

Brain Development, Trauma, and Resilience: A Guide for Youth Workers

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Gratitude

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Overview

- Brain growth and development
- Adverse childhood experiences (ACEs)
- Resilience
- Developmentally Appropriate Strategies
- Resources

Learning Objectives

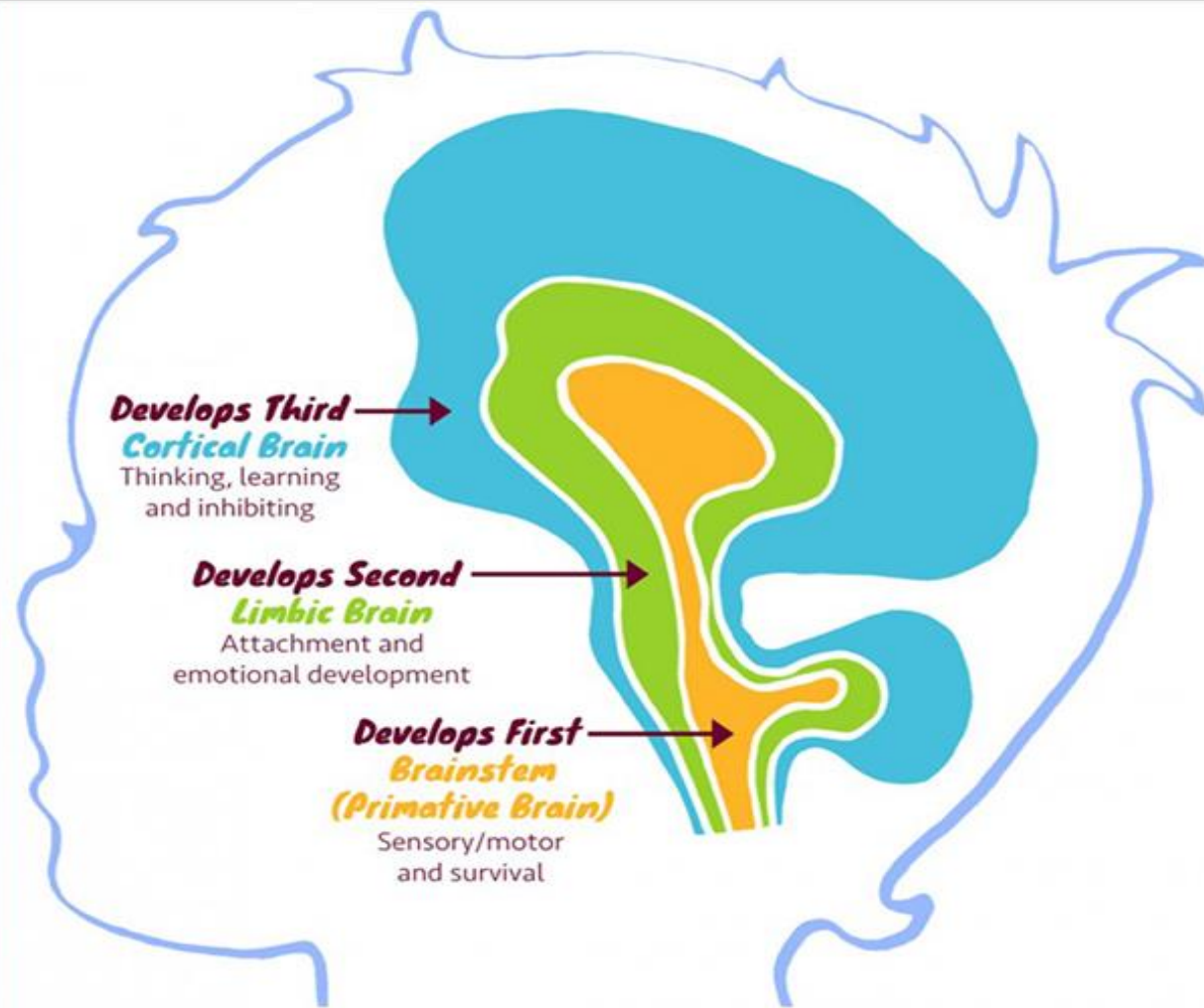
- Describe basic processes and critical periods of brain development
- Identify how adverse childhood experiences impact behavior and brain development
- Define resilience and identify trauma-informed resilience-building strategies for working with youth

Your Experiences

- What are your experiences teaching youth?
- What age groups do you primarily work with?



Bottom Up Brain Development



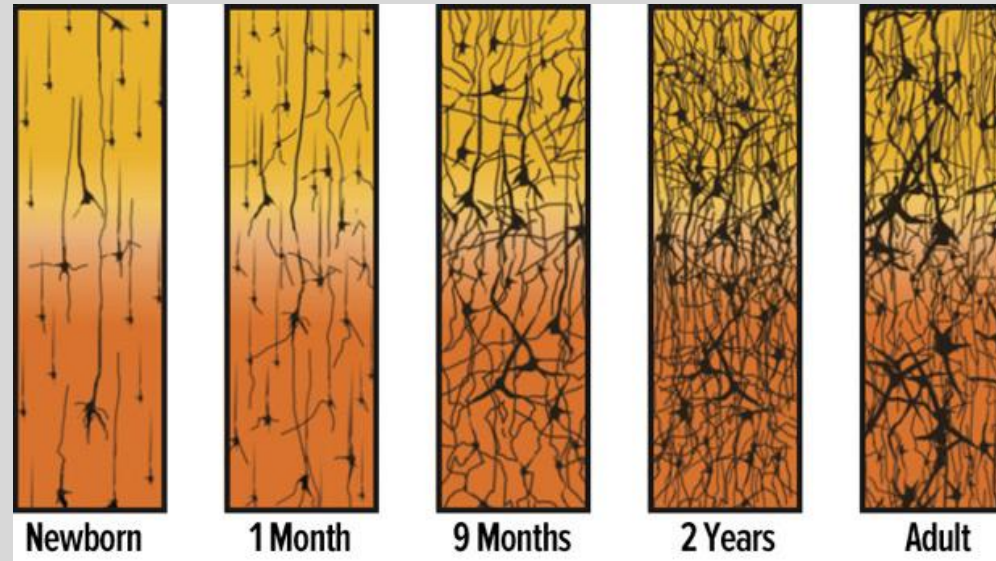
Children's brains develop
from the bottom up.



