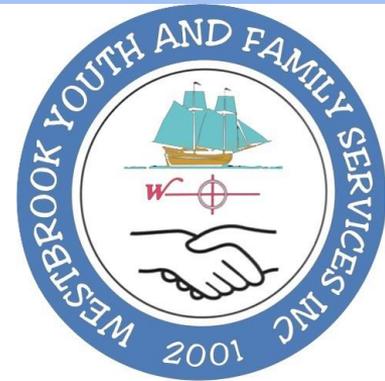


Teens and Technology

Brain-Wise Parenting in the Digital Age

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Questions

What is one way technology makes your day better?

What is Addiction?

Short Definition of Addiction:

Addiction is a primary, chronic disease of **brain reward, motivation, memory and related circuitry**. ... Addiction is characterized by **inability to consistently abstain**, impairment in **behavioral control, craving**, ..., and a **dysfunctional emotional response**.

Source: American Society of Addiction Medicine

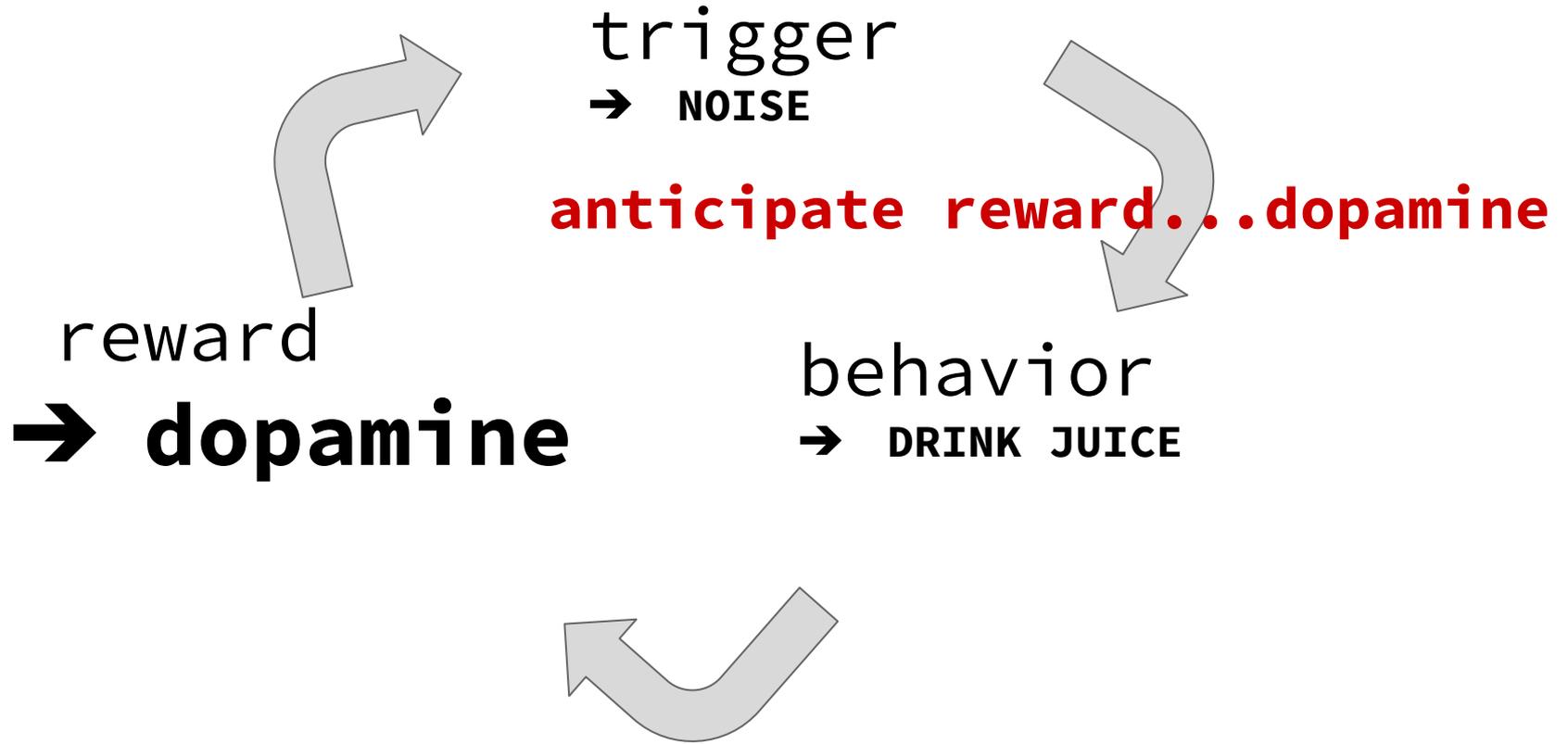
<http://www.asam.org/for-the-public/definition-of-addiction>

**Are you (a little)
addicted to
technology?**

**Are your
children?**



Practice Panic-free Parenting



The Habit Cycle

trigger

→ NOISE

anticipate reward...dopamine

punishment

→ dopamine

DROPS...

