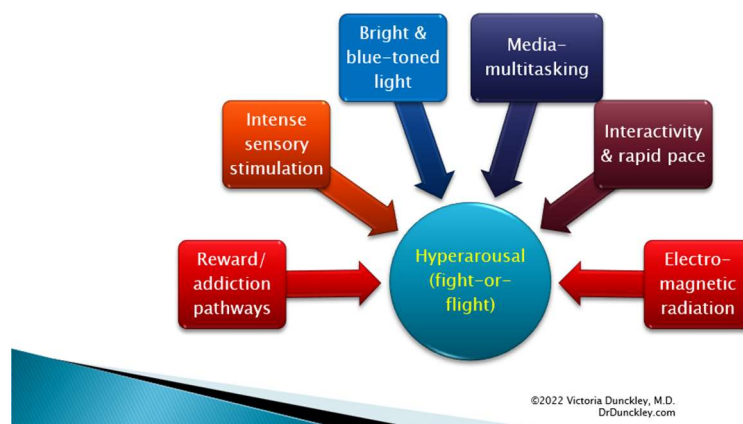
I sit on the advisory board at Fairplay's Screen Time Action Network, and for Physicians for Safe Technology and the Global Health Alliance (Canada).

Talking Points:

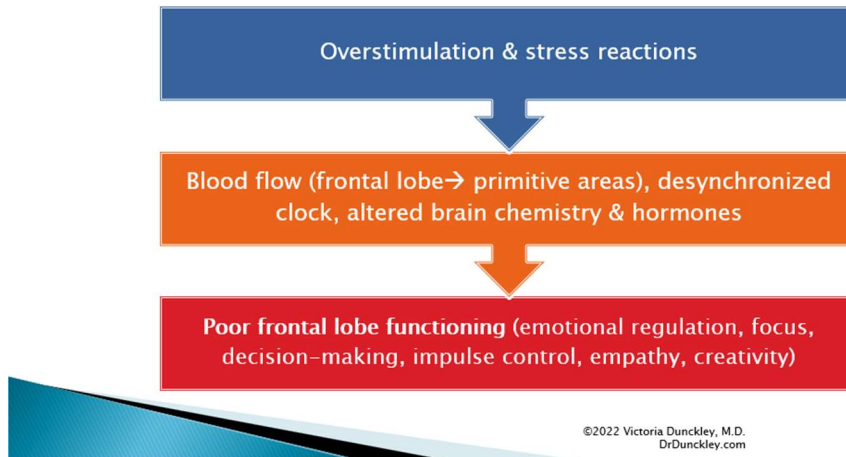
How adverse screen time effects translate to symptoms and dysfunction:

- **All screen time acts like a stimulant and induces a stress response – fight or flight (or freeze)**

NUMEROUS SCREEN RELATED FACTORS TRIGGER STRESS RESPONSE



HOW ELECTRONIC STRESS CREATES SYMPTOMS (ELECTRONIC SCREEN SYNDROME OR “ESS”)



- Eventually screen-related stress or hyperarousal shuts down the brain’s frontal lobe (that governs focus, motivation, “getting things done”, emotional regulation, creativity and impulse control.)
- These adverse effects – due to **overstimulation or hyperarousal** of the nervous system- vary but often cause irritability, tantrums, difficulty learning, low motivation, low frustration tolerance, less eye contact, and poor social skills.
- Screen fasting resynchronizes the body clock, resensitizes dopamine receptors/reward pathways, shifts blood flow from primitive areas to the brain’s frontal lobe, and lowers stress hormones. In effect the nervous system is “reset”.

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- *Trends* on the rise linked to screen time – Mental health issues, developmental delays, obesity and high cholesterol, academic decline, technology addiction, “failure to launch” in young adults. Specifically- sharp increases in ADHD, autism/ASD, tics, language and motor delays, **psychotropic medication use**, depression, anxiety, and suicide. Lower reading and math scores.
 - Unifying contributor to all these = screen time (gaming, social media, YouTube videos, texting, school-based screen time). *The current situation is not sustainable.*
 - The pandemic amplified these problems, but these issues were accelerating prior to the pandemic. Beginning around the 2000s and then sharply rising since 2010 or so, when smartphones and tablets/iPads came out.
 - Huge amounts of resources are being deployed to address these issues without addressing the root problem. At same time mental health clinicians are experiencing burnout at unprecedented rates.

- **School-required screen time - Ed Tech and using 1:1 devices (as opposed to computer lab time to learn skills) – are contributing more and more to this problem; parents feel helpless to control screen time when they’re being forced to use devices at school.**
- Children vary in their sensitivity to screen time; kids with underlying vulnerabilities cannot tolerate screen time as well, but are also drawn to it, which creates a vicious cycle.
- ***Screen time can mimic a disorder in a child with no diagnosis, and exacerbates symptoms and dysfunction in a child with underlying diagnosis*** (eg ADHD, anxiety, autism, learning disorder, tantrums, etc will worsen) – AND these worsening symptoms are resistant to traditional treatment efforts.
- Even “regular” amounts of screen time can cause issues with sleep, focus, mood regulation, and slowed development. In some children even a few hours a week has a negative impact.
- **The gold standard for determining whether a child is being affected by screen time is to do an electronic fast (or screen fast) for at least 4 weeks.** This is more effective and “clean” when the child can be screen-free at school as well.
- **Social media adds extra psychological layers as developmental needs are exploited. However even if social media is being used in a more “healthy” or benign way, it is still unnaturally stimulating.**

Conclusions and Recommendations:

- Screen-based technology is at odds with what brain needs to function well and to develop properly over time
- Sooner or later screen time dysregulates brain functions, mostly by chronically stressing the arousal system, which translates to the “overstimulated child” we see today: irritable and unfocused children and anxious and depressed teens.
- Problems can occur even if a child is not addicted, and even if a child is using screens within the recommended limits
- Today’s mental health crisis and the academic failures we’re seeing in children are not reversible without a dramatic turnaround in how we’re addressing screen time.
This point bears emphasizing: The “balanced use” advice is not working.
- Screen fasting followed by strict limits based on tolerability (ie did symptoms come back?) is vastly superior to trying to moderate.
- Both schools and health providers should be recommending screen fasting to clarify and address mental health and learning issues as a 1st step: it dramatically

improves functioning and symptoms, promotes efficient use of resources, and clarifies diagnosis.

- Eliminate use of learning or “ed tech” apps in schools, and allow parents to (easily) opt out of 1:1 device programs; allow children to use paper-based (“analog”) and hands- on methods of learning. (and
- Reduce emphasis on tracking data at schools as this leads to more screen time for children and teens (as well as teachers), as well as increased “light at night” when children are forced to use a device for homework
- Return to evidence-based methods of brain optimization- exposure to nature, physical activity, art, music, and connection. These things make the brain bigger and more connected, while technology use makes the brain smaller and more fragmented.

Recommendations: “Big picture”

- ▶ Pace technology exposure according to developmental and individual needs
- ▶ Restricting during youth protects frontal lobe → higher tolerance later PLUS maximizes child’s potential
- ▶ Use electronic fasts to “reset” physiological systems when children are dysregulated; reintroduce slowly as tolerated
- ▶ Use wired-only access: reduces EMFs and accessibility
- ▶ In school, allow fasts, opting-out of iPad/laptop programs, & other tech-related accommodations (e.g. screen-free, WiFi-free, no light-at-night)