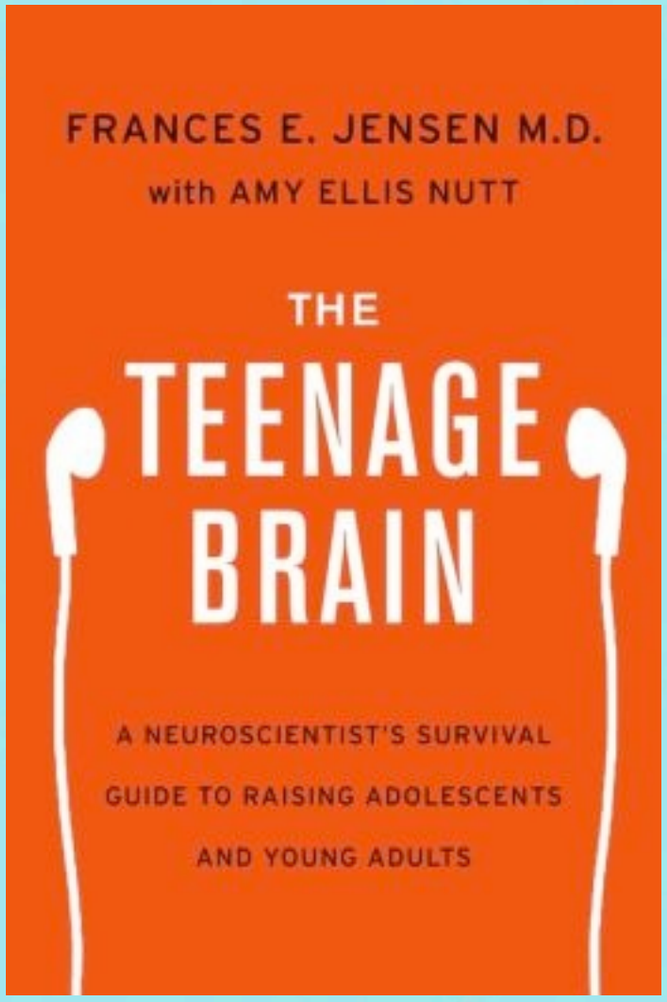
THE TEENAGE BRAIN



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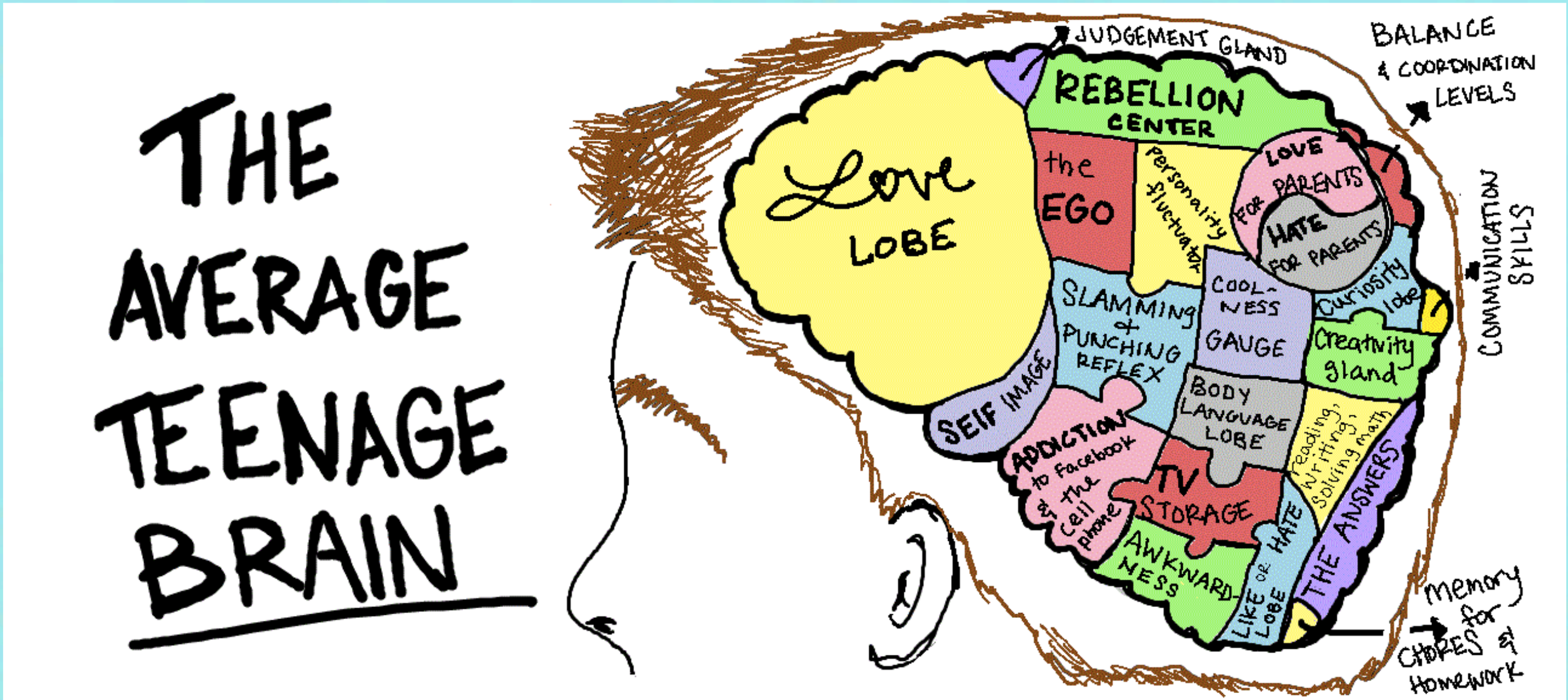
THE TEENAGE BRAIN

What are your goals for being here?

