SOAR EDUCATIONAL AND MENTAL HEALTH THERAPY
169 Dayton St, Ridgewood, NJ 07450 • 201-458-0850 • nan@soartherapy.org • www.soartherapy.org

SESSION HANDOUT · SCREENS & MENTAL HEALTH

# Your Brain on Screens

Nobody's going to tell you to throw your phone in a lake. But the apps you use were built by people who study exactly how your brain works. Here's what the research actually found.



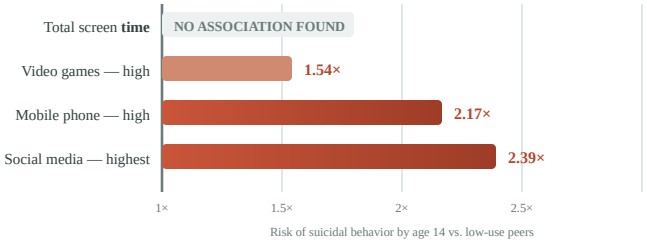
**8h 39m**
Average daily screen media use, US teens 13–18 — **not counting schoolwork**
Common Sense Media Census (2021 data)

**31%**
Of ~4,300 US kids tracked from age 10 to 14, this share developed an **increasing addictive pattern** of social media use
Xiao et al., *JAMA*, 2025

**8–10**
Hours of sleep a 13–18 year old needs each night to function well
American Academy of Sleep Medicine

## 1 It's not how many hours. It's how hooked.

The finding that surprised researchers most — and it changes the whole conversation.




**How to read it:** researchers followed 4,285 US kids from about age 10 for four years. Kids whose use looked *addictive* — craving it, unable to cut back, distressed without it — had roughly double the risk. Kids who simply logged a lot of hours, without that pattern, did not. Bars show the highest-use group; the 31% "increasing" group's risk was 2.14×.

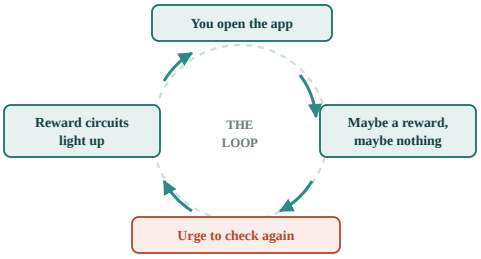
> *"Baseline total screen time alone was not associated with suicidal behaviors, suicidal ideation, or internalizing or externalizing symptom associations."*
>
> Xiao Y, Meng Y, Brown TT, Keyes KM, Mann JJ. *JAMA*. 2025.

**So the real question isn't "how many hours?"**
It's: **can you stop when you want to?** Do you feel worse when you can't get to it? Is it taking the place of things you actually care about?

Two people can both use screens four hours a day. For one it's a hobby; for the other it's a hook. Only one of those predicts harm.

## 2 Why it's genuinely hard to put down

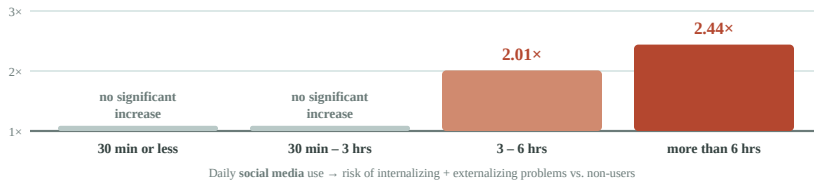
This is design, not weakness. Knowing the mechanism is most of the defense.




- **The payoff is unpredictable on purpose.** Most of what you scroll past is forgettable — then something lands. That's *intermittent reinforcement*: the same reward schedule that makes slot machines hard to walk away from. Designers know this. (Montag et al., 2019)
- **Likes hit real reward circuitry.** Brain scans of teens 13–18 showed the nucleus accumbens — a core reward region — activating more strongly for a photo with many likes than for the identical photo with few. (Sherman et al., *Psychological Science*, 2016)
- **Your brain is in an unfair fight right now.** Sensitivity to reward peaks in mid-adolescence, while the prefrontal cortex — the part that pumps the brakes — is one of the last regions to finish developing, into the mid-to-late 20s. That gap is normal biology, not a character flaw. (Crone & Konijn, 2018; NIMH, 2023)

## 3 Where the line seems to fall

In 6,595 US adolescents, risk didn't climb steadily — it stayed flat, then bent.




