



ANA M. MORENO LMHC, MCAP, CIP, CAI, ICADC, CDWF

TECHNOLOGY, COVID AND
TEENS MENTAL HEALTH



THANK YOU RUTH ANN RIGBY!



**EARTH ANGELS HELP
OTHERS REMEMBER
WHO THEY ARE**

THANK YOU TO THE FIRST RESPONDERS AND NURSES!



MS FIREFIGHTERS TO COLORADO
JACKSON

THE ONE TO WATCH
16 WAPT NEWS



UMMC SON alums responding to the call.
These are OUR HEROES



ADOLESCENT 101:

- Reward system fully developed by age 12 -13 years old
- Executive function fully developed by 25 years old
- Dopamine and Serotonin are very powerful neurotransmitters
- Amygdala: fear factor less for adolescents and young adults therefore increased desire for risk taking
- Adolescents are greater risk for addiction and mental health issues
- Most substance use disorders begin in adolescence
- Unconscious goals of adolescence: autonomy, separation, individuation, and cooperation
- Struggle with delayed gratification and self-regulation

DOPAMINE: OUR “HAPPY JUICE”

How much dopamine does an activity release?

Various activities cause the brain to release more dopamine than usual. Enjoying food brings a 50 percent boost to dopamine levels in the brain, for instance. Video games and sex also increase dopamine, and drug use does so significantly. It's not reasonable to equate the brain response to drug use with that of video games.

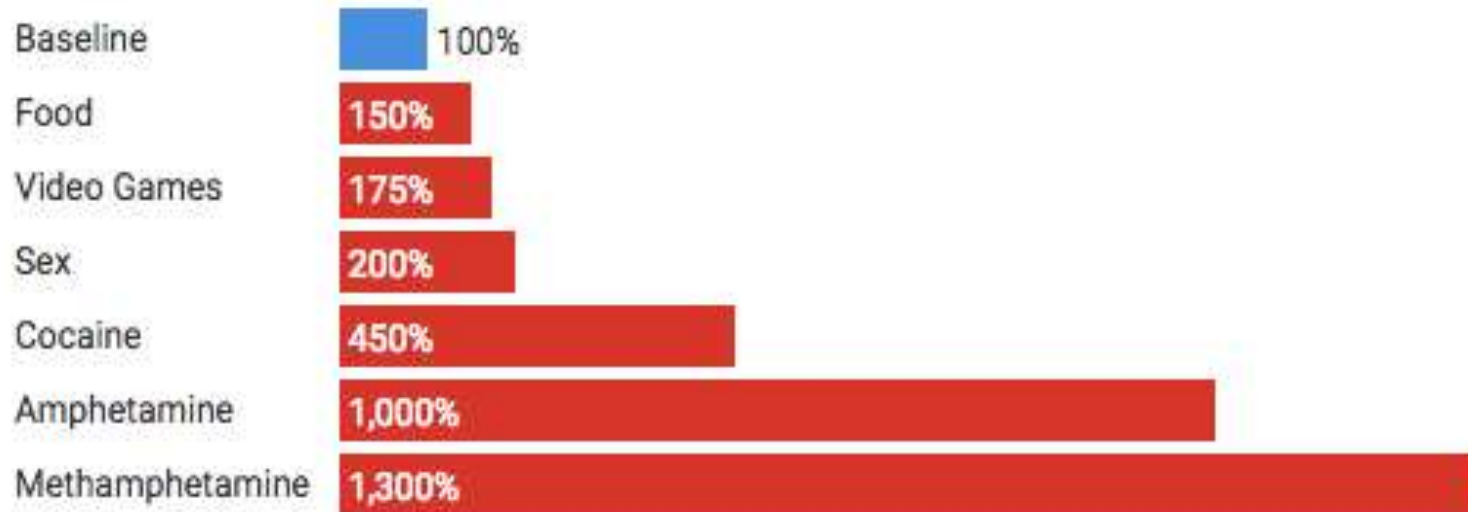


Chart: The Conversation, CC-BY-ND • Source: [National Institute on Drug Abuse](#) • [Get the data](#)

Dopamine affects:

- Pleasure and reward
- Movement
- Attention
- Memory



Immediate Gratification:

- I-Phone, Facebook, Instagram, Twitter, SnapChat
- Instant Messenger/Texting
- Internet
- Video Games



*Struggle with Delayed Gratification

*Struggle with Impulse Control



HOW TECHNOLOGY FOSTERS ADDICTION

- Netflix: Next episode immediately plays
- SnapChat: Streaks
- Games: Free prize per day – start over if you miss a day
- Video Games: level up



WHY OVERUSE

- FOMO: Fear of Missing out
- Fear of Being Ignored
- Peer pressure
- All About Me
- Detaching from the Real World (Video games)