THE TEENAGE BRAIN



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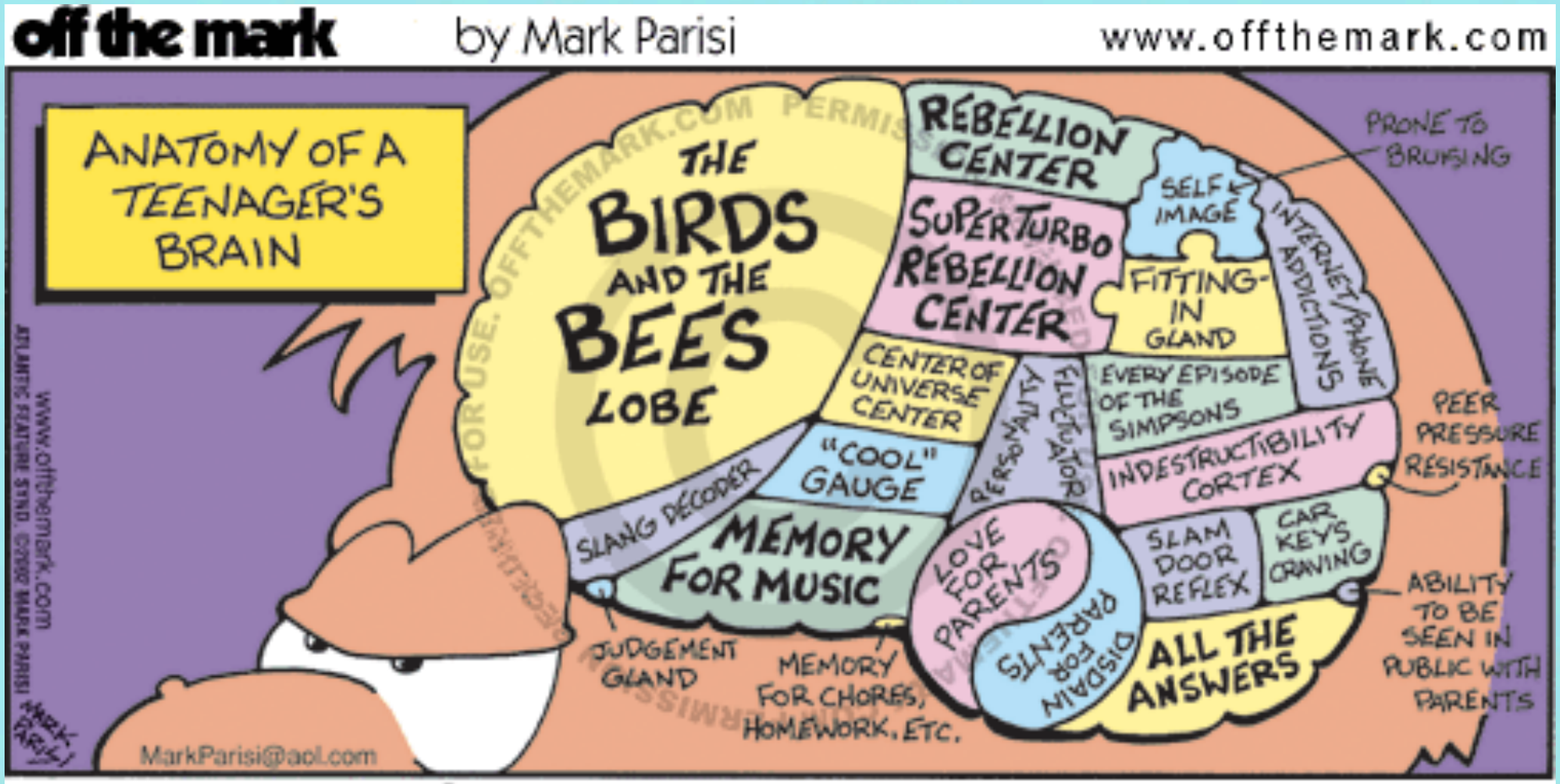

