

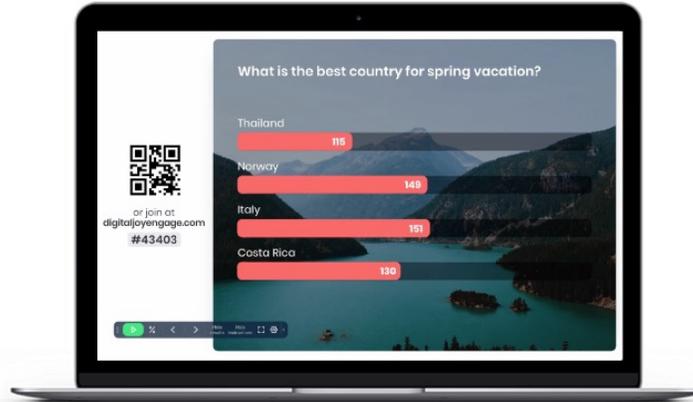
The Importance of Adolescent Brain Development in Relation to the Franklin Hearing Evaluations: Research to Practice

Dr. Nicole M. Vienna & Dr. Di Nguyen

Agenda

- Ice Breaker Poll
- About You Poll– Who is in the audience?
- Speaker Introductions
- **Relevant Case Law & Statutes**
- **Broad Overview of Adolescent Brain Development**

ICEBREAKER POLL



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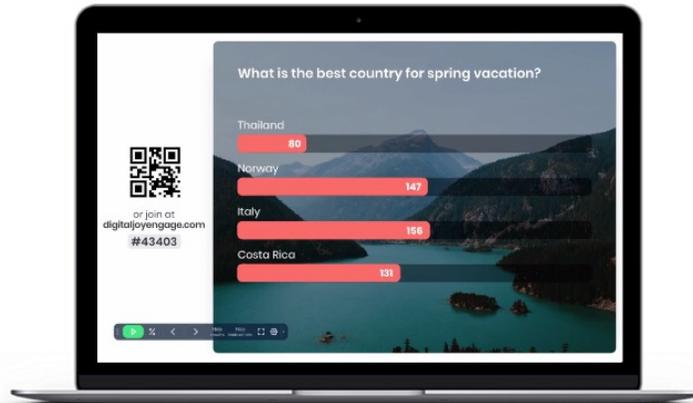
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Introductions

About Nicole

About Di



Who is Franklin?

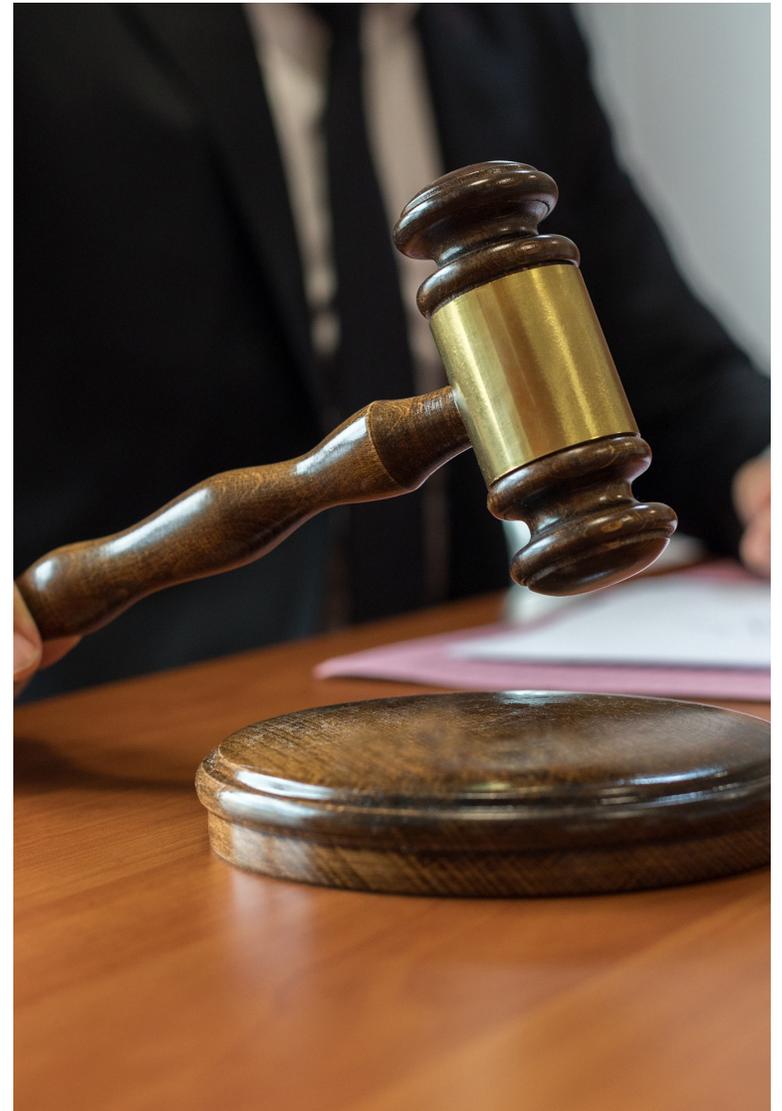
- *People v. Tyris Lamar Franklin* (2016) 63 Cal. 4th 261.
- **16 years old** when he shot and killed another teenager.
- A jury found him **guilty and convicted** him of first-degree murder with a firearm enhancement.
- Two consecutive **25-year back-to-back sentences**.
- Life in prison with the possibility of parole after **50 years**.

*People v. Tyris
Lamar
Franklin (2016)*
63 Cal. 4th 261.

- After Franklin was sentenced, The Supreme Court held that his sentence violated the Eighth Amendment to the federal Constitution- the prohibition against cruel and unusual punishment as indicated in **Miller v Alabama (2012)**.

*People v. Tyris
Lamar
Franklin (2016)*
63 Cal. 4th 261.

