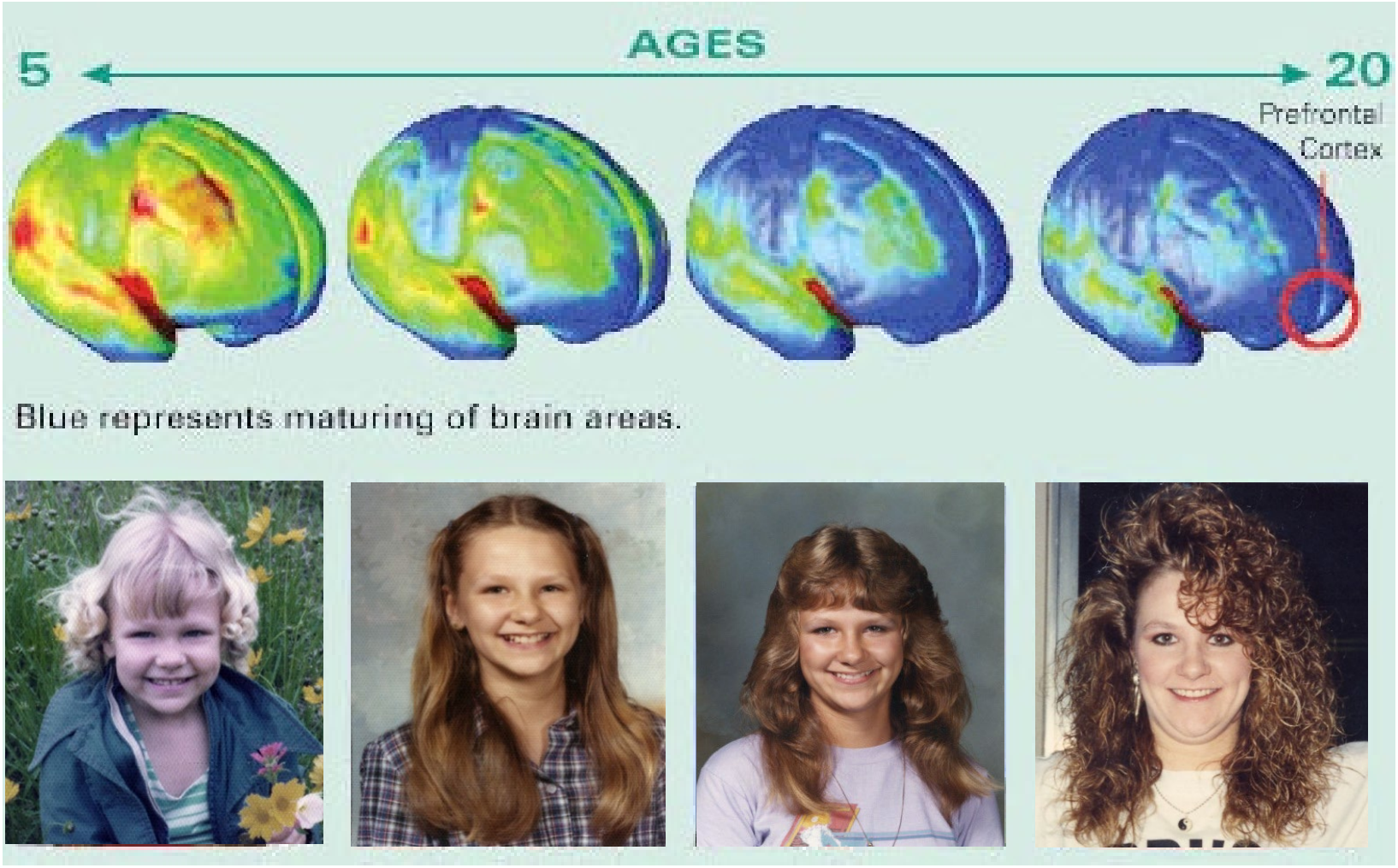
Know Your Neuro.org

The Neuroscience of Screens: Shaping Our Brain for Better and Worse

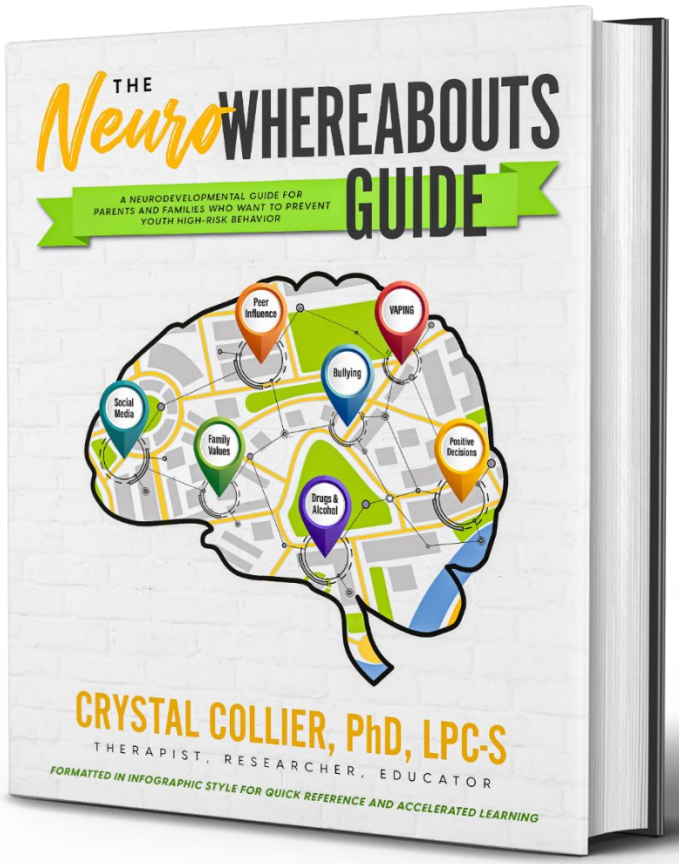
Crystal Collier, PhD, LPC-S




AGES
5
20
Prefrontal Cortex
Blue represents maturing of brain areas.

Record date discussed below.

- _____ Alcohol Use
- _____ Binge Drinking
- _____ Pornography Use
- _____ Suicidal Behaviors
- _____ Self-Injury
- _____ Dating Violence
- _____ Marijuana Use
- _____ Nicotine and Tobacco Use
- _____ Gambling
- _____ Illegal 'Street Drug' Use
- _____ Driving Under the Influence
- _____ Risky Sexual Behavior
- _____ E-Cigarette Use and Vaping
- _____ Bullying and Cyberbullying
- _____ Eating Disorder Behavior
- _____ Sexting or Sending Nudes
- _____ Video Game Addiction
- _____ Technology Overuse







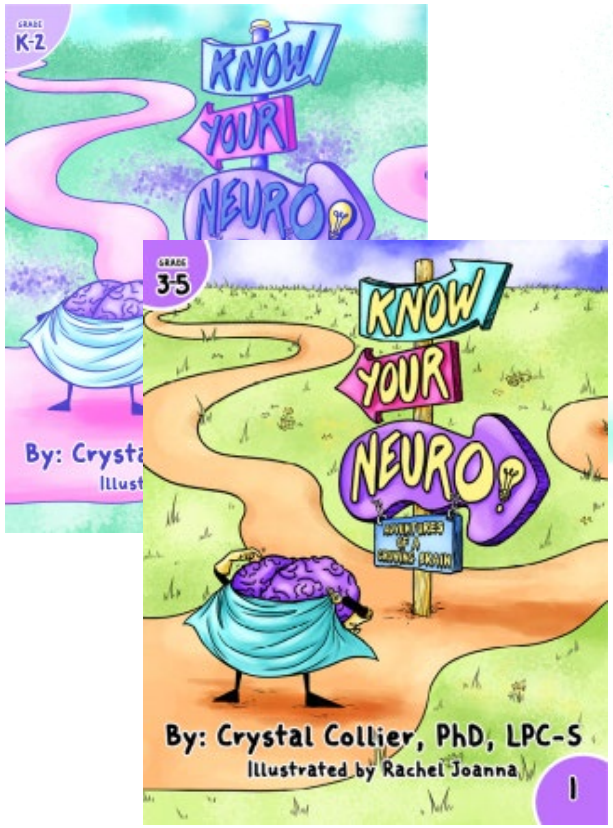




SCREEN-BASED CHILDHOOD VS. PLAY-BASED CHILDHOOD



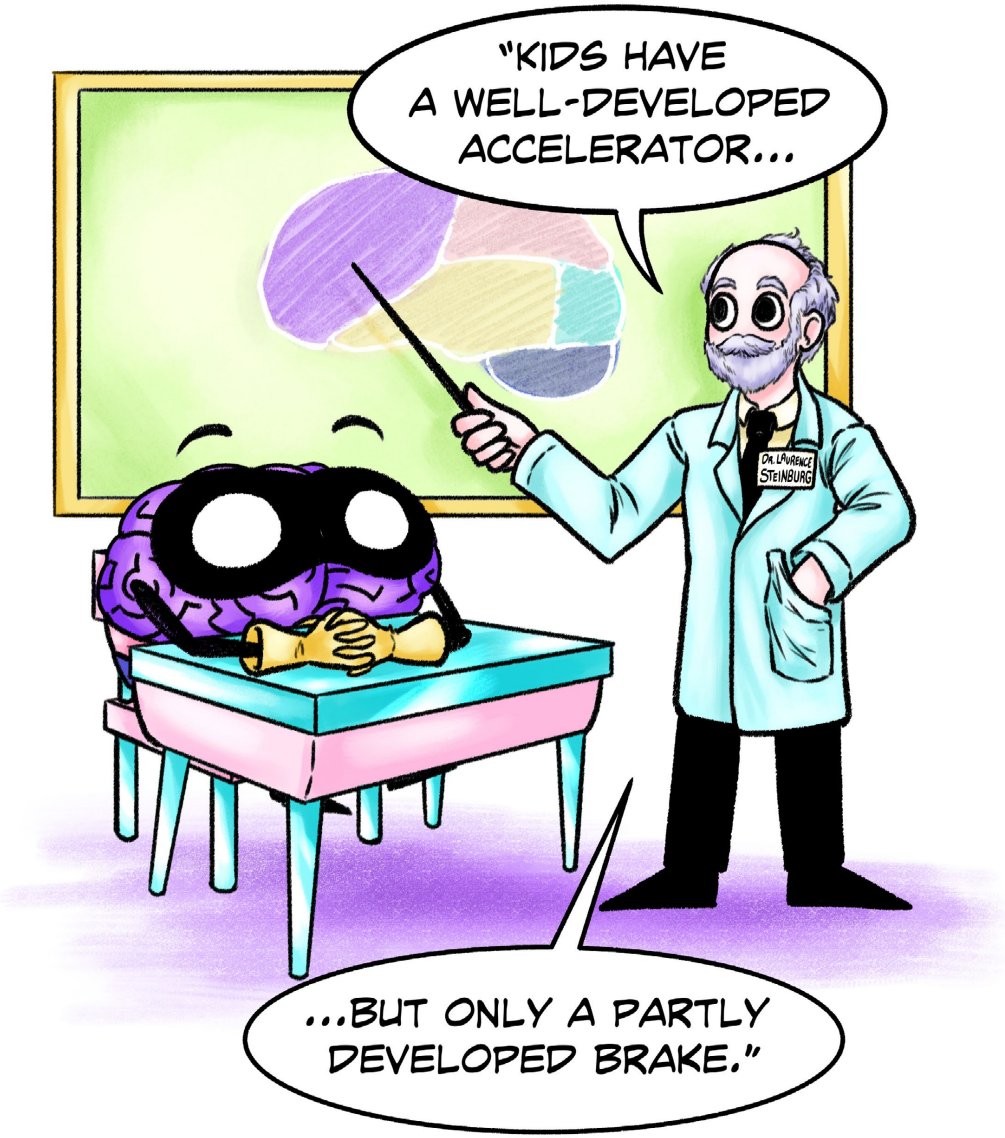
Know Your Neuro: Adventures of a Growing Brain





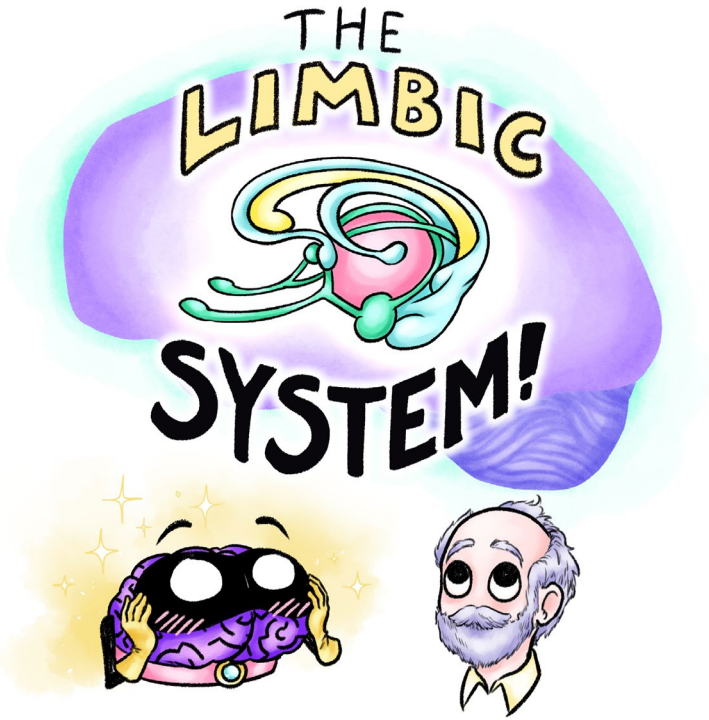
An adolescent has a well-developed accelerator but only a partly development brake.

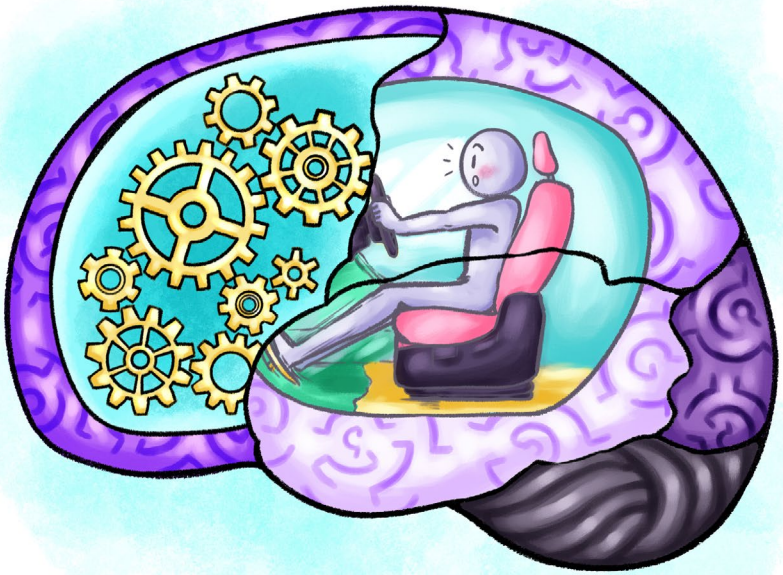
-Laurence Steinberg



What part of your brain is the *accelerator*?









What part of your brain is the *brake*?