Riehm et al., *JAMA Psychiatry*, 2019 (n = 6,595, ages 12–15). In a separate UK study of 10,904 fourteen-year-olds, depressive symptom scores ran 50% higher in girls and 35% higher in boys at 5+ hrs/day vs. 1–3 hrs — much of it running through **sleep loss, online harassment, low self-esteem, and body image** (Kelly et al., 2018).

## 4 The sleep problem

The most consistent finding in the whole literature.

**2.2×**
Odds of too little sleep when you use a device at bedtime

**1.8×**
Odds when the phone is just **in the room** — not even used

**55%**
Melatonin suppressed after 4 hrs of a bright screen before bed

**90%**
Of 67 studies reviewed found screens linked to worse sleep

Carter et al., *JAMA Pediatrics*, 2016 (125,198 children); Chang et al., *PNAS*, 2015 (lab study, adults); Hale & Guan, 2015. **Look at the second tile:** the phone didn't have to be used. Being reachable was enough.

## Quick self-check — be honest, nobody's grading this

These reflect the "addictive use" pattern the research measures — not hours.

- ☐ I've tried to cut back and couldn't stick to it.
- ☐ I reach for it automatically, before deciding to.
- ☐ It's cost me sleep, grades, or time with people.
- ☐ I feel restless or irritable without it.
- ☐ I use it mainly to avoid a feeling I don't want.
- ☐ I feel worse after, but go back anyway.

**Three or more?** Not a diagnosis, and it doesn't mean something's wrong with you. It *is* worth bringing into session — it's a specific, workable thing to change.

Also worth naming: what the screen is doing *for* you. Boredom, anxiety, loneliness, avoidance — each has a different fix.

## 5 What actually has evidence behind it

**Reduce — don't quit**
Across 10 randomized trials, **cutting back** lowered depression symptoms (g = 0.25). Quitting entirely wasn't shown to work better.
*May et al., 2025 (N = 1,491)*

**Phone sleeps elsewhere**
Charge it outside your room. The highest-yield single change on this page.
*Carter et al., 2016*

**Cut screens before bed**
A 4-week trial of a **30-min** pre-bed cutoff added ~18 min of sleep and lifted mood. AAP advises an hour.
*He et al., 2020 (pilot, adults)*

**Kill the notifications**
Notifications are the unpredictable trigger. Off = the loop breaks at its start.
*Mechanism: Montag et al., 2019*

**Move 60 min a day**
The federal target for ages 6–17 — and the most reliable competition for a screen.
*HHS Guidelines, 2018*

**Nan Kurz, PhD, LPC**
License #37AC00727100 (NJ) | NPI 1235908005 | 201-458-0850
SOAR Educational and Mental Health Therapy | Ridgewood, NJ

SOAR EDUCATIONAL AND MENTAL HEALTH THERAPY
169 Dayton St, Ridgewood, NJ 07450 • 201-458-0850 • nan@soartherapy.org • www.soartherapy.org

SESSION HANDOUT · SCREENS & MENTAL HEALTH

# What's Recommended, By Stage

If you learned a screen-time number years ago, it has changed. In February 2026 the AAP replaced fixed hour limits with a framework about content, context, and what screens displace.



### WHAT CHANGED IN 2026

> *"Time limits* **might range** *from <1 hour/d for toddlers and preschoolers to 1 to 2 hours/d or more of entertainment (not school-related) media for school-aged children and teens."*

AAP Council on Communications and Media. *Digital Ecosystems, Children, and Adolescents: Policy Statement.* Pediatrics. 2026;157(2):e2025075320.

Read the hedging — **"might range,"** and **schoolwork excluded.** These are illustrative, not limits; the AAP adds that *"the most important considerations are high-quality content and prioritizing healthy activities (eg, sleep, play, physical activity, reading)."* The 2016 rules many handouts still repeat — "no screens under 18 months except video chat" — are no longer AAP's framing.