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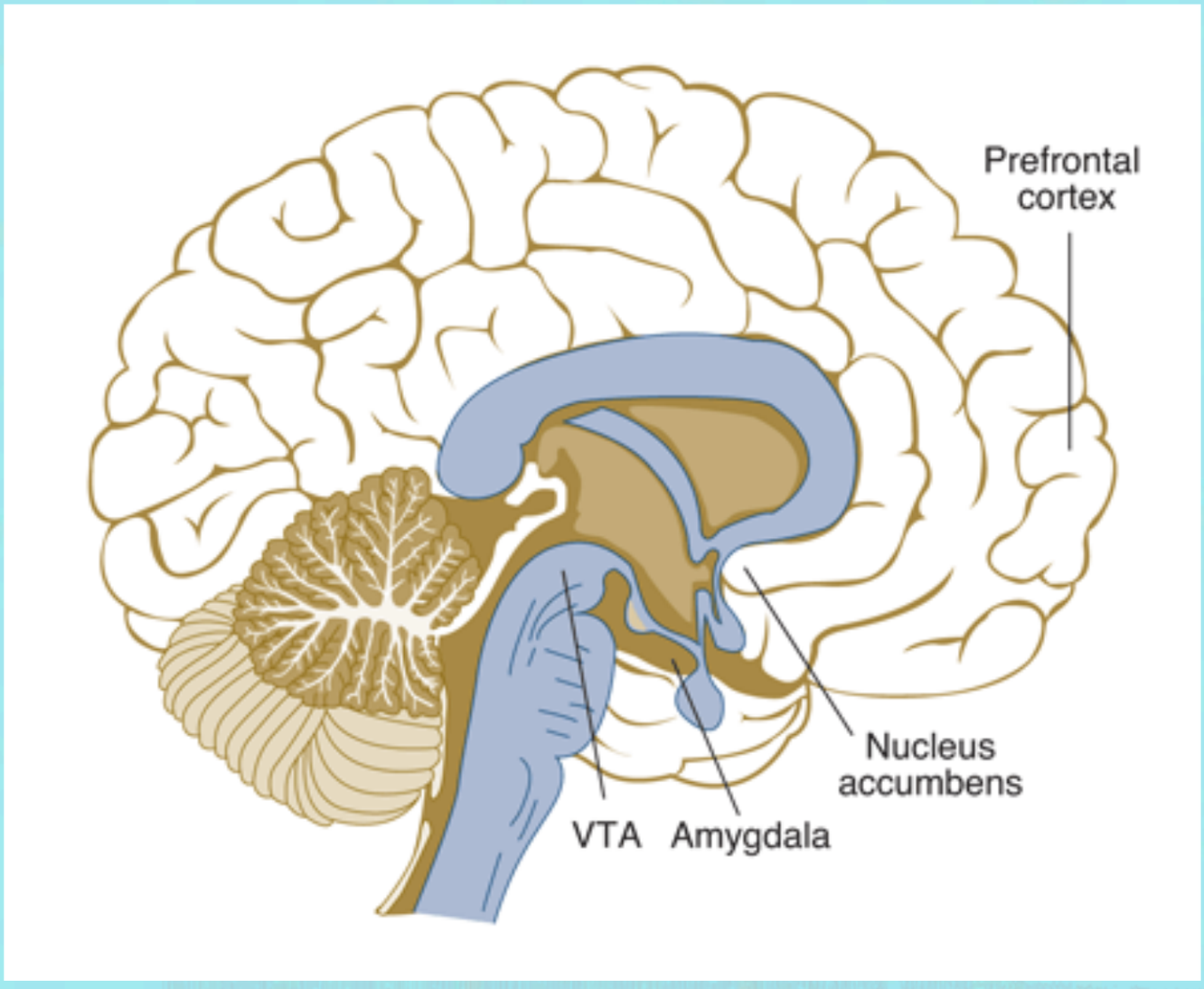

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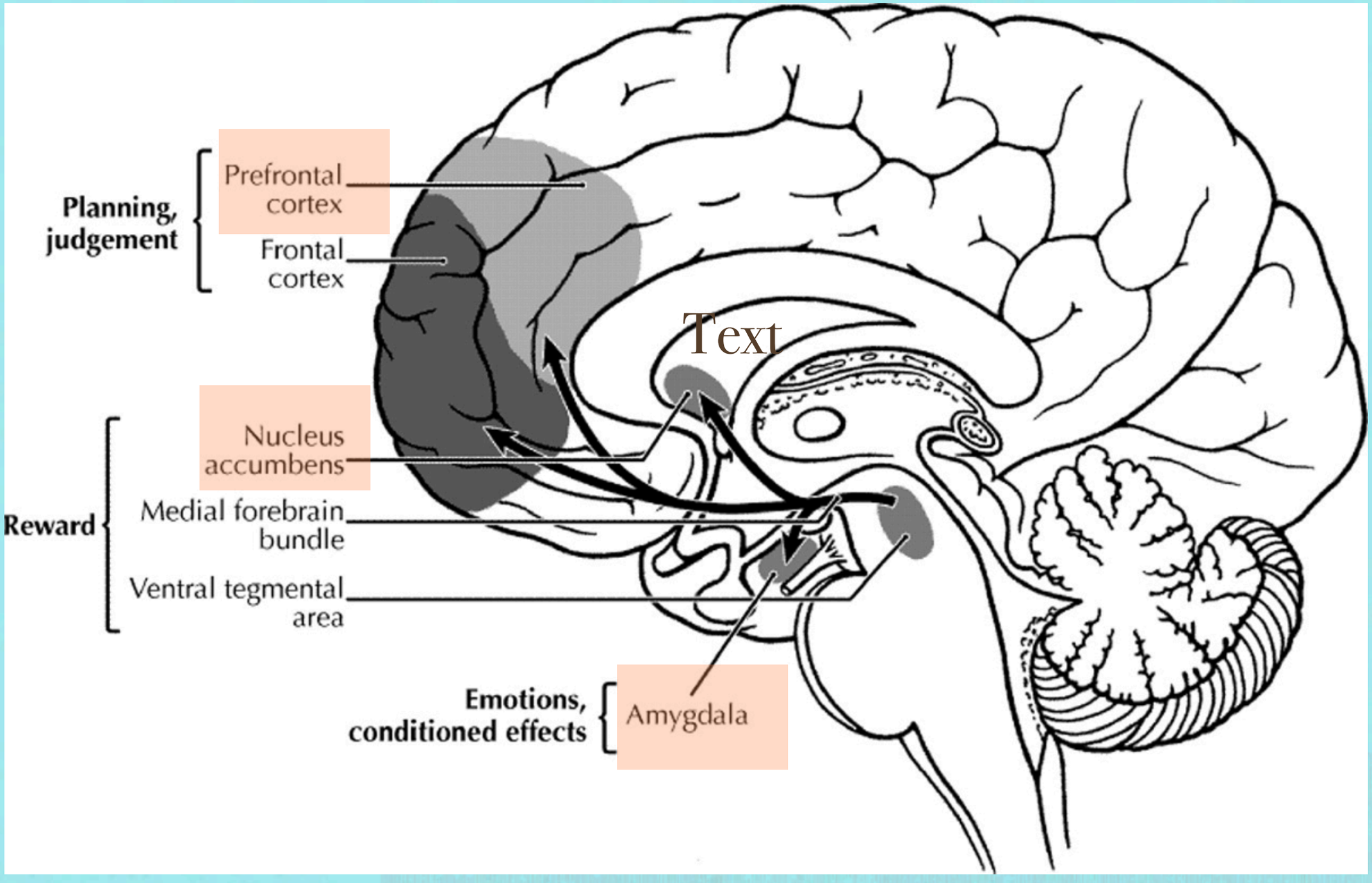