Brain growth and development

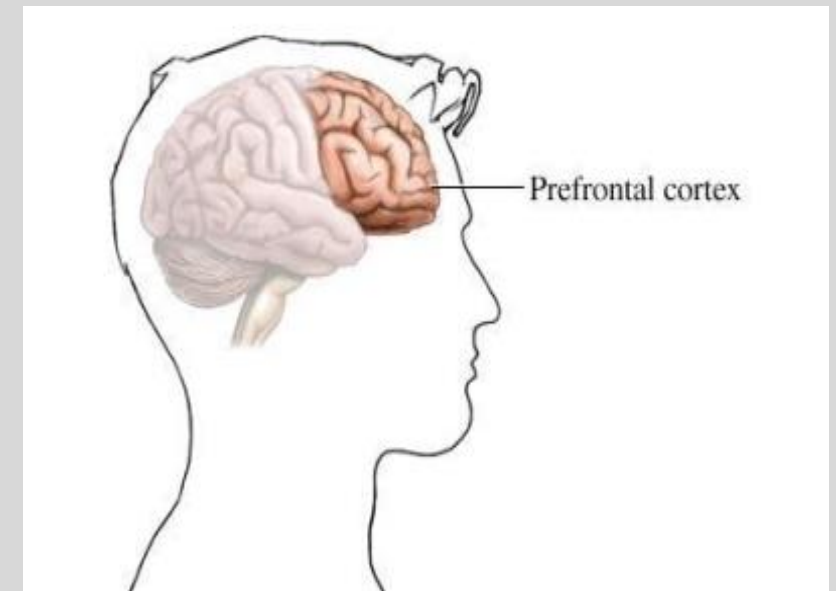
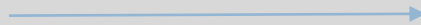
Experience shapes brain development
→ overproduction followed by pruning

“The brain uses an incredible process called pruning where it gets rid of connections that it deems useless and strengthens connections that it needs.”



Executive functions

- Higher-level cognitive abilities
- Allows for goal-directed behavior, planning, and complex tasks
- Vital to successful performance in real-life situations
- Highly susceptible to environmental influences during the first years of life



