



Building Strong Brains

Six-Hour Professional Development Session for Secondary Schools

Welcome



Tennessee MTSS Model

Guiding Principles

Leadership • Culture of Collaboration • Prevention & Early Intervention

TIER I All 80-85%

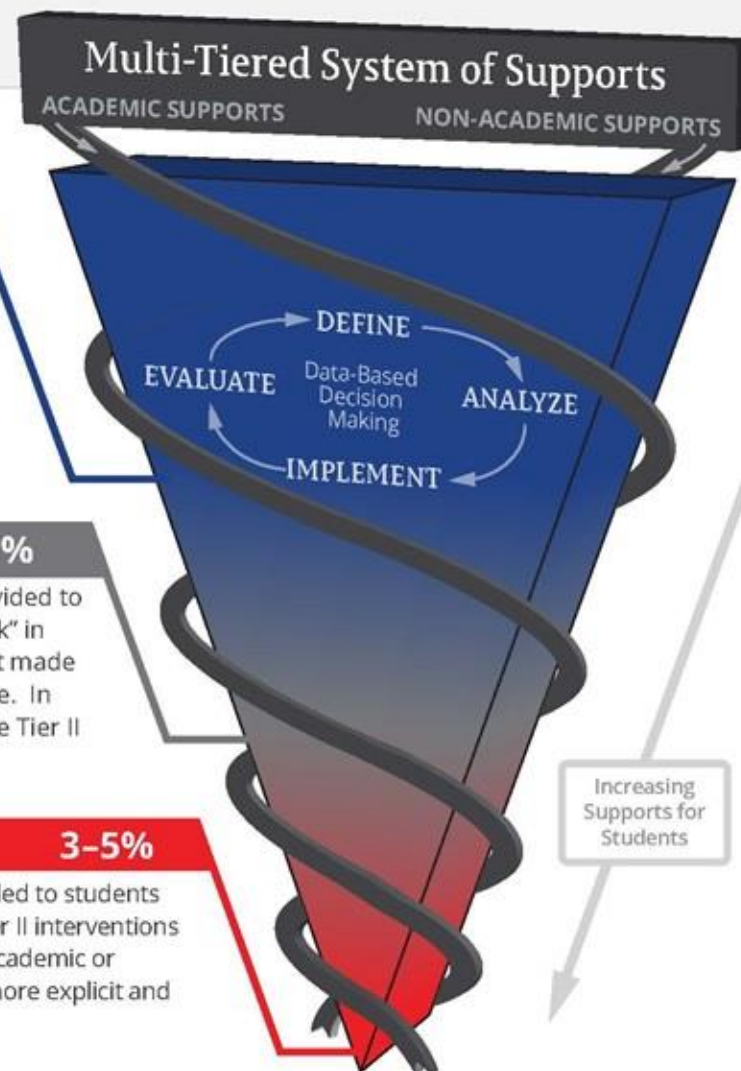
ALL students receive research-based, high-quality, instruction using Tennessee State Standards in a positive behavior environment that incorporates ongoing universal screening and ongoing assessment to inform instruction. In general, 80-85 percent of students will have their needs met by Tier I supports.

TIER II Some 10-15%

In ADDITION to Tier I, extra support is provided to students who have been identified as "at risk" in academic or non-academic skills or have not made adequate progress with Tier I supports alone. In general, 10-15 percent of student will receive Tier II interventions.

TIER III Few 3-5%

In ADDITION to Tier I, extra support is provided to students who have not made significant progress in Tier II interventions or who are significantly below grade level in academic or nonacademic skills. Tier III interventions are more explicit and more intensive than Tier II interventions.



Tennessee MTSS Model

Effective Tier I Practices

TIER I All 80–85%

ALL students receive research-based, high quality, general education instruction using Tennessee State Standards in a positive behavior environment that incorporates ongoing universal screening and ongoing assessment to inform instruction. **Effective Tier I practices within the MTSS framework include the following four main components.**

Multi-Tiered System of Supports

ACADEMIC SUPPORTS

NON-ACADEMIC SUPPORTS



Engaging Academic Instruction

Schools and classrooms that teach the Tennessee State Standards through engaging practices optimize student potential for success. Engaging academic instruction includes differentiating content, process, and product through consideration of student readiness, interests, and learning styles. Examples include the use of technology to increase opportunities to respond, varying response formats to increase access for students who struggle with reading and writing, and providing choice in academic tasks.



Climate and Student Engagement

School climate and connectedness are critical for students, staff, and families to feel valued, as well as physically and emotionally safe. Universal strategies for building a strong, positive school climate that fosters student connection include consistent schoolwide behavior expectations, student leadership opportunities in developing school policies and practices, positive behavior acknowledgment system, and schoolwide discipline policy utilizing restorative practices.



Health and Wellness

Prioritizing resources to address health issues—both physical and mental—improves academic and life outcomes for students. Some universal strategies that support health and wellness include student access to licensed health professionals, school breakfast programs, providing comprehensive health education for all students, and student health screenings.



Social and Personal Competency Instruction

Social and personal competence is necessary for children and adults to manage emotions, establish and achieve positive goals, develop and maintain positive relationships, and make responsible decisions. Universal strategies that promote social and personal competence include class meetings, cooperative learning groups, and student focus groups.

Community Builder



Equality vs. Equity



EQUALITY



EQUITY

Goals of the Session

- Build and enhance foundation of knowledge on **trauma-informed care** in the context of **brain science**, **adverse childhood experiences**, and **resilience**.
- How does trauma effect learning.
- Examine and integrate practices that promote **resilience** of students and staff.