AGE

11-12 ⟷ **24-25**

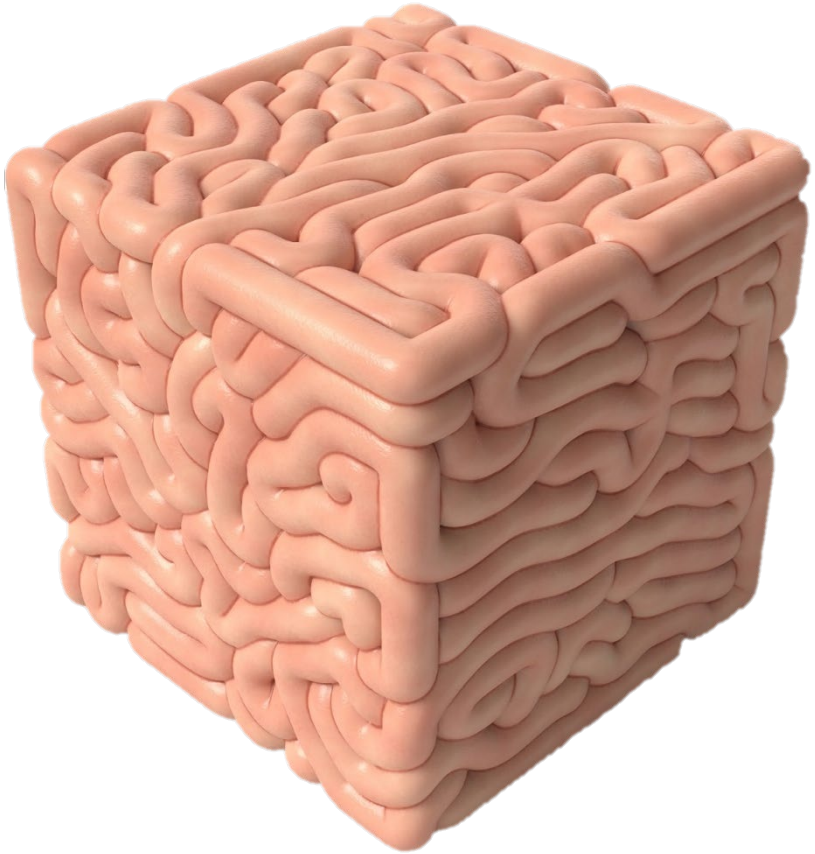
200



AGE

11-12 ⟷ **24-25**

200 **100**

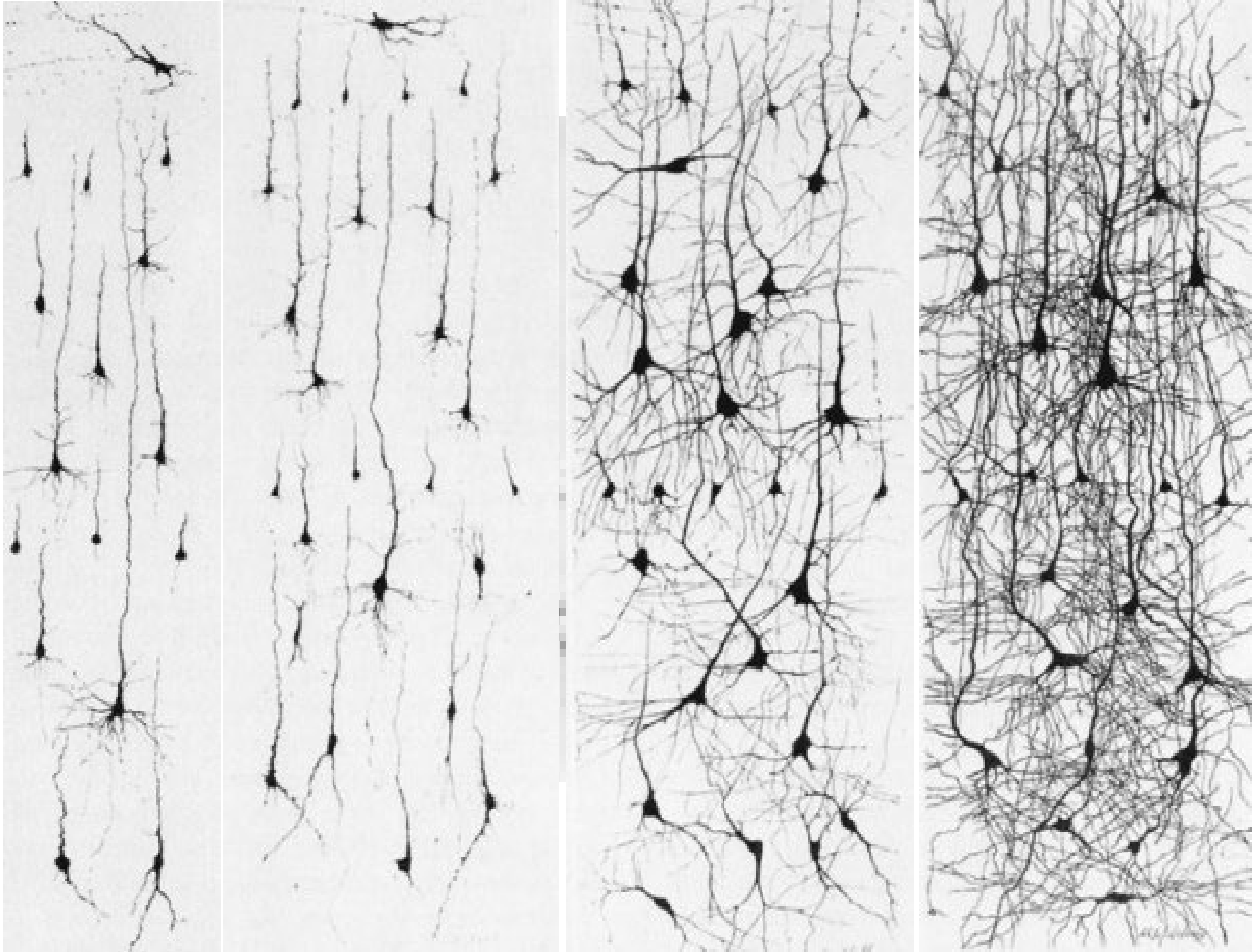


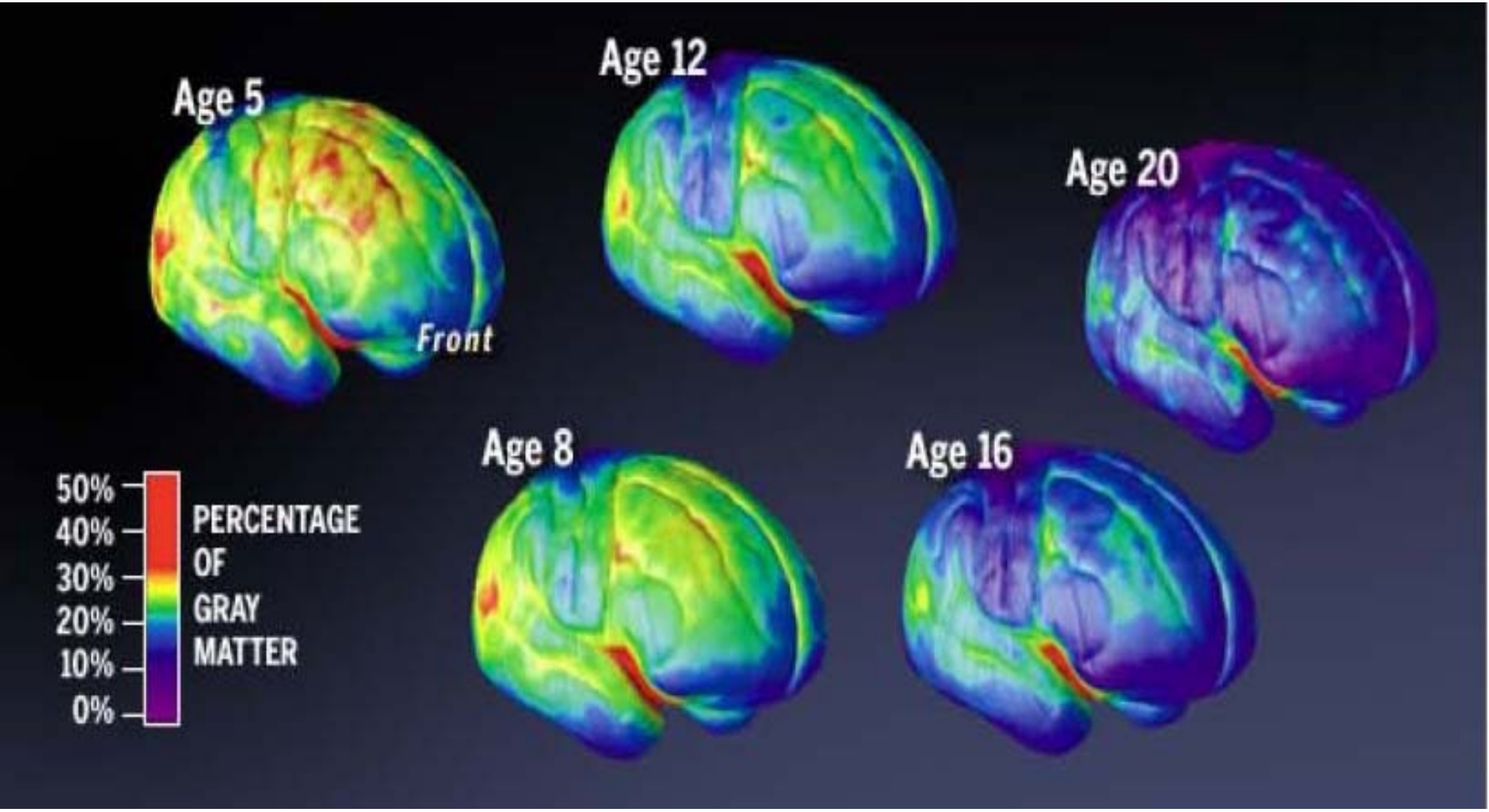
AGE

11-12 ⟷ **24-25**

200 **100**






Age 5
Front
Age 12
Age 20
Age 8
Age 16
50%
40%
30%
20%
10%
0%
PERCENTAGE OF GRAY MATTER

The Brain's Rule:

USE IT or LOSE IT



Executive Functioning Skills



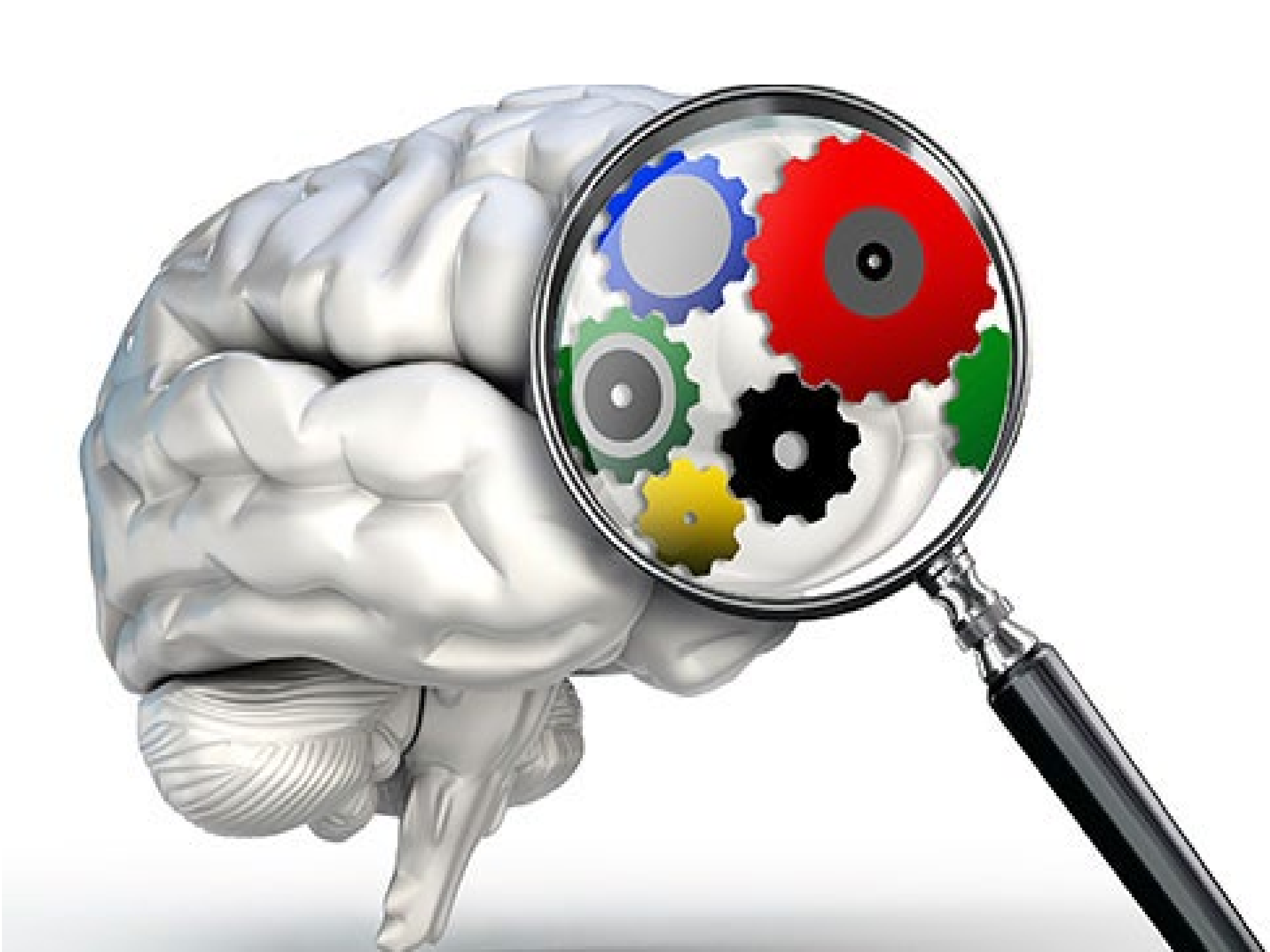
Birth to Age 11/12

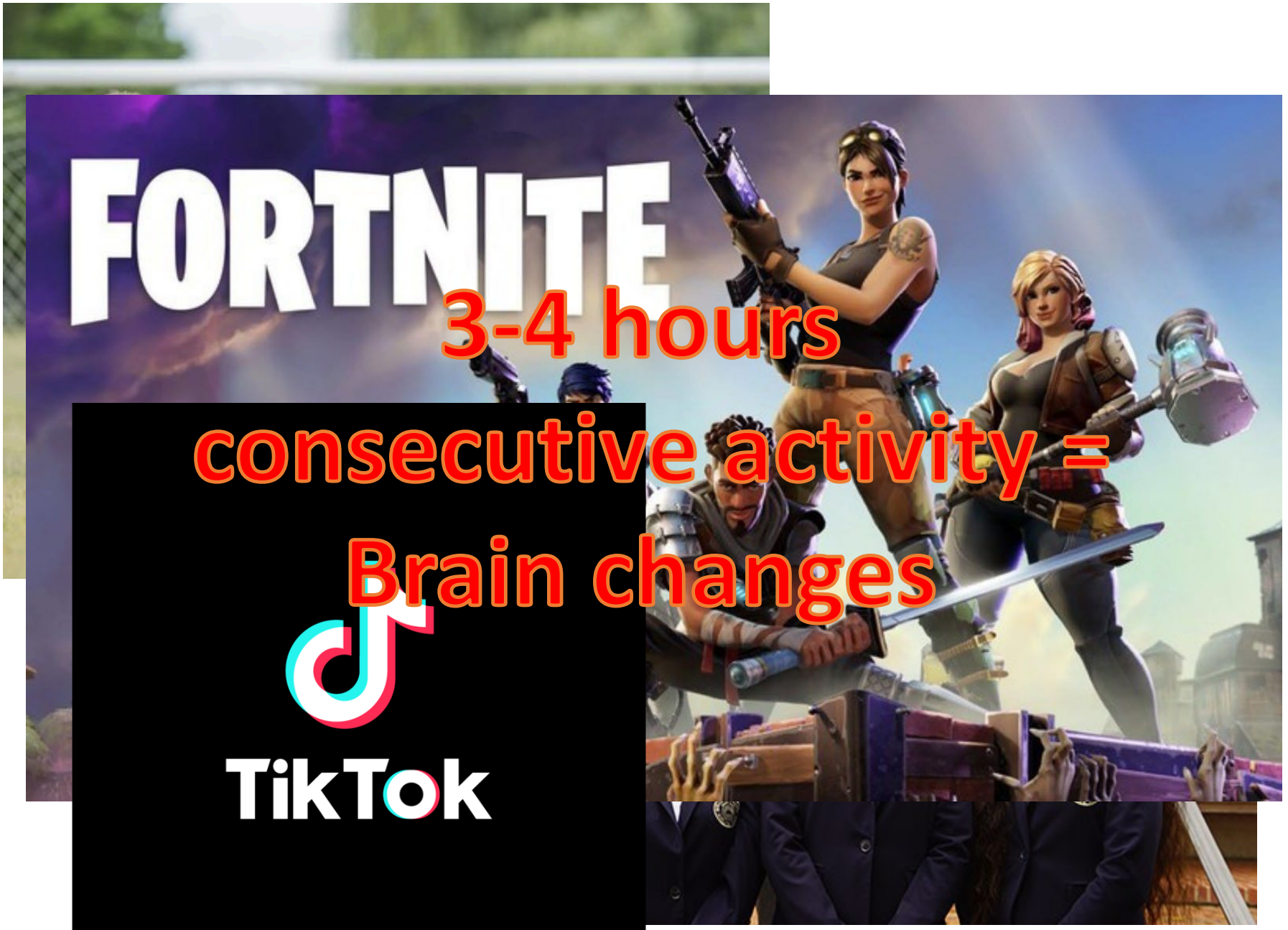
- Task Initiation
- Flexible Thinking
- Planning and Prioritizing
- Organization
- Working Memory
- Self-Monitoring
- Selective Attention
- Coordination

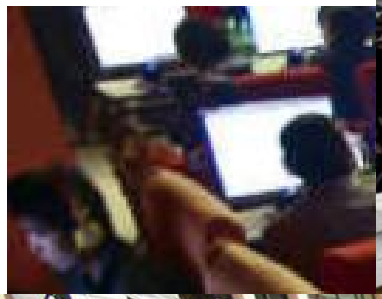
Age 11/12 to 24/25

- Abstract; conceptual understanding
- Impulse Control
- Problem-Solving
- Decision-Making
- Judgment
- Emotion Regulation
- Frustration Tolerance
- Ability to Feel Empathy


Dendrites!
Dendrites!
Dendrites!

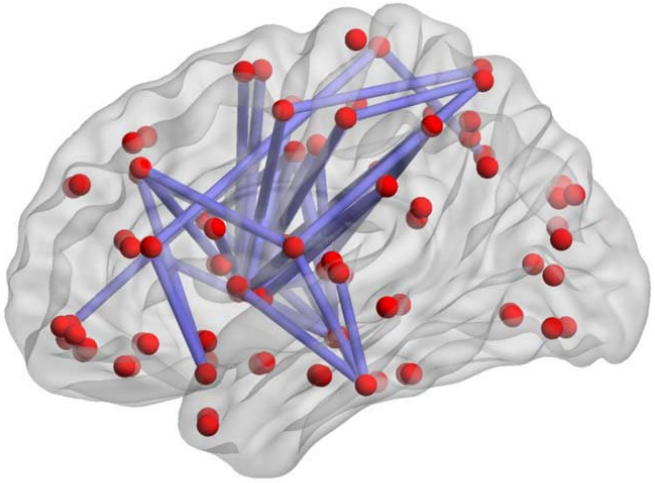


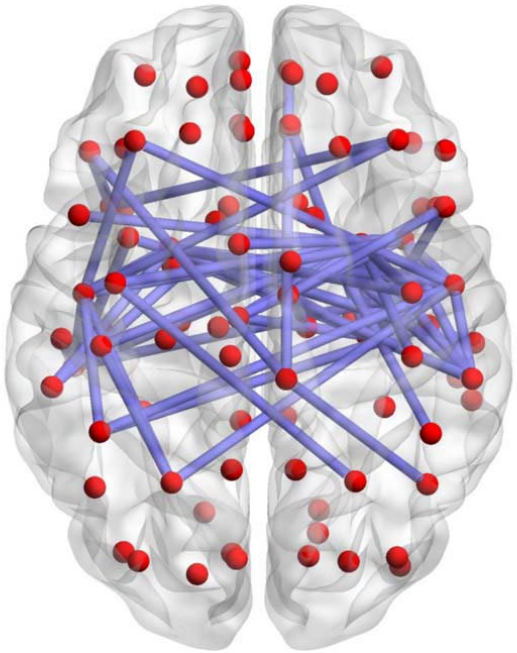

FORTNITE
3-4 hours
consecutive activity =
Brain changes
TikTok




中国第一条
手机人行道


NO CELLPHONES
CELLPHONES
WALK IN THIS LANE
AT YOUR OWN RISK





Adolescents
with internet addiction
display altered brain
functional connectivity and
decreased connections
within all three
major cerebral lobes
involved.