DISCOMFORT!!!

behavior

→ NO JUICE

The Habit Cycle

trigger

-
-
-

anticipate reward=craving

reward

→ dopamine

- novelty
- distraction
- reduction in discomfort

behavior

-
-
-

The Habit Cycle: Technology

trigger

- “I’m bored”
- Ding
- “I’m worried”

anticipate reward=craving

reward

→ **dopamine**

- novelty
- distraction
- reduction in discomfort

behavior

- check email/Facebook/Instagram
- watch cat videos on YouTube
- play Minecraft

The Habit Cycle: Technology

THE COMMON SENSE CENSUS

MEDIA USE BY TWEENS + TEENS

This 2015 national survey details the media habits and preferences of American 8- to 18-year-olds and shows just how central a role media plays in the lives of Generation Z.



TWEENS

8-12 Years Old

TEENS

13-18 Years Old

AVERAGE DAILY MEDIA USE

Excluding time spent using media for school or for homework

TWEENS

6 hours

5:55 Total Hours

4:36 Hours of Screen Time

TEENS

9 hours

8:56 Total Hours

6:40 Hours of Screen Time

Multitasking: The New Normal

Many teens use media while studying, and most think it has no effect on the quality of their work.

While Doing Homework, Teens ...



BOYS ARE FROM XBOX, GIRLS ARE FROM INSTAGRAM

Average daily time used for social media and gaming is strikingly different.

TWEENS

Video Games 43 mins.

12 mins.

Social Media 6 mins.

26 mins.

♂ Boys

♀ Girls

TEENS

56 mins.

7 mins.

52 mins.

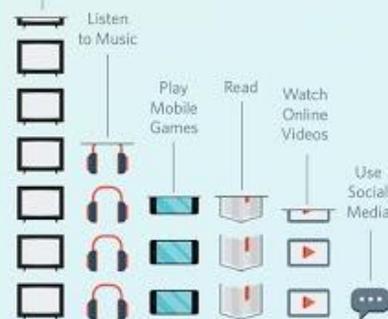
1 hr. 32 mins.

Video Games

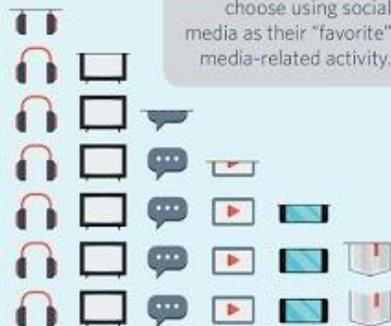
Social Media

SURPRISE! TV AND MUSIC STILL DOMINATE DAILY MEDIA DIET

Watch TV



TWEENS WHO DO ACTIVITY EVERY DAY:



TEENS WHO DO ACTIVITY EVERY DAY:

Social Media = #meh

Teens spend on average 1:11 using social media, but only 10% of teens choose using social media as their "favorite" media-related activity.

Risks of Technology Addiction

→ Multi-tasking leads to Inefficient cognitive processing

- ◆ Multi-tasking is a misnomer
- ◆ Really switching between tasks
- ◆ Each switch takes time
- ◆ Teens WORSE than adults (less efficient)
 - Why? They have more grey matter, we have more white matter
- ◆ Switching causes forgetfulness
- ◆ Homework taking 4 hours? “Multi-tasking” distractions could be the culprit

(Source: <http://www.nais.org/Magazines-Newsletters/ISMagazine/Pages/Can-Teens-Really-Do-It-All.aspx>)

Risks of Technology Addiction

→ Memory

- ◆ Working...short term...long term
- ◆ Overloaded information processing creates fragmented memories

→ CEO overload

- ◆ Prefrontal Cortex is brain's "CEO"
- ◆ Executive Function like prioritizing, discriminating important from fluff, creative problem solving
- ◆ Learning process moves out of PFC...inference capacity lost

(Sources: <http://www.nais.org/Magazines-Newsletters/ISMagazine/Pages/Can-Teens-Really-Do-It-All.aspx>
<http://www.nytimes.com/2015/11/29/opinion/sunday/addicted-to-distraction.html>)