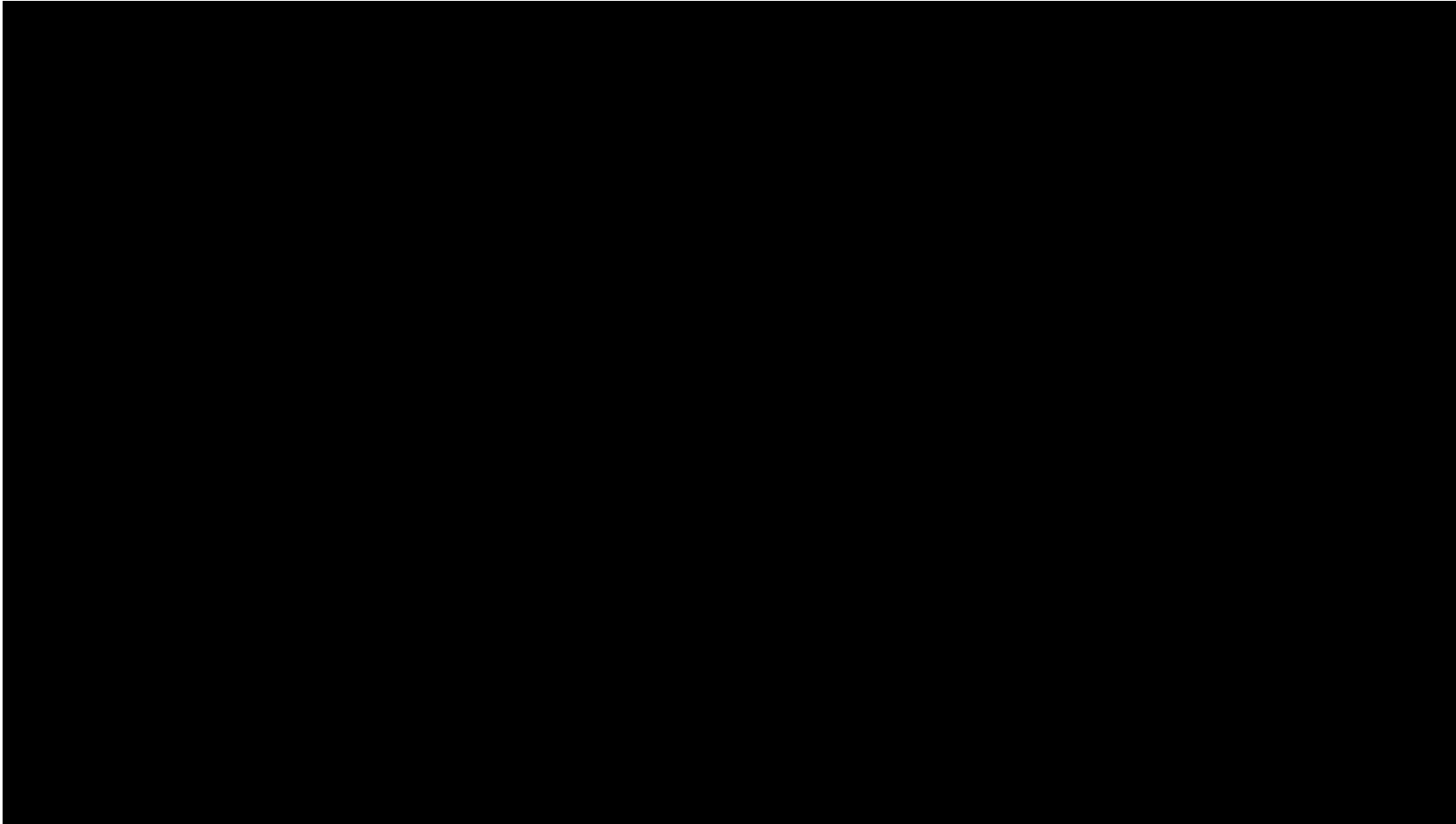
Four Core Concepts of Development

1. **Brain architecture** is established early in life and supports lifelong learning, behavior, and health.
2. **Toxic stress** in the early years of life can derail healthy development.
3. Stable, caring relationships and “**serve and return**” interaction shape brain architecture.
4. **Resilience** can be built through “serve and return” relationships, improving self-regulation and executive.

Four Core Concepts of Development

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How are Brains Built?

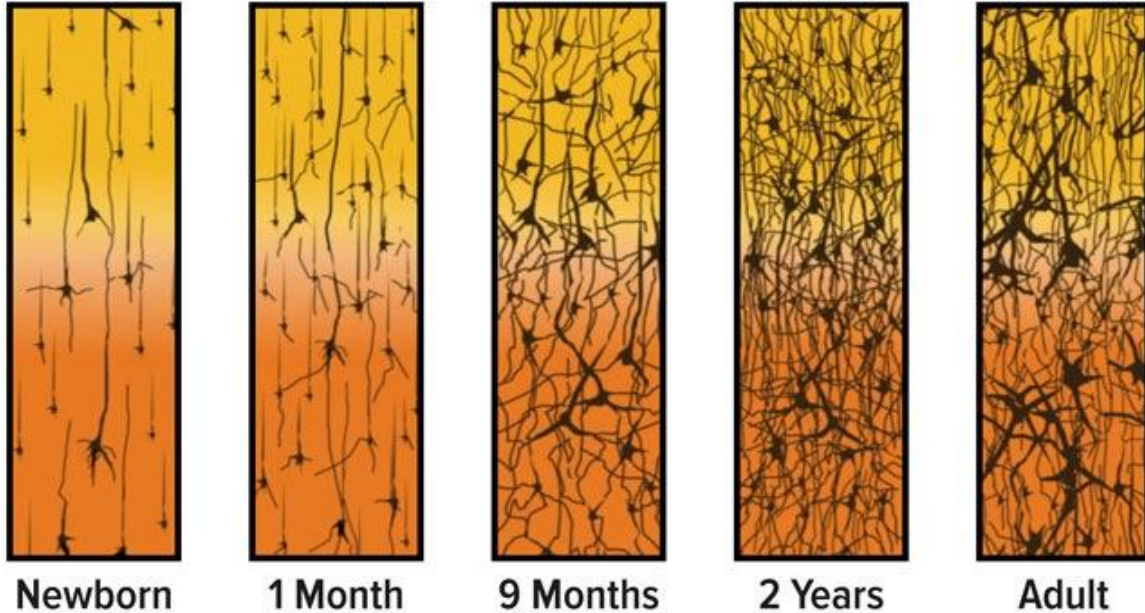


Brain Architecture

- Brains are built over time starting at the very beginning of life. Simple skills come first, more complex skills build on top of them.
- Cognitive, social, and personal capabilities are inextricably intertwined throughout the life course.
- A strong foundation in the early years improves the odds for positive experiences of relationship, learning, and growth later on. A weak foundation increases the odds of difficulties.