Hong, S., Zalesky, A., Cocchi, L., Fornito, A., Choi, E., Kim, H., & ... Yi, S. (2013). Decreased Functional Brain Connectivity in Adolescents with Internet Addiction. Plos ONE, 8(2), 1-8. doi:10.1371/journal.pone.0057831

Effects of Technology: The Great Rewiring

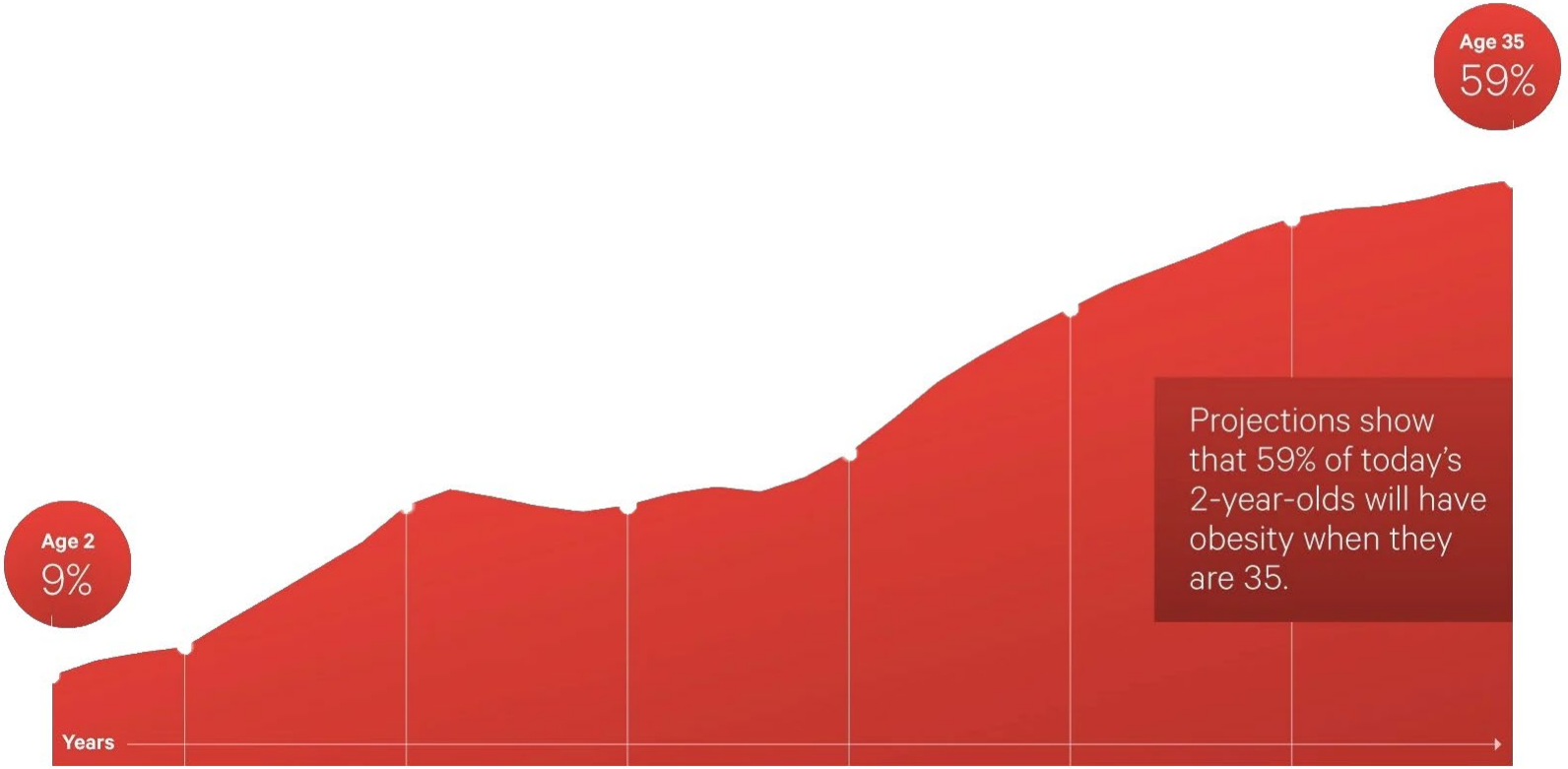
1) Physical Wellbeing
2) Attention & Memory
3) Learning
4) Attachment & Connection
5) Mood & Self-Perception
6) Motivation
7) Addiction
8) Victimization



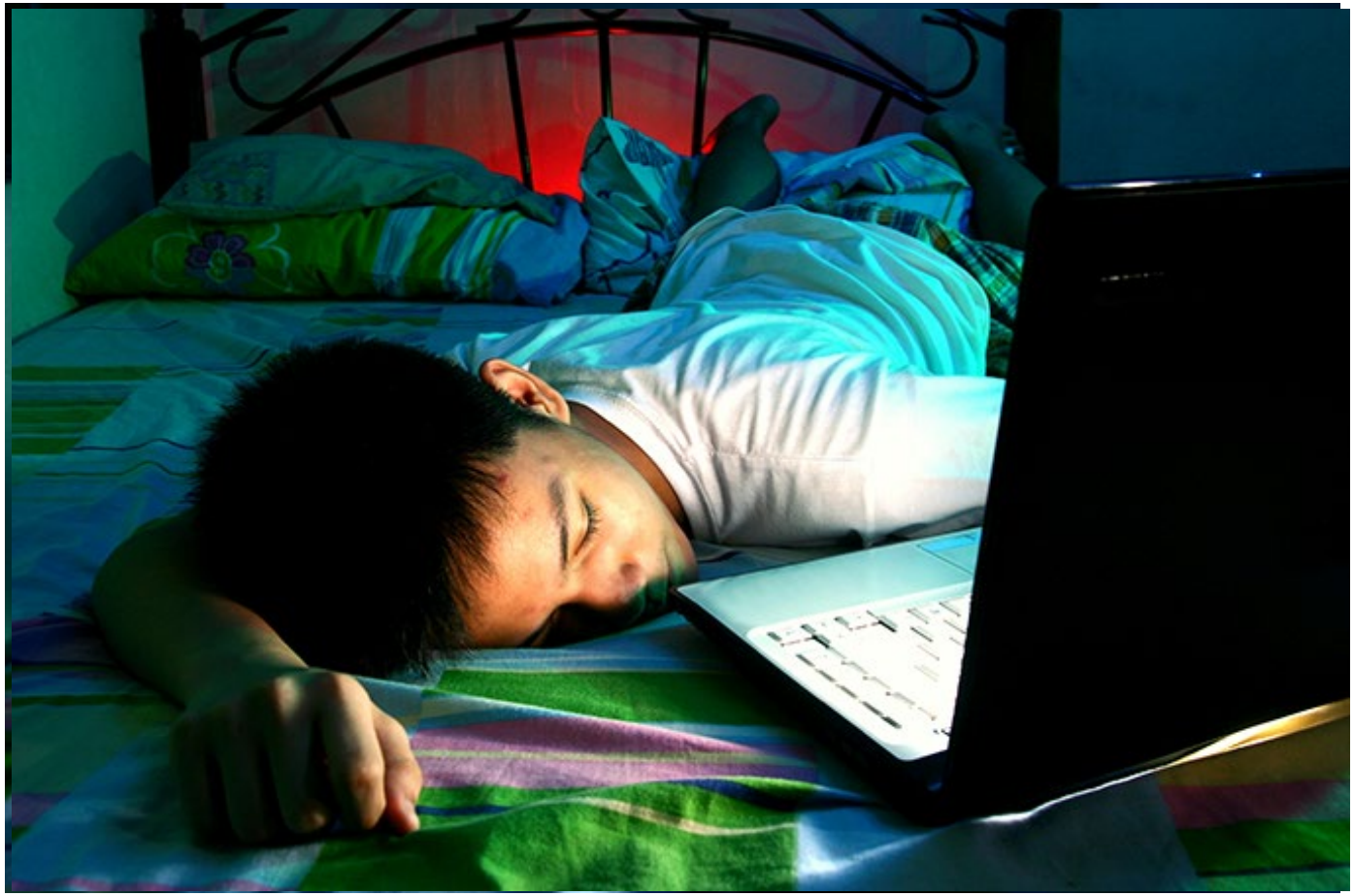
1) Physical Wellbeing



Sedentary Lifestyle



- **59% of children will be obese by age 35**
- **Screentime ↑ plus ↓ outdoor time associated with poorer nutrition, weight gain, lower immune resistance**



- **Screentime ↑ associated with sleep problems**
- **Homework interference = 3 hours longer to finish homework**

https://sleepopolis.com/education/screen-time-and-sleep-survey/

Near-sightedness



Near-sightedness: Myopia



Nearsighted vision



Corrected vision

Cannot see *far*.

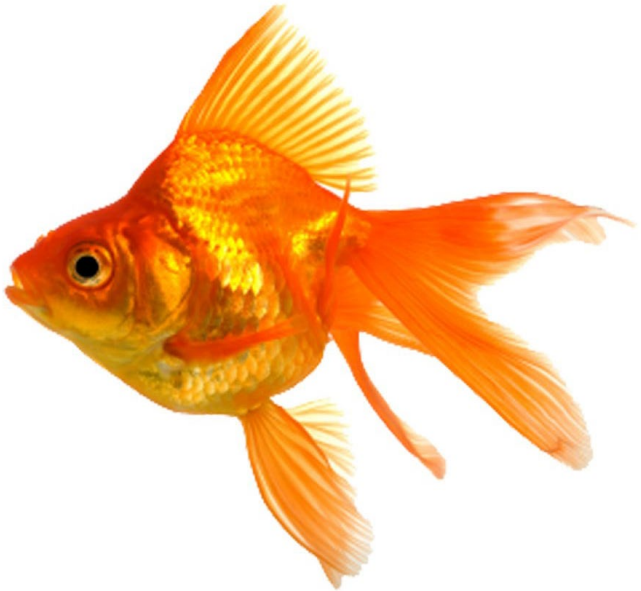
2) Attention & Memory



Attention Span: Use It or Lose It

Year 2000 12 seconds

Year 2018 8 seconds

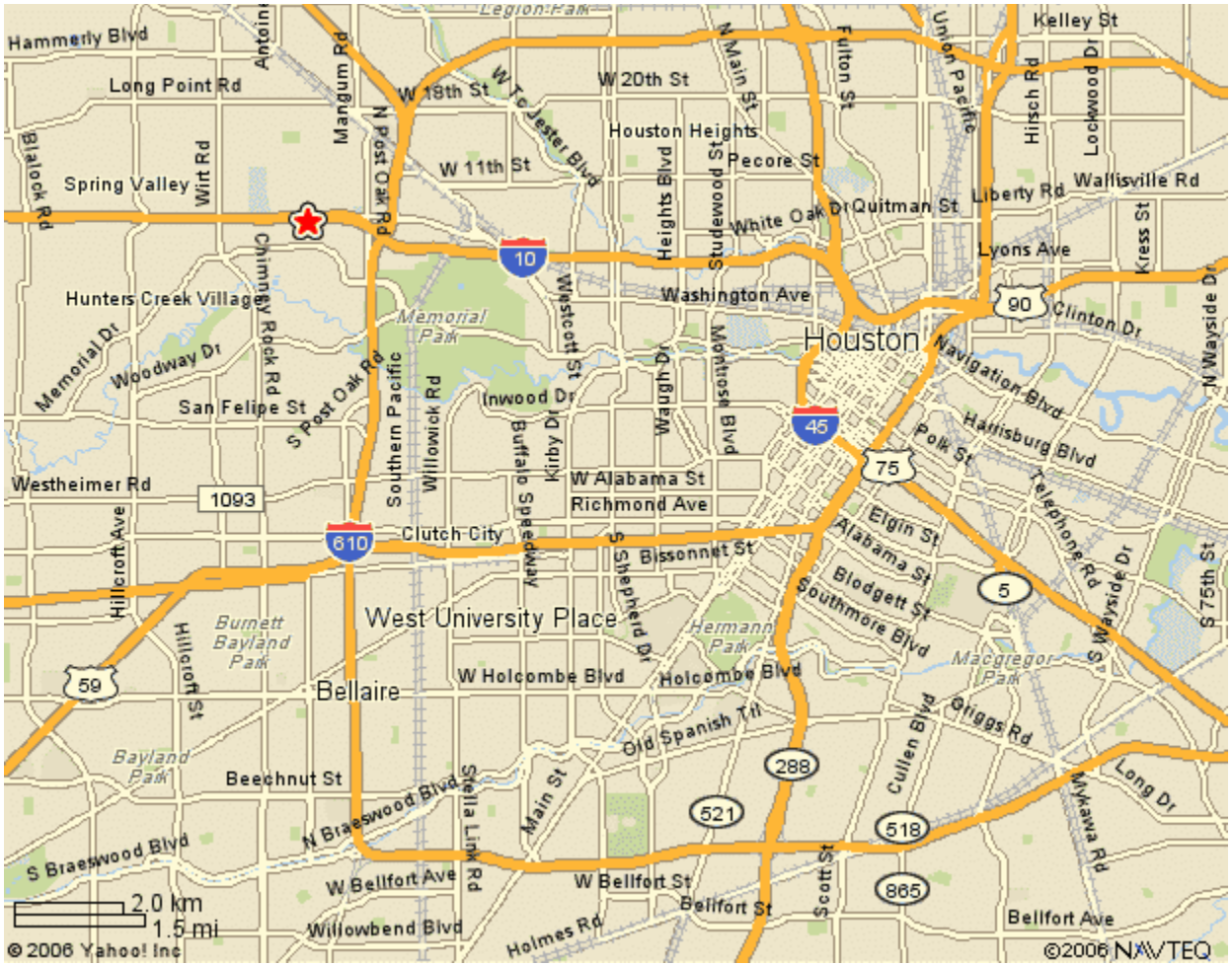


Switch-Tasking Supernormal Stimuli



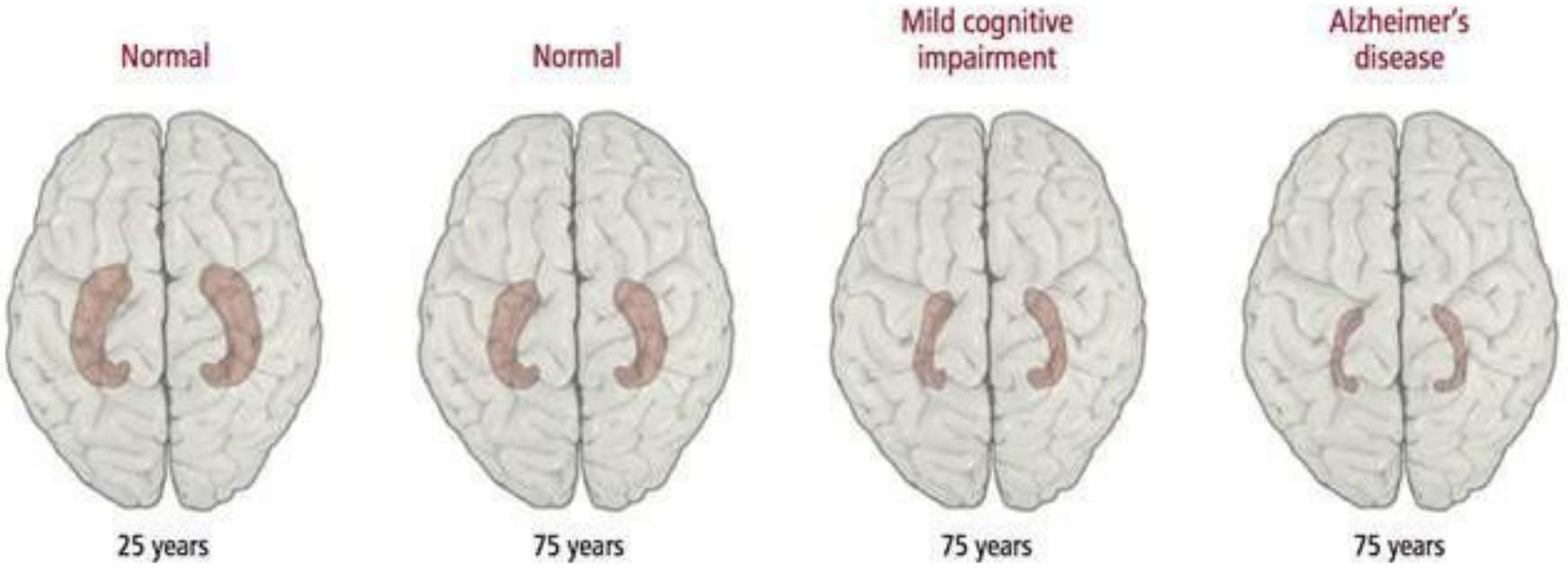
- Attention being split due to multiple stimuli
- No need to imagine, daydream or solve as many problems

Reliance on the Cloud



- Loss of navigation skills

Figure 7 The shrinking hippocampus



A curved structure nestled deep within the brain, the hippocampus (from the Greek word for sea horse) plays a major role in forming, storing, and processing memories. The hippocampus becomes somewhat smaller as a part of normal aging, as shown by the comparison between the hippocampus in a healthy 25-year-old and a healthy 75-year-old. But the structure diminishes in size even more in a person with mild cognitive impairment and is markedly smaller than normal in a person with Alzheimer's disease.

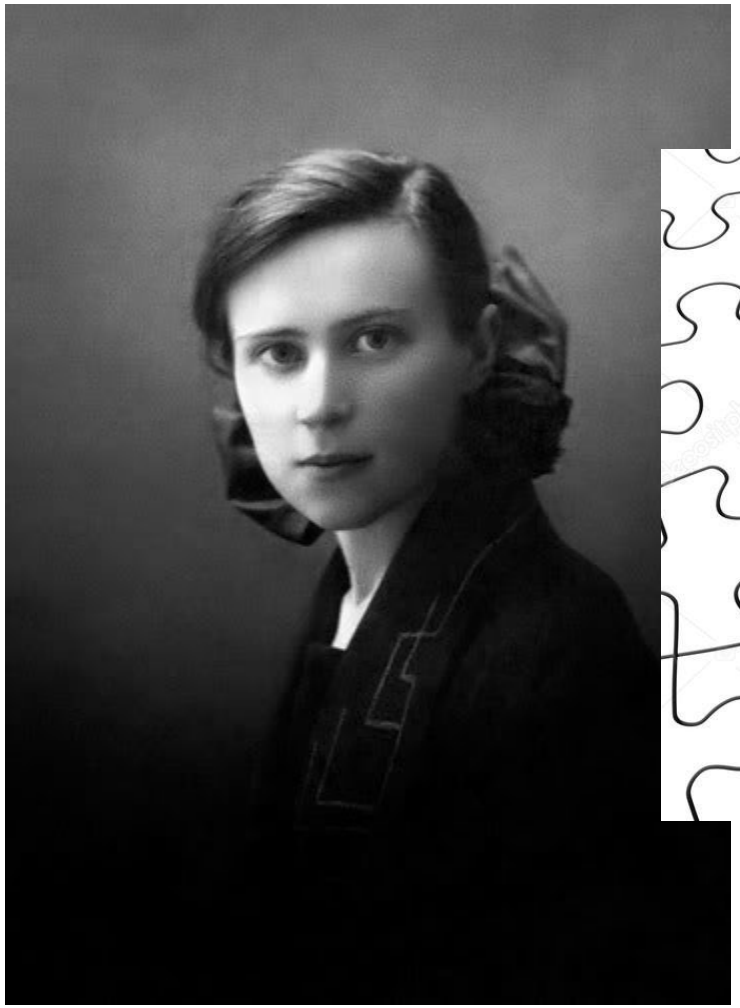
3) Learning


School & Friends
Vaping
Bullying
Positive Decisions
Family Values
Social Media
Drugs & Alcohol

Working Memory: 7 Bits of Space

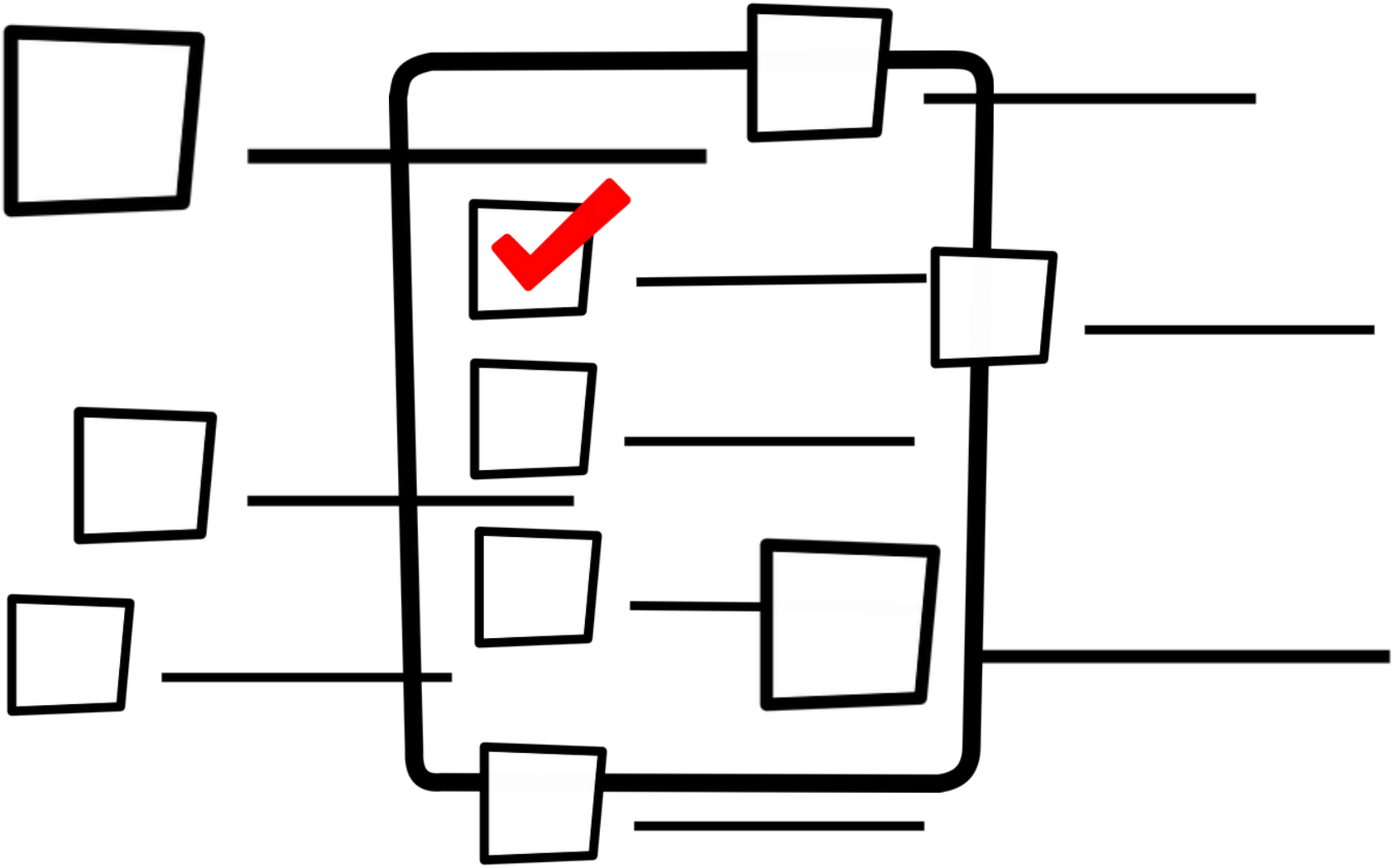


Zeigarnik Effect





- Activity that has been interrupted may be more readily recalled
- We remember unfinished tasks better than completed ones