### THE REPLACEMENT FRAMEWORK: THE 5 C'S

The AAP's questions for a family media plan — ask them about each child, at any age.

| Child | Content | Calm | Crowding out | Communication |
|---|---|---|---|---|
| What are their strengths? | What are they interacting with? | Using media to self-soothe? | What's it getting in the way of? | How does the family talk about it? |

**The one concrete AAP instruction:** "Establish phone-free zones during mealtimes, in bedrooms, an hour before bed, and during homework." If you change one thing, make it the bedroom.

## Guidance by developmental stage

The major bodies now disagree with each other, so each column is attributed.

| Stage | AAP 2026 — screen media | WHO 2019 / AACAP 2025 | Sleep (AASM) | What matters most at this stage |
|---|---|---|---|---|
| **Under 2**<br>Infant / toddler | No avoidance rule. Infants "do not learn from digital media," but brief, high-quality videos are "not detrimental." Video chat is framed as a **benefit**. | **WHO:** not recommended under age 2. **AACAP:** under 18 mo, video chat with an adult only. | **11–14 hrs**<br>ages 1–2 | Back-and-forth interaction with a person. Under 18 months, children can't reliably transfer screen content to real life. |
| **2–5**<br>Preschool | Under 1 hr/day of high-quality content, watched together where possible. | **WHO:** max 1 hr/day, "less is better." **AACAP:** ~1 hr weekdays, 3 hrs weekend days of non-educational media. | **10–13 hrs**<br>ages 3–5 | Co-view and talk about what they see. Watch for media as the default calming tool — that habit carries forward. |
| **6–10**<br>School age | Illustrative 1–2 hrs/day or more of **entertainment** media, schoolwork excluded. | Outside WHO scope. AACAP: build healthy habits; limit screen-based activities. | **9–12 hrs** | A **shared family tablet** beats a personal device. AAP: "Children will not miss out on learning opportunities if families delay giving their children a tablet." |
| **11–13**<br>Early adolescence | Same range. No AAP minimum age for a first phone; AAP points to its **PhoneReady Questionnaire**. | Platforms set **13** as the minimum — but that comes from a 1998 privacy law (COPPA), not a developmental marker. AAP names no specific age. | **9–12 hrs**<br>to age 12 | The highest-risk window: addictive-use patterns in the JAMA cohort took hold between ages 10 and 14. |
| **14–18**<br>Adolescence | Same range; emphasis shifts to autonomy, content quality, and what use displaces. | US Surgeon General's 2023 advisory (still posted) suggests considering no devices for 1 hr before bed or overnight, and device-free meals. | **8–10 hrs** | Above ~3 hrs/day of **social media**, risk of internalizing problems rises. Negotiate rather than confiscate — and model it. |

## Ordinary heavy use vs. worth a closer look

The distinction the 2025 *JAMA* cohort drew: pattern, not quantity.

### Probably just a teenager

- ✓ Long stretches, but stops when asked
- ✓ Screens are one interest among several
- ✓ Sleeping enough; grades roughly steady
- ✓ Sees friends in person at least sometimes

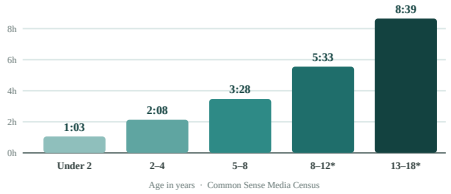
### Worth raising in session

- Repeated failed attempts to cut back
- Distress or anger when it's unavailable
- Sleep loss; grades slipping; dropped activities
- Withdrawing from in-person friendships
- Using it mainly to escape a feeling

**A caution on the numbers:** most of this evidence is observational, and measured effects on mood are real but modest at a population level. A sudden change in a specific child matters more than any national average.

## What the averages look like

Daily screen media use, largely excluding schoolwork.




*8–12 and 13–18 are 2021 data — no newer census exists for these ages.

**Equity note:** among children 0–8, those in households under $50k averaged twice the screen time of those at $100k+ (3:48 vs 1:52). Access to alternatives is part of the picture, not just parenting.

## Five moves with actual evidence behind them — sources at refs 1, 5, 12, 18, 20

**1 · Bedroom is a no-phone zone.** A device merely *present* in the room raised the odds of inadequate sleep by 79%, even unused — buy an alarm clock. **2 · Reduce, don't ban.** Trials that cut use lowered depression symptoms (g = 0.25); quitting entirely wasn't shown to work better. **3 · Delay the personal device.** AAP recommends a shared family tablet first; later is a real option. **4 · Protect meals and the hour before bed.** The two windows every major body agrees on — and the ones adults break most. **5 · Ask what it's replacing.** "Crowding out" is the useful question; 60 min/day of movement is the federal target for ages 6–17.