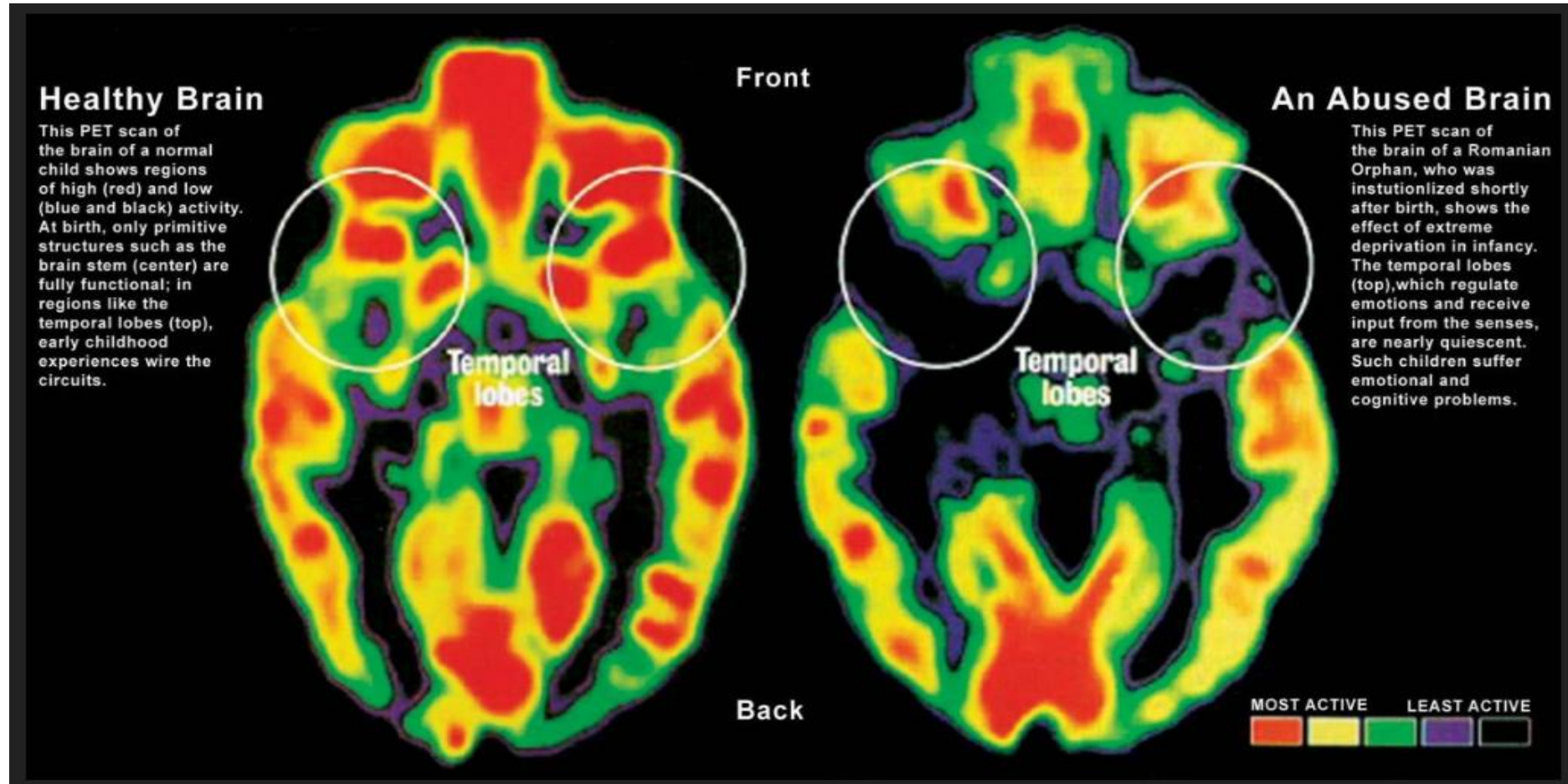
Formation of Neural Connections



The brain rapidly develops synaptic connections during the earliest years of life.

Connections that are reinforced grow stronger, and those that are not, disappear.

What Childhood Neglect Tells Us About Nature vs. Nurture



Bottom Up Processing

Neocortex (planning, judgement,...):

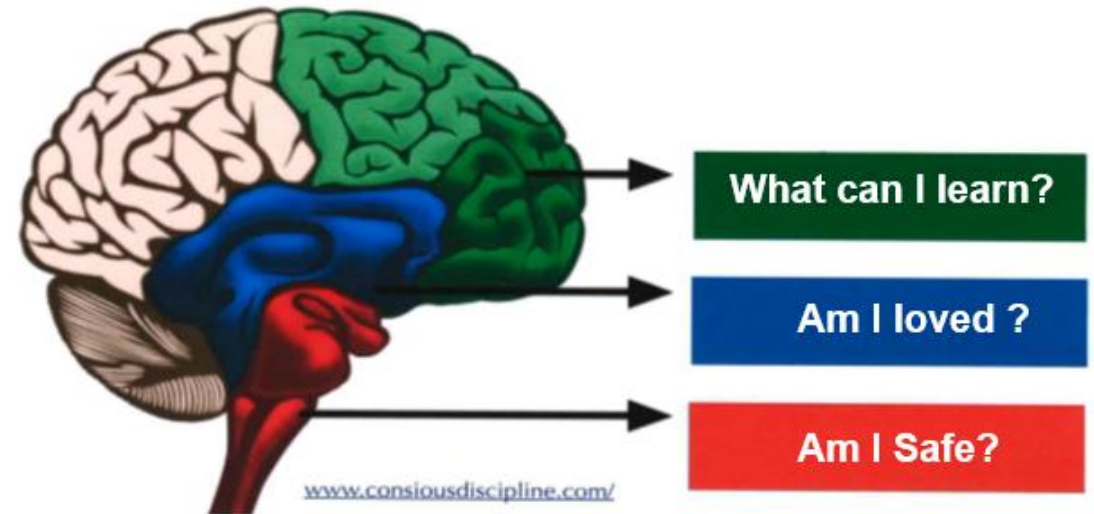
What can I learn from this?

Limbic System (emotions):

Am I loved?