Zeigarnik Effect

The Past 9 Minutes of Learning

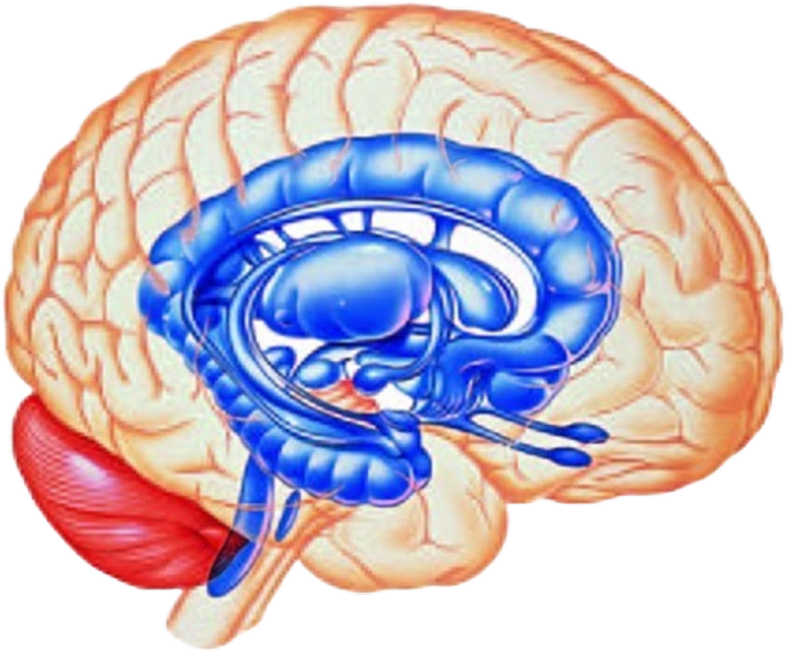


4) Attachment & Connection



Limbic System

1) Survival: Fight or Flight
2) Pleasurable Experiences



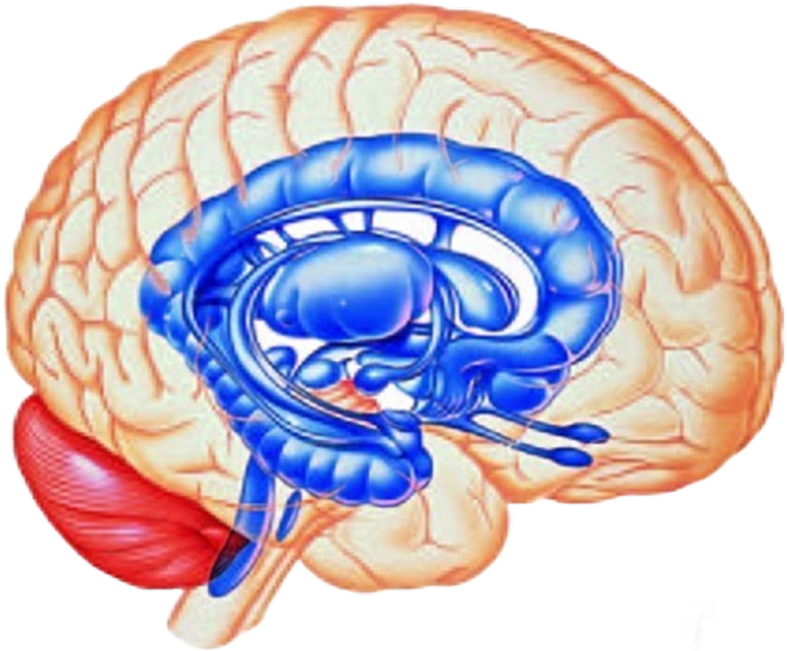
Happy Chemicals

OXYTOCIN
LOVE CHEMICAL

PETTING ANIMALS
PHYSICAL TOUCH
HELPING OTHERS
SOCIALISING

DOPAMINE
REWARD CHEMICAL

GETTING ENOUGH SLEEP
ACHIEVING A GOAL
HAVING A BATH
EATING FOOD



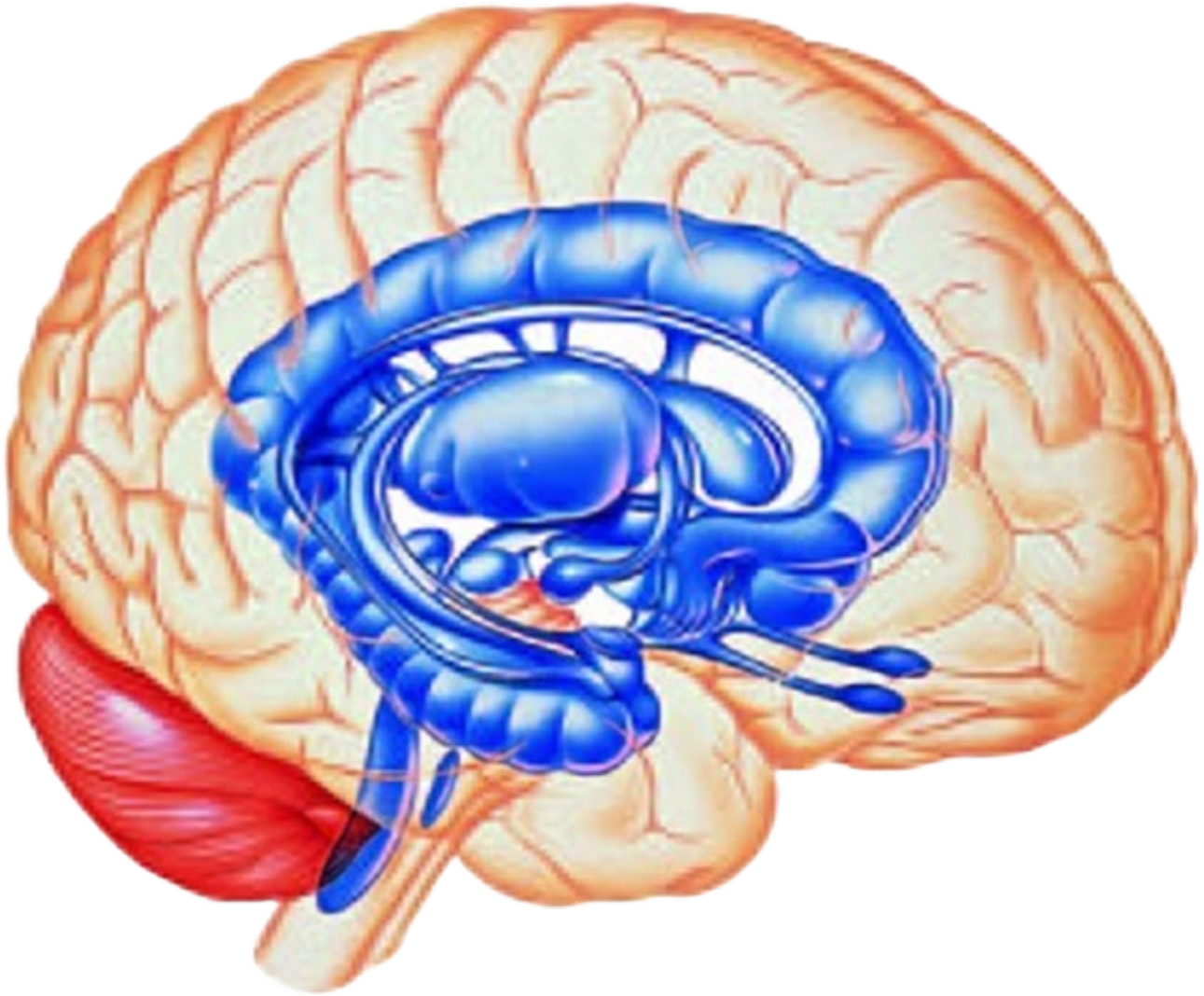
SEROTONIN
CALMING CHEMICAL

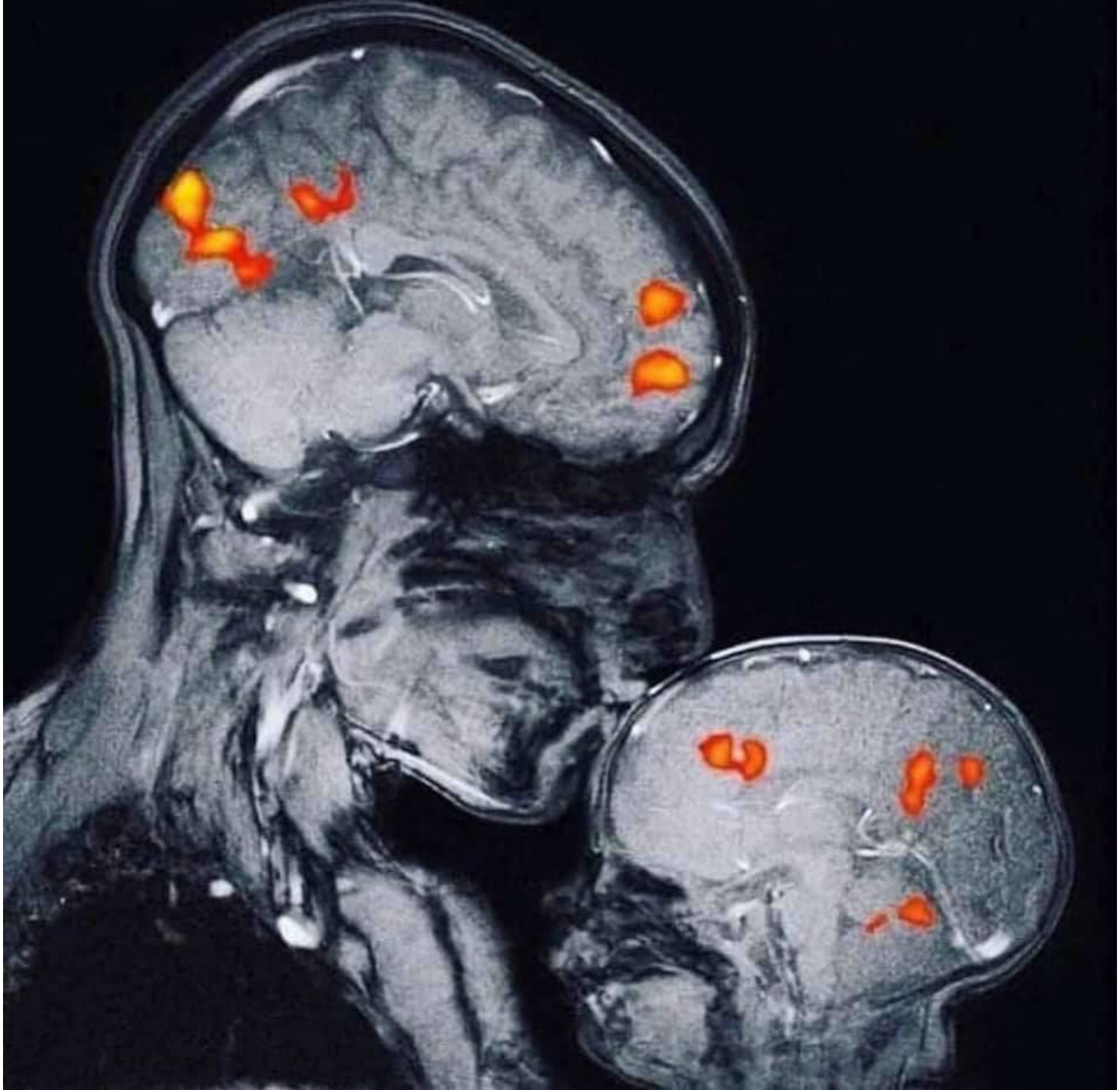
MINDFULNESS
SUN EXPOSURE
NATURE WALKS

ENDORPHIN
PAIN KILLER CHEMICAL

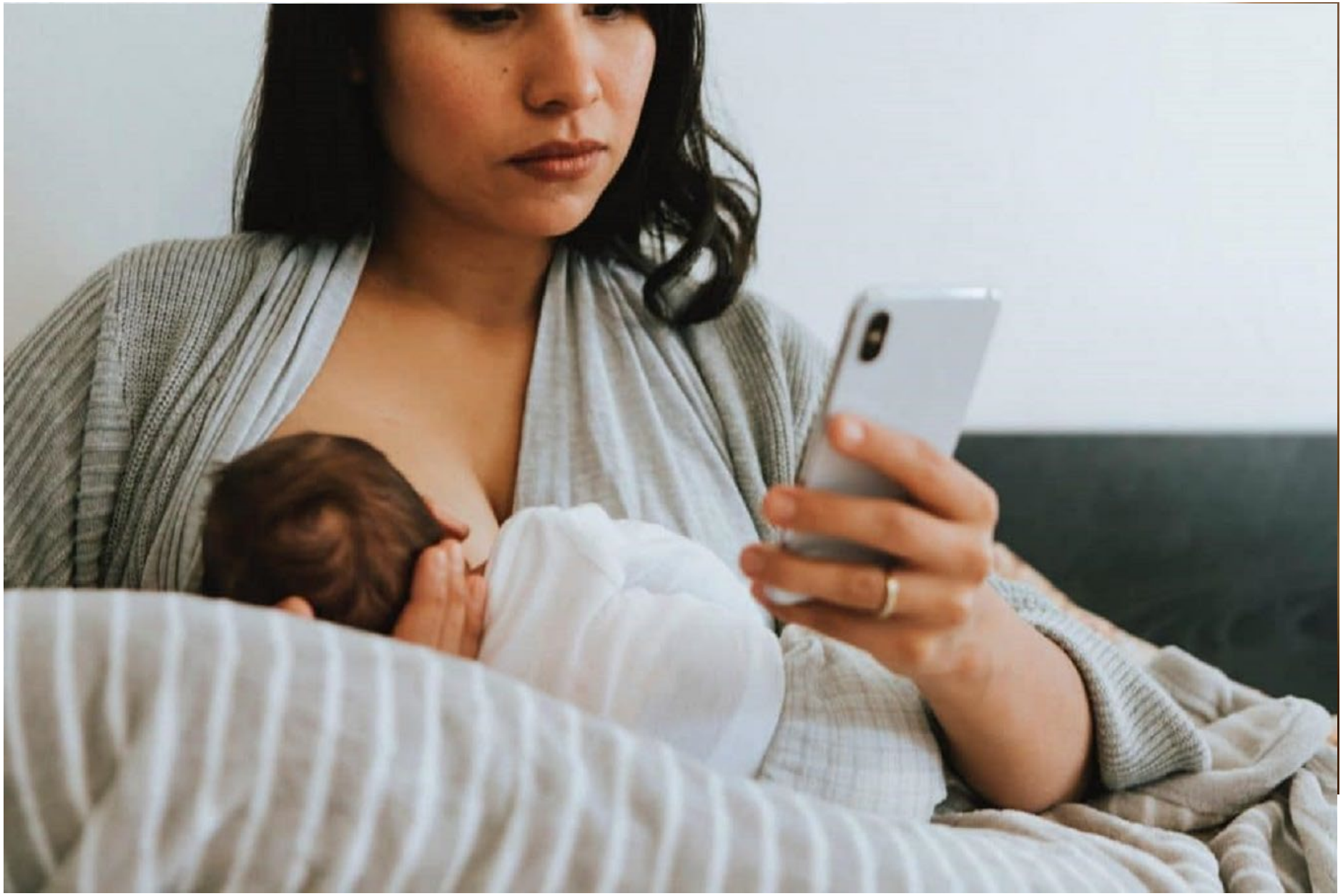
LISTENING TO MUSIC
EXERCISING
LAUGHING

Reward Pathway



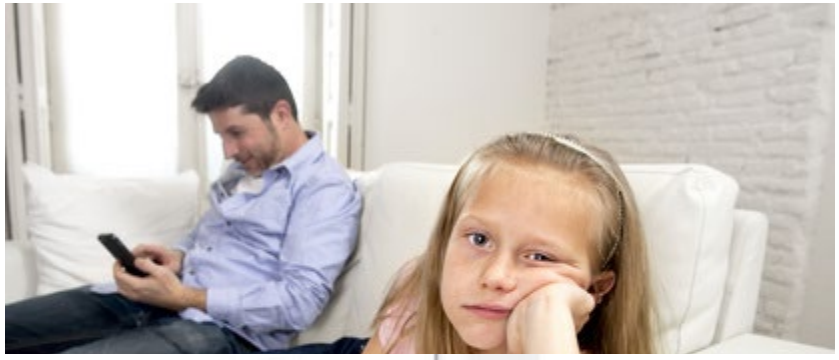


Brexting: Texting while breastfeeding.



Phubbing: Ignoring someone in favor of using your phone.

"You are not as important as what is on this screen."