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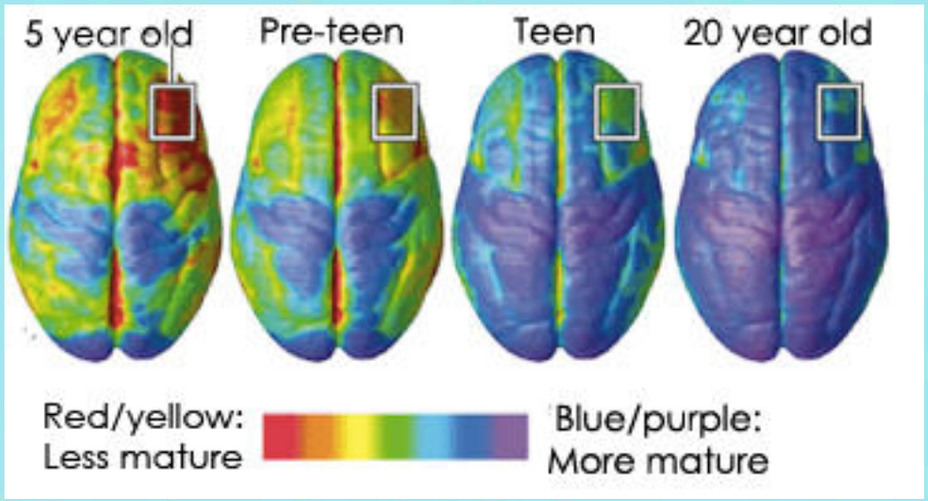


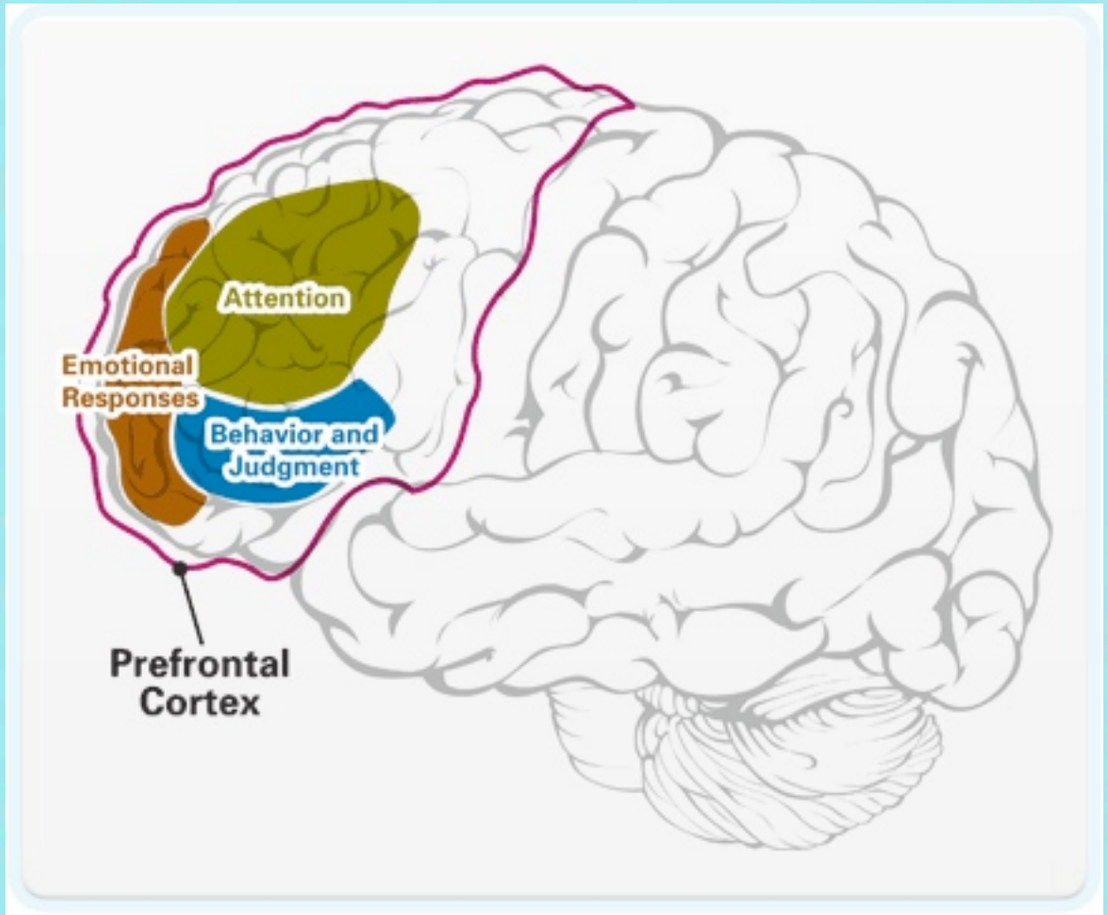
The Teenage Brain

Goes through the highest level of pruning

Adult: succinct circuitry

Teen: lots of wires not sorted out.