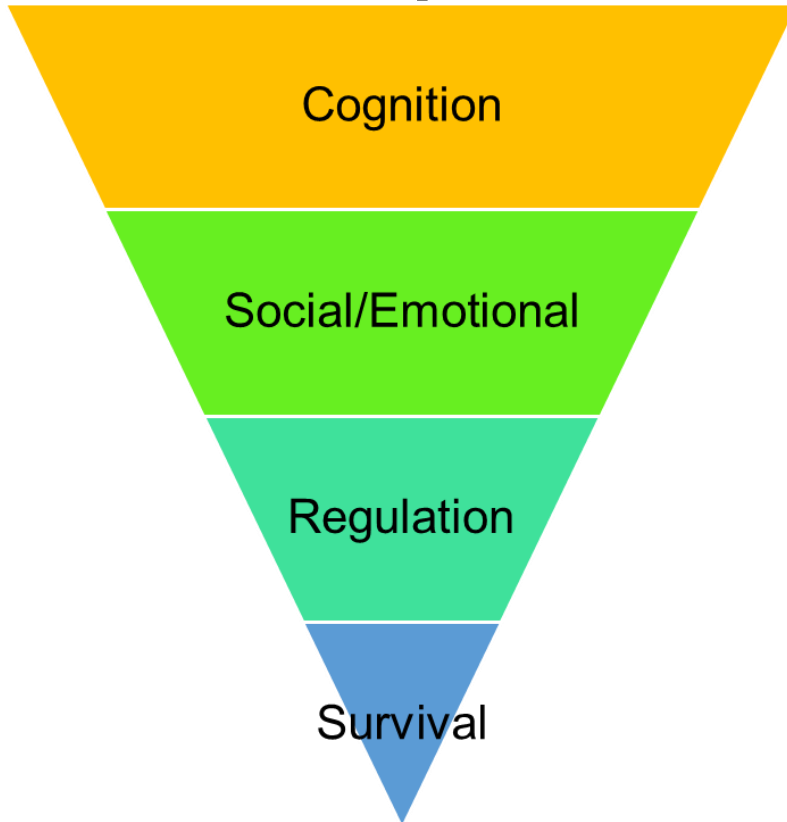
Brain Stem:

Am I safe?

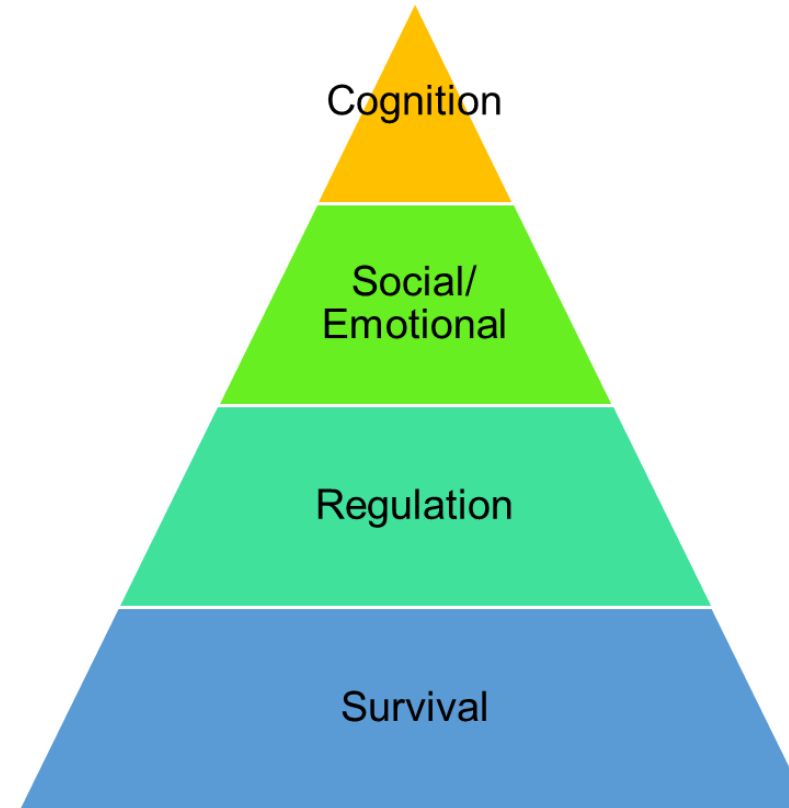


Top Down vs. Bottom Up

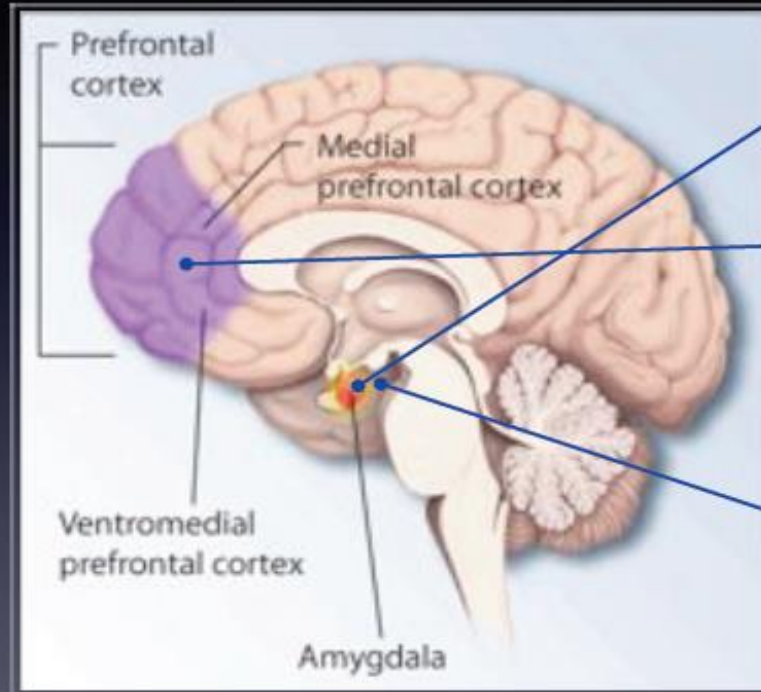
Typical Development



Developmental Trauma



What happens?



Amygdala:

activates the stress response

Toxic stress: enlargement

Prefrontal cortex:

usually a check to the amygdala

Toxic stress: loss of neurons, less able to function

Hippocampus:

major role in memory and mood

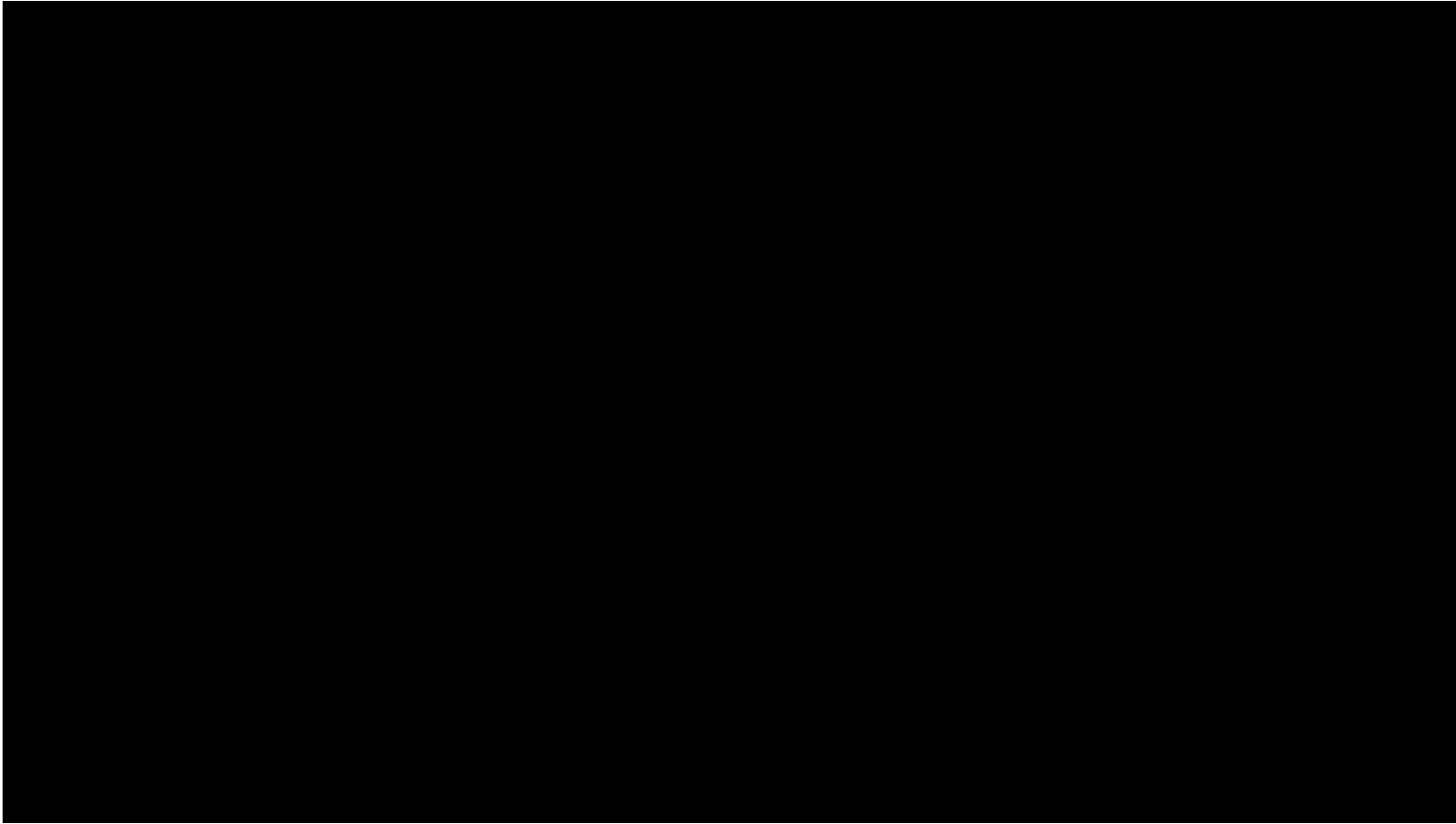
Toxic stress: impairment in understanding and emotion

Freely-reproducible image from the National Institutes of Health

The Hippocampus: Our Memory Storage Unit



Can kids learn to acknowledge when they are flipping their lid?



Flipping Your Lid

Neocortex:

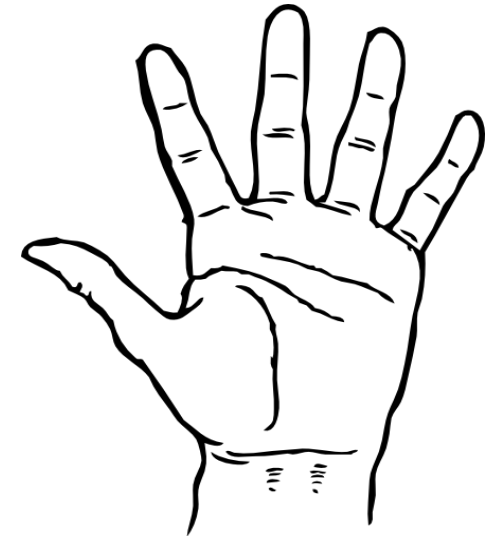
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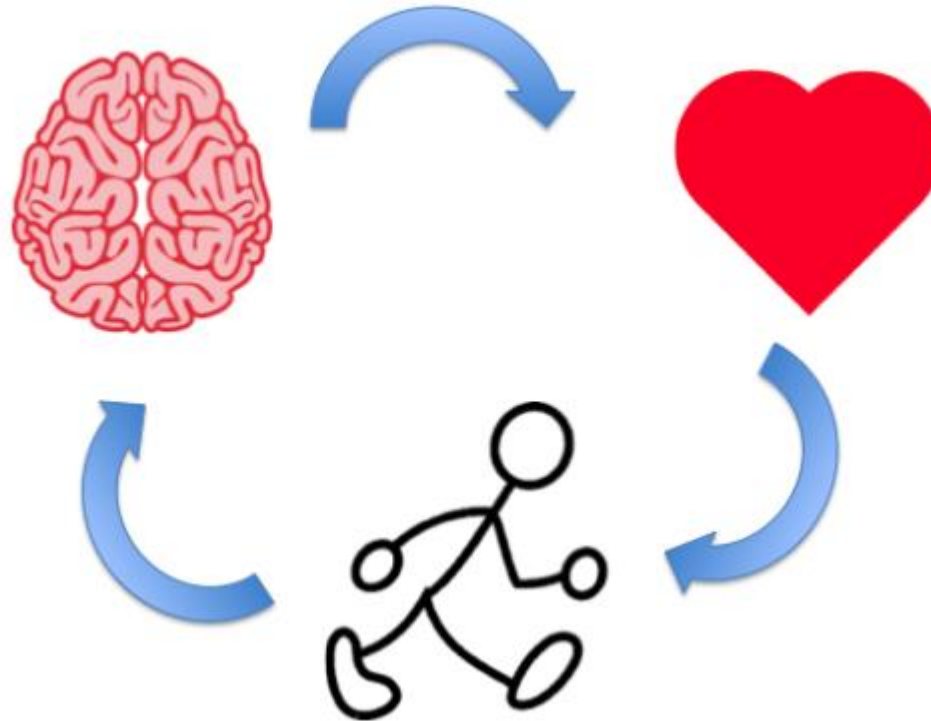
Am I loved?