Risks of Technology Addiction

Distracted Driving

- 10% of drivers of all ages under the age of 20 involved in fatal crashes were reported as distracted at the time of the crash. This age group has the largest proportion of drivers who were distracted.
- 21% of all traffic crashes involve distracted drivers
- 4x as likely to be in car crash if using mobile phone (hands free or not)
- 2012 3,328 car deaths involved distracted drivers

(Sources: US Department of Transportation, National Safety Council, Centers for Disease Control)

new behavior

trigger

- "I'm bored"
- Ding
- "I'm worried"

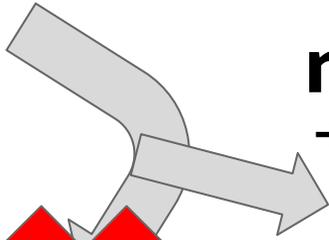
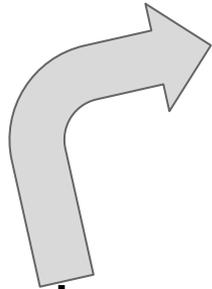


behavior

- check email/Facebook/Instagram
- watch cat videos on YouTube
- play Minecraft

reward

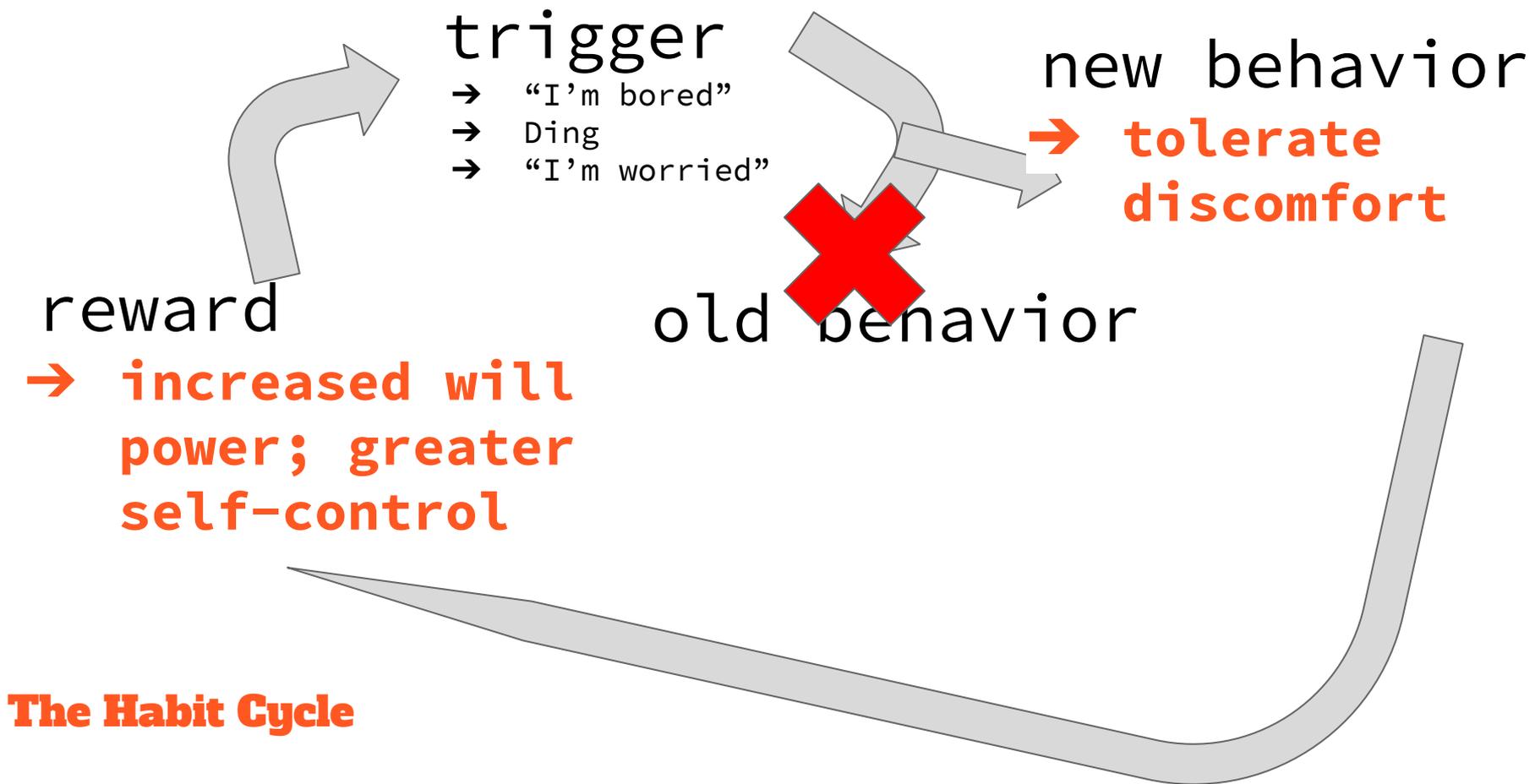
- dopamine
- novelty
- distraction
- reduction in discomfort