Pre-Frontal Cortex



" With an underdeveloped PFC, it is not uncommon where we see teens know the rules but not know how to use the rules."

Prefrontal Cortex:

- Slowest part of the brain to develop
- Executive functioning
- Emotional Responses
- Part of the brain that learns empathy

(teens learn it through socializing)

- Insight development
- Ability to Play it forward

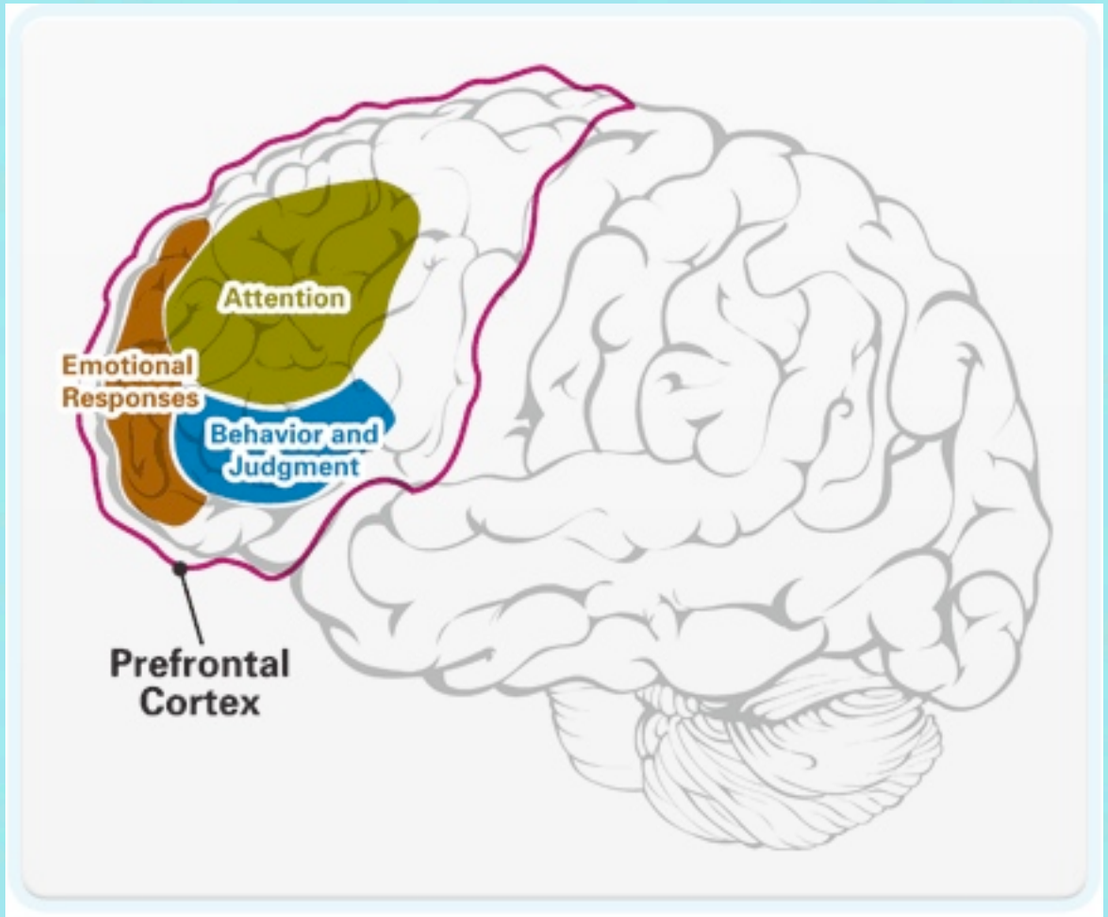
With Adults:

It connects to the amygdala

With Teens:

Exist disconnected from the amygdala

Working with the PFC



What does it mean for you:

- Teens are non **insight oriented** clients
- **Experiential** vs. Lecture based learning (due to an overactive amygdala and an underdeveloped PFC)
- **Empathy** isn't learned via insight, it's conditioned socially.
- Play out cause -effect -- the exercise for the PFC.