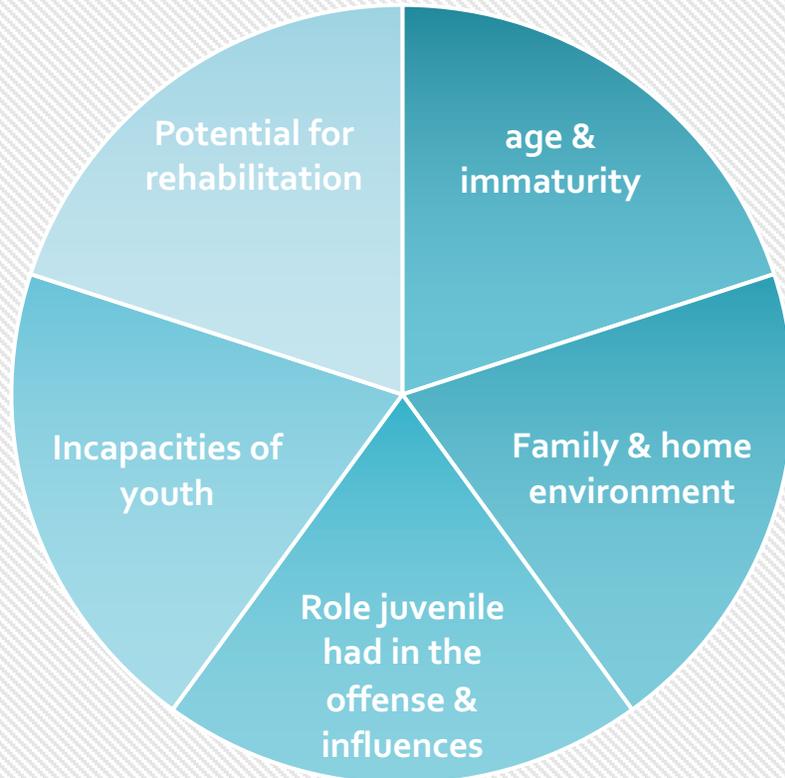
- Supreme court ruled that an individual sentenced to a lengthy prison term for a **crime committed while 26** or under **must** have had the opportunity to present, during trial, the mitigating evidence that would be relevant at a future parole hearing.
- Even if the hearing is set to happen 10, 15, or 20 years from now.
- But to understand the Franklin case, we need to talk about other landmark juvenile cases.



Miller v. Alabama (2012)

- **Miller v. Alabama (2012)** prohibits a mandatory life without parole (LWOP) sentence for a juvenile offender who commits homicide.





MILLER FACTORS ACTIVITY & DISCUSSION 20-30 min

Break into groups. Each group must identify examples that might have impacted the youth's development within the the assigned Miller factor.

* Incapacities of youth that may have disadvantaged the juvenile in dealing with the justice system (e.g., challenges dealing with police or participation in court)

Key areas of adolescent brain development that relate to the Miller factors

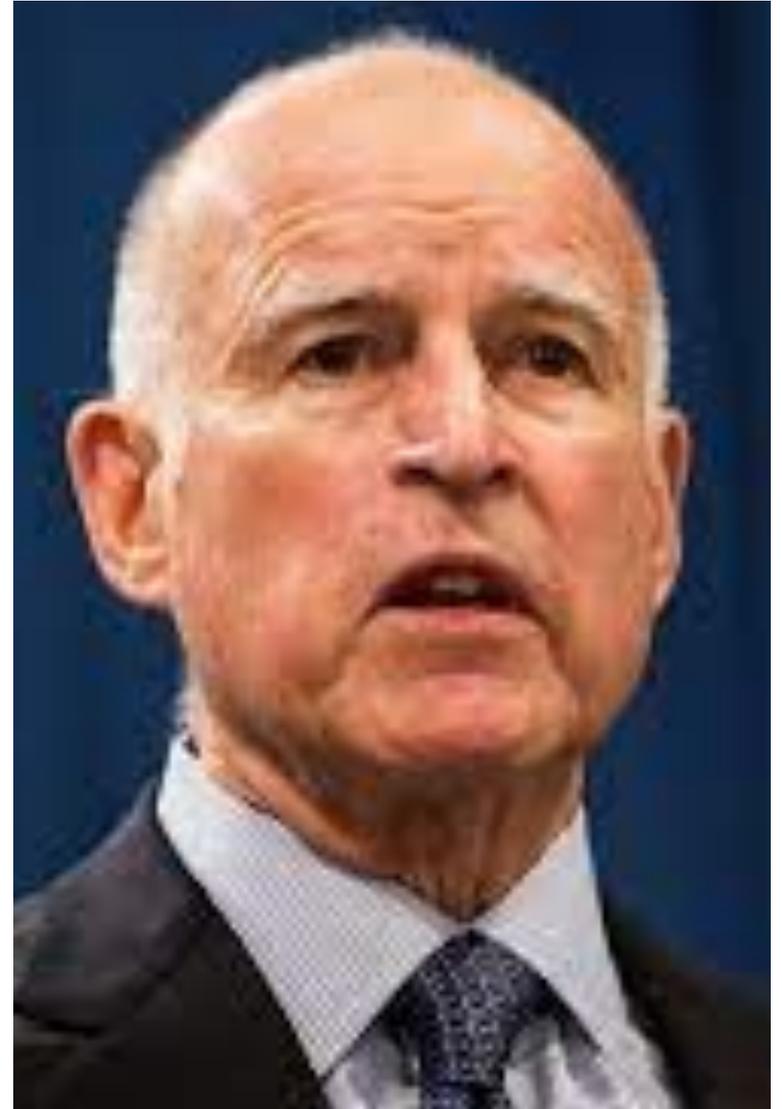
- Potential mitigating factors (adolescent brain development issues) that can be applied to the **Miller factors**
 - Cognitive/Emotional immaturity (**age & immaturity**)
 - Trauma history and ACES (**family/home environment**)
 - Neurodevelopmental disorders (**age & immaturity**)
 - Mental disorders (**age & immaturity**)
 - Dysfunctional family dynamics (**family/home environment**)
 - Being bullied (**circumstances of the offense- role the juvenile had in the offense and influence of peer pressure**)
 - * Gang involvement (**circumstances of the offense- role the juvenile had in the offense and influence of peer pressure**)
 - Residing in **poverty (incapacities of youth)**
 - Challenges with police (**incapacities of youth**)
 - No hx of program failures/lack of opportunity for adequate txmt/Adequate insight (**potential for rehabilitation**)

Other Relevant Case Law & Statutes

- Roper v. Simmons
- Graham v. Florida
- Montgomery v. Louisiana
- SB 260
- 8th Amendment: Cruel & Unusual Punishment
- PC 3051: Youthful Offender Parole Hearings
- Amicus Curie Brief by the APA

SB 260

- Influenced by the **Miller** decision.
- Recognized that **youthful offenders are fundamentally different than adult offenders.**
 - Prone to **peer pressure** and greater influence by others.
 - Time left to **grow and change.**



