



Vaping / JUULING

WHAT'S THE BIG DEAL?

BY KAREN POLLOCK, MD, FAAP

Trends in Middle / High school

Clothes / Music

Social media

Snapchat

Instagram

Drinking

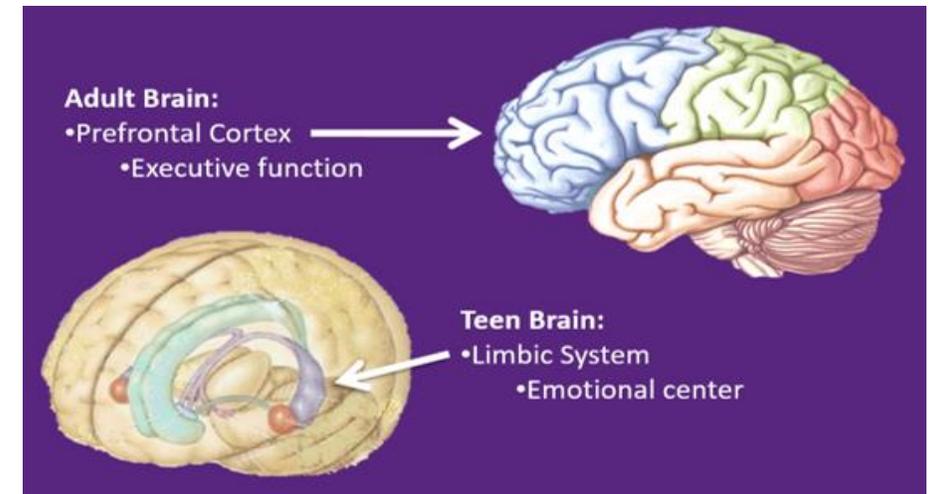
Smoking weed

Juuling / Dab pen

Netflix

ADOLESCENCE

- ▶ When describing brain development scientists consider adolescence to be from ages 10-24
- ▶ Maturation of limbic system, prefrontal cortex



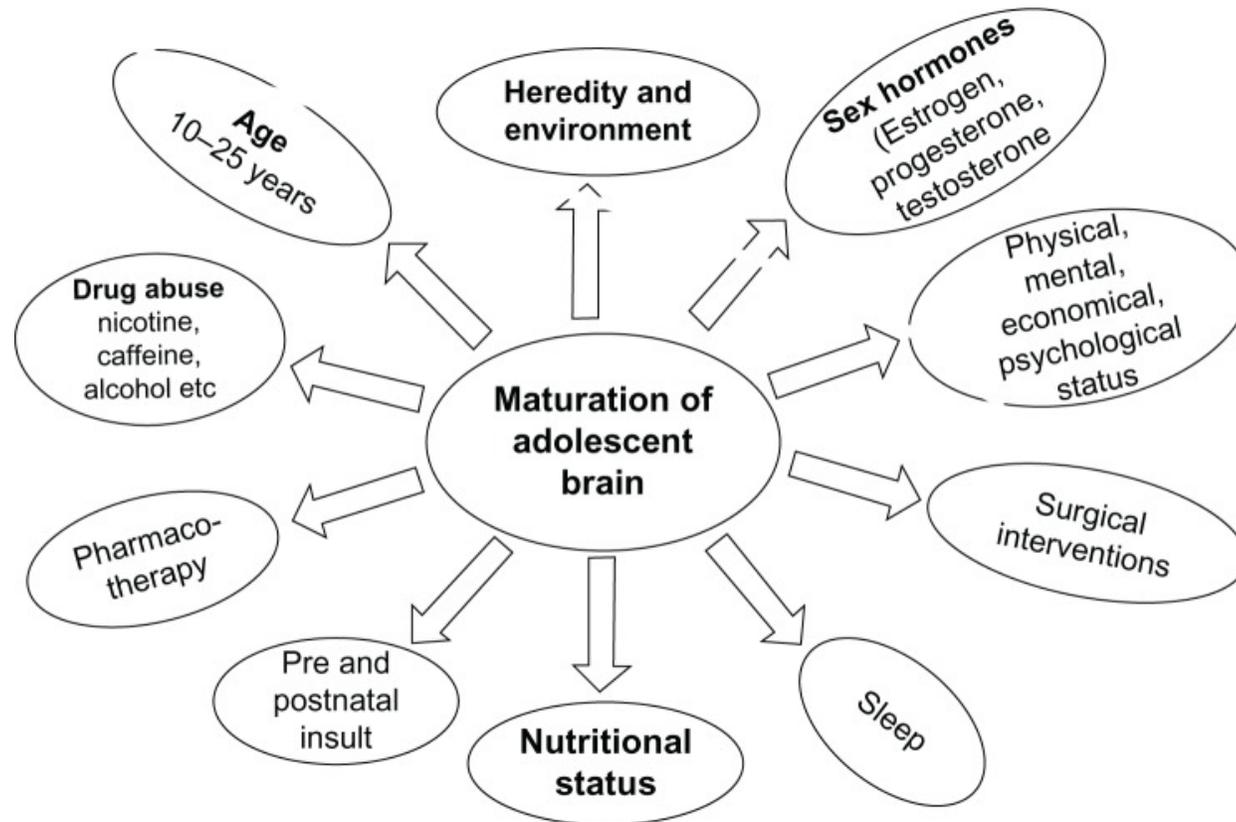
Since areas that govern impulse and motivation aren't fully developed it increases risks for alcohol, nicotine and drug addiction