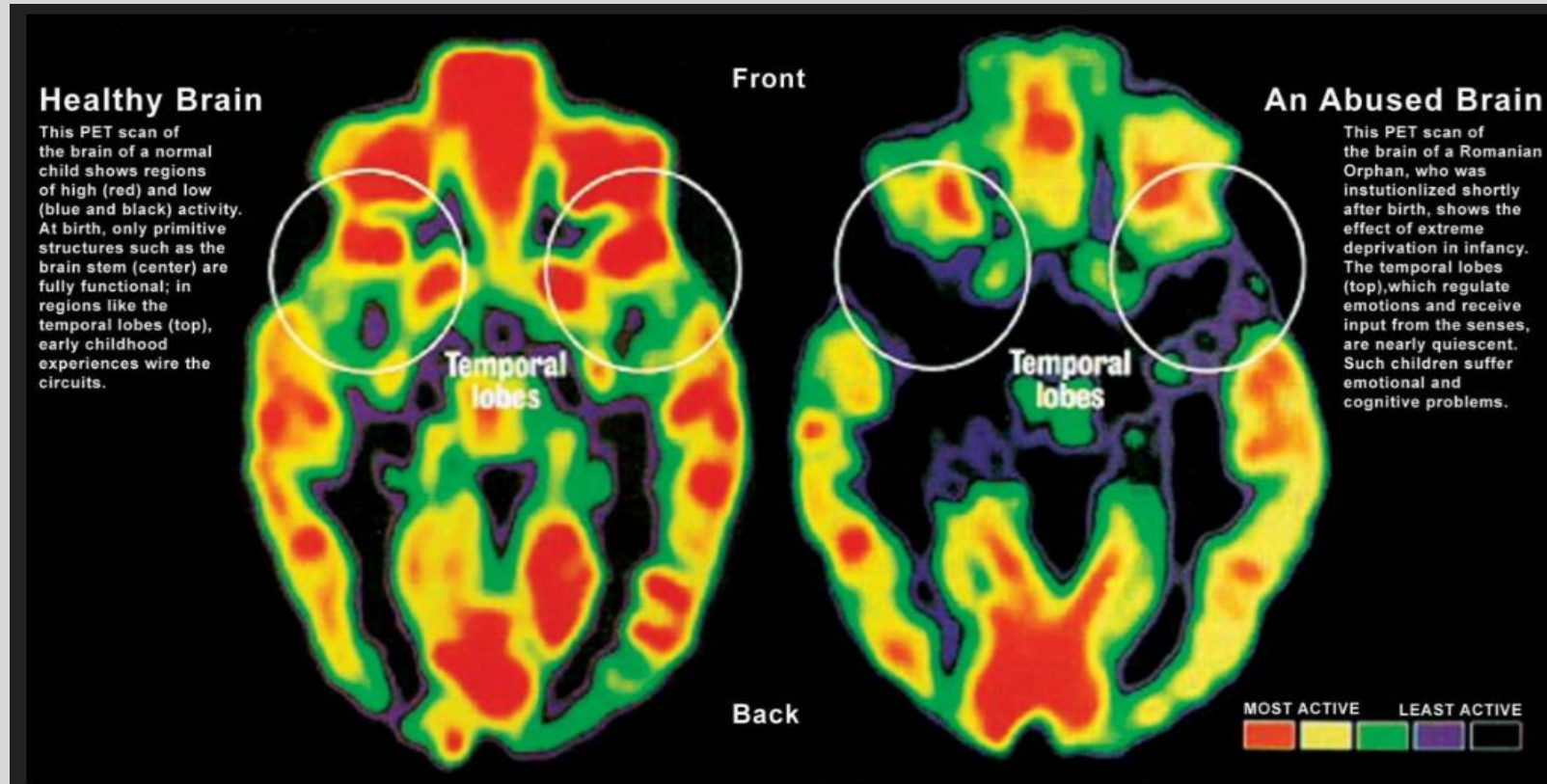
Critical Periods of Brain Development

- Children's brains develop in spurts called critical periods
 - Brain plasticity is maximal at specific time windows
 - Early childhood and adolescence
- "Windows of Opportunity"
 - The number of connections (synapses) between brain cells (neurons) doubles
 - Enables the brain to learn faster than any other time of life
 - Experiences in these phases have lasting effects on development



When Critical Periods are Missed....