PC 3051

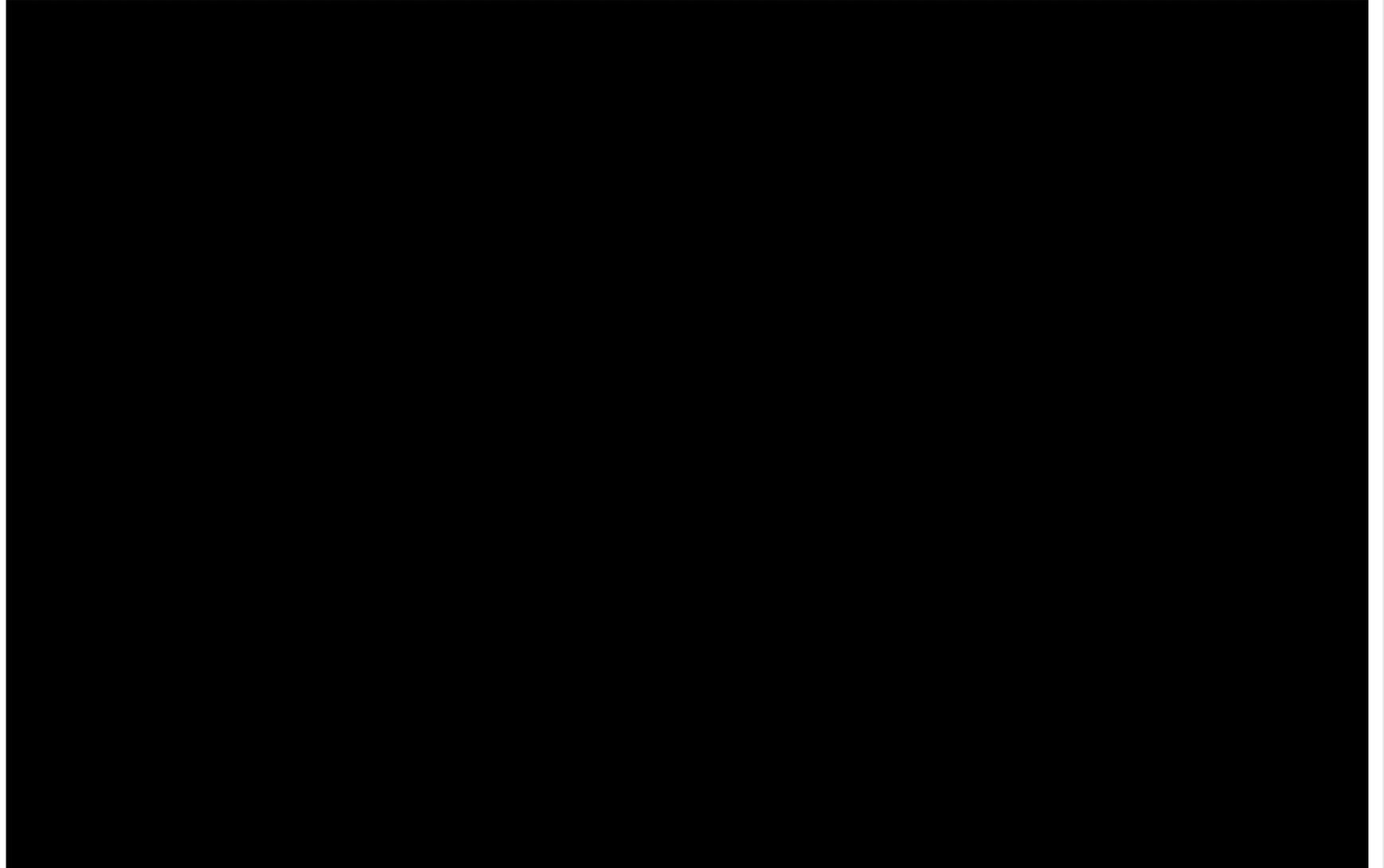
- SB 260 amended PC 3041 & 4801 (parole board hearings) and added the new section- PC 3051.
- **A youth offender parole hearing** is a hearing by the Board of Parole Hearings for the purpose of reviewing the parole suitability of any incarcerated individual who was 25 years of age or younger, or was under 18 years of age at the time of the controlling offense.
- [State of California, PC 3051](#)

SWITCHING GEARS.
Let's talk about the brain.

The environment plays an important role in *typical* brain and central nervous system development and functioning (Blair, 2016; Kolb and Wishaw, 2015).

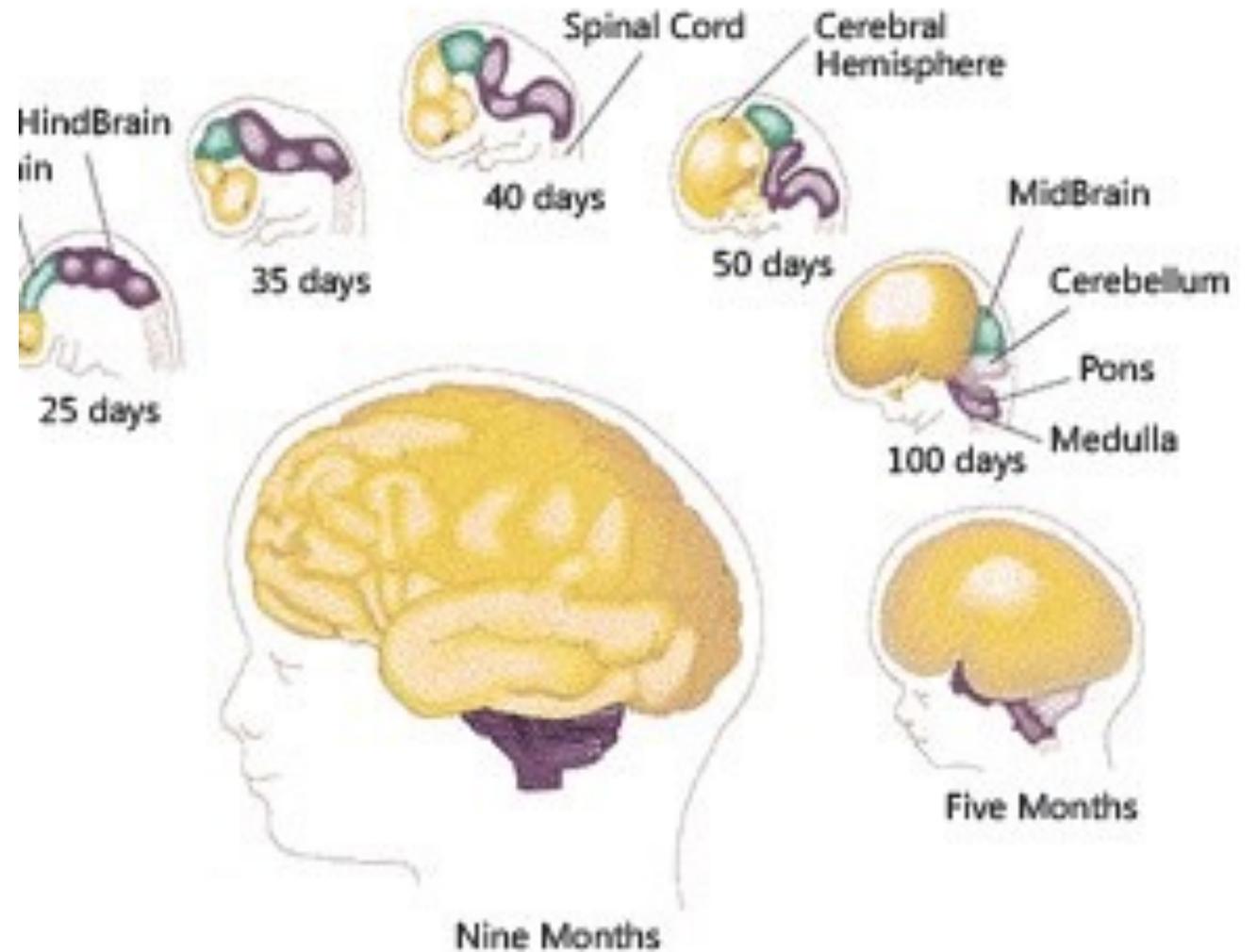
Development begins with the formation and closure of the **neural tube**.