ADOLESCENCE



***" I'm good or bad depending on the circumstances,
the situation, and the people involved. "***

Brain Development



Brain development

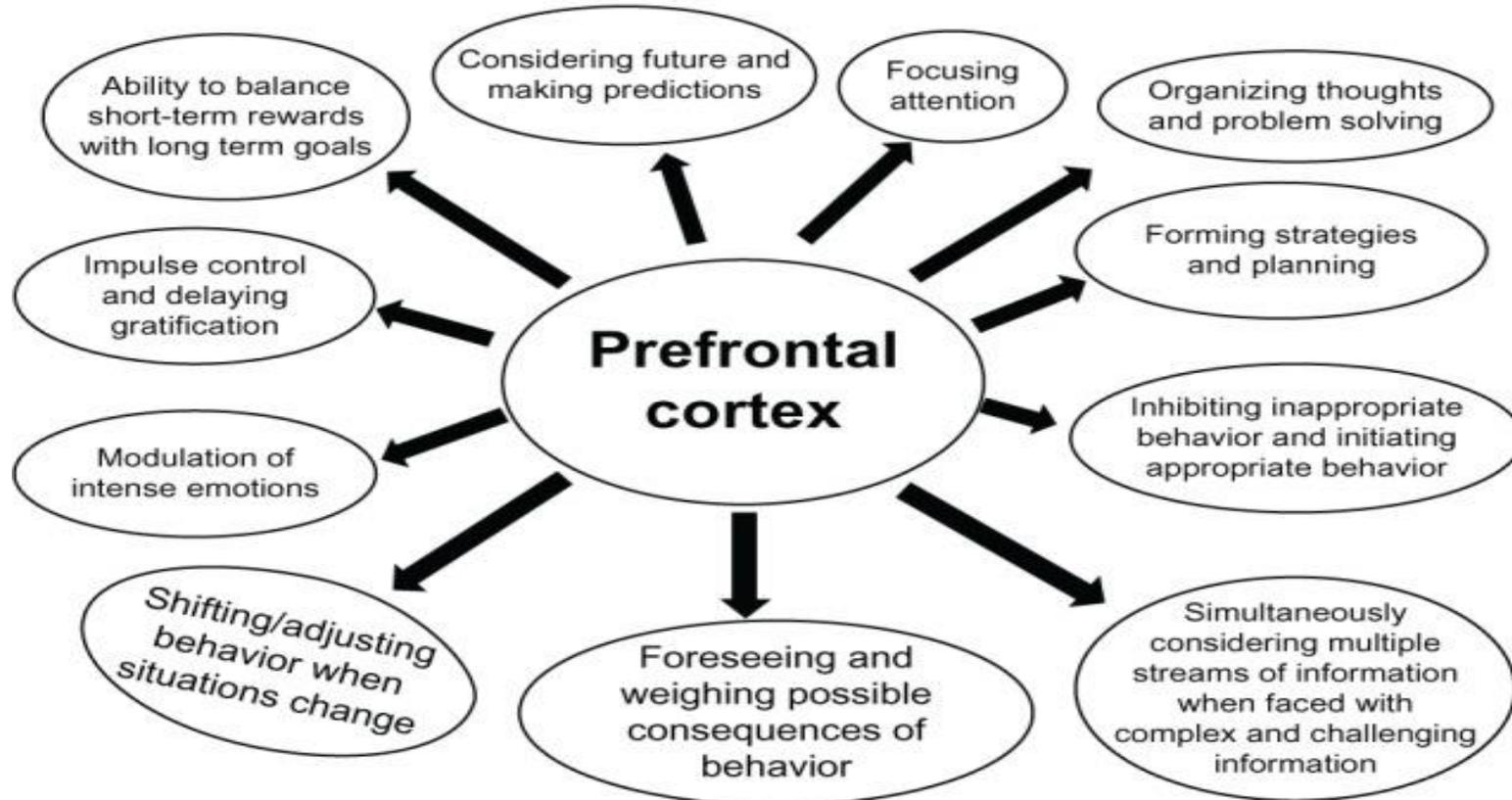
- ▶ Prefrontal cortex is immature
- ▶ Adolescents weigh the positive experiences more and the negative experiences less than adults do
- ▶ More likely to engage in risky behavior such as reckless driving, unprotected sex, and drug and alcohol use / abuse

Adolescent behavior



Brain Development

Executive human brain functions



ADOLESCENT THOUGHT PROCESS

- ▶ READY
- ▶ SET
- ▶ GO!!