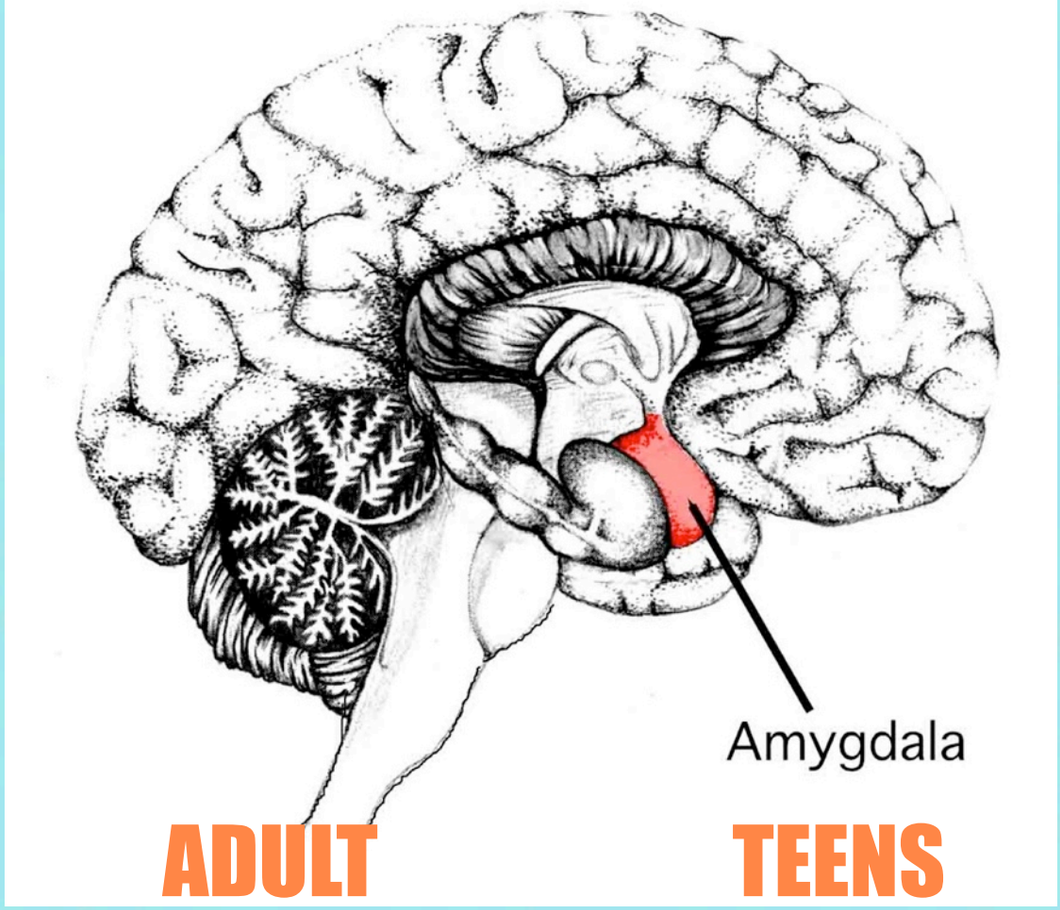
THE TEENAGE BRAIN

Example of Amygdala working Separately from Pre-frontal cortex

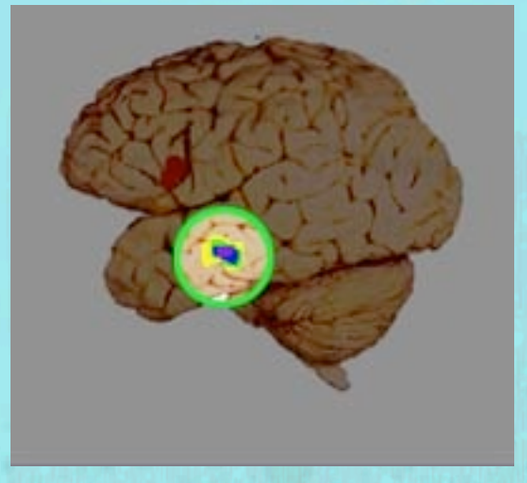
2 cases
- driving
- girl vomiting

Pre-Frontal Cortex

Amygdala



ADULT TEENS



Amygdala

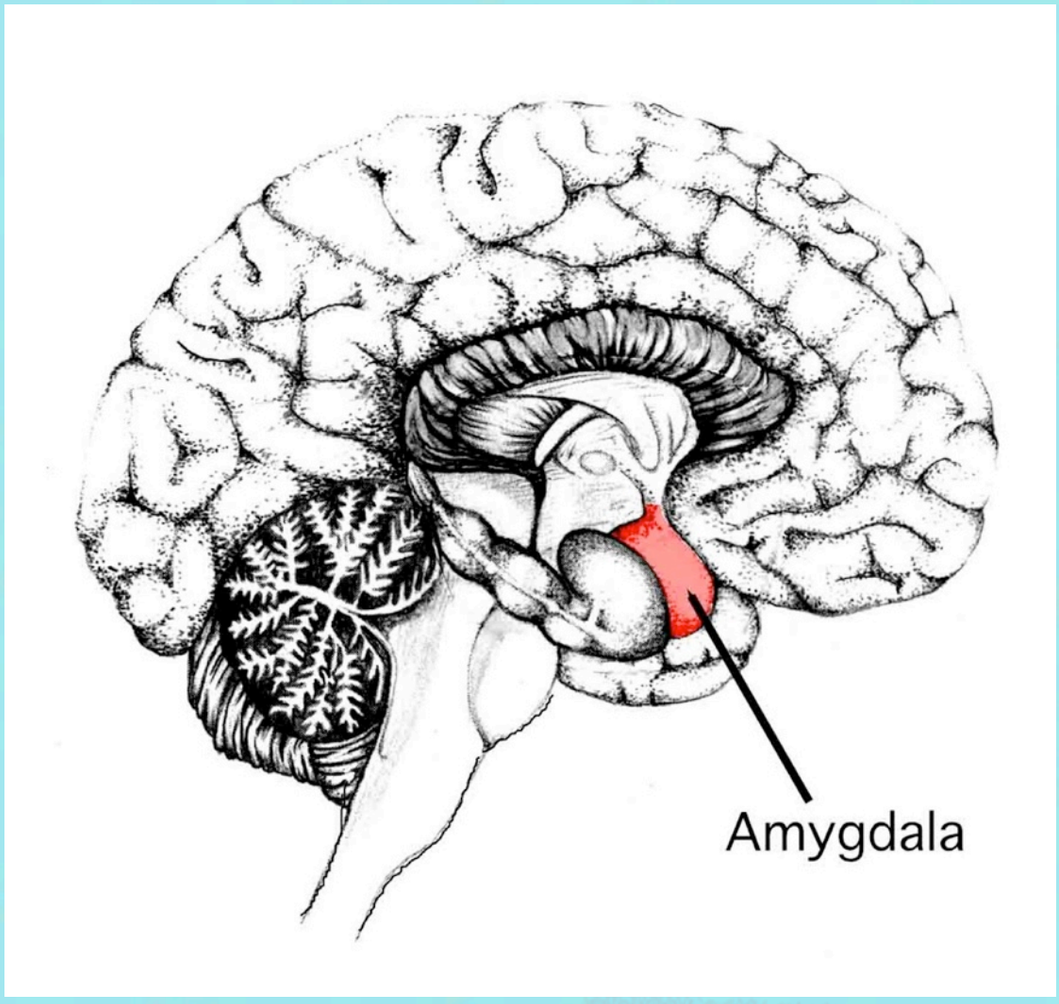
- **Reptilian Brain:** amygdala, + hypothalamus + hippocampus,
- Houses emotional reactions to stimuli.
- **Fight Flight Freeze**
- Primed for **danger**