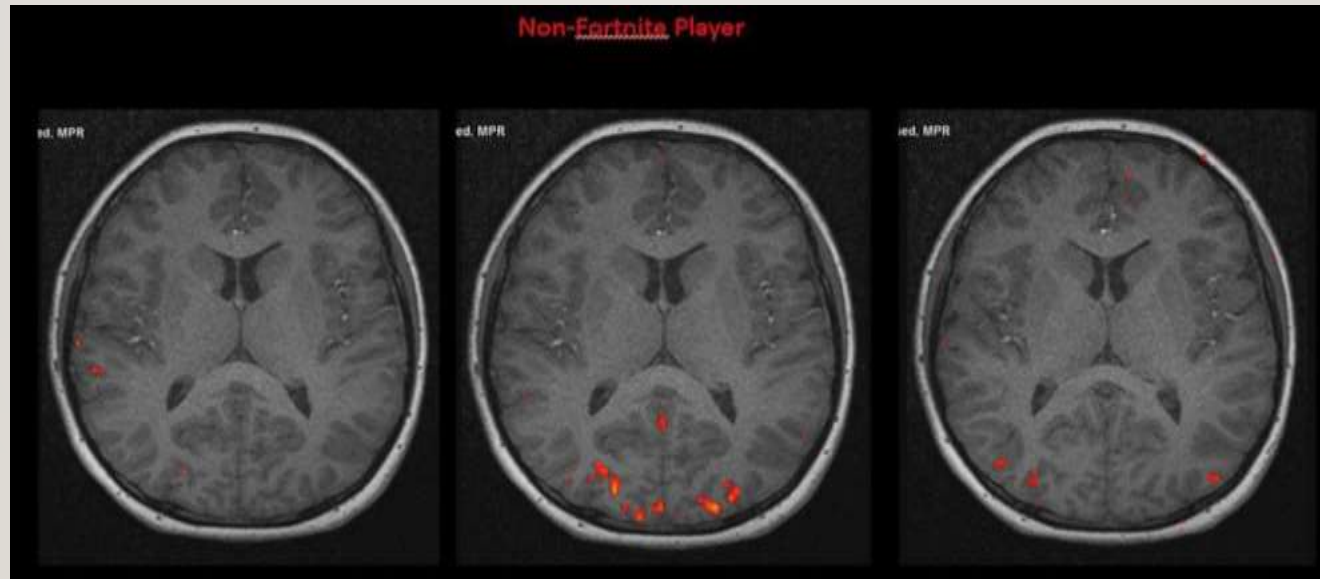
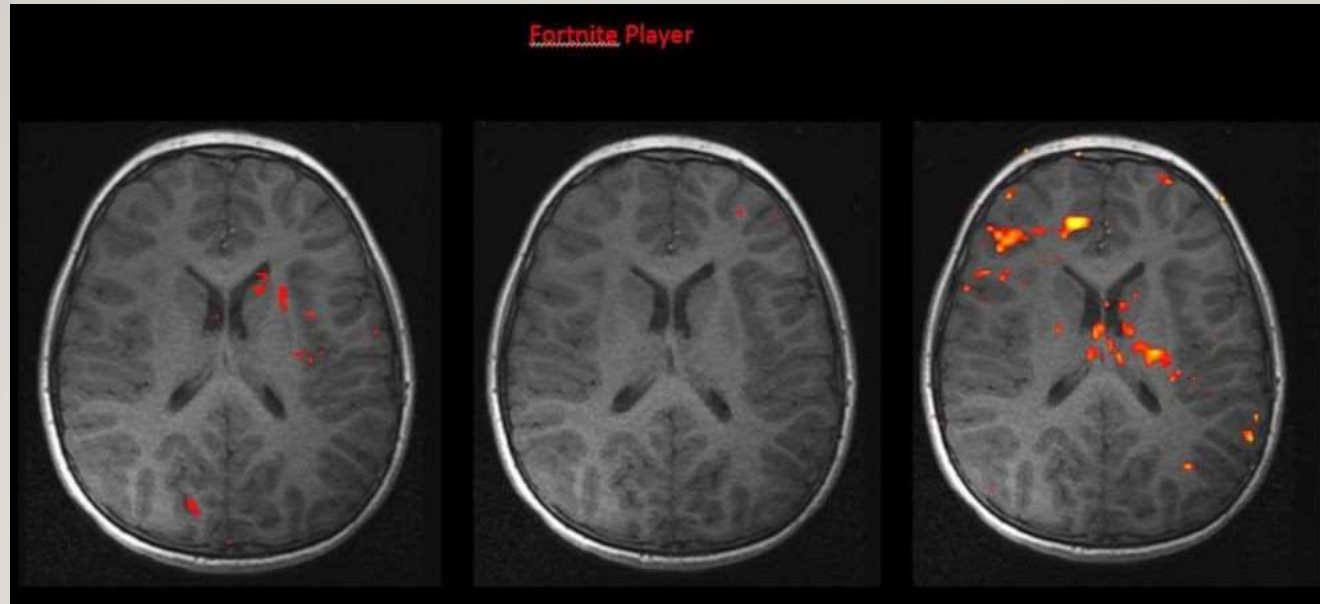
REWARD CHEMISTRY