250,000 neurons are added every minute.



Fetal Brain Development

- 100 billion neurons.
- Changes **rapidly**
- Distinctly human after **100 days**
- Distinctly like an **adult human** brain at 9 months



Critical Periods

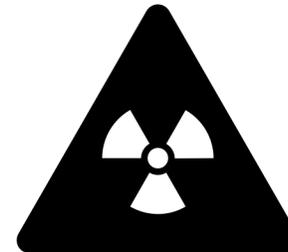
- Use it or lose it! Hence, the importance of what environmental experiences the brain is exposed to and how the brain manages it.
- The growing brain is not just about increasing in size but rather **forming connections**. This occurs during critical periods of development wherein brain cells are pruned.
- A critical period is a phase where cell connections called “synapses” can form or strengthen more easily. This is because the brain is more **plastic and vulnerable** to the influence of its environment and experiences.
- Generally, development is **most sensitive** to exposure **from day 15 to 60 after fertilization**. However, **critical period for brain growth and development is between 3 to 16 weeks** (Blair, 2016; Kolb and Wishaw, 2015).

Critical Periods

- **Experience shapes and fine-tune connectivity patterns and hardwiring.**
- Example: abuse alters trajectories of brain development to affect sensory systems, network architecture and circuits involved in threat detection, emotional regulation and reward anticipation.
- HENCE, the brain is particularly vulnerable during development, especially to insults and teratogens.
- Teicher, et.al., 2016

Teratogens

- Alcohol
- Illicit substances
- Stress
- Diseases
- Chemicals

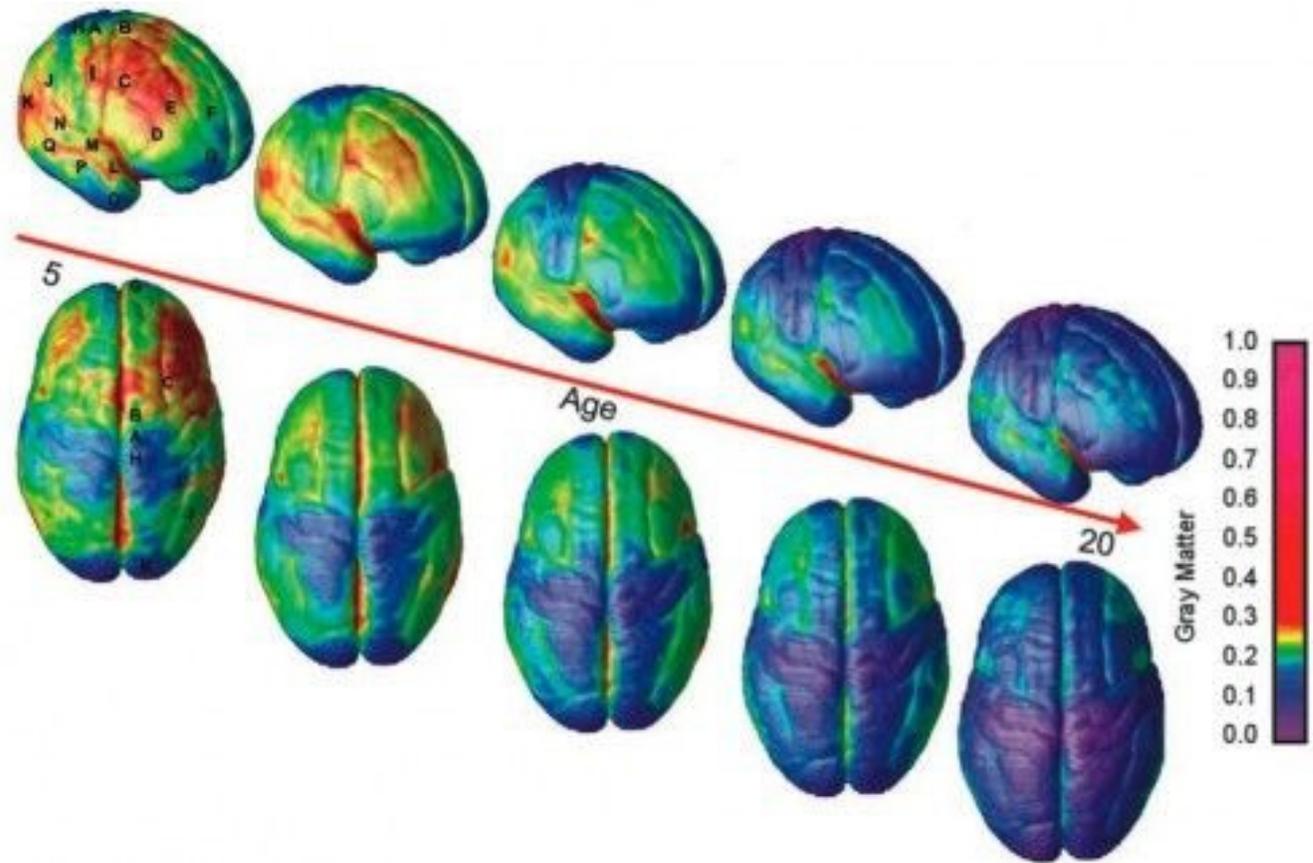


NIMH Imaging studies of brain development, 2004

Development of the brain 5-20 years old.