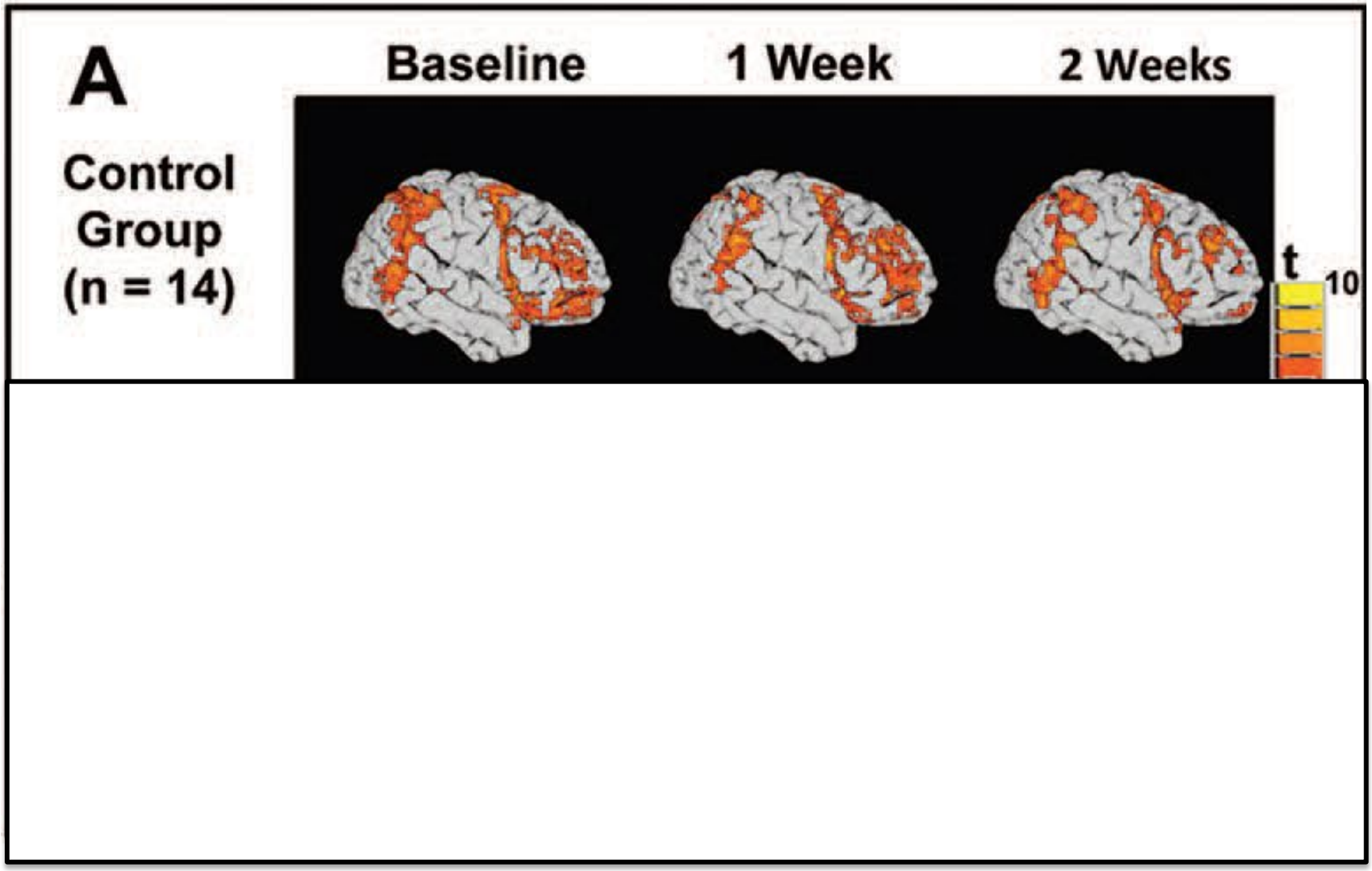








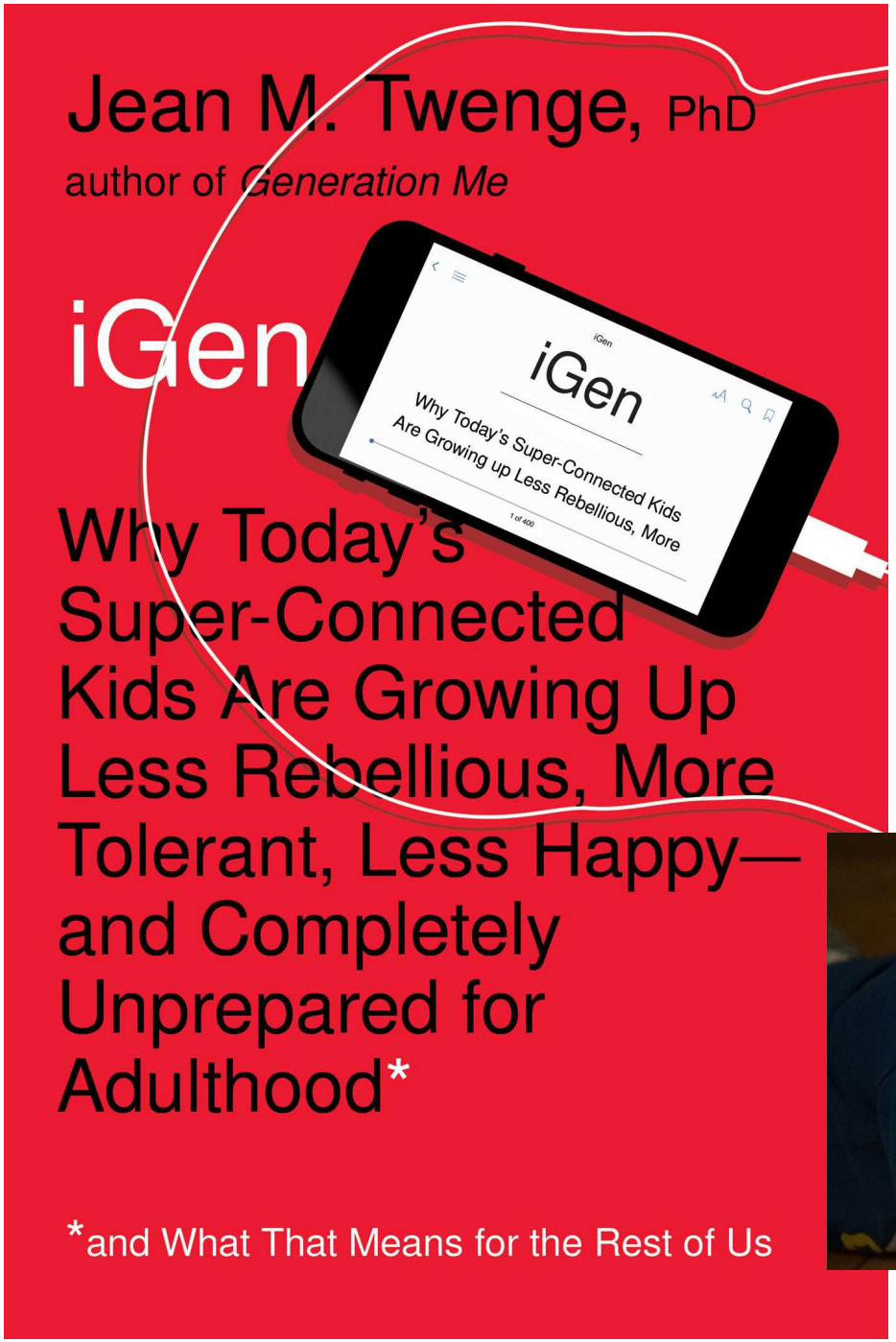
DID NOT PLAY ANY VIDEO GAME



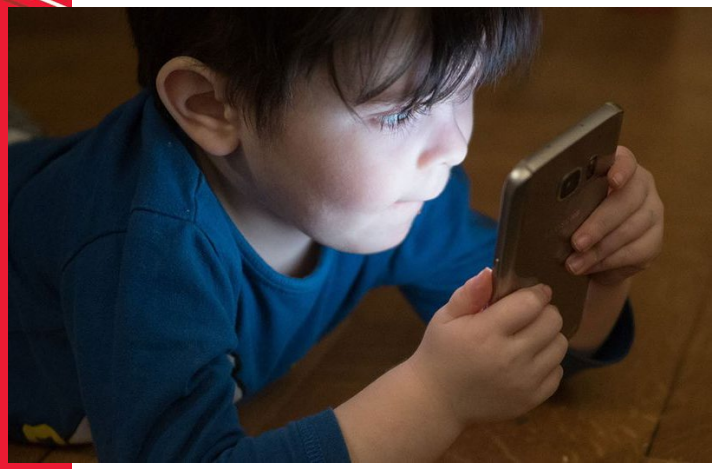
PLAYED CALL OF DUTY 4: MODERN WARFARE

5) Mood & Self-Perception





The iGeneration is experiencing more depression, hopelessness, meaninglessness, and **suicide risk due to lack of face-to-face time**





Depression
Isolation
Anxiety
Jealousy
Low Self-Esteem

Digital Self-Harm



New method of Nonsuicidal Self-Injury (NSSI) wherein a youth creates an online account and uses it to send hurtful messages, threats, or content to themselves, pretending they are anonymous for the following reasons:

- Self-hatred or self-punishment
- Gain the attention of their peers or adults
- Prove they can handle being bullied
- Create worry in others
- Accuse others of doing it to start a fight
- Feel that someone cares about them

Anxiety



Avoiding fears, difficulties and challenges yields experience deficits and neural networks for avoidant coping mechanisms.



Anxiety

Technology anxiety keeps the brain on edge looking for the next thing to see or do.

What is Popcorn Brain?

The constant stimulation from electronics makes our brain accustomed to "popping", fast-paced stream of information that we find on the internet.

- Why we are becoming increasingly less adept to handle the slower pace of real life.



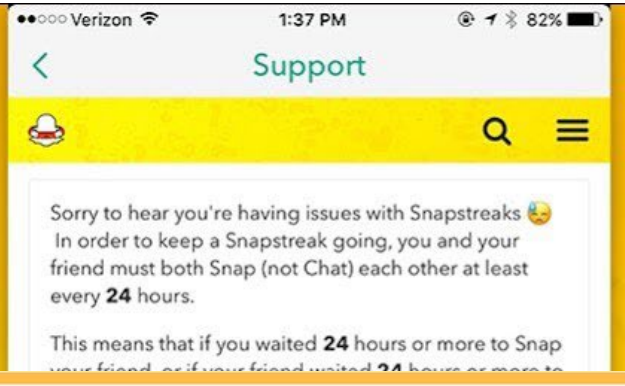
Constant State of Insufficiency

In the online world, we are never finished**...**





Tips & Tricks!





How to get more LIKES on *Instagram*

ULTIMATE GUIDE 2017




Social m

6) Motivation



Amotivation & Constant Novelty Seeking

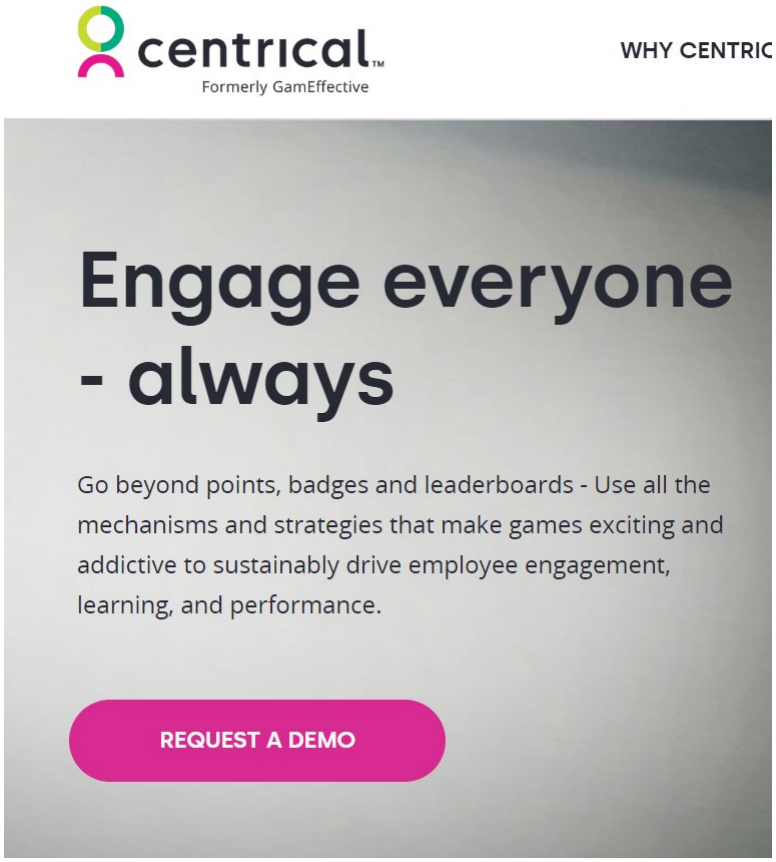
Not Self-determined — Self-determined

Amotivated	External	Internal
Non-intentional, non-valuing, incompetence, lack of control	Compliance, external rewards, avoid punishment	Interest, enjoyment, inherent satisfaction
"I have no desire to do it."	"I was told to do it. I want to earn the reward."	"I love this. It feels great!"
No motivation	*Extrinsic motivation*	*Intrinsic motivation*

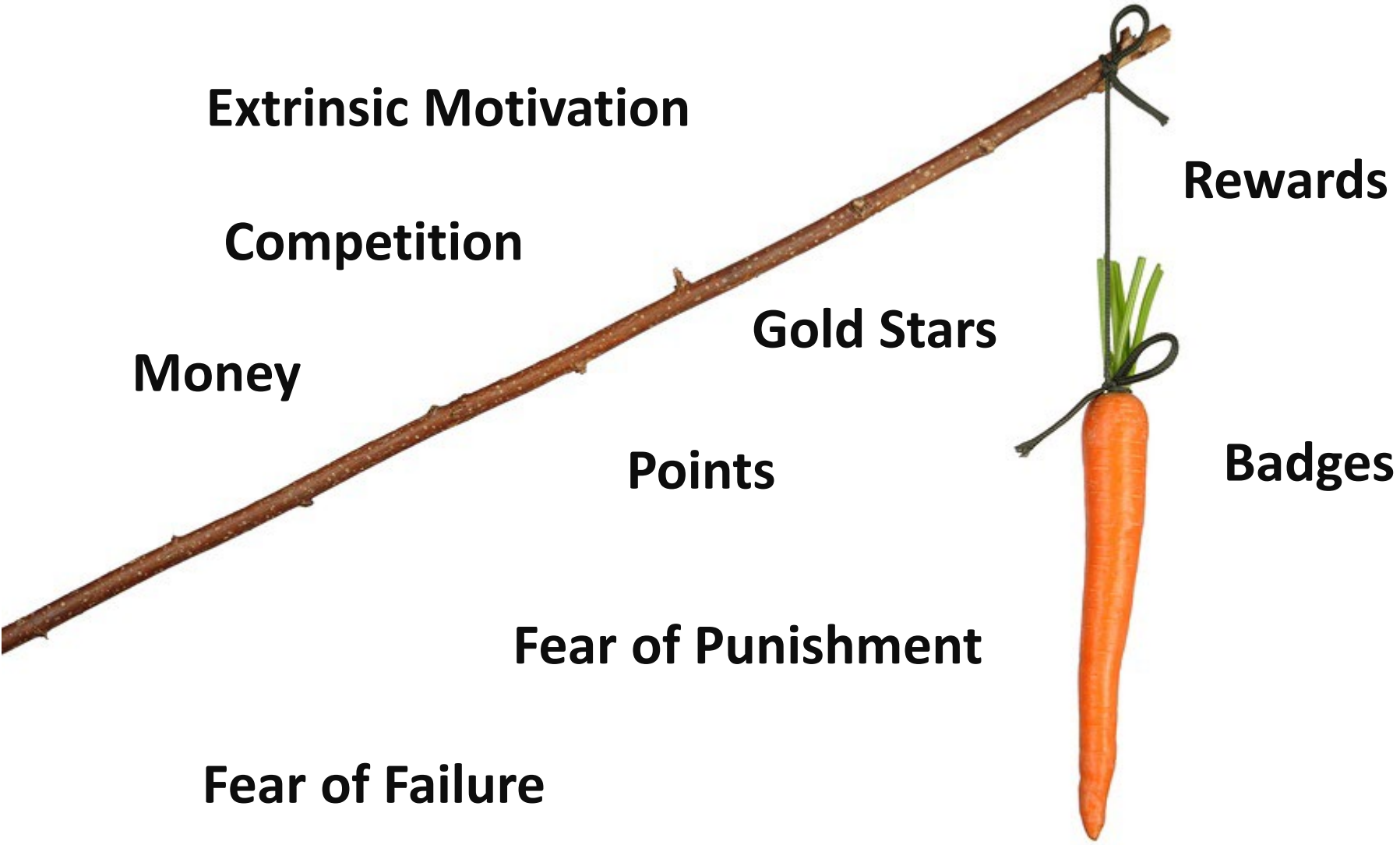
Adapted from Ryan & Deci 2017

Gamification

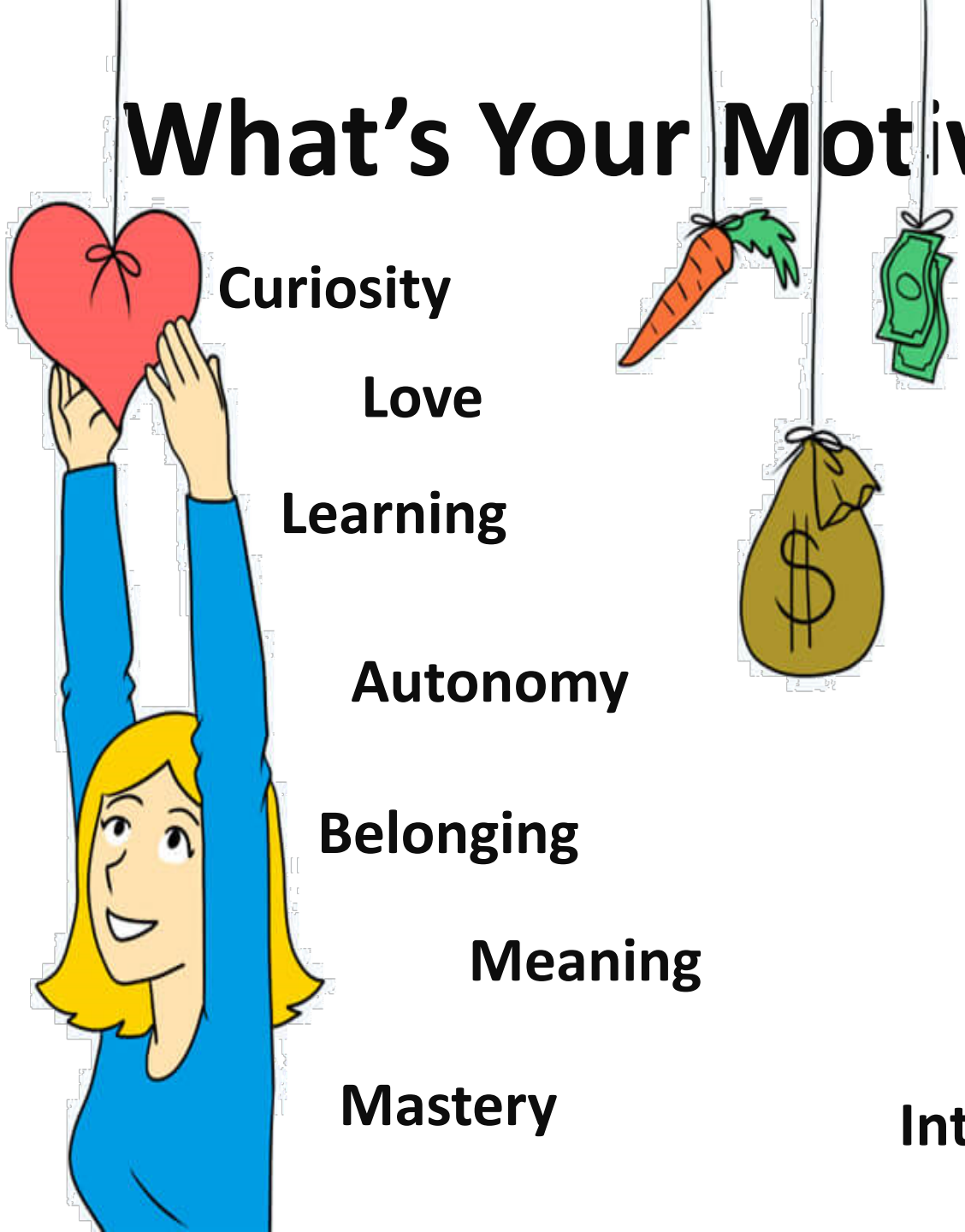
Combing the mechanics of gaming with social media, employment platforms, or video games to increase motivation or productivity.



What's Your Motivation?



What's Your Motivation?



