League of Women Voters Modified Training

By Christa Lindemer, LMSW, Juvenile Justice Clinic at University of Michigan Law School

BRAIN BUILDERS

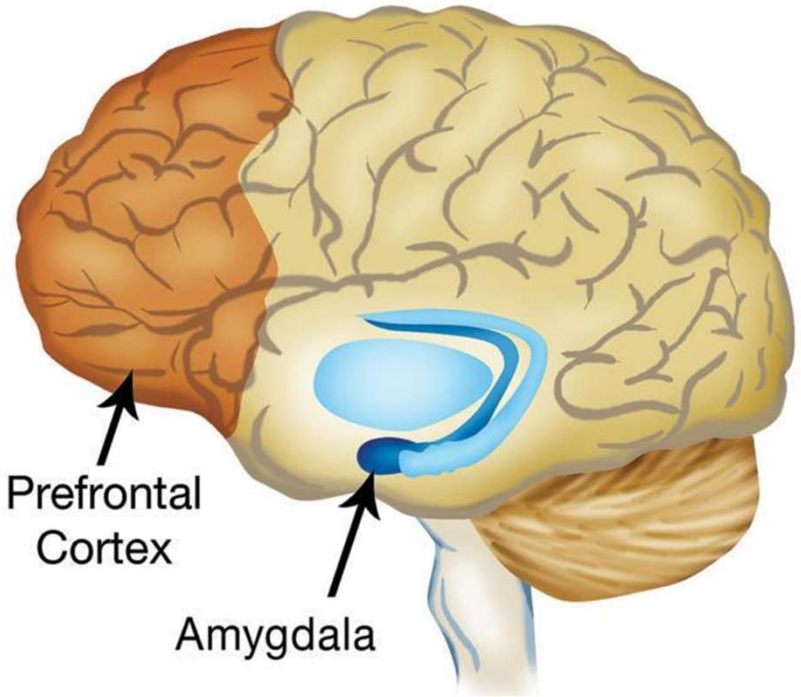


Why is Understanding the Developing Brain Important?

"Epidemiological evidence overwhelmingly supports the fact that childhood behavior problems are far more commonly a symptom of trauma, neglect, or abuse than an indicator of psychopathy." -National Institute of Health

Studies now show that structural changes in the brain peak and stabilize up to 32 years of age - Mousley, A., Bethlehem, R.A.I., Yeh, FC. *et al.*

Brain Stem, Amygdala and the Prefrontal Cortex (PFC)



Brain Stem: "Autopilot"

- controls **automatic** life sustaining functions for survival (breathing, heart rate and blood pressure)

Amygdala/Limbic System: "Danger Detector"

- processing **emotions** (fear, joy, disgust)
- activating **survival mode** (fight/flight)

Prefrontal Cortex: "Command center"

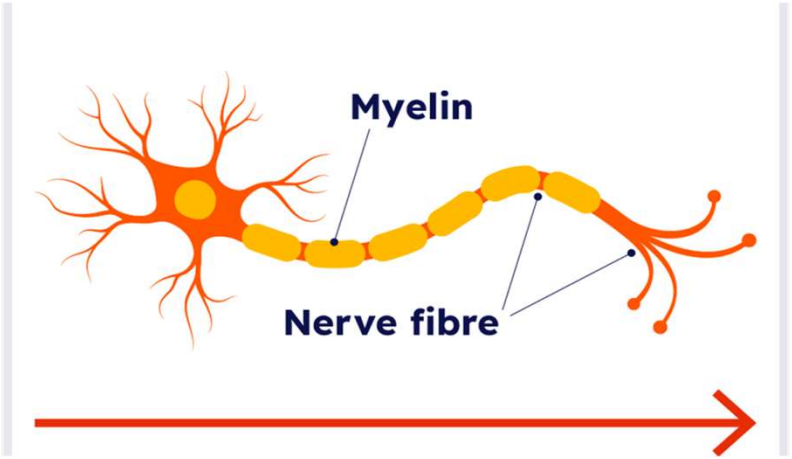
- **thinking** brain responsible for executive functions (planning, impulse control, decision making, working memory, emotional regulation)