Brain Stem:

Am I safe?



Think, Feel, Do Cycle



Iceberg Theory – What lies beneath the behavior?



What Lies Beneath Behavior

FLIGHT	FIGHT	FREEZE
Withdrawal	Acting out	Numbness
Running out of the classroom	Aggression	Refusal to answer
Daydreaming	Refusal and defiance	Refusal to get needs met
Appearance of sleeping	Silliness	Giving a blank look
Avoidance of others	Hyperactivity	Inability to move or act
Hiding or wandering	Argumentative	Answering "I don't know"

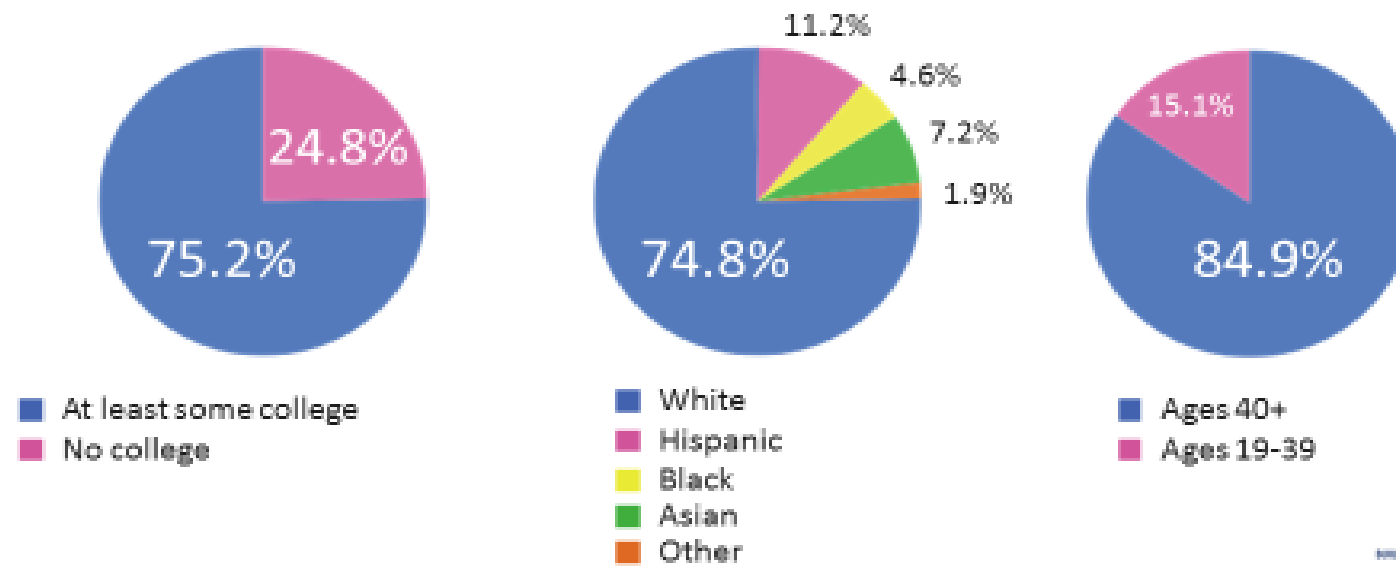
Adverse Childhood Experiences Study



Demographics

ACE Study Demographics

Participants were mostly white, middle-aged, college educated, and insured. They didn't face many of life's challenges such as poverty or racism.



Source: Centers for Disease Control and Prevention. Available at:
<https://www.cdc.gov/ace/about.htm>



ACEs Can Have Lasting Effects On...



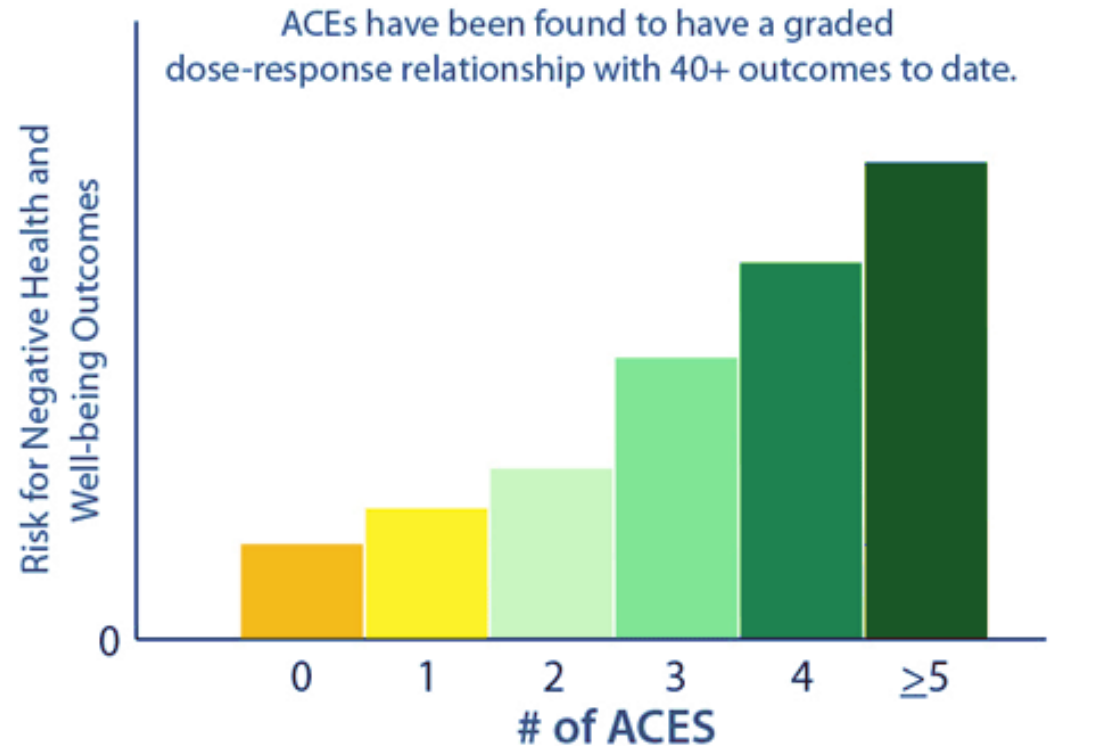
Health (obesity, diabetes, depression, suicide attempts, STDs, heart disease, cancer, stroke, COPD, broken bones)



Behaviors (smoking, alcoholism, drug use)