Curiosity

Love

Learning

Autonomy

Belonging

Meaning

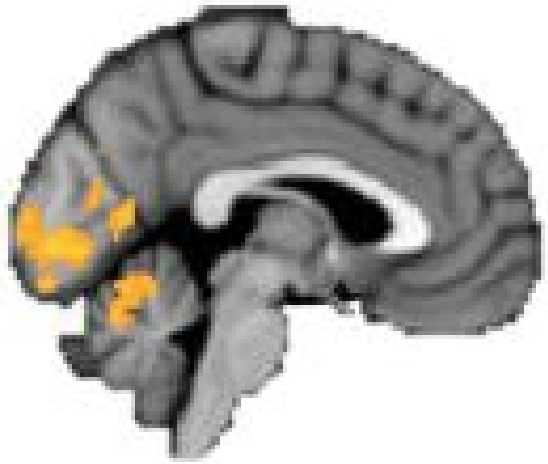
Mastery

Intrinsic Motivation





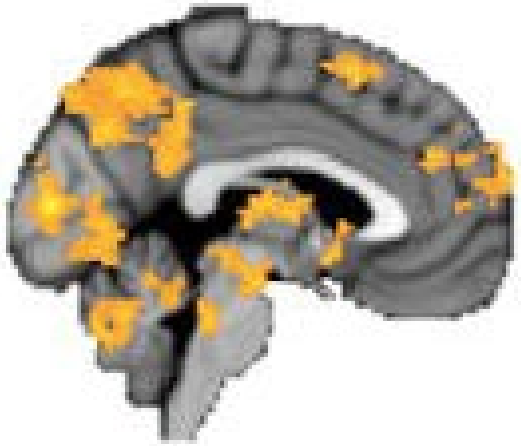
6







87

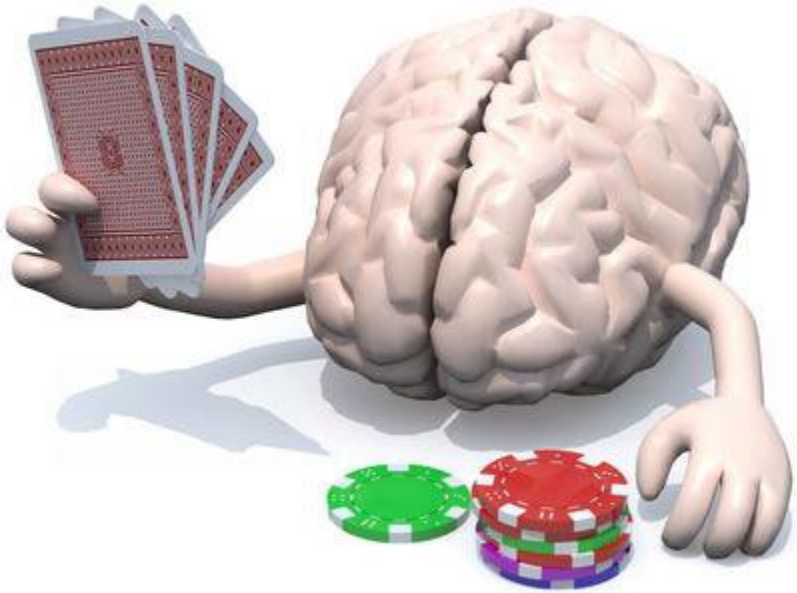


7) Addiction


School & Friends
Vaping
Bullying
Positive Decisions
Family Values
Social Media
Drugs & Alcohol

Gamblification

Combing the mechanics of gambling with social media or video games to entice use such as free-to-play online games or apps that include play options that cost money.



Predatory Monetization Scheme

- Designed to encourage spending

- Gamer information such as preferences, available funds, and playing habits are used to determine when to solicit gamers for money



Microtransaction

Small purchases within online games for game content.

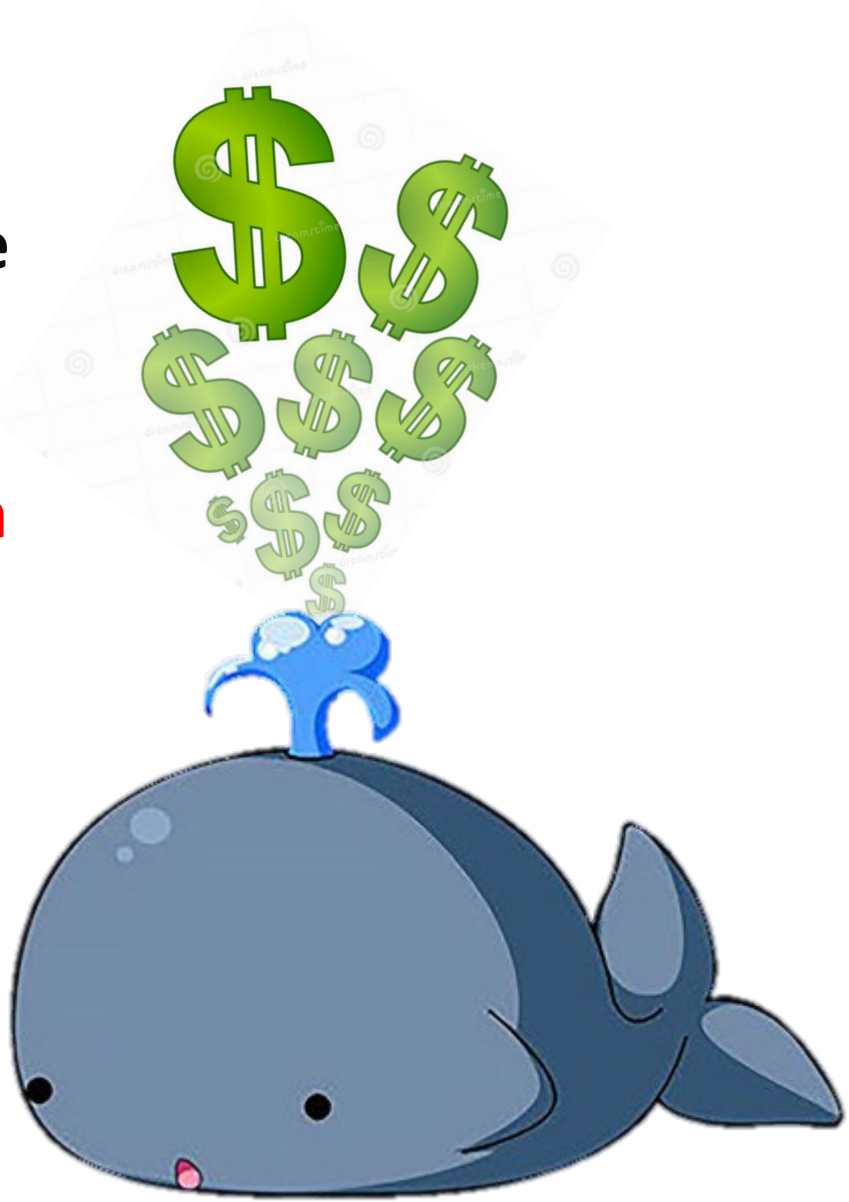


- Skins
- Currency
- Levels
- Power ups
- Other virtual items

Whales

How many people make microtransactions?

- **1.5% of users**
- **majority are children**



Loot Boxes

A monetization scheme that contains:

- **random selection of game content**
- **may or may not have the player's desired item**
- **purchased with real money**
- **low probability of desired item**
- **requires the player to have to purchase many loot boxes until they get the item they want**







Teen Testers

are hooked up to polygraph devices to measure their heart rate, respiration, and sweat on their fingertips while playing games to find the most stimulating scenes.



Do you have technology withdrawals?

Techno-Tantrum

PIMU: Problematic Interactive Medica Use

1. Playing games for more than 3 hours/day
2. Thinking about games/craving often
3. Skipping social events, work, or school to play
4. Scheduling around game play
5. Gaming becomes central to life
6. Blurring of games and reality
7. Playing to modify mood or emotional escape
8. Playing to socialize thus becoming isolated
9. Neglecting work/study/homework
10. Sleep disturbances
11. Unable to stop playing
12. Falling or failing grades

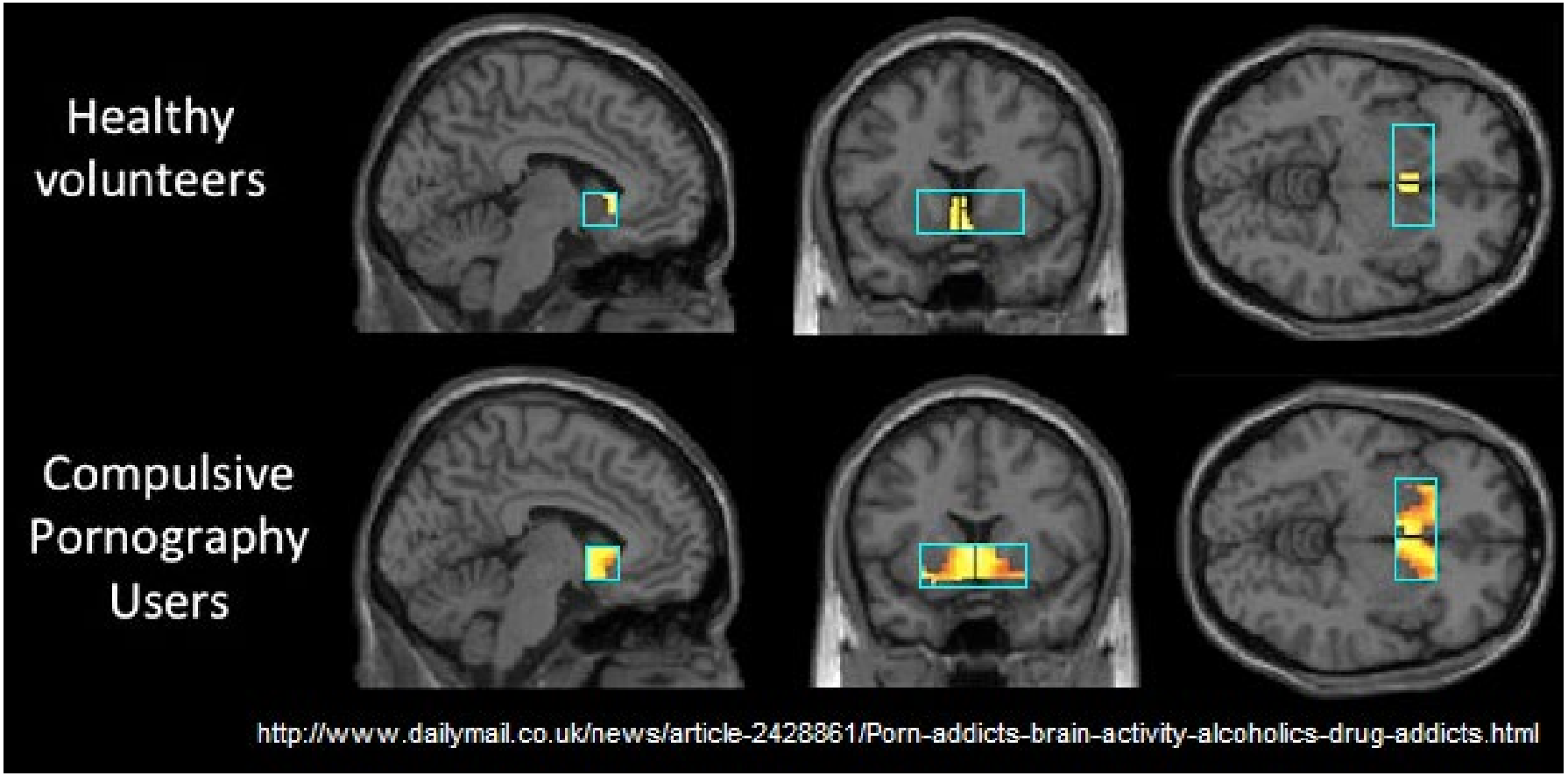
9% of users meet addiction criteria

-20 hrs/wk
-50 hrs/wk
for extreme users

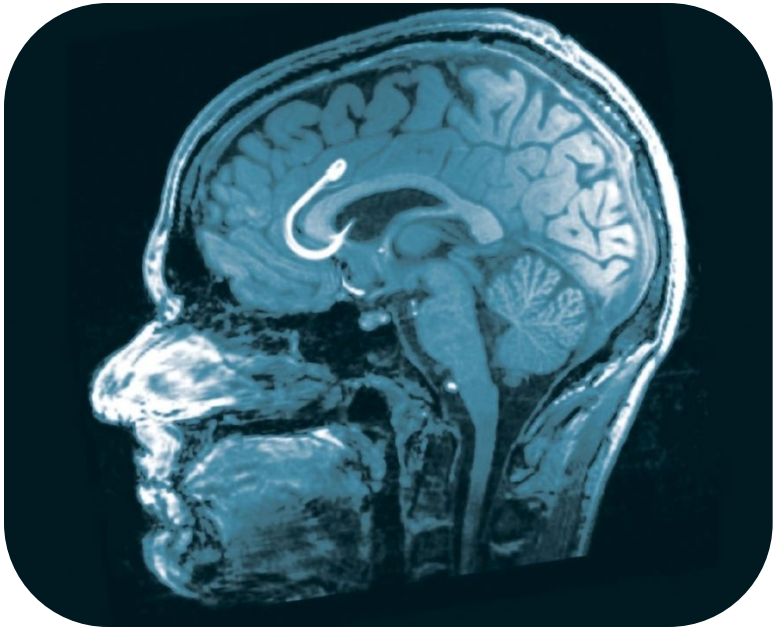
http://netaddiction.com/internet-addiction-test/
http://www.parents.com/parents/quiz




PORN



Arousal Addiction : Digital "re-wiring" of the brain from too much dopamine which competes against real-life dopamine spikes from healthy relationships.



Studies indicate that when porn use increases:

- desensitization to reward increases
- brain matter related to impulse control, motivation, & decision-making, decrease

8) Victimization





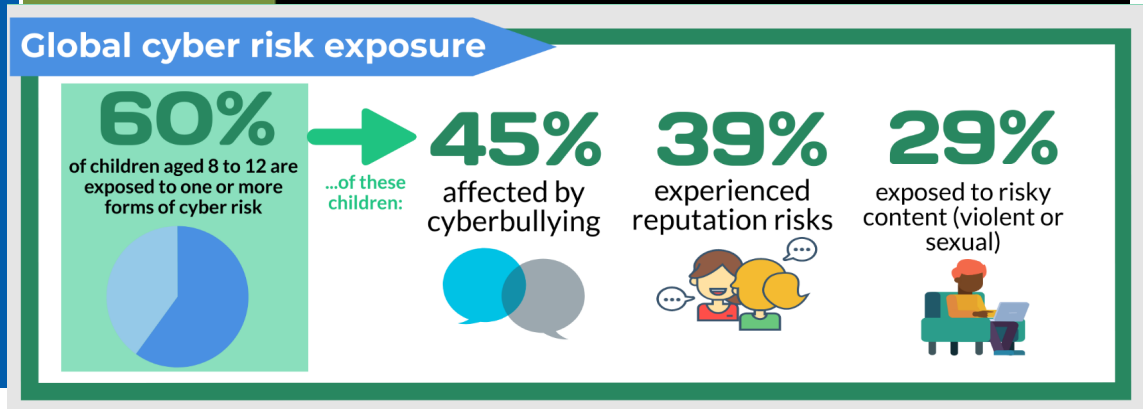








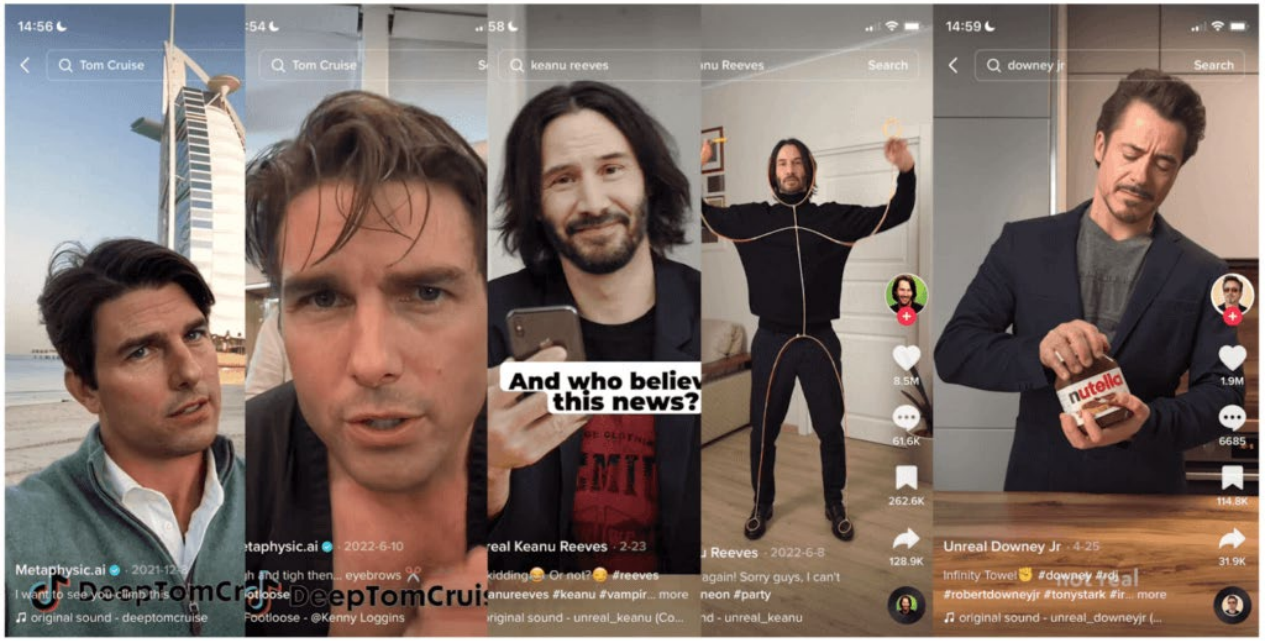




DQ Institute (2020). 2020 Child Online Safety Index

AI makes it easy to:

- Generate grade-A papers
- Remove clothes from a picture of a person
- Create deepfakes, revenge porn, & child sexual abuse content
- Create false videos & fake voices to be used as sextortion





How do you protect yourself and your brain when you use technology?

Illusion: **"I can't enforce screentime guidelines because screens are everywhere!"**

Parenting is more a verb than a noun.

~ Michael Rich, MD, MPH





Model

- Apply the Brain-Balance Rule
- Establish tech-free times & zones
- Screen-free mealtimes
- Eye-contact, attunement, co-regulation





Mentor

- Use grayscale, turn off notifications
- Use airplane mode
- Put cellphones away while driving
- Educate about sextortion, deepfakes & catfishing



Monitor

- Delay smartphones until high school
- Delay social media until 16
- Devices off 2-3 hours before bedtime
- Reduce screentime if empathy, depression & anxiety increase

The lap is more important than the app.