What is responsible for the "hijacking the brain"

Teen amygdala: react disproportionately greater reactivity to stimuli -- inability to delay or suppress reaction.

Detects danger when it is not there

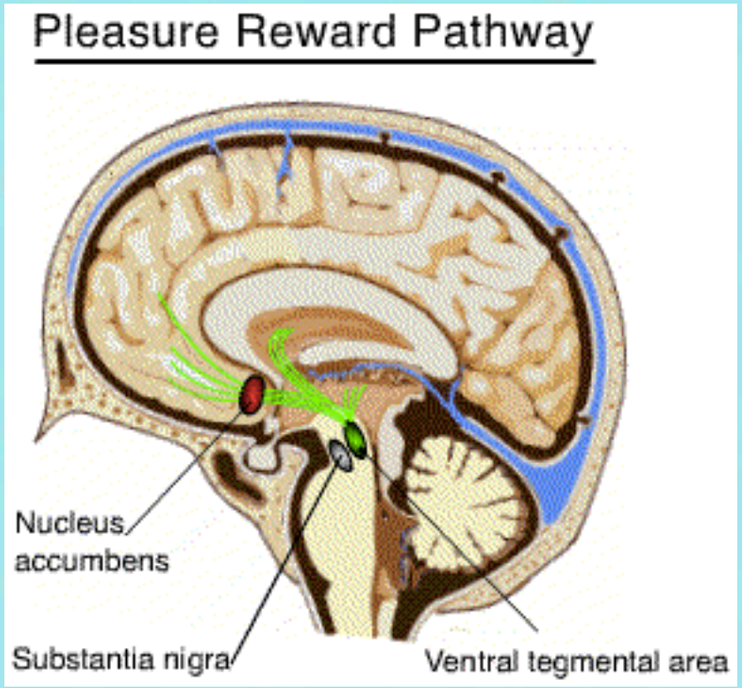
THE TEENAGE BRAIN



What does it mean for you:

- We cannot have 2 amygdala's talking
- When we yell at our kids their whole left brain shuts down.
- Calming an amygdala means calming them somatically
- Educating them on their brain

Nucleaus Accumbens

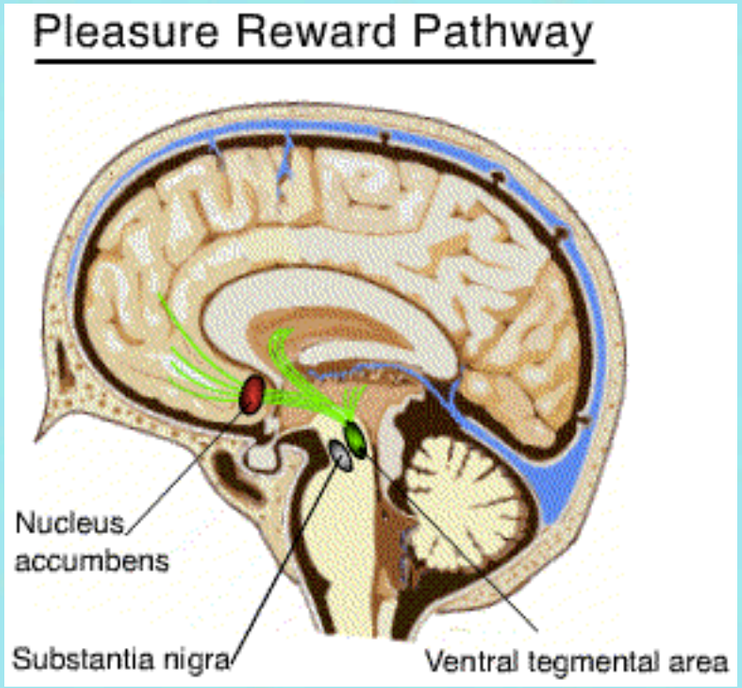


" If adolescence is time where the reward center is the highest developed -- we should be leveraging that as a motivational force."