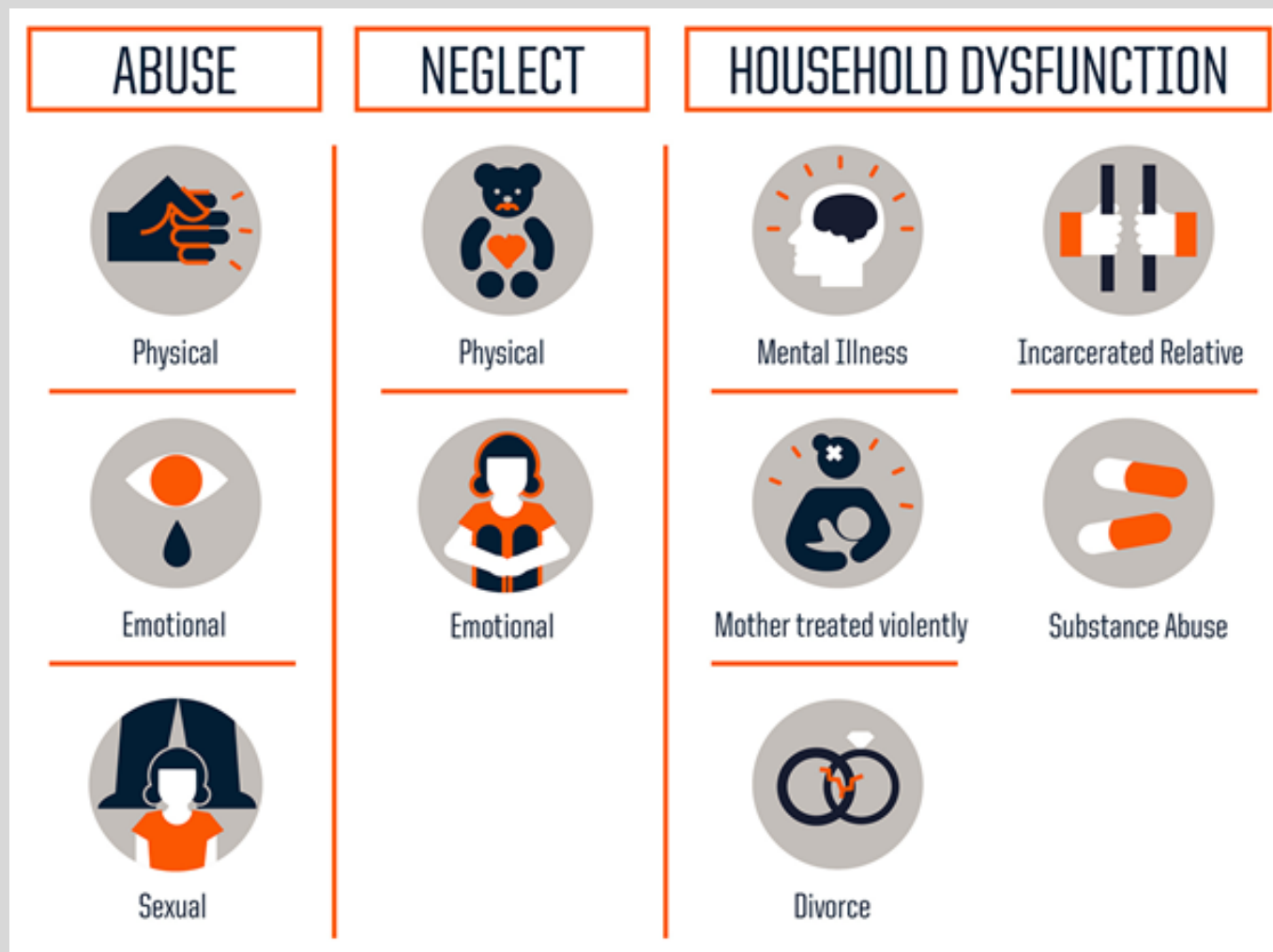
Romanian Orphanages



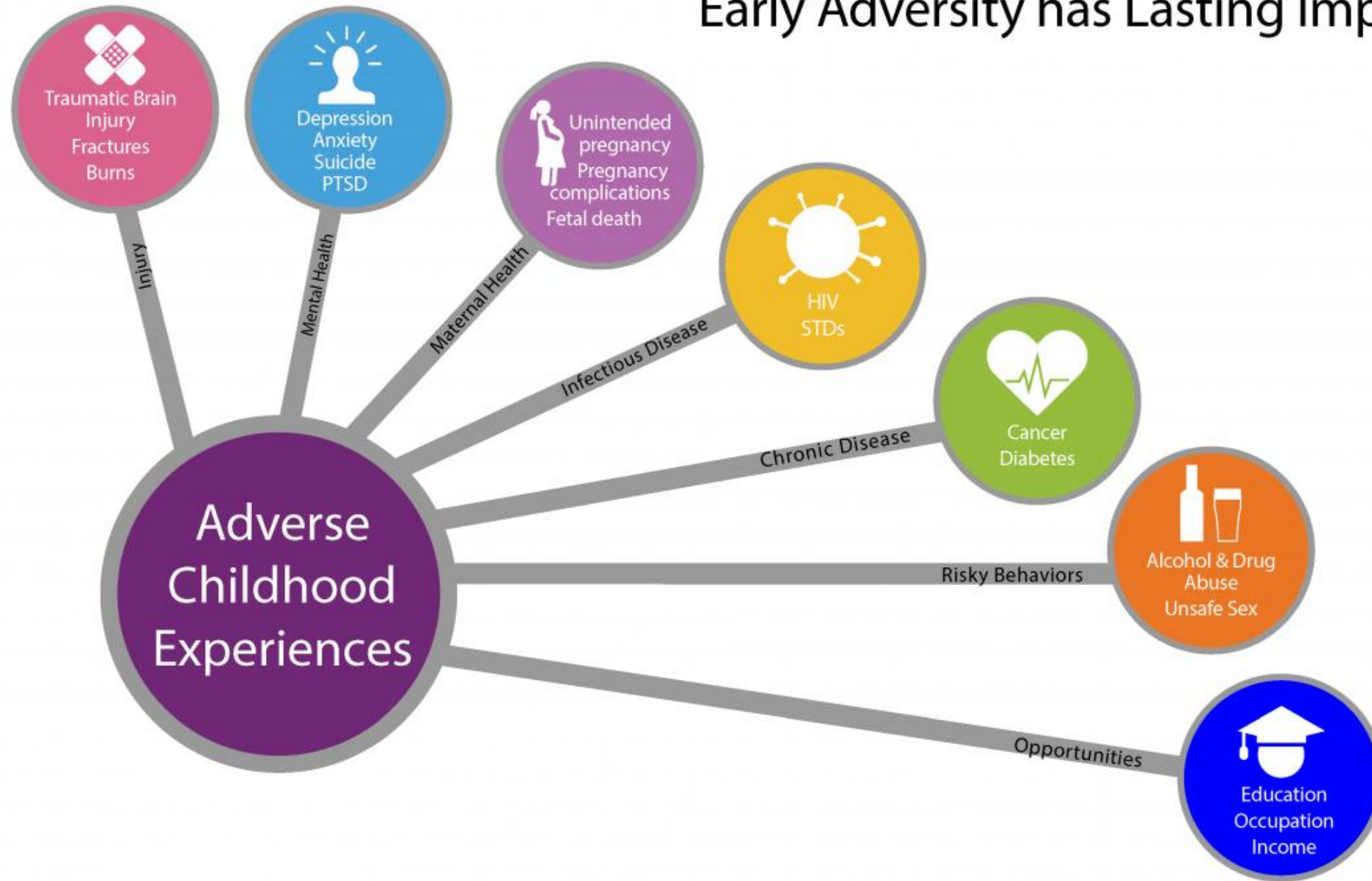
Genie's Story



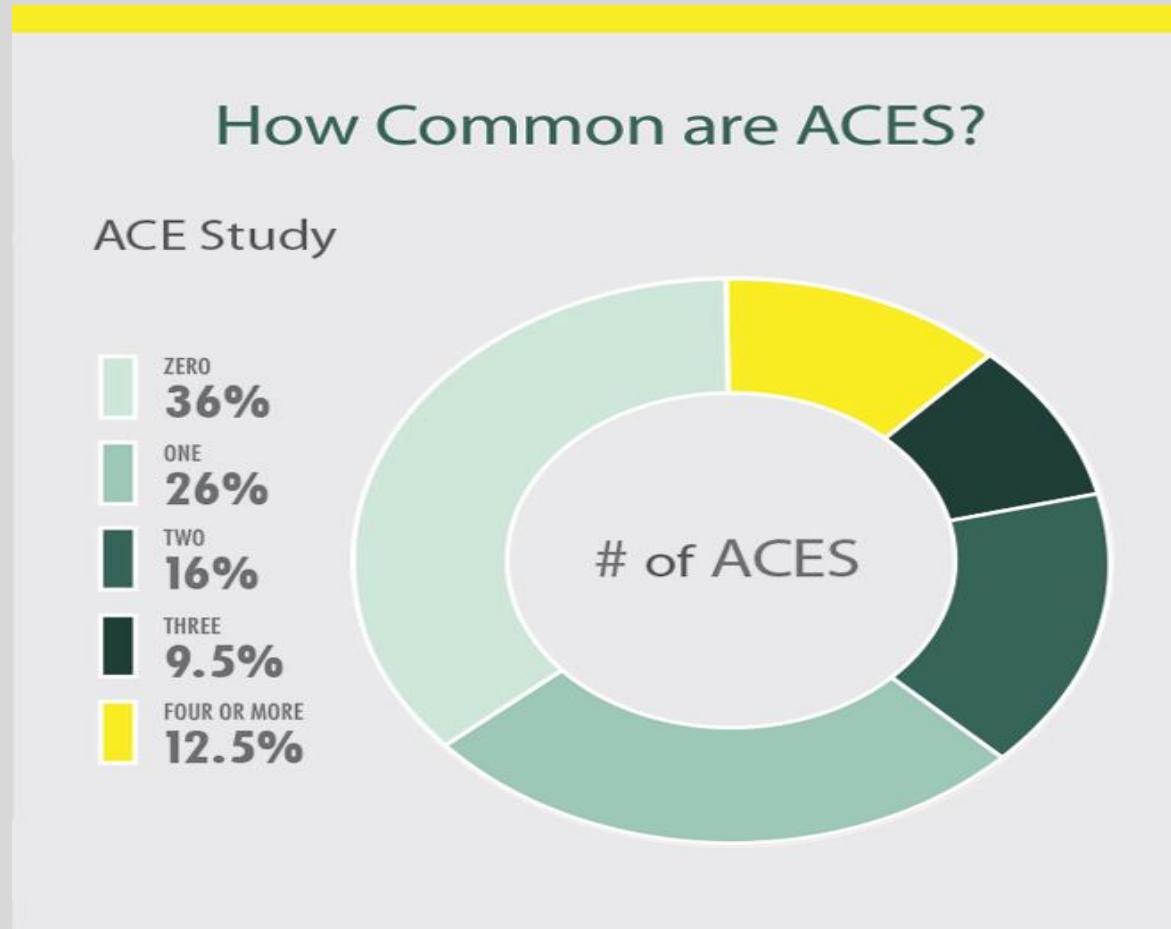
Adverse Childhood Experiences



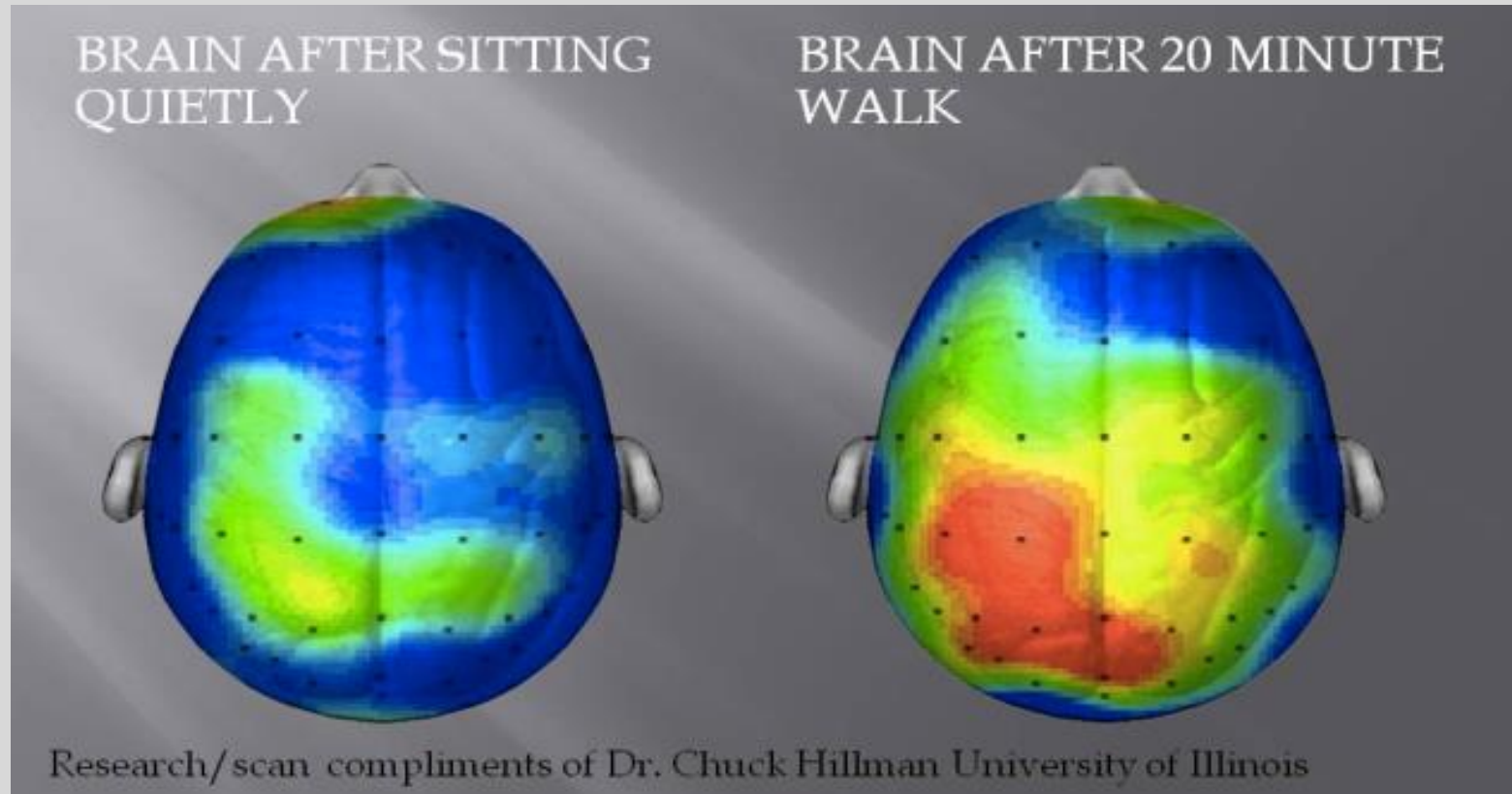
Early Adversity has Lasting Impacts



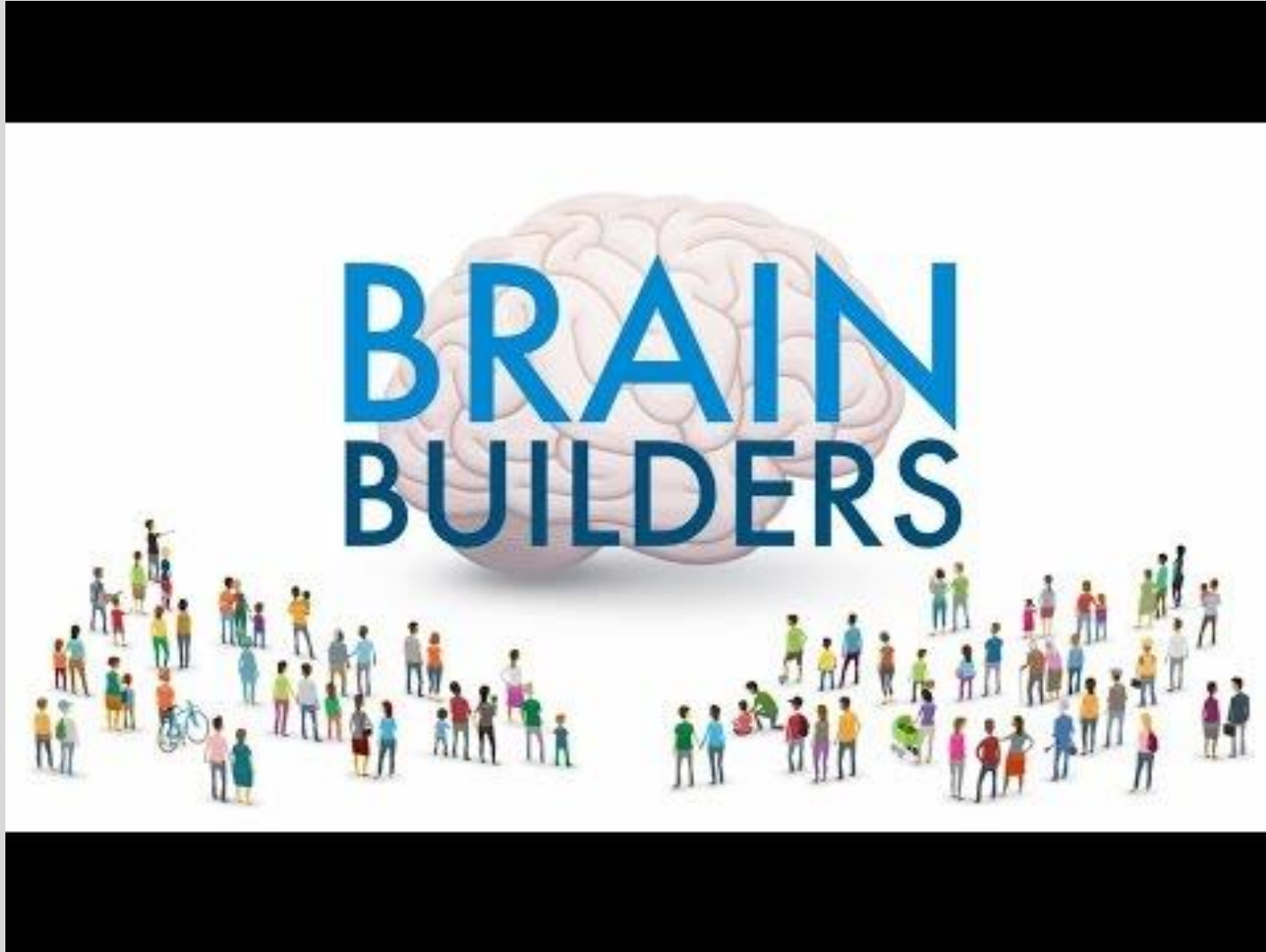
ACEs are Common and Cluster



There is hope! The Brain Can Adapt Positively!



Summary Video



Resilience

- Resilience is the process of:
 - Overcoming the negative effects of risk exposure
 - Coping successfully with traumatic experiences
 - Avoiding negative trajectories associated with risk
- Requires both risk and promotive factors
- Promotive factors:
 - Assets
 - Resources



Resilience Cont'd

- Resilience is *not*:
 - An innate characteristic possessed by some but not others
 - Simply coping with problems independently
 - Dealing with a traumatic event without emotional pain or distress
- Instead, Resilience involves behaviors, thoughts, and actions that anyone can learn and develop