The most noteworthy features of adolescent brain development relate to changes occurring within brain's frontal lobes. Specifically, the regions and systems related to higher-order executive functions such as impulse control, planning ahead, and risk avoidance."

Yet, the frontal lobes are the last to thin. Indeed, brain maturation is not complete until mid to late 20's.



Frontal Lobes

Last to thin, **last to develop**. All other systems already developing.

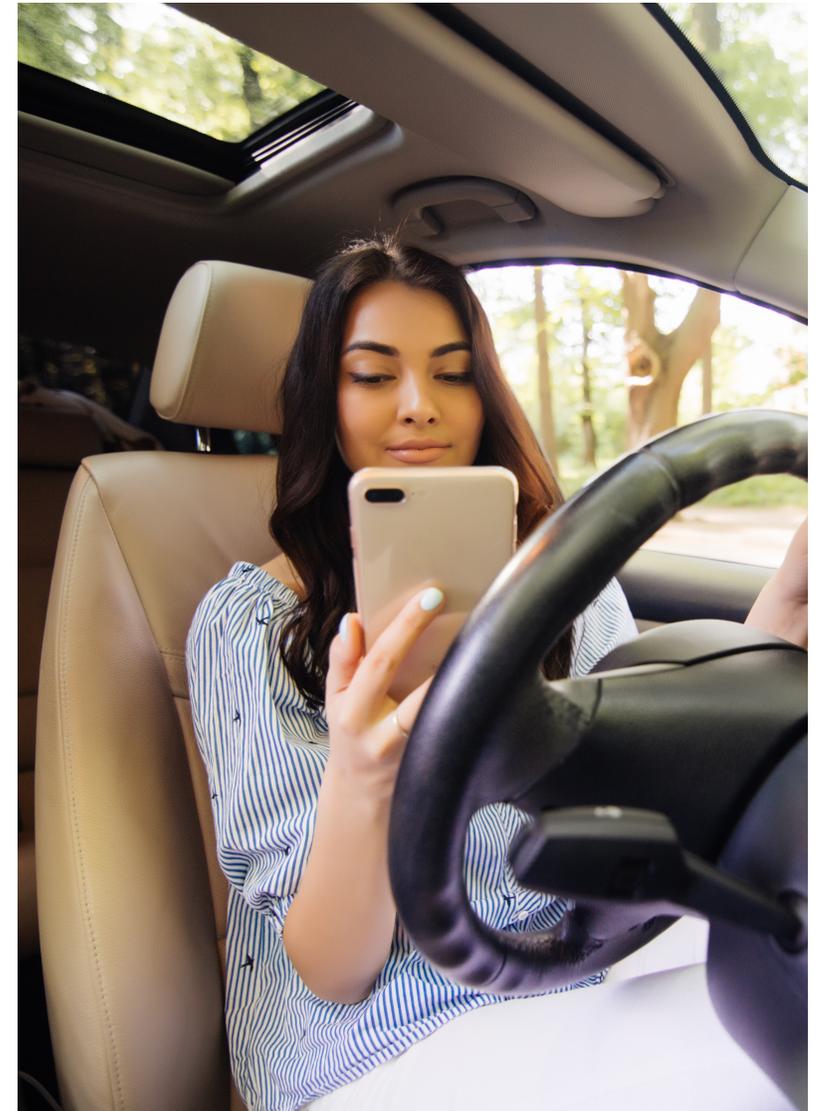
Example: **The limbic system**.

During teen years, the neurocircuitry of the reward-and-sensation-seeking behavior region of the brain exhibits a rapid increase.

Hence, by natural neurobiology (hormones coming in strong + limbic system online), youth are processing information out of emotion (they are sensitive to reward) without “thinking” sometimes, maybe most times because they don’t have access to higher order cognitive functions in the frontal lobes (judgment, reasoning, organization, planning and execution of ideas).

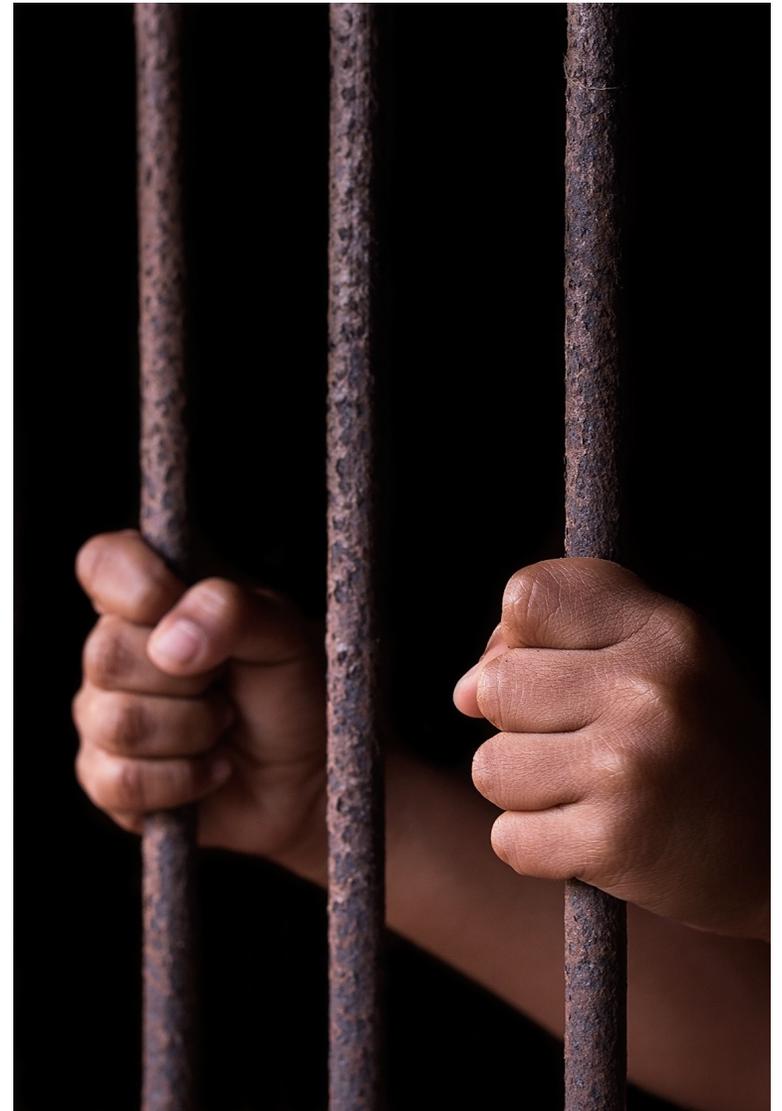
Teens are “driving” but have can have faulty breaks.