- “Smartphone screens light up the same area of the brain as opioids and cannabis. The rewards pathways mediated by dopamine respond to screens in a very similar way to opioids.”
-

— Anna Lembke assistant professor of psychiatry and behavioral sciences at the Stanford University Medical Center



A scan of 10-year-old Cash's brain shows in red and orange blooms the blood flow and stimulation and compares between "Fortnite" and images of birds (left), images of birds and a non-"Fortnite" game (center), and between "Fortnite" and the non-"Fortnite" game (right).



A scan of 12-year-old Amado's brain shows in red and orange blooms the blood flow and stimulation between "Fortnite" and images of birds (left), images of birds and a non-"Fortnite" game (center), and between "Fortnite" and the non-"Fortnite" game (right).

ASSESSING FOR PROBLEMATIC USE



How often do you find that you stay online longer than you intended?

How often do others in your life complain to you about the amount of time you spend online?

How often do your grades or schoolwork suffer because of the amount of time you spend online?

How often do you snap, yell, or act annoyed if someone bothers you while you are online?

How often do you lose sleep due to Internet use?

SIGNS OF PROBLEMATIC USE:

- A sense of euphoria while plugged in
- Neglecting friends and family
- Skimping on sleep
- Dishonesty about usage
- Feeling anxious, ashamed, guilty or depressed as a result of technology use
- Withdrawing from other activities that were once pleasurable



PHYSICAL SIGNS:

- Weight gain or weight loss
- Carpal tunnel syndrome
- Headaches
- Neck or backaches
- Dry, red eyes



POSSIBLE CONSEQUENCES

- Developmental delays: cognition, emotional, social and language
- Obesity
- Sleep (blue light)
- Distraction
- Decreased academic performance
- Isolation from family
- Depression / anxiety





REMEMBER...THINGS YOU CAN DO NOW:

- Be interested in what your child does online
- Encourage moving back and forth between virtual and real world
- Be a role model
- No technology one hour before bed
- Set limits

Create:

- Trust
- Mentorship
- Support
- Watching your kids back!



YOU GOT THIS!



TEENAGERS

tired of being
harassed by
your parents?

ACT NOW!

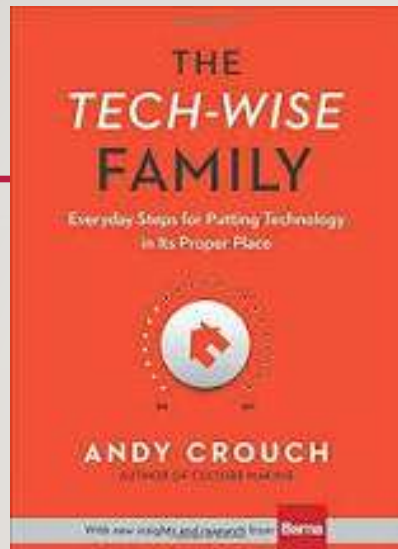
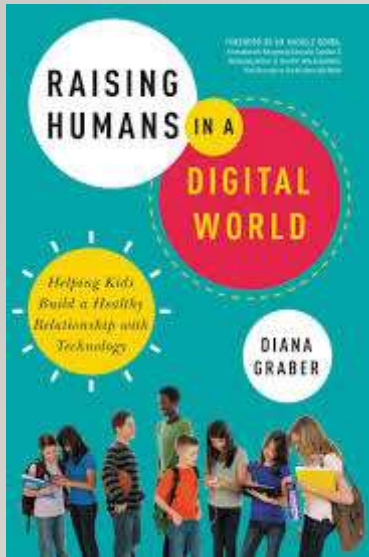
Move out, Get a job,
& Pay your own way,

QUICK!

while you still
know everything!

**SOMETIMES MY
CHILDREN THINK I'M
GETTING ON THEIR BACK.**

**WHAT THEY DON'T
UNDERSTAND IS THAT IM
THE ONLY ONE WHO HAS
THEIR BACK!**



RESOURCES

<https://hms.harvard.edu/news/screen-time-brain>

MY HEART HONORS YOURS!

THANK
YOU  **TO THE**
HELPERS.