The Habit Cycle

Study Habits

- 20-50 minutes of undistracted work
- 5-10 minute breaks
 - ◆ Activity different from study work
 - Don't read a novel during a break from reading for LA
 - ◆ NOT emotionally charged (amygdala activity)
 - e.g., Facebook pic of friends out without you



trigger

- "I'm bored"
- Ding
- "I'm worried"

new behavior

→ tolerate
discomfort

reward

→ increased will
power; greater
self-control

old behavior

The Habit Cycle

YOUR TOOL KIT

Engage.

Limit.

Monitor.

Engage

As a brain-wise parent raising children in the technology age, your goal **is not to exercise complete control** over your child's technology use. Why? Simple: Because you can't. Your goal is to raise children with **good judgment** so they can appropriately manage their own technology use.

What's good judgment? That depends on your **Family's Values.**

Engage: Norms

Research shows that children WANT norms around technology (just like research shows children want rules of conduct in homes and classrooms)

- How have you engaged your children in the discussion of family rules/norms/rituals about technology?
- Is there anything we've discussed today you want to share with them?

Engage: Talking Technology Norms

- ACKNOWLEDGE the value of technology
- ASK what risks/concerns they have about technology
 - ◆ Don't use questions as criticism ("Why do you like playing that game?")
 - ◆ Don't use questions as interrogation
- SHARE what you've learned (remember: DON'T PANIC)
- DISCUSS why limits are helpful and collaborate on good rules (although you get the final say)
 - ◆ Tip: If they've identified a friend has a technology "risk" ask what rules they would impose if they were the friend's parent
- USE technology with them
- MODEL appropriate technology etiquette and electronic restraint

Risks

Concern

My Rating

Child's Rating/Self

Child's Rating/Friends

Rating Scale 1 (not a problem at all) to 5-(major issue)

Risks

Concern

My Rating

Child's Rating/Self

Child's Rating/Friends

Craving/addiction

life in public

sexting

violence (gaming)

distracted living/driving

multi-tasking fallacy (sustained focus)

Rewards

connection

information

there's an app for that

lifelong learning

sharing economy

cross-cultural problem solving

here to stay

Limit

Start early.



Limit: Technology-Free Zones

- Family Time
 - ◆ Family Dinner, Family Game Time, Family Movie Time, Restaurants
- “Sacred Spaces” - Church, Relatives’ house, Therapist’s office, etc.
- Before School
- Until homework/instrument practice/Scouting activities/chores, etc., completed
- Bedtime

Total Daily Limits:

- 30 minutes daily recreational technology during school-week
- 120 minutes daily recreational technology during weekend

Limit: Suggested Rules

2. Set up Charging Station in central location

- Homework time: No phones during homework (phones at charging station)
- Bedtime: All devices to Charging Station before bedtime

3. Delay Engagement in Social Media

- No smart phone until high school
- No Facebook, Instagram, Twitter, etc. until high school

4. Limit Violence

- Limit use of first-person shooter games. Check ratings.

Monitor

Make it about family values

Passwords

Usage

Apps and Devices

Monitor

Remember...monitoring works best when ENGAGEMENT and VALUES are clear. It's important that your children know WHY you have the right/responsibility to monitor them.

Don't abuse the right.

Monitor

- Find My Friend or Find My Phone
(I can know where you are)
- Apps to limit/monitor use of home network/mobile service
- Parents know all passwords
- Parents approve all downloads
- Gaming devices are only used in central location (not bedroom)
- Limit devices in bedrooms
- BRAIN SCIENCE TRICK: Put picture of you near devices

For Your Reading

The Teenage Brain by Frances E. Jensen with Amy Ellis Nutt

How We Decide by Jonah Lehrer (Especially chapter on Dopamine)

The Power of Habit by Charles Duhigg

[Addicted to Distraction](#) by Tony Schwartz in the New York Times

[Can Teens Really Do It All](#) by Karen Bradley in Independent School Magazine

Other topics you might be interested in:

[Teens, Social Media and Privacy](#) from the Pew Research Center
(Norms for kids today around using social media)

[The Vault Apps That Keep Sexts a Secret](#) in The New York Times
(For some info on sexting and hidden pictures on mobile phones)