WHY IS THIS IMPORTANT?



Frontal Lobes

- This has significant impact on crime related factors
 - Thinking ahead
 - Evaluating Consequences
 - Impulse Control
 - Empathy
 - Emotion Modulation
 - Judgement & Decision Making



Brain Maturation

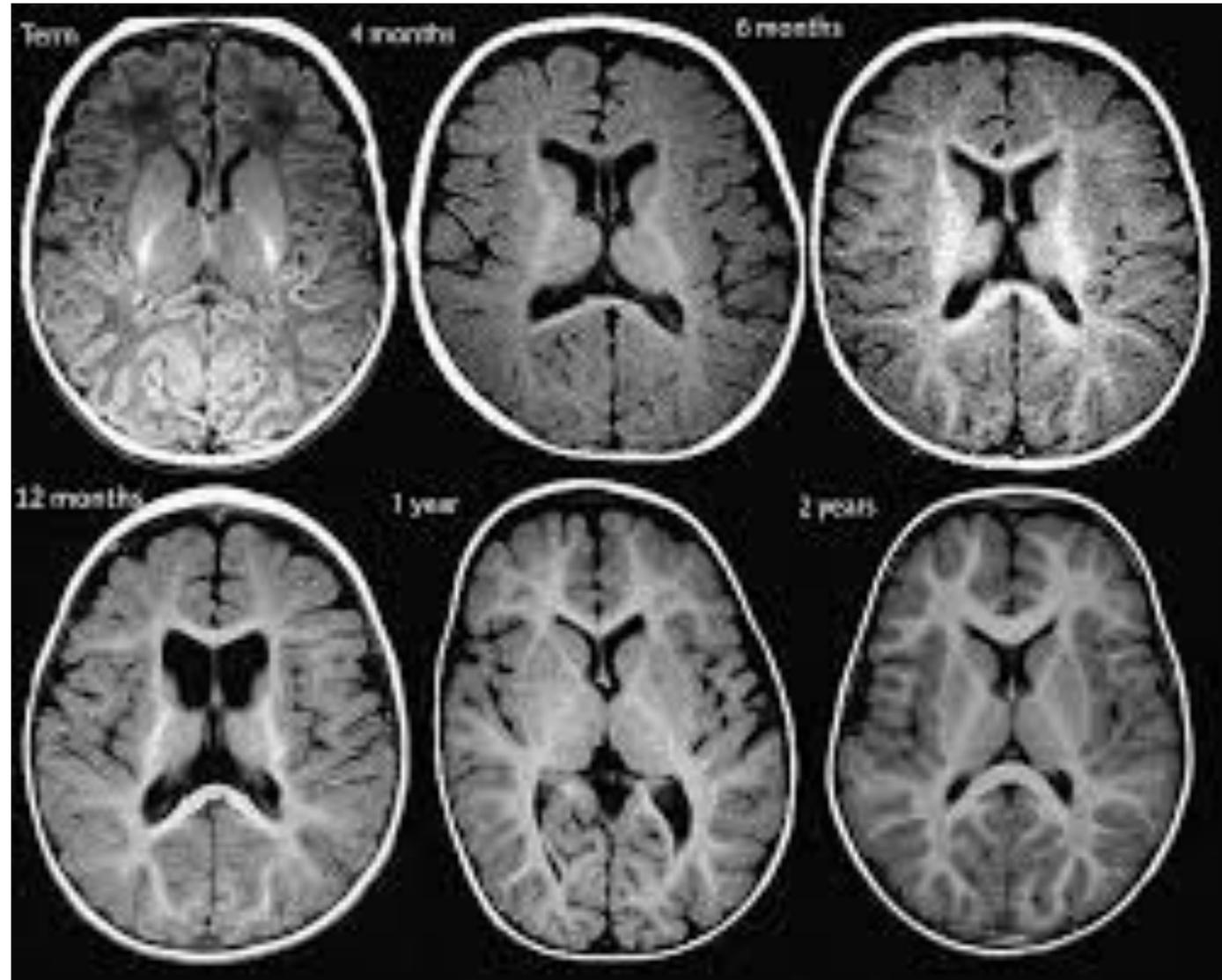
- Over time as the brain matures, there is typically a decline in an individual's "willingness to engage in risky and socially motivated behavior."
- This has to do with the changes in the reward circuit and "incentive processing system" area of the brain—particularly the parts that process rewards and social cues.

Also ... Myelination

As time goes on, not only does the brain thin away connections it doesn't need, it also strengthens the ones it does through an increase in myelination.

And the more myelination, the faster connections can form and communicate between brain regions.

The more the brain is active, the more opportunity for strengthening cognitive skills.



Environmental Effects on Brain Development

- Because the brain is pliable or plastic, it is at great vulnerability to its environment (what is going on around it).
 - Inside the body (hormones, injury, nutrition, gestational stress, microbiome).
 - Outside the body (stress, ACES).
- The brain and nervous system has the potential to maximize, minimize, and adapt to stress and injury.
- Overtime, the brain molds differently.



ACES

Adverse Childhood Experiences

Adverse Childhood Experience Questionnaire for Adults

California Surgeon General's Clinical Advisory Committee



Our relationships and experiences—even those in childhood—can affect our health and well-being. Difficult childhood experiences are very common. Please tell us whether you have had any of the experiences listed below, as they may be affecting your health today or may affect your health in the future. This information will help you and your provider better understand how to work together to support your health and well-being.