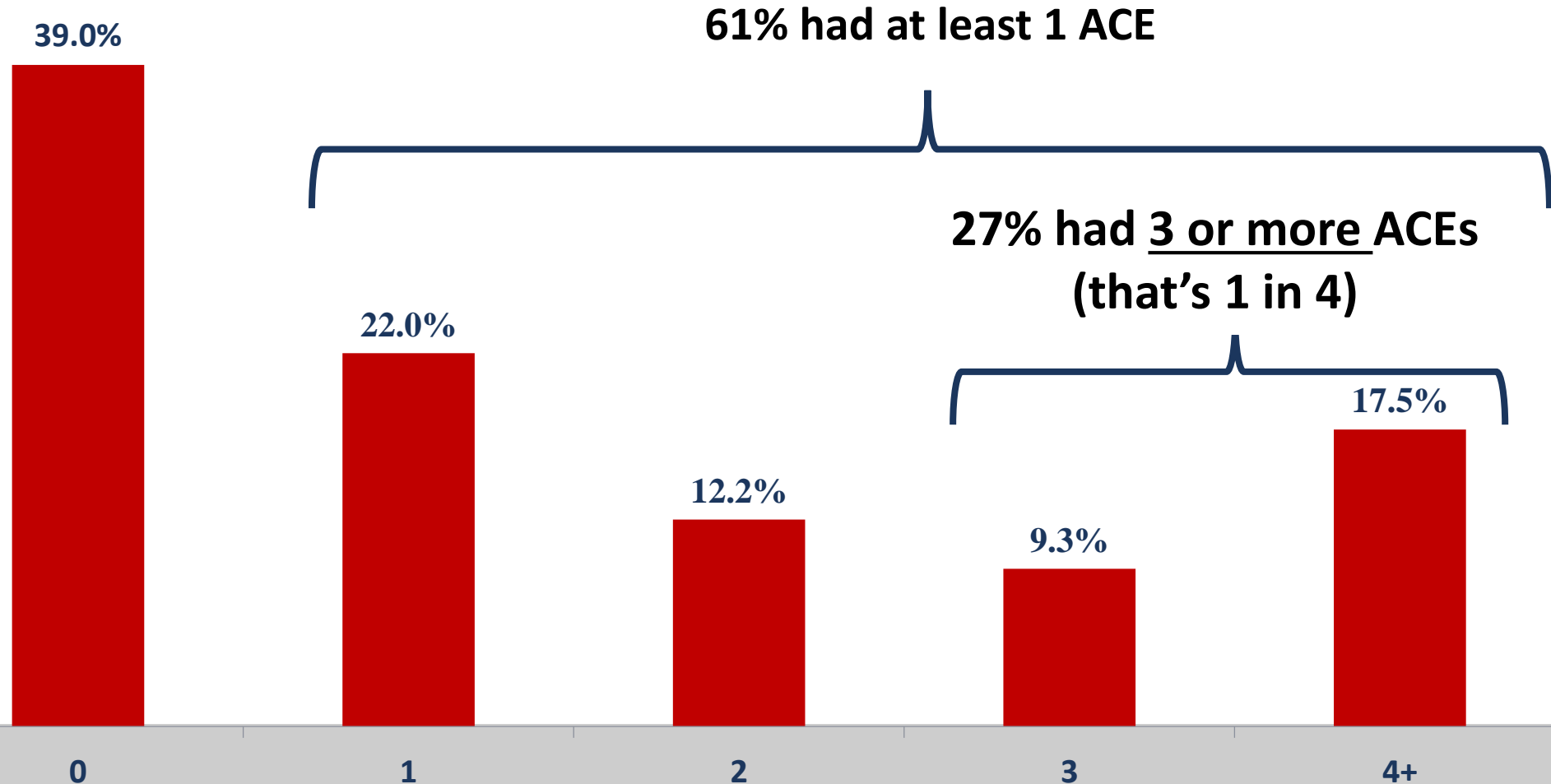


Life Potential (graduation rates, academic achievement, lost time from work)



*This pattern holds for the 40+ outcomes, but the exact risk values vary depending on the outcome.

Number of ACEs Experienced Before Age 18 by Adult Tennesseans in 2016



ACEs \neq Trauma

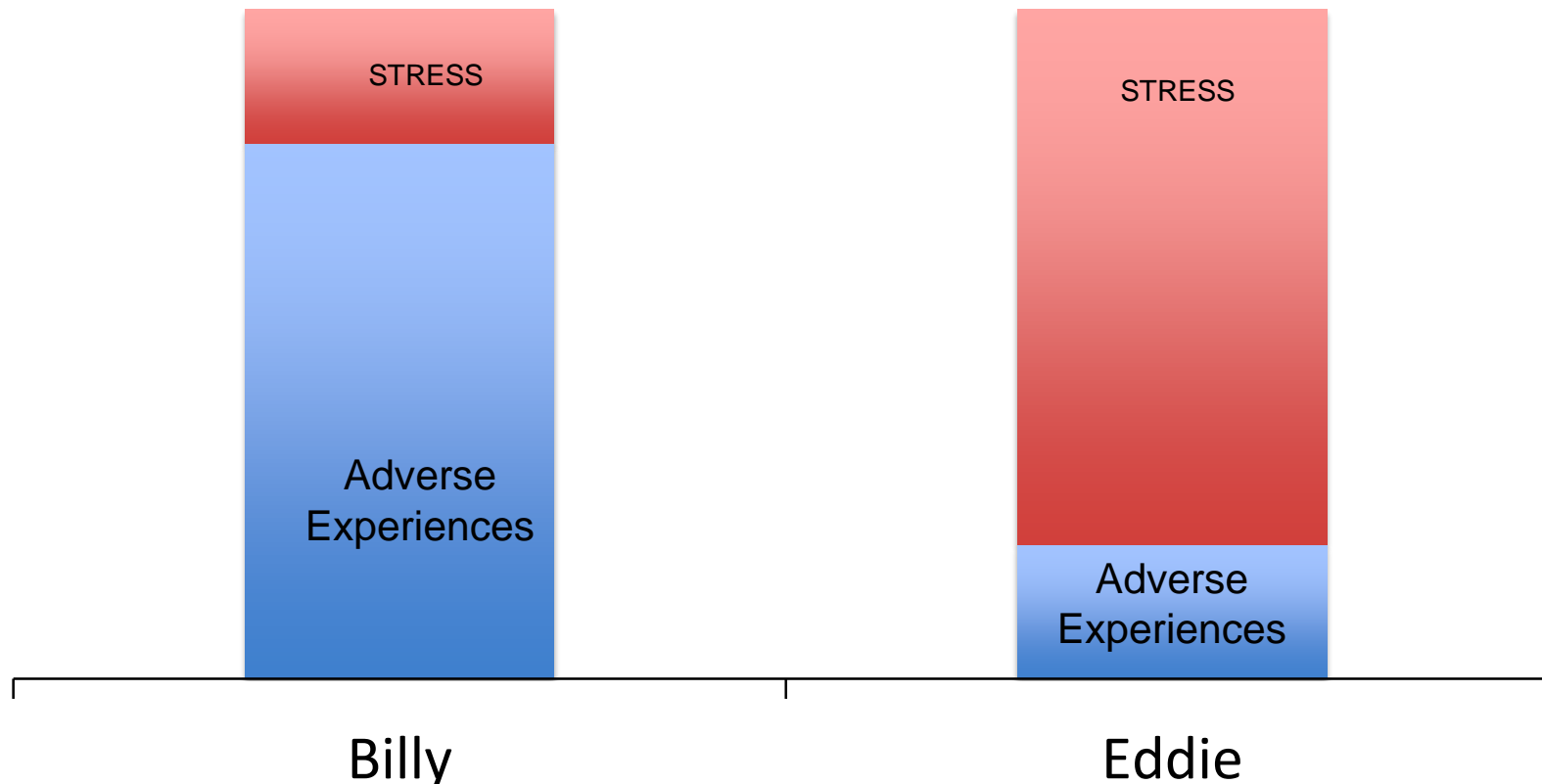
- Significant relationships can be pivotal buffers
- Being a member of a marginalized population does not equal trauma or an adverse childhood experience (it is not causal, just a risk factor)
- ACEs are universal, but the access to healing is not.