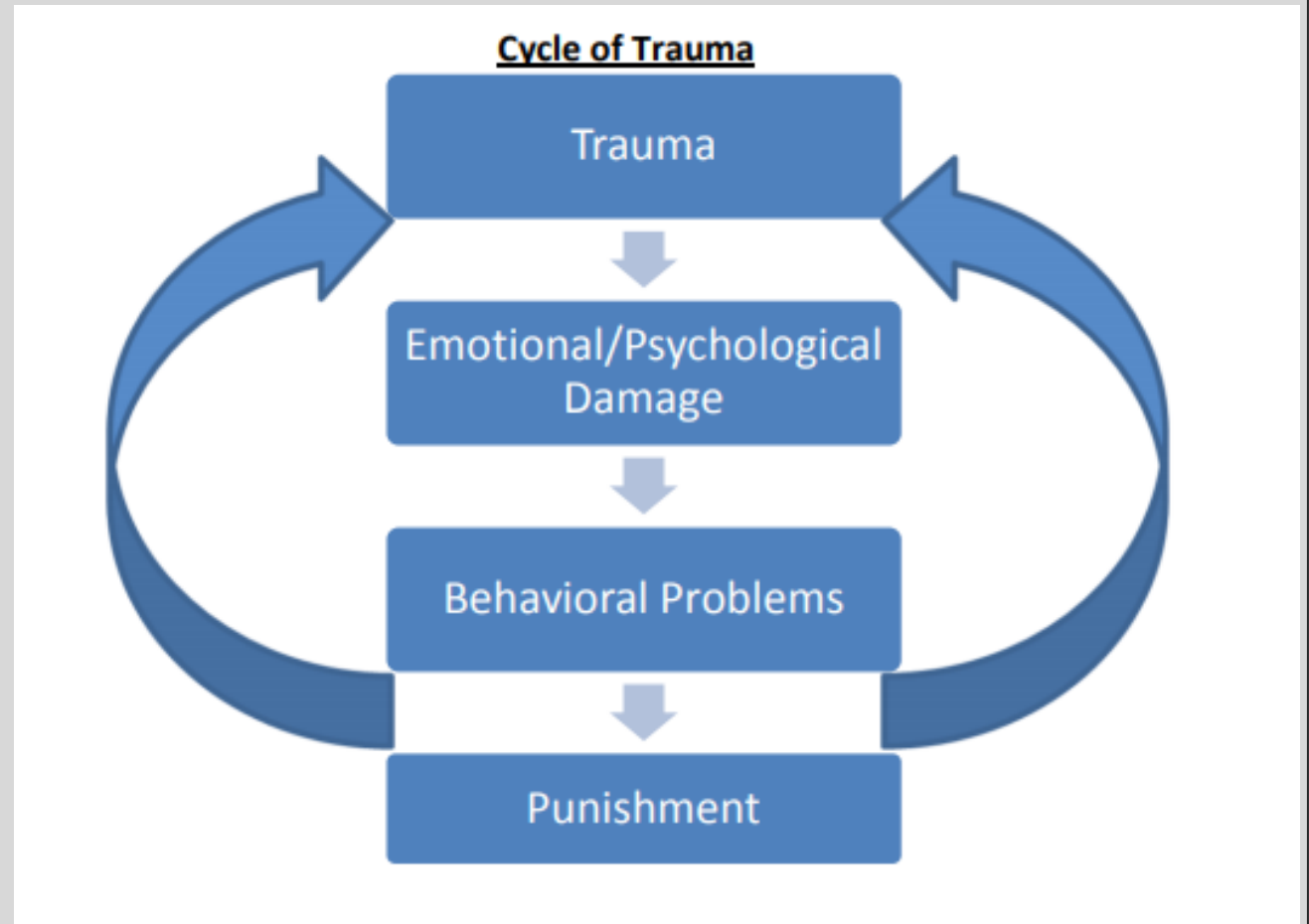
Trauma-Informed Resilience Building

- Trauma-informed youth mental health interventions have been shown to be beneficial for all children, *regardless of whether they are considered at-risk or not* (Durlark et al., 2011)
- Positive mental health promotion/resilience building programs for youth have been linked to increases in academic achievement, as well as reduced likelihoods of developing substance use disorders, future arrest, and incarceration (SAMSA, 2007; Tebes et al., 2007)



Cycle of Trauma

- When trauma causes emotional or psychological damage to youth, they may adopt a set of behaviors or patterns of thinking that put them on a path for further trauma.
- A primary goal of trauma-informed approaches with youth is to prevent re-injury and re-traumatization by acknowledging trauma and its triggers, and avoiding stigmatizing and punishing students.



Universal Trauma-Informed Strategies for Resilience Building

1. Reframe and Reimagine Disciplinary Approaches

- Balance accountability with an understanding of traumatic behavior
- Teach students the school and classroom rules while reinforcing that school is not a violent place and abusive discipline (which students who have experienced trauma may be accustomed to) is not allowed at school
- Motivate students through an understanding of right and wrong, rather than through fear of punishment
- Shouting at youth has been shown to have long-term effects that are similar to physical punishment
- Safe, predictable, and consistent consequences



Universal Trauma-Informed Strategies for Resilience Building

2. Structure, Routine, and Predictability

- All students, particularly those with trauma experiences, can benefit from structure and predictability, which reduces anxiety/stress and reduces fight or flight responses
 - Ex: Creating an easily-readable schedule and going over it on a consistent basis, establishing safe, consistent, and predictable consequences for actions



Universal Trauma-Informed Strategies for Resilience Building

3. Opportunities to Foster Positive Relationships

- Students with traumatic backgrounds may have a heightened sense of alarm and mistrust in others. Fostering positive connections can rebuild trust and establish a safe and uplifting community
 - Ex: Daily/weekly community building circles, sponsoring/creating clubs



Universal Trauma-Informed Strategies for Resilience Building Cont'd

4. Unconditional Positive Regard

- Unconditional positive regard requires valuing a student “regardless of his or her behaviors, affect, or presentation”
 - Ex: Personal greetings, using a student’s name, high rates of positive acknowledgement, praising in public while correcting in private, encouraging peer uplift

Unconditional Positive Regard

Accepting people as they are, instead
as I wanted them to be!