Key Aspects of the Adolescent Brain



- “Under construction"
- Lack of Myelination
- Weakened Brain Connections (The amygdala and PFC are still learning to communicate!)
- High Neuroplasticity (good and bad)





Common Adolescent Behaviors (Typically Developing Brain)

- **Increasing Cognitive Ability**
- **Poor Decision-Making**
- **Impulsivity**
- **Emotional Volatility**
- **High Self importance**

- **Emerging/Incomplete Identity**
- **Focus on Peer Influence**
- **Challenging Authority**
- **Exploration and Experimentation**





What Happens When We Add Trauma?

Adverse Experiences and Trauma

Trauma is a deeply distressing or disturbing experience that overwhelms an individual's ability to cope, causing lasting negative effects on their mental, physical, social, or emotional well-being. It is defined not just by the event itself, but by the subjective experience of helplessness, fear, or a shattered sense of safety. -American Psychological Association

**Distressing things happen to all of us. Whether or not we are traumatized by them or develop PTSD depends on our ability to integrate our experiences and cope.

The Coyote and the Rabbit





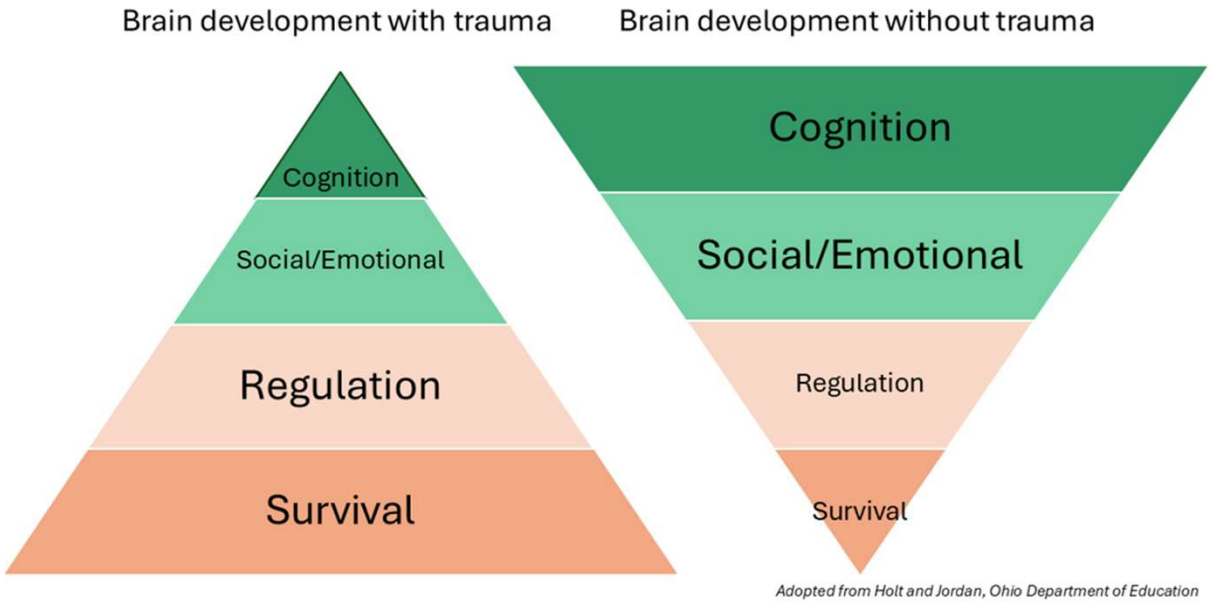
Impacts of trauma on the brain and adolescent **behavior:**