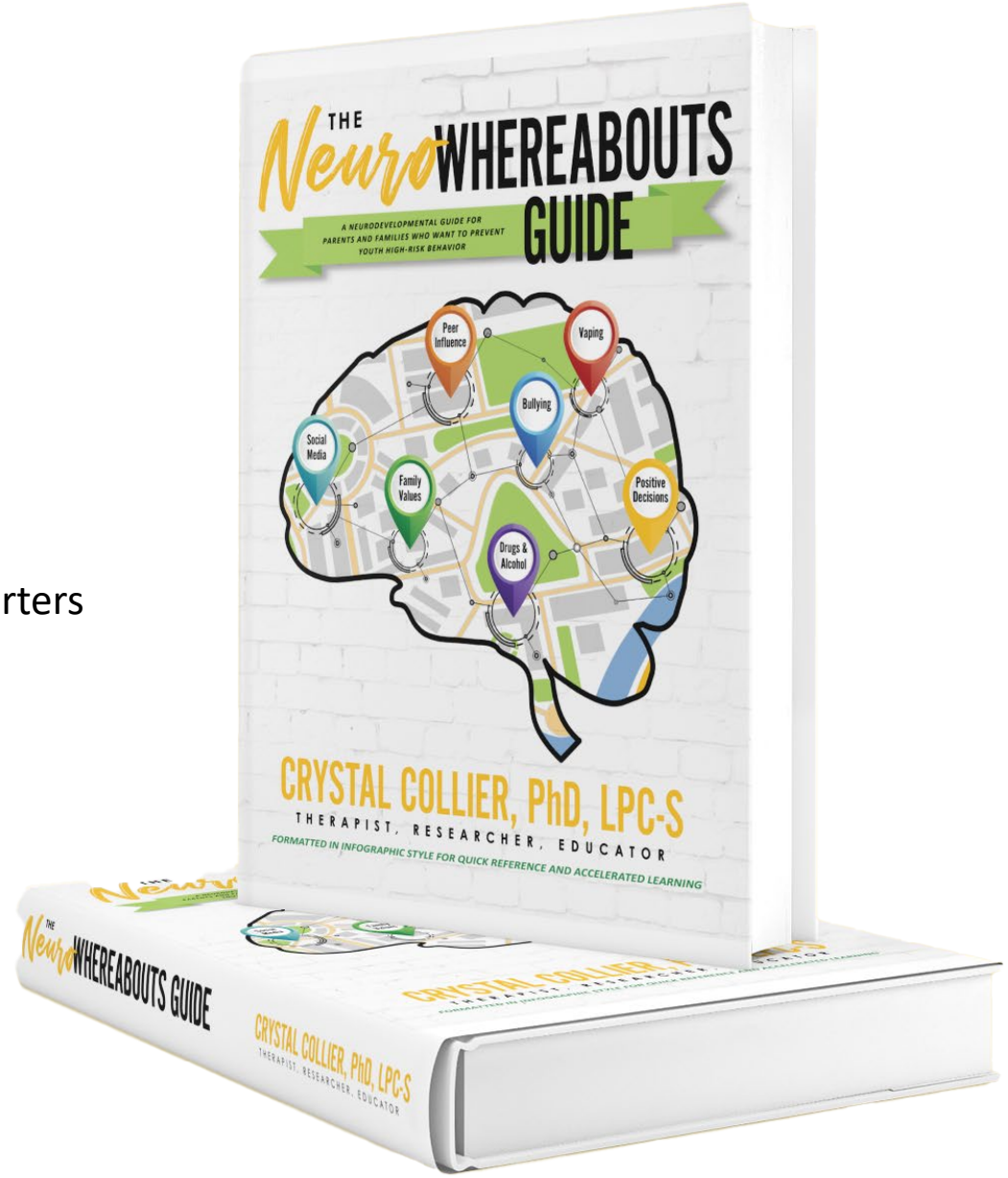
~ Michael Rich, MD, MPH

- Mutual, sustained attention, positive emotional bond is most predictive protective factor
- Sharing meals increases connection, accountability and reduces high-risk behavior
- Free play is necessary for building executive functioning skills



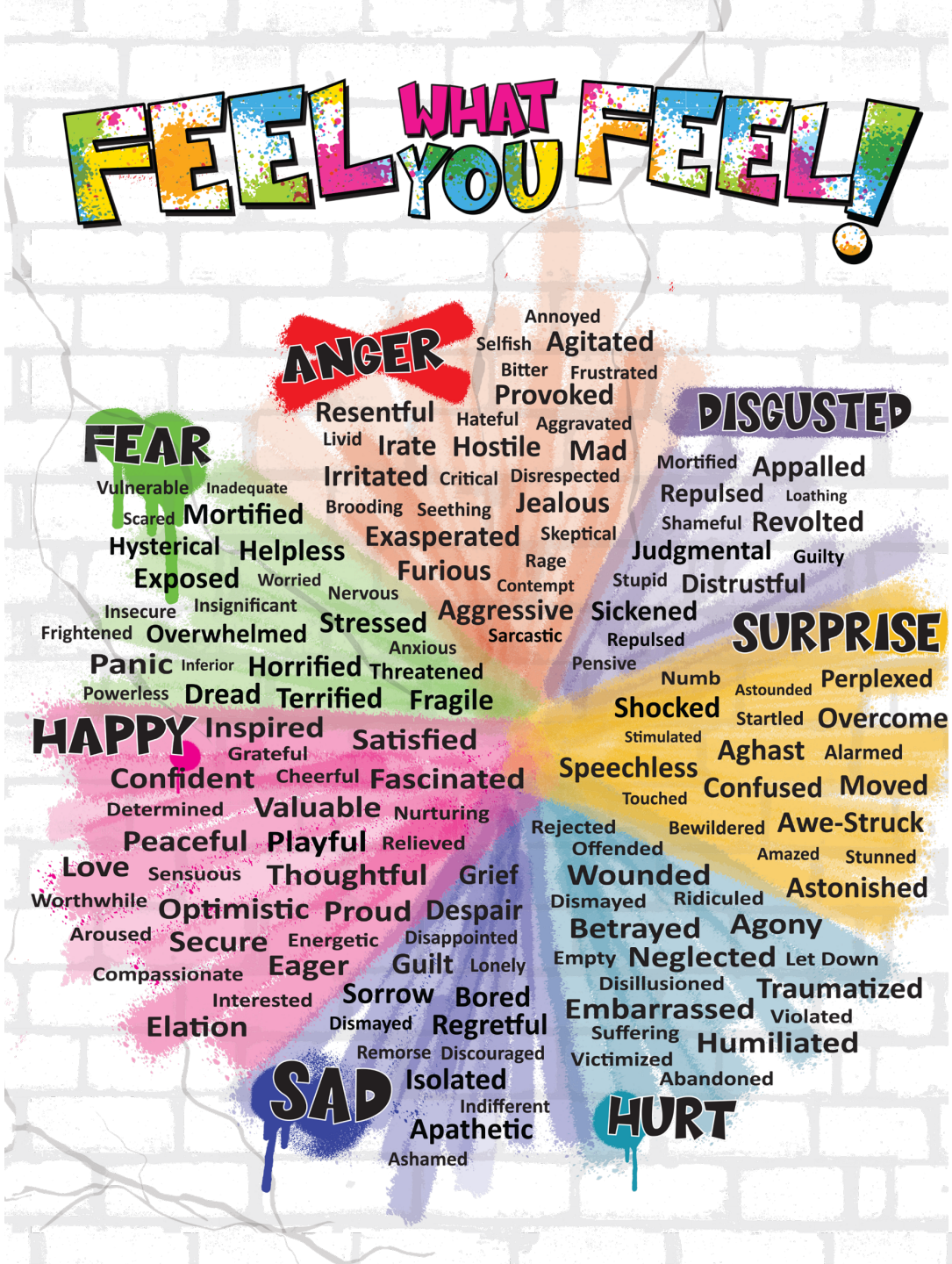
Parenting Tools

- High-Risk Behavior Checklist
- Executive Function Scripts
- Emotional Literacy
- B-Mod Contract
- Family Code
- Calendar of Conversation Starters
- Alcohol Poisoning Card
- Activity Pyramid
- High-Risk Behavior Talks
- Driving Contract
- Smartphone Contract
- WhereAbouts Log



Executive Function Building Scripts




FEEL WHAT YOU FEEL!
ANGER
Annoyed
Selfish
Agitated
Bitter
Frustrated
Provoked
Resentful
Hateful
Aggravated
Livid
Irate
Hostile
Mad
Irritated
Critical
Disrespected
Brooding
Seething
Jealous
Exasperated
Skeptical
Furious
Rage
Contempt
Nervous
Aggressive
Sickened
Stressed
Sarcastic
Anxious
Threatened
Horrified
Inferior
Panic
Dread
Terrified
Fragile
Powerless
Overwhelmed
Frightened
Insignificant
Insecure
Exposed
Worried
Hysterical
Helpless
Mortified
Scared
Vulnerable
Inadequate
FEAR
DISGUSTED
Mortified
Appalled
Repulsed
Loathing
Shameful
Revolted
Judgmental
Guilty
Stupid
Distrustful
SURPRISE
Repulsed
Pensive
Numb
Astounded
Perplexed
Shocked
Startled
Overcome
Stimulated
Aghast
Alarmed
Speechless
Confused
Moved
Touched
Rejected
Bewildered
Awe-Struck
Offended
Amazed
Stunned
Wounded
Astonished
Dismayed
Ridiculed
Betrayed
Agony
Empty
Neglected
Let Down
Disillusioned
Traumatized
Embarrassed
Violated
Suffering
Humiliated
Victimized
Abandoned
HURT
SAD
Isolated
Indifferent
Apathetic
Ashamed
Remorse
Discouraged
Dismayed
Regretful
Sorrow
Bored
Interested
Elation
Compassionate
Eager
Guilt
Lonely
Aroused
Secure
Energetic
Disappointed
Worthwhile
Optimistic
Proud
Despair
Love
Sensuous
Thoughtful
Grief
Peaceful
Playful
Relieved
Determined
Valuable
Nurturing
Confident
Cheerful
Fascinated
Grateful
HAPPY
Inspired
Satisfied



https://www.kimochis.com/

~~Dys~~Functional Family Rules

~~Dont~~Talk

~~Dont~~Trust

~~Dont~~Feel

~~Dont~~Deal

American Pediatric Society
Under 18 Months

Age	Screen Time Per Day	Type and Supervision
0 - 18 months	0 - 1 hours/day	only video chatting
Provide ample face-to-face time, skin-to-skin time & eye contact		
Offer touch, toys or soft objects to calm and soothe		
Offer physical objects or toys for distraction, not screens		
Develop attachment to people, not attachment to screens		

American Pediatric Society
18 – 24 Months

Age	Screen Time Per Day	Type and Supervision
18 - 24 months	0 - 1 hours/day	video chatting with loved ones
Co-view high-quality programming to use as teaching moments		
Provide ample physical interaction and creative, free play		
Offer touch and physical objects for soothing and distraction		
Read books and offer toys to develop social and creative skills		
Develop learning skills not watching skills		

American Pediatric Society
3 – 5 Years

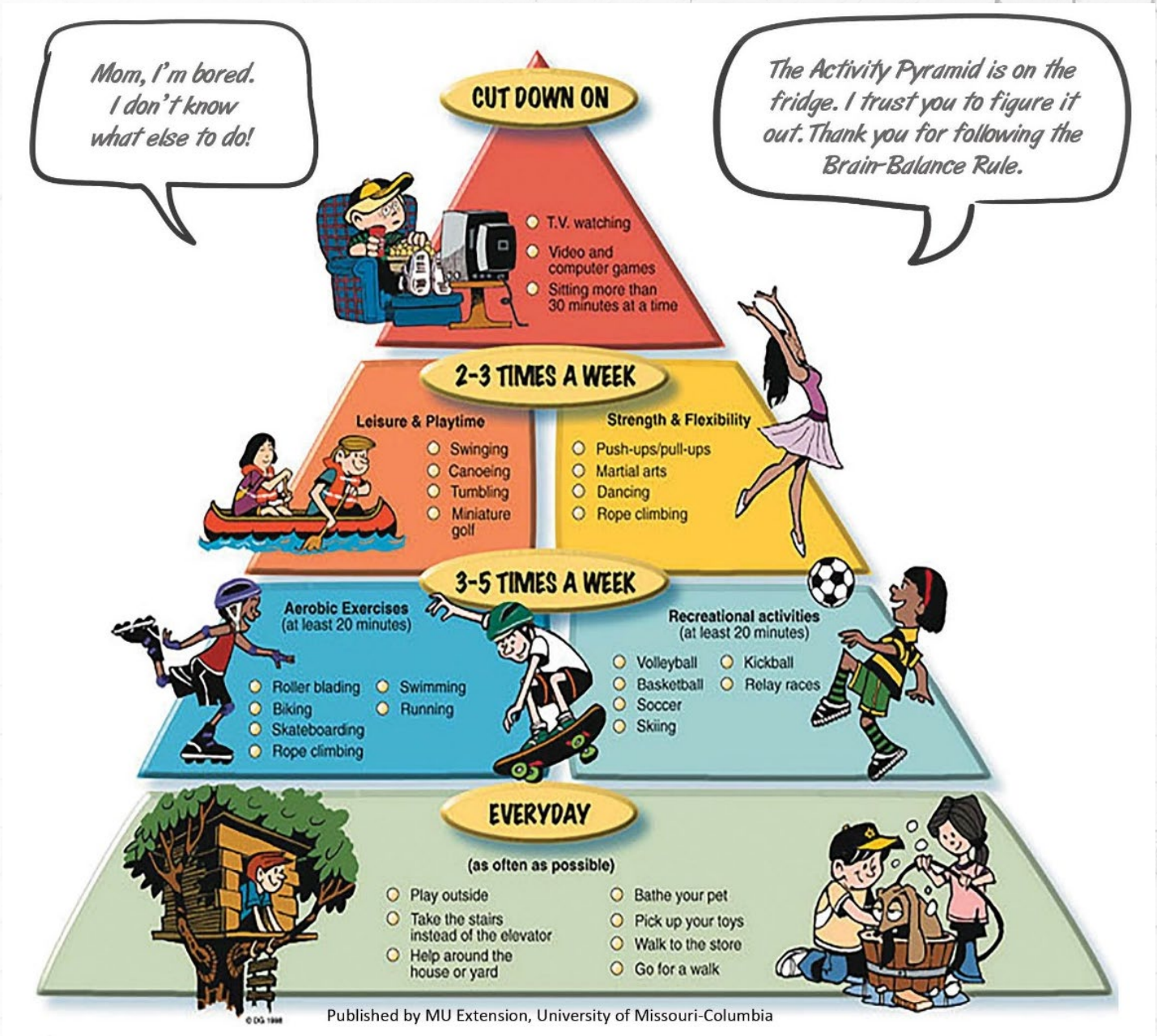
Age	Screen Time Per Day	Type and Supervision
3 – 5 years	1 hour/day	video chatting with loved ones
Co-view high-quality programming to use as teaching moments		
Provide ample physical interaction and creative, free play		
Teach and praise use play as distraction and self-soothing skills		
Read books together to develop reading and social skills		
Discuss characters from the books and educational shows		
Provide toys from books and shows to grow creative skills		
Provide as many screen-free family meals as possible		

American Pediatric Society
6 – 10 Years

Age	Screen Time Per Day	Type and Supervision
6 – 10 years	1.5 - 2 hours/day	Solo screentime on weekends
All recreational screentime is earned with completed homework and good behavior		
None to minimal recreational screentime on school nights		
Provide as many screen-free family meals as possible		
Engage in screen-free activities and tech-free weekends		
Use a communal screen for co-viewing		
Use the Brain Balance Rule = 1 hour screentime + 1 hour activity		

American Pediatric Society
11 – 16 Years

Age	Screen Time Per Day	Type and Supervision
11 – 16 years	2 - 3 hour/day	Solo screentime on weekends
All recreational screentime is earned with completed homework and good behavior		
None to minimal recreational screentime on school nights		
Provide as many screen-free family meals as possible		
Reinforce media-free time, healthy sleep hygiene, social skills		
Use a communal screen for co-viewing		
Use the Brain Balance Rule = 1 hour screentime + 1 hour activity		
Smartphone earned in HS, social media earned at age 16		


Mom, I'm bored. I don't know what else to do!
The Activity Pyramid is on the fridge. I trust you to figure it out. Thank you for following the Brain-Balance Rule.
CUT DOWN ON
T.V. watching
Video and computer games
Sitting more than 30 minutes at a time
2-3 TIMES A WEEK
Leisure & Playtime
Swinging
Canoeing
Tumbling
Miniature golf
Strength & Flexibility
Push-ups/pull-ups
Martial arts
Dancing
Rope climbing
3-5 TIMES A WEEK
Aerobic Exercises (at least 20 minutes)
Roller blading
Biking
Skateboarding
Rope climbing
Swimming
Running
Recreational activities (at least 20 minutes)
Volleyball
Basketball
Soccer
Skiing
Kickball
Relay races
EVERYDAY
(as often as possible)
Play outside
Take the stairs instead of the elevator
Help around the house or yard
Bathe your pet
Pick up your toys
Walk to the store
Go for a walk
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Published by MU Extension, University of Missouri-Columbia

DIGITAL CITIZENSHIP CHECKLIST:

- ❑ *I stay safe online and think before I post*
- ❑ *I respect myself and others by speaking respectfully of others online and offline*
- ❑ *I am an Upstander against cyberbullies and speak out against negative posts*
- ❑ *I balance my online and offline activities*
- ❑ *Do not give credit cards numbers online without parent permission*
- ❑ *I am a safe gamer and social media user*

Family Code
Building Activity

Our Family Code

In our family, we treat others with kindness, compassion, and respect on- and offline. We take care of our brain development and do not engage in risky behaviors. We never use drugs, and only use alcohol when we are 21 or over.



BEHAVIOR MODIFICATION

B-Mod Guidelines

1. **KEEP IT SIMPLE.** One page. Simple language results in less nagging, reminding, or manipulating. Use one row, if that is all that is needed, and no more than 3-4 behaviors.

2. **KEEP IT POSITIVE.** Write behavioral expectations in positive terms and enlist youth to help fill in rewards.

3. **KEEP IT CONSISTENT.** Deliver the consequences set out in the contract consistently. Giving rewards back too soon, or failing to institute consequences, results in longer extinction bursts.

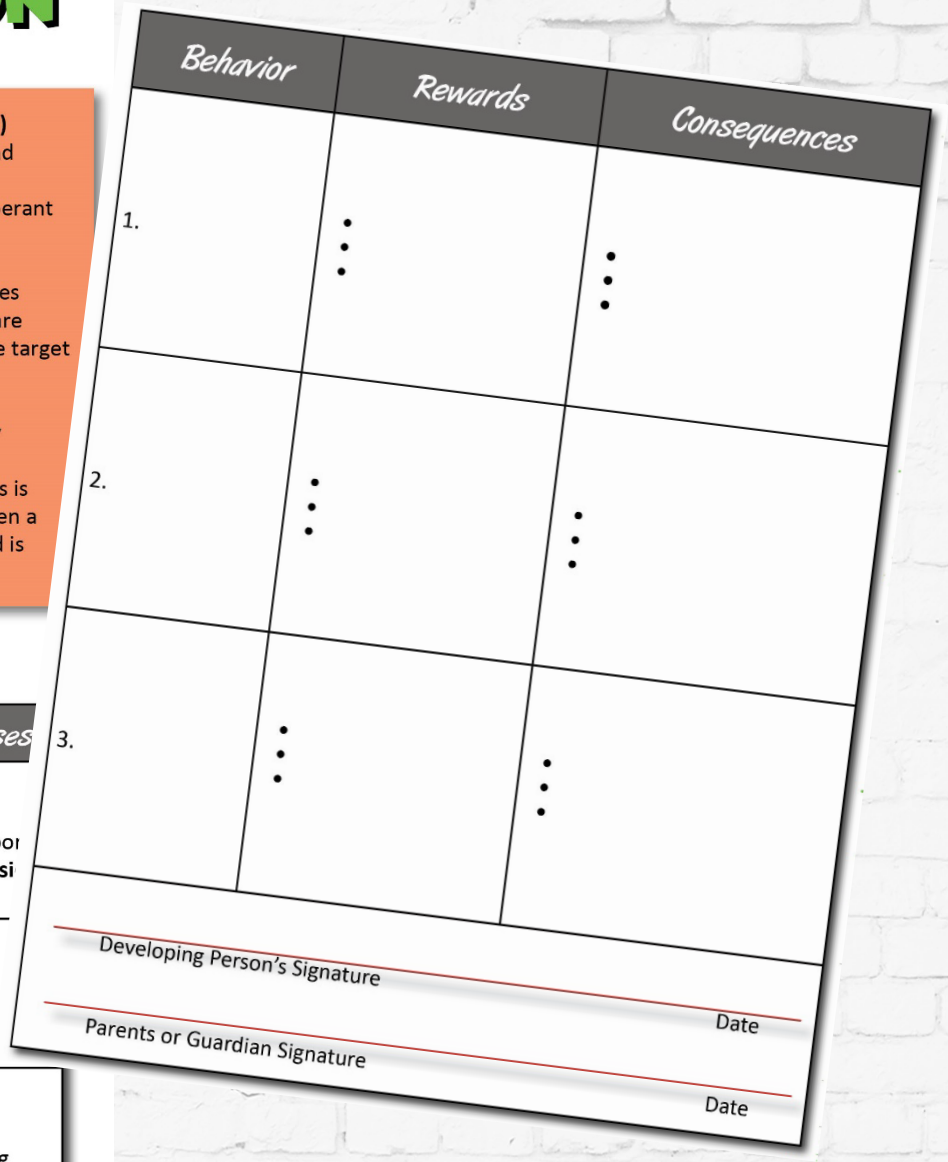
BEHAVIOR MODIFICATION (B-MOD) — A technique that uses rewards and consequences to shape or modify behavior based on B. F. Skinner's Operant Conditioning Theory.[33,34]

SHAPING — A technique that involves patiently rewarding behaviors that are close to the target behavior until the target behavior is achieved.[33,34]

EXTINCTION BURST — A temporary *increase* in a behavior that a B-Mod contract is meant to decrease — this is a normal and expected reaction when a consequence is earned, or a reward is lost.