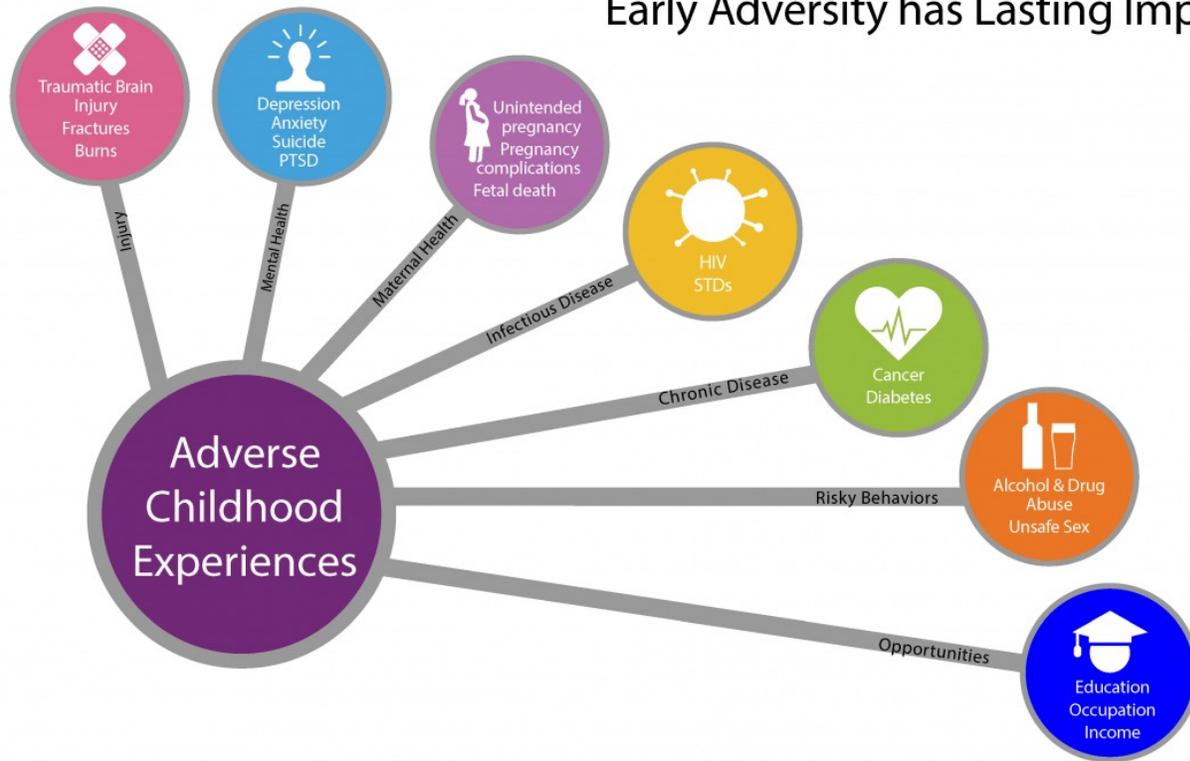
Instructions: Below is a list of 10 categories of Adverse Childhood Experiences (ACEs). From the list below, please place a checkmark next to each ACE category that you experienced prior to your 18 th birthday. Then, please add up the number of categories of ACEs you experienced and put the <i>total number</i> at the bottom.	
Did you feel that you didn't have enough to eat, had to wear dirty clothes, or had no one to protect or take care of you?	
Did you lose a parent through divorce, abandonment, death, or other reason?	
Did you live with anyone who was depressed, mentally ill, or attempted suicide?	
Did you live with anyone who had a problem with drinking or using drugs, including prescription drugs?	
Did your parents or adults in your home ever hit, punch, beat, or threaten to harm each other?	
Did you live with anyone who went to jail or prison?	
Did a parent or adult in your home ever swear at you, insult you, or put you down?	
Did a parent or adult in your home ever hit, beat, kick, or physically hurt you in any way?	
Did you feel that no one in your family loved you or thought you were special?	
Did you experience unwanted sexual contact (such as fondling or oral/anal/vaginal intercourse/penetration)?	
Your ACE score is the total number of checked responses	

Do you believe that these experiences have affected your health? **Not Much** **Some** **A Lot**

Experiences in childhood are just one part of a person's life story.
There are many ways to heal throughout one's life.

Please let us know if you have questions about privacy or confidentiality.

Early Adversity has Lasting Impacts



ACES

ACES are common across all populations. However, some populations are more vulnerable because of their social and economic situations.

Individuals with 2 or more ACES are 50 times more likely to suffer from addiction or attempt suicide.

Individuals with more ACES have an increased risk of more severe COVID-19 disease and death.

Effects of ACES

- CDC indicated the following are a list of developmental issues and problems that arise from ACES:
 - Encephalopathy
 - Frontal lobe and executive function deficit
 - Intellectual disabilities
 - Unspecified lack of expected normal physiological development in childhood
 - Unspecified symbolic dysfunctions (includes language delay, learning disabilities)
 - Other symptoms and signs involving cognitive functions and awareness
 - Other symptoms and signs involving the musculoskeletal system
 - Other symptoms and signs involving the nervous system Social pragmatic communication disorder

Effects of ACES

- CDC provides a sample health care letter that providers can use to write to the schools of children who have ACES and are in treatment addressing toxic stress response.



- **Toxic stress response:** the body has difficulty regulating the stress response
- The effects of the toxic stress response may be on behavior, brain development, the immune system, hormones or all of the above.

Interaction of
incomplete brain
development and
Miller Factors
**(family/homelife/
aces)** on decision
making.

- Environmental stress early in life --> negative social interactions, risk for aggressive and antisocial behavior (Downey, Khouri, & Feldman, 1998).
- Aggressive youth sometimes overestimate harmful intentions in others, causing them to respond with aggression toward their peers. This pattern of social reasoning, is labeled a hostile attributional bias. This leads aggressive youth to feel justified in using physical aggression as a social strategy (Hudley & Novac (2007).
- Community: early threat that is experienced consistently may, in some children, establish a neural circuit that supports retaliatory aggression (Hudley & Novac 2007).



Interaction of
incomplete brain
development and
Miller Factors
**(family/homelife/
aces)** on decision
making.

- Hostile experiences may cause children to presume that everyone behaves toward them with deliberately hostile intent (Hudley & Novac 2007).
- **Harsh discipline** and **parental abuse** induce structural and hormonal changes in the brain that make these negative experiences more lasting in memory and more likely to produce aggression in later childhood and adolescence. These more available memories may serve as filters through which future events are perceived and decisions made (Hudley & Novac 2007).
- The brain may undergo neurobiological change in a region called the hypothalmo-pituitary axis (HPA) that triggers a stress response (Ostrander et al., 2006).
- In essence, behavior at the time of the offense likely reflect aspects of impulsivity, poor emotional regulation, and overall poor decision-making, all features common to youth as a result of incomplete brain development. However, little Johnny also has [cognitive limitations and chronic adverse childhood experiences] that served to further reduce his functional maturity relative to others his same age.
- Because of his [cognitive limitations/ACES/abuse], he also likely struggled with [emotion regulation/anger management/perspective-taking skills/ communication/ self-talk/etc.].

Interaction of incomplete brain development and Miller Factors **(family/homelife/aces)** on decision making.

- Both human and rat studies have shown that environmental adversity early in life impedes or stunts the development of intelligence and thereby setting the stage for numerous consequences for later functioning.
- Hence, the development of early intervention programs such as Head Start for disadvantaged children.