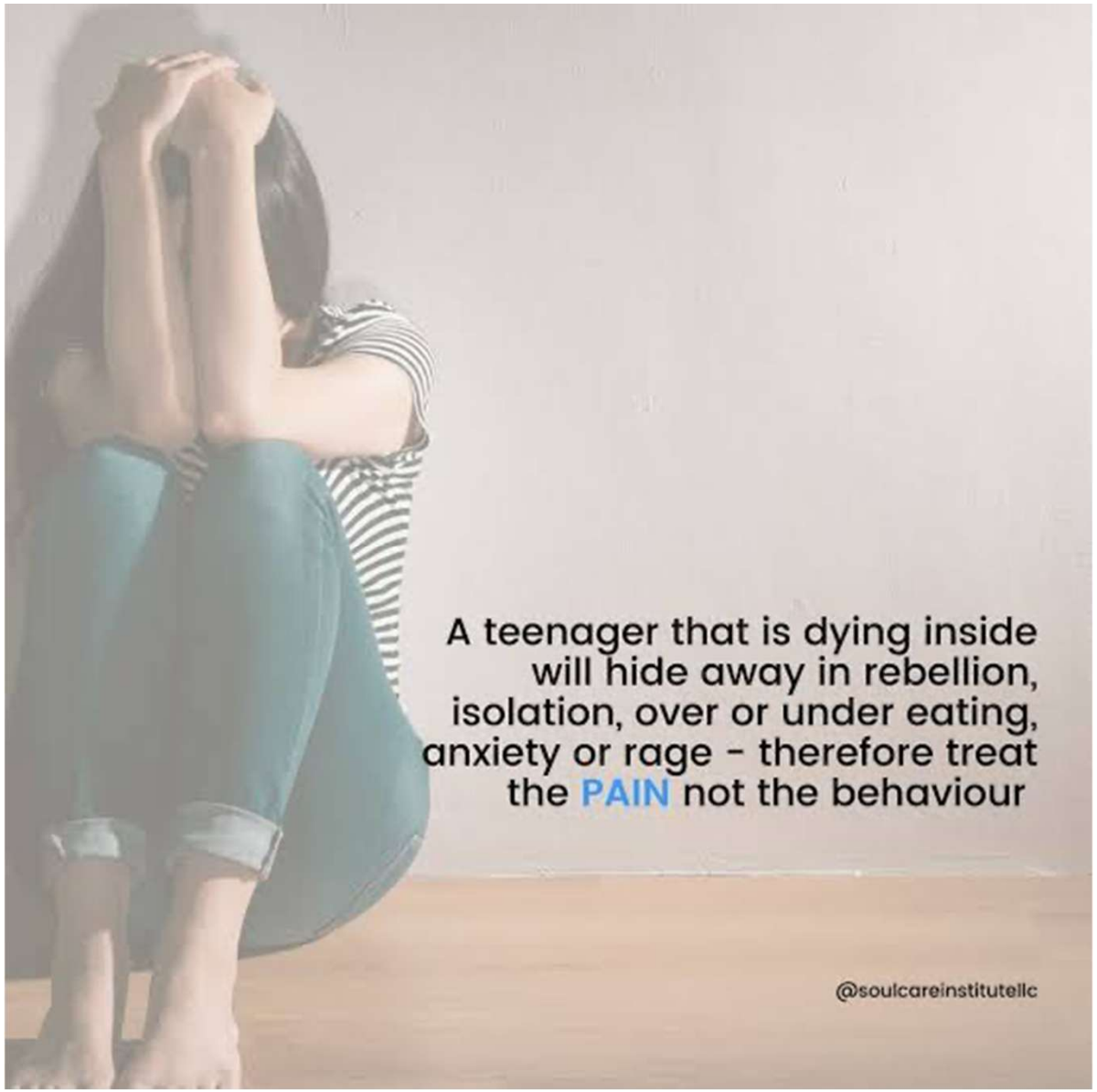
Trauma:

- Can physically alter structures in the brain responsible for stress regulation and threat detection
- Can contribute to cognitive impairment
- Can lead to heightened aggression

We Experience the World in our Primitive Brains FIRST

- If something happens that activates our nervous system, it may take longer or we may never get to process the event with our thinking brain




A teenager that is dying inside
will hide away in rebellion,
isolation, over or under eating,
anxiety or rage - therefore treat
the PAIN not the behaviour
@soulcareinstitutellc