Nucleaus Accumbens

- Pleasure Reward Center
- Fastest part of the brain to grow during puberty.
- That + underdeveloped PFC= Makes them more vulnerable to risky behavior.
- Extroverts have a more sensitive Nucleaus Accumbens than Introverts
- Extroverts: Understimulated easily - riskier behavior to get a hit
- Introverts: overstimulated easily

Nucleaus Accumbens



Nucleaus Accumbens

- Teenagers experience a higher level of dopamine levels than adults

- The anticipation of pleasure activates the NA and makes it Buzz: not the money but the anticipation of money

- They experience pleasure more intensely than adults

- Unable to delay gratification

" If adolescence is time where the reward center is the highest developed -- we should be leveraging that as a motivational force."

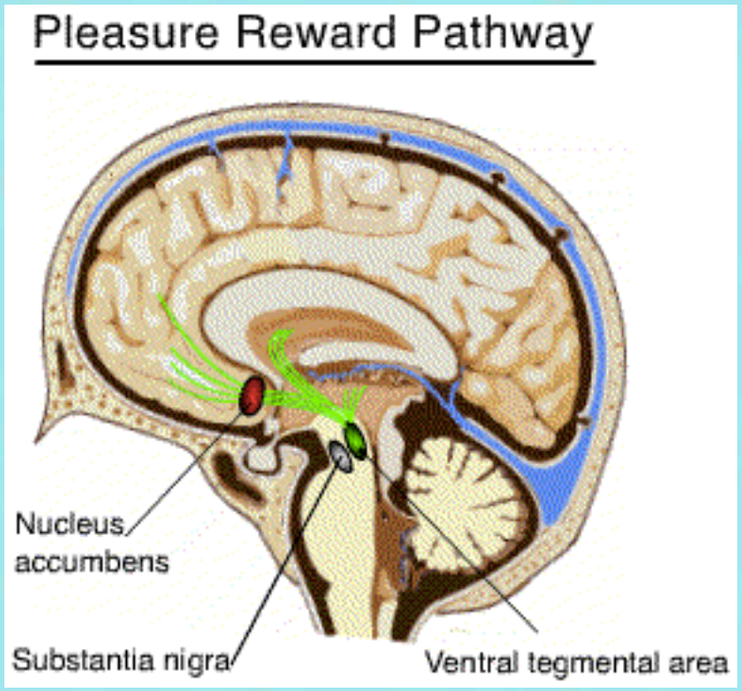
THE TEENAGE BRAIN

Gratification is at the heart of an adolescent's impulsivity. Adolescent's who engage in risky behavior and **who have never experienced negative consequences are more likely to keep repeating reckless behavior in search of reward.**

Pleasure center: we set consequences to mitigate the rewards and pleasure they get by making the decisions they make.

The chief predictor of adolescent behavior is not the perception of risk, but the **anticipation of reward** despite the risk.

Nucleaus Accumbens



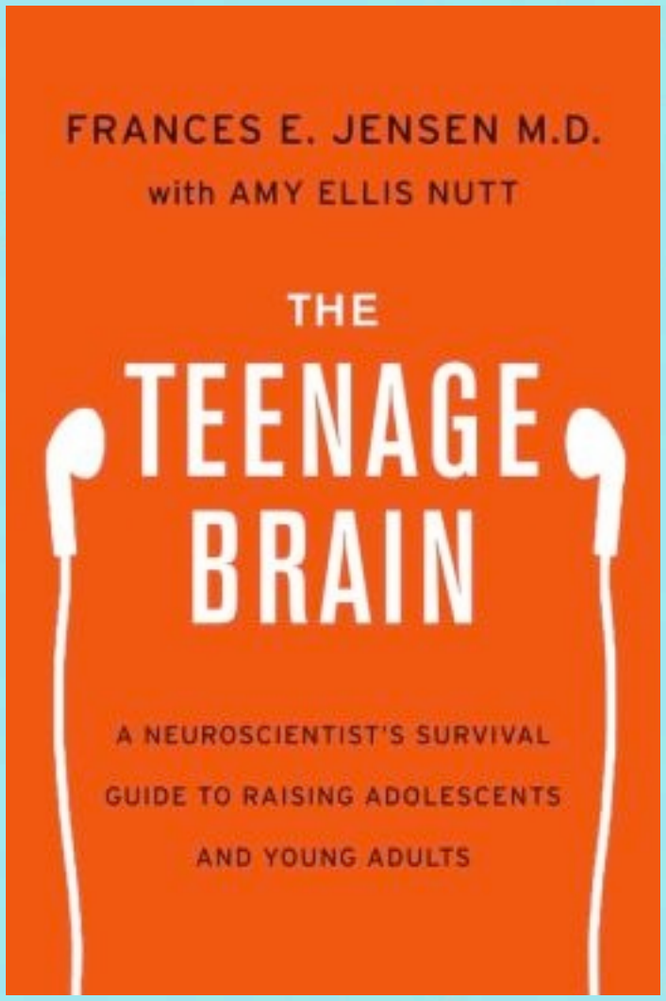
"Alright i"ll brush my teeth,
you're lucky
you bring me comfort!"

Are we being a reward?
Crafting pleasures
Crafting logical reality based consequences.

THE TEENAGE BRAIN

Q & Answers

THE TEENAGE BRAIN



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