**It's not about the event,
It's about the
experience of the event.**

What do your students face daily?



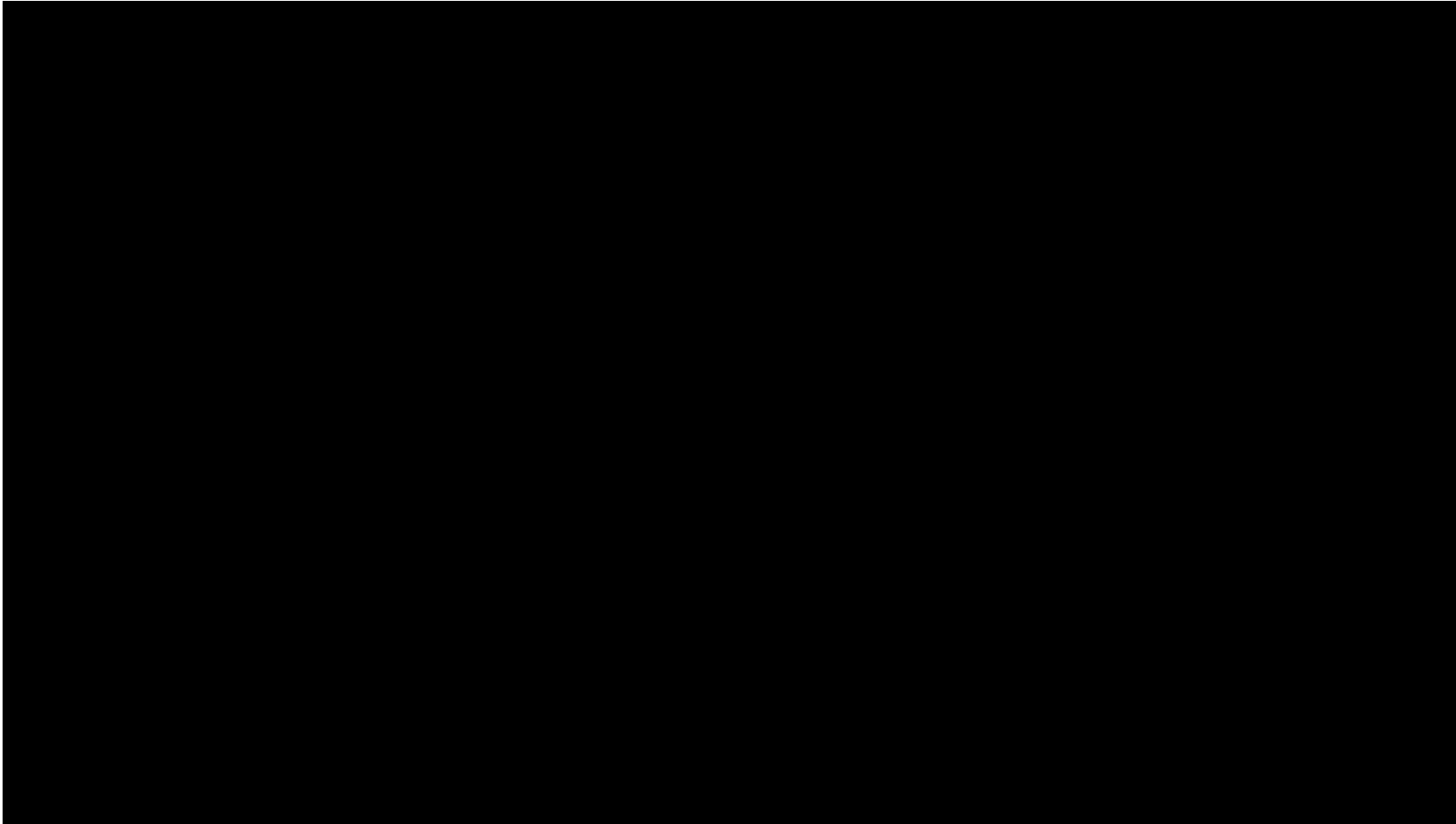
Window of Tolerance for Stress



Four Core Concepts of Development

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Learning Takes Place in the Context of Relationships



All Learning Takes Place in the Context of Relationships.

- “Kids don’t learn from people they don’t like.” *Rita Pierson*
- “Children don’t care how much you know until they know how much you care”
John Maxwell
- “Be who you needed when you were younger.” *Ayesha Siddiqi*
- At the end of the day, people won’t remember what you said or did. They will remember how you made them feel.” *Maya Angelou*

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4. **Resilience** can be built through “serve and return” relationships, improving self-regulation and executive functions.

The 3 R's Are Not Enough

RESILIENCE

[ri - zil - yuhns]