Universal Trauma-Informed Strategies for Resilience Building Cont'd

5. Incorporating Breaks

- Normalizing asking for breaks provides a tool for students to practice emotional self-regulation
 - Can include calming kits or sensory items
 - Sensory Breaks:
 - Although research on the effectiveness of sensory interventions is mixed, it is known that sensory stimuli can be triggering for people with traumatic pasts. Further, trauma can cause dissociation/detachment, and sensory breaks may offer a way for students to reorient themselves in their present environment



Universal Trauma-Informed Strategies for Resilience Building Cont'd

6. Engaging Community and Families

- Ex: Informing caregivers about classroom design, inviting caregivers to classroom, sending positive postcards and making phone calls



Universal Trauma-Informed Strategies for Resilience Building Cont'd

7. Promote healthy risk-taking

- Healthy risk-taking builds confidence and better equips young people to cope with future challenges.
- Positive stress vs. toxic stress
 - Ex: public speaking/performance, setting individual challenges/goals, introducing new social settings



Developmentally Appropriate Strategies

- Empower youth by describing adolescence as a window of opportunity!
- Highlight that having responses and/or reactions to stress and trauma are normal
- Focus on resilience, strategies, actions, and resources for coping and seeking help
- Integrate youths' social and cultural contexts into examples to ensure relevance and meaning
- Utilize simplistic examples that are relatable
 - Our brains are like sponges, just like a sponge soaks up water, our brains can expand based upon the environment. This can be positive or negative.



Activity for Younger Audiences

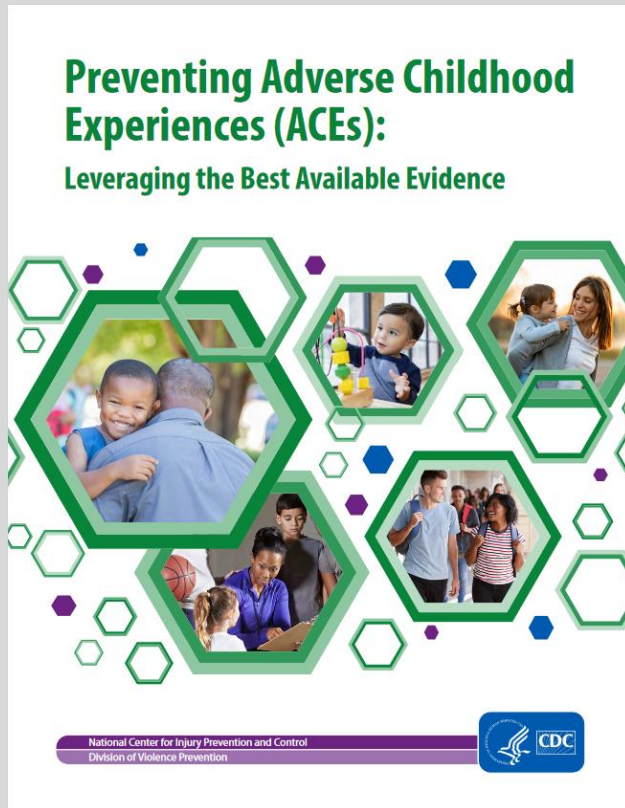
- Each marble represents a life stressor
- Each stick represents a coping outlet



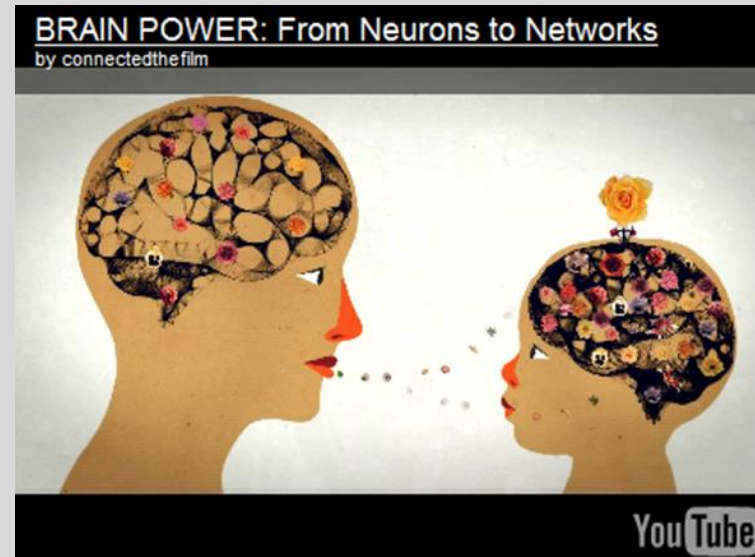
Resources for Youth Programming and Positive Mental Health Promotion

- National Center on Intensive Intervention:
 - <https://intensiveintervention.org/audience/educators>
 - Tools and resources for students with intensive needs
 - Includes COVID-19 specific resources and sample lessons
- Collaborative for Academic, Social, and Emotional Learning (CASEL)
 - Systematic guide on best practices for SEL programs for both preschool/elementary and middle/high school student
 - <https://casel.org/guide/>

Resources for Educators



- <https://www.cdc.gov/ncbddd/childdevelopment/early-brain-development.html>



Take-Home Messages

- Brain growth and development
 - The brain develops from the bottom up - providing a safe environment and promoting relationships are essential for positive youth development
 - The prefrontal cortex is still developing in high school students
 - Adolescence is a second window of opportunity
- Adverse childhood experiences
 - Experiences shape brain development and behavior
 - ACEs are common, cluster, and are linked with many negative health outcomes
- Resilience Building
 - Trauma-informed resilience building strategies are beneficial to all children, regardless of whether they are at risk or not
 - Such strategies have been shown to reduce risk of substance use, incarceration, and improve academic achievement
 - Creating structure, routine, and predictability along with unconditional positive regard and opportunities to foster positive relationships are characteristics of successful resilience-building strategies



Evaluation

We would like to know if the training was helpful. We are also interested in how to improve the training. Please answer this five minute survey about your knowledge and attitudes. Your answers will not be linked to you and findings will be reviewed only at the group level.

<https://tiny.utk.edu/YDCEva>

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