### REFERENCES & FURTHER READING

**1.** AAP Council on Communications and Media. Digital Ecosystems, Children, and Adolescents: Policy Statement. *Pediatrics.* 2026;157(2):e2025075320. **2.** Xiao Y, Meng Y, Brown TT, Keyes KM, Mann JJ. Addictive Screen Use Trajectories and Suicidal Behaviors, Ideation, and Mental Health in US Youths. *JAMA.* 2025. **3.** Riehm KE, Feder KA, Tormohlen KN, et al. Time Spent Using Social Media and Internalizing and Externalizing Problems Among US Youth. *JAMA Psychiatry.* 2019;76(12):1266–73. **4.** Kelly Y, Zilanawala A, Booker C, Sacker A. Social Media Use and Adolescent Mental Health: UK Millennium Cohort Study. *EClinicalMedicine.* 2018;6:59–68. **5.** Carter B, Rees P, Hale L, et al. Portable Screen-Based Media Device Access or Use and Sleep Outcomes. *JAMA Pediatrics.* 2016;170(12):1202–8. **6.** Hale L, Guan S. Screen time and sleep among school-aged children and adolescents. *Sleep Medicine Reviews.* 2015;21:50–8. **7.** Chang AM, Aeschbach D, Duffy JF, Czeisler CA. Evening use of light-emitting eReaders. *PNAS.* 2015;112(4):1232–7. **8.** Sherman LE, Payton AA, Hernandez LM, et al. The Power of the Like in Adolescence. *Psychological Science.* 2016;27(7):1027–35. **9.** Crone EA, Konijn EA. Media use and brain development during adolescence. *Nature Communications.* 2018;9:588. **10.** Maza MT, Fox KA, Kwon SJ, et al. Habitual Checking on Social Media and Longitudinal Functional Brain Development. *JAMA Pediatrics.* 2023. **11.** Montag C, Lachmann B, Herrlich M, Zweig K. Addictive Features of Social Media/Messenger Platforms and Freemium Games. *IJERPH.* 2019;16(14):2612. **12.** May W, Malouff JM, Meynadier J. Reducing Social Media Use Decreases Depression Symptoms: Meta-Analysis of RCTs. *EJIHPE.* 2025;15(11):222. **13.** He J, Tu Z, Xiao L, Su T, Tang Y. Restricting bedtime mobile phone use: randomized pilot trial. *PLOS ONE.* 2020;15(2):e0228756. **14.** Paruthi S, Brooks LJ, D'Ambrosio C, et al. Recommended Amount of Sleep for Pediatric Populations: AASM Consensus Statement. *J Clin Sleep Med.* 2016;12(6):785–6. **15.** World Health Organization. Guidelines on physical activity, sedentary behaviour and sleep for children under 5. Geneva: WHO; 2019. **16.** AACAP. Screen Time and Children. *Facts for Families* No. 54. Updated June 2025. **17.** Mann S, Calvin A, Lenhart A, Robb MB. The Common Sense Census: Media Use by Kids Zero to Eight. Common Sense Media; 2025. (Ages 8–18: 2021 Census.) **18.** Office of the Surgeon General. Social Media and Youth Mental Health: Surgeon General's Advisory. HHS; 2023. **19.** National Institute of Mental Health. The Teen Brain: 7 Things to Know. NIH Pub. 23-MH-8078; 2023. **20.** HHS. Physical Activity Guidelines for Americans, 2nd ed.; 2018. **21.** Sohn SY, Rees P, Wildridge B, Kalk NJ, Carter B. Prevalence of problematic smartphone usage. *BMC Psychiatry.* 2019;19:356. **22.** WHO Regional Office for Europe. Adolescent social media use and gaming (HBSC 2021/22), Vol. 6; 2024.

**Nan Kurz, PhD, LPC**
License #37AC00727100 (NJ) | NPI 1235908005
SOAR Educational and Mental Health Therapy | 169 Dayton St, Ridgewood, NJ 07450
201-458-0850 | nan@soartherapy.org | www.soartherapy.org