Interaction of incomplete brain development and Miller Factors **(circumstances of the offense/peer pressure)** on decision making.

- Peer Interactions: Exposure over time to perceived threats (e.g., abuse, peer aggression) reduces the capacity to regulate neurotransmitters- serotonin, norepinephrine that send external information to the brain resulting in several social deficits in adolescence (Cecchi, Khoshbouei, Javors, & Morilak, 2002).

Interaction of
incomplete brain
development and
Miller Factors (risk
aversion and other
hallmark features
of youth) on
decision making

- The hallmark features of youth include:
 - a lack of understanding of the risks and consequences of their actions
 - lack of impulse control
 - susceptibility to peer pressure
 - and lack of control of their life circumstances
 - (These are noted in PC 4801 and discussed in *Franklin and Miller*).
- The hallmark features of youth apply to little Johnny as they do all youthful offenders, and were compounded in his situation by the impact of [numerous adverse childhood experiences/abuse/neglect/etc.].

Interaction of incomplete brain development and Miller Factors (Incapacities of youth) on decision making

- Youth have little to no control over their unstable and abusive home environment which may place them at higher risk for delinquency and criminal justice involvement.
- Youth may run away to escape the adversity and turn to less than ideal role models for survival and guidance. Indeed, they may become exposed to the juvenile delinquency system or child welfare systems at a young age.
- It is important to note that youth who are engaged in survival activities, such as running the streets trying to avoid their abusive or neglectful homes, their increased public presence often leads to interface with police more times than not (Snyder et al., 2016) and places them at increased risk for justice system involvement.
- To that end, these experiences place youth at a further disadvantage, as these encounters often limit their access to housing, financial, and other resources that are not available to individuals with "marks" on their records (Alexander, 2010).
- Moreover, juvenile/criminal justice system experiences and child welfare system experiences, can be traumatic for many youth and are associated with a variety of negative health and social outcomes (Bender, Yang, et al., 2015; Lim, Rice, & Rhoades, 2016; Snyder et al., 2016).

Interaction of
incomplete brain
development and
Miller Factors
(**evidence of
rehabilitation**) on
decision making

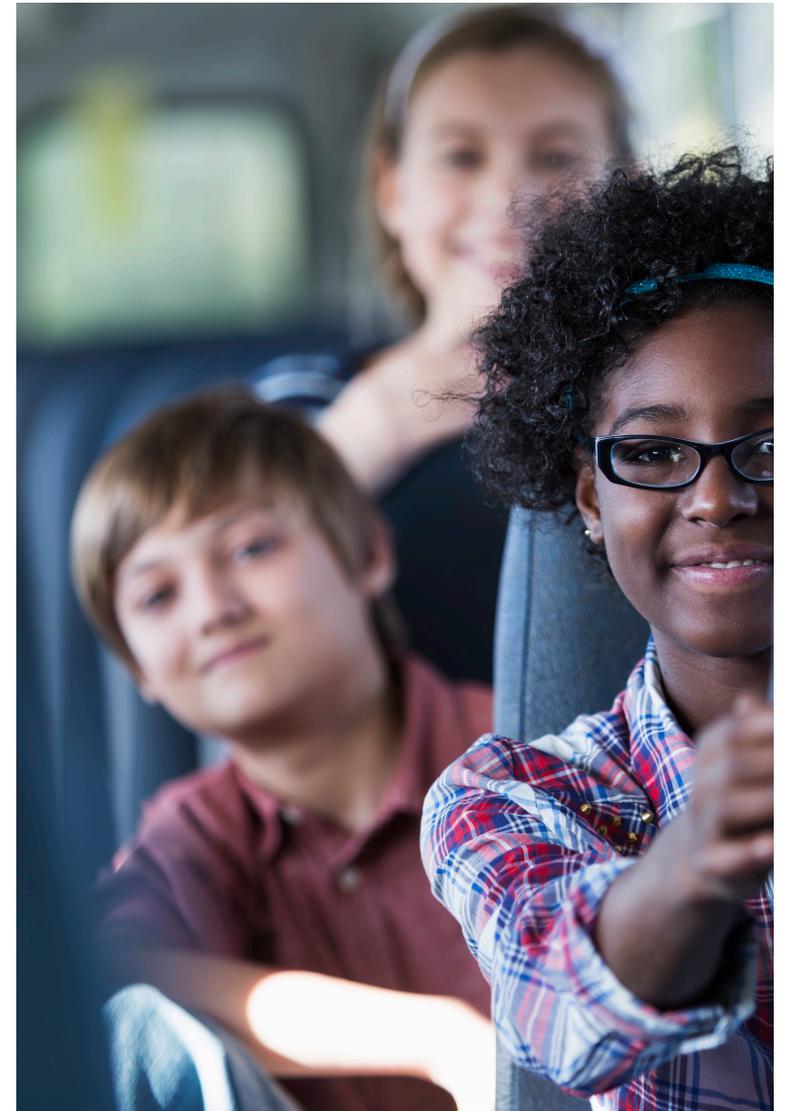
- Young people going to prison – document their stability or lack thereof since they have been in custody. Note any negative or positive behavioral changes and any evidenced based treatment that could further stabilize mental health and behavior .
- Individuals seeking re-sentencing based on Franklin, meaning they may be released after this kind of hearing- consider including a risk-assessment such as the HCR-20.
 - Make sure you review C-file from CDCR and note behavioral and psychiatric stability or lack thereof, pattern of violence, etc. Look at their chronos and write-ups. Many will also include character letters.

Summary of Brain Development

- The brain is pliable, therefore vulnerable to negative impact, especially in critical periods.
- Injury to the brain can occur pre-natal , neo-natal, and postnatal.
- Prenatal exposure to drugs, toxins, and infections pose a large threat to the developing brain.
- The environment plays an important role in brain development.
- Environmental influences on the brain and contribute to later decision-making include but not limited to:
 - Maternal stress
 - Psychosocial Stressors
 - ACES
 - Harsh Parenting Styles
- Complex and engaging environments is a protective factor.

How does brain development relate to Franklin Evaluations ..

- Youth are fundamentally different from adults by the fact that brain development is not complete until the mid to late 20's. In some research, it has been found that brain development completes around age 30.
- Therefore, we must address these factors and potential for youth rehabilitation in report to the court as life or unreasonably lengthy sentences are cruel and unusual punishment for youth.



Purpose of a Psychological Evaluation for a Franklin Hearing

- The purpose of having a psychological evaluation at a Franklin Hearing is to provide a **clinical picture of the offender** and **youthful mitigating factors** (if any) to be heard at a **future parole hearing** date.

Questions



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