B-Mod Contract Sample

Behavior	Rewards (Earnings)	Consequences (Losses
1. Be sober	• Cell phone use • Peer privileges • Privacy (such as having a door)	• Cell phone use • Peer privileges • Privacy (no door on roo • **Emergency family sessi (earned this one)**
2. Follow rules (includes doing chores)	• Allowance • Cell phone use • Technology privileges	• Allowance • Cell phone use • Technology privileges
3. Get good grades	• Cell phone use • Technology privileges • New games or clothing	• Cell phone use • Technology privileges • New games or clothing



CONVERSATION STARTERS CALENDAR

Conversations about risky behavior can be awkward. Use the 'Conversation Starters Calendar' on these two pages to help normalize discussions about these subjects and increase family unity.[25] Prevention month, week and day themes can be used to bring up topics in order to (a) teach prevention science information specific to each topic from this guide, (b) discuss family expectations outlined in the Family Code, and (c) help youth feel more comfortable sharing honestly about potentially difficult issues regularly.

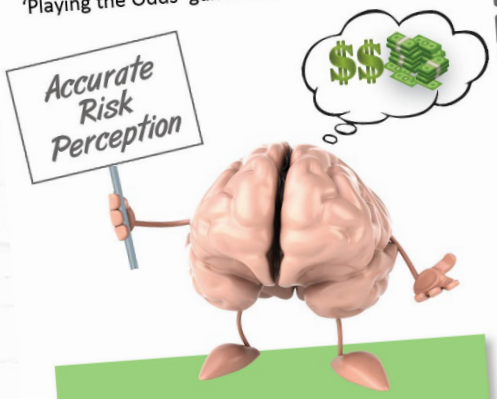
January	February	March
9 - National Law Enforcement Appreciation Day 11 - National Human Trafficking Awareness Day 12 - National Youth Day 21 - National Hugging Day 22 - Celebration of Life Day 27 - International Holocaust Remembrance Day 28 - Data Privacy Day - National Healthy Weight Week (begins 3rd Sunday) - National Mentoring Month	- National Ice Cream for Breakfast Day (1st Saturday) - Safer Internet Day (Tuesday in 2nd week) - Children of Alcoholics Week (begins the week of Valentine's Day) - National Condom Week (begins Valentine's Day, 14th) - Random Acts of Kindness Week (begins week of 17th) - National Eating Disorders Awareness Week (begins on Last Monday) - Teen Dating Violence Awareness Month	1 - Self-Injury Awareness Day 2 - World Teen Mental Wellness Day 4 - World Obesity Day 18 - Awkward Moments Day - Brain Awareness Week (begins 3rd week) - National Day of Unplugging (first Friday) - National Inhalants and Poisons Awareness Week (begins 3rd week) - Problem Gambling Awareness Month
April	**May**	**June**
7 - World Health Day 10 - National Siblings Day 25 - National Drug Take Back Day - National Alcohol Screening Day (Thursday of 1st full week) - Sexual Assault Awareness Month - National Alcohol Awareness Month - Distracted Driving Awareness Month - Stress Awareness Month	6 - International No Diet Day 15 - International Day of Families 25 - National Missing Children's Day 31 - World No Tobacco Day - World Laughter Day (1st Sunday) - National Teacher Appreciation Day (Tuesday of 1st full week) - Mental Health Awareness Month - Women's Health Month	1 - National Say Something Nice Day - Global Day of Parents 12 - National Loving Day 14 - World Blood Donor Day 27 - National PTSD Awareness Day 29 - Hug Holiday 30 - World Social Media Day - Men's Health Month - Pride Month

July	August	September
1 - International Joke Day 8 - National Video Game Day 11 - National Cheer Up the Lonely Day 14 - National Mac 'n Cheese Day 15 - National Give Something Away Day 18 - World Listening Day 30 - International Day of Friendship	12 - International Youth Day 15 - National Relaxation Day 31 - International Overdose Awareness Day - National Exercise with Your Child Week (begins 2nd week) - Be Kind to Humankind Week (25th-31st) - Drive Sober & Ride Sober (weeks before/after Labor Day) - National Wellness Month	4 - World Sexual Health Day 10 - World Suicide Prevention Day 14 - Sober Day 16 - National Stepfamily Day - National Family Day (4th Monday) - Weight Stigma Awareness Week (begins last Monday) - National Recovery Month - National Suicide Prevention Month
October	**November**	**December**
2 - World Smile Day 10 - World Mental Health Day 13 - National Train Your Brain Day 23-31 National Red Ribbon® Week - Mental Illness Awareness Week (1st full week) - National Stop Bullying Day (2nd Wednesday) - Digital Citizenship Week (begins 3rd week) - National Bullying Prevention Month - Eat Better, Eat Together Month - Emotional Wellness Month - National ADD/ADHD Awareness Month - National Depression Education & Awareness Month - National Domestic Violence Awareness Month	1-2 - Día de los Muertos (Day of the Dead) 3 - National Homemaker Day 13 - World Kindness Day 14 - National Family PJ Day 16 - International Day for Tolerance 19 - National Camp Day 20 - National Pay Back Your Parents Day - World Children's Day 21 - Great American Smokeout 23 - National Adoption Day 25 - International Day for the Elimination of Violence Against Women 28 - National French Toast Day 30 - National Meth Awareness Day - National Computer Safety Day - National Men Make Dinner Day (1st Thursday) - International Survivors of Suicide Loss Day (Saturday Before Thanksgiving)	3 - International Day of Persons with Disabilities - National Disability Day 13 - National Ice Cream Day 19 - National Emo Day 22 - National Short Person Day 30 - National Bacon Day - Giving Tuesday (1st Tuesday) - National Handwashing Awareness Week (1st-7th) - National Impaired Driving Prevention Month - Universal Human Rights Month



THE GAMBLING TALK

Research indicates that many problem gamblers begin gambling as young as ages 8 to 11.[141-143] Around that age, begin discussing this issue by asking the questions in the box at the right, creating family rules about gambling games, and praising them for demonstrating good Executive Function skills, such as accurately perceiving the risks of gambling and predatory monetization schemes.[144] Definitions can be found in Ch. 4 and 'Playing the Odds' game is below.



Play the Odds Game

What do you think the odds are of...

1. Winning the lottery?
2. Being hit by lightning?
3. Winning an online poker tournament?
4. Being bitten by a shark?
5. Getting a royal flush?
6. Picking the winning horse at a track?
7. Hitting the jackpot on a slot machine?
8. (Add your own odds questions)

Gambling Prevention Questions

- What is gambling? What should our family rules about gambling be?
- How old do you have to be to gambl in our state?
- How do video games gamblify game play? What is a predatory monetization scheme?
- What would you do if, when you a playing a free game, it prompts y to buy something?
- If someone loses money at gam is it due to bad luck or the odds against winning?
- What are odds? What does it r when they say 'the house alw wins'?
- What are the emotional outc losing money to gambling?
- What type of betting or wag allowed in our family? Do y parental permission to buy tickets?
- How much money would comfortable losing at gan
- Is it okay to bet on a frie of basketball? Or, on wh football game?
- What would the conse you used your parents' to make an online bet games?
- What would you do pressured you to ma something?

THE PORNOGRAPHY TALK(S)

PORN PREVENTION BY AGE

ELEMENTARY (6 to 9 years, depending upon maturity level)

- ☐ Discuss the difference between good pictures and bad pictures;[140] give examples of good pictures like school photos or puppy videos
- ☐ Define the word pornography: Printed or visual material showing sexual images or activities; sexual images show private parts of the body that we keep covered with clothes
- ☐ Define pornography as 'bad picture' because it may make kids feel yucky or uncomfortable to see someone's private parts
- ☐ Explain what you expect them to do if they see a bad picture: Show good self control and look away, then tell a parent or adult
- ☐ Tell them they will not get in trouble if they see pornography, but that in order to protect their brain, they should look away
- ☐ Let them know that you will stay calm and be proud of them when they tell you if they see pornography

MIDDLE SCHOOL (10 to 13 years)

- ☐ When young people see sexually explicit scenes on TV, media or video games, take the opportunity to review the topic of pornography
- ☐ Validate that being curious about pornography is normal, but that viewing it could change their brain in negative ways
- ☐ Ask them to refuse to look if someone tries to show it to them, and to never show it to others in case they see it by accident
- ☐ Set limits regarding taking photos: Do not allow others to take pictures of your private parts. No 'selfies' of your own private parts.
- ☐ Let children know:
  1) Perpetrators use pornography to manipulate children because they know how curious kids can be
  2) Viewing pornography is linked to child sexual abuse because kids may want to try the things they see, and don't know the dangers
  3) Pornography changes the brain and can cause addiction

HIGH SCHOOL (14 to 18 years)

- ☐ Monitor their technology for pornography use, and let them know they will incur a consequence if they watch pornography
- ☐ Discuss the potential social and emotional consequences of pornography use and addiction

THE MEDIA TALK

DANGERS OF DOING 'RESEARCH' ON THE INTERNET — The Internet contains hundreds of p
drug and pro-risky behavior websites that cherry-pick research to bolster their stance, resul
reduced perceived harms and increased use or engagement. Teach children how to criticall
media for buzzwords and conflicts of interest, and how to spot reliable and objective sourc

Marketers and advertisers use buzzwords to entice buying behavior and divert attention from adverse public health effects. Some may rely on research based on limited evidence, or on research conducted by investigators that have **conflicts of interest**.



In the era of 'fake news', it may be confusing to know where to locate accurate information, at least the most accurate and **unbiased** as it can be. The list below describes information sources in order of most to least reliable.

Beware of Buzzwords

Natural · Pure
Clean · Organic
Cures or Treats Illn
Cure-All · Miracle
Growing Body of Ev
Holds Promis
Generally Recognize
Healthier Ch

SYSTEMATIC REVIEW — An article or book that summarizes research conduct
area or research topics, including carefully designed studies, clinical trials, or
that includes reliable sources of evidence to guide practice.

PEER-REVIEWED JOURNAL ARTICLES OR BOOKS — Research articles or bo
scientists and experts, then reviewed by many other experts in the field to
and scientific validity before publication.

PROFESSIONAL ARTICLES OR BOOKS — Research, knowledge or practice
written by professionals or experts in the field.

OFFICIAL GOVERNMENT OR UNIVERSITY WEBSITES — Information pro
institutions and organizations.

NEWSPAPER OR MAGAZINE ARTICLES — Information gathered by re
writers who fact-check information from reliable sources, but may p

WEBSITES OR BLOGS — Information or editorial opinions written by
business owners who may or may not have a biased agenda or financial stake in

THE MEDICINE TALK



MEDICINE — A substance or formulation of ingredients used to treat a disease or condition.

FOOD AND DRUG ADMINISTRATION (FDA) — A government agency responsible for ensuring that medications are safe and effective. This organization conducts scientific testing to determine if the benefits of a drug are greater than any potential harmful effects. If a drug fails to meet FDA standards and approval, it cannot be sold as a medicine in the United States.

What it is

Medicine is a tool to be used cautiously. It should be obtained from healthcare professionals who have been trained to know the benefits and potential risks of drugs.

Many medicines can have harmful side effects, and some have the potential to cause addiction when overused, such as certain pain medications. They should be taken only when necessary, and only in amounts directed by the prescribing professional.



For a medicine to be considered reliable, it should meet certain standards, such as containing well-defined, measurable effective ingredients that are identical in each dose.

What it is Not

Medicine is not a 'street drug' that is being depicted as medicinal, such as marijuana, pain medications and amphetamines taken without a prescription. Some 'street drugs' have medicinal properties ***and*** potentially harmful effects.[70]

The FDA has approved two medications that contain ingredients derived from marijuana, but has not approved marijuana itself as a medicine. Scientific research has been conducted on these medications for treatment of the symptoms caused by cancer, multiple sclerosis and HIV/AIDS.

These medications do not cure illness but only treat their symptoms. If you have any of these illnesses, consult a doctor regarding the safest, most appropriate medicine.

Smartphone Contract

In order to earn a smartphone connected to the Internet, I will:

- ☐ Demonstrate and represent our Family Code when using it.
- ☐ Understand that having it is a privilege, not my right.
- ☐ Never take or send inappropriate pictures of myself or others with it.
- ☐ Never cyberbully with it, and report cyberbullying if I see it happening to others.
- ☐ Understand my parents own it, and turn it off or on when they say so.
- ☐ Never add or download anything on it without parental permission.
- ☐ Know the signs of technology addiction, and change my usage if I show any.
- ☐ Value people more than technology by refraining from using it when talking or eating with others.
- ☐ Turn in my phone at night, and refrain from using it behind closed doors.
- ☐ Commit to doing chores and homework before smartphone time.
- ☐ Pay, or help to pay, the cost of replacing it if I break it.
- ☐ Follow my school's smartphone rules and refrain from using it in class.
- ☐ Never use the phone to view or purchase inappropriate content or items.
- ☐ Be safe online, and never enter my information on unknown sites or interact with unknown people.
- ☐ Allow my parents to set up security and know my passwords.
- ☐ Tell my parents if I see something inappropriate that goes against our Family Code.
- ☐ Ask for permission before posting pictures of myself, friends, or family.
- ☐ Always answer a call or text from parents, and call or text immediately back if missed.

Signature _____ Date_____

Driving Contract

In order to earn the privilege of driving a motor vehicle, I will:

- ☐ Understand that driving is an earned privilege, and not my right.
- ☐ Understand that these privileges can be taken away by my parents.
- ☐ Obey all driving laws to protect myself and others, and wear seatbelts at all times.
- ☐ Observe and follow all posted speed limits, especially when driving with others.
- ☐ Drive carefully. I will not text, eat, play loud music, put on makeup, or be distracted by others while driving. I will not drive when emotionally upset or angry. I will not drive in a rush or hurry, and may be required to find an alternative ride if running late. I will not engage in thrill-seeking or stunts while driving.

Understand that the motor vehicle belongs to my parents, even if it was a gift.

Know that driving irresponsibly will result in loss of driving privileges.

Not use mind-altering substances, such as alcohol or drugs, especially while driving. I will not ride in a vehicle with someone who has used alcohol or drugs.

Stay on the scene in case of a motor vehicle accident, and notify authorites and arents immediately.

ay within the location bounds set by my parents, and agree to allow my location be tracked.

e the vehicle only during hours set my parents, and return the vehicle by curfew.

e with passengers only when given permission, and never with more engers than the law allows.

it the keys if I lose my driving privileges, with no argument or debate.

that failure to surrender the keys will mean indefinite loss of the vehicle.

that if I drive the vehicle without parental permission, the police may be d.

parental permission for anyone else to drive the motor vehicle.

nsible for any costs incurred by tickets or accidents.

e of the motor vehicle by keeping it clean and maintained.

_____ Date_____

Parenting Tools























SMART FAMILIES

SHAPING SOULS

Know Your Neuro

About Contact Shop Calendar Donate English

Topics Skills Age/Grade Schools Families Students

strong brain

healthy choices

Prevention works if done consistently! Know Your Neuro puts brain-based, social-emotional, and prevention skills training right in the hands of schools and caregivers. Designed to be integrated into a school's health or homeroom curriculum, Know Your Neuro videos and class activities can be easily integrated and tailored to fit the developmental needs of K-12 youth.



Program Description Handout

families

Get the parenting tools that will

students

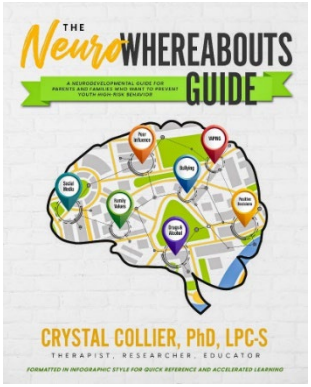
Find youth-friendly resources to

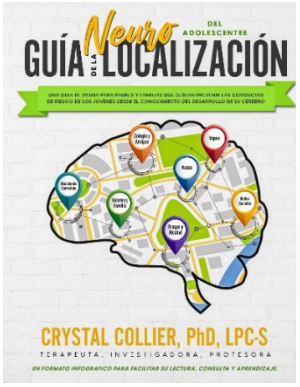
schools

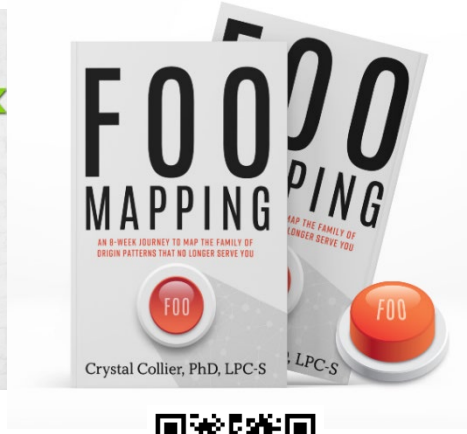
Utilize brain-based skills training

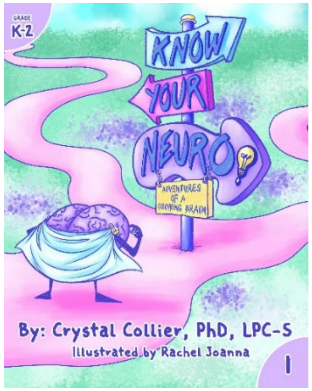
Know Your Neuro.org

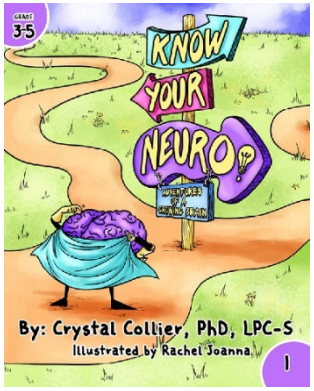
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