- ▶ UH, OH!



Vaping /JUUL

- ▶ JUUL is a type of vaping
- ▶ Over 2 million middle and high school students admit to vaping routinely
- ▶ **ALL** JUUL pods contain nicotine
- ▶ 1 pod contains the equivalent amount of nicotine in 1 PACK of cigarettes

JUUL and pod



Suorin



Vape pens



Advertising



Dangers

- ▶ Easy access
- ▶ Nicotine is highly addictive and harms developing brains
- ▶ Can lead to problems with attention, learning, mood and impulse control
- ▶ The pods contain other flavorings / chemicals
- ▶ Some flavors are ok to eat, but may not be ok to inhale
- ▶ Using e-cigarettes leads to using regular cigarettes in the future
- ▶ These devices can be used to deliver marijuana and other drugs

Dangers

- ▶ The aerosol is not just “water vapor”
- ▶ Others around the person vaping may inhale small amounts of nicotine and chemicals as well
- ▶ Addiction to nicotine – Reasearcher Richard Miech reported in Nat. Academy of Science report that “Vaping can provide a physical pathway to smoking by creating an addiction to nicotine”. Among adolescents who have never smoked, those who vaped were about 3.5 times likely to have tried cigarettes within a year.

Most worrisome:

- ▶ Scientists really don't know all the harmful long term effects of e-cigarettes

Nicotine addiction

- ▶ Inhaling from just 1 cigarette can lead to nicotine addiction
- ▶ **Kids show signs of addiction almost immediately**



Withdrawal from nicotine

- ▶ Tingling in hands/feet
- ▶ Sweating
- ▶ Nausea / abdominal pain
- ▶ Headache
- ▶ Cough / sore throat
- ▶ Depressed mood
- ▶ Trouble sleeping
- ▶ Trouble concentrating
- ▶ Increased hunger

Diacetyl & "Popcorn lung"

Named for people who were exposed to breathing in diacetyl which was in a flavoring of buttery popcorn.

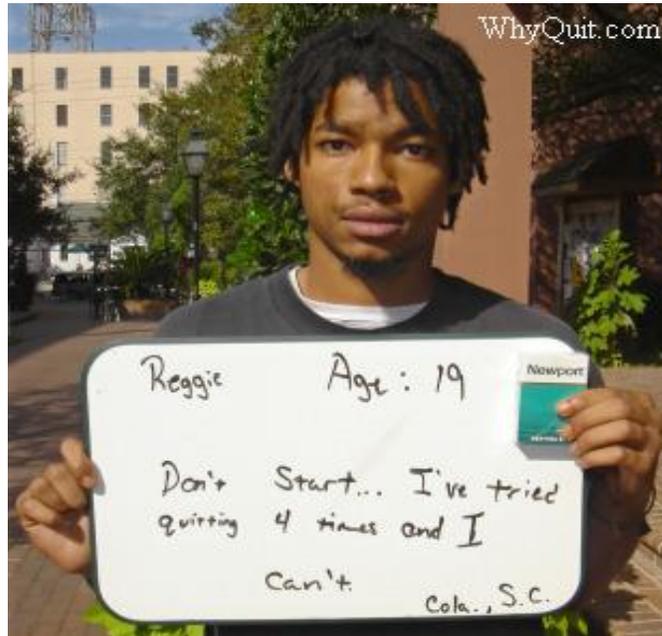


Signs your child may be vaping

- ▶ Increased thirst
- ▶ Desire for flavor
- ▶ Nosebleeds
- ▶ Acne
- ▶ Cutting back on caffeine
- ▶ Pneumonia / frequent cough
- ▶ Extra USB drives / spare parts

Listen and learn

A February 2019 JAMA study found that among 12 to 15 year-olds who had used e-cigarettes that, within 2 years, they were 3 times more likely to become smokers.



SCOTT AND BOB EGAN 1922

The BASIC PROBLEM



I CAN SEE YOU,
I CAN HEAR YOU,

YET I CANNOT
COMPREHEND ANYTHING
YOU SAY OR DO.



©2009 2175 Partnership. Distributed by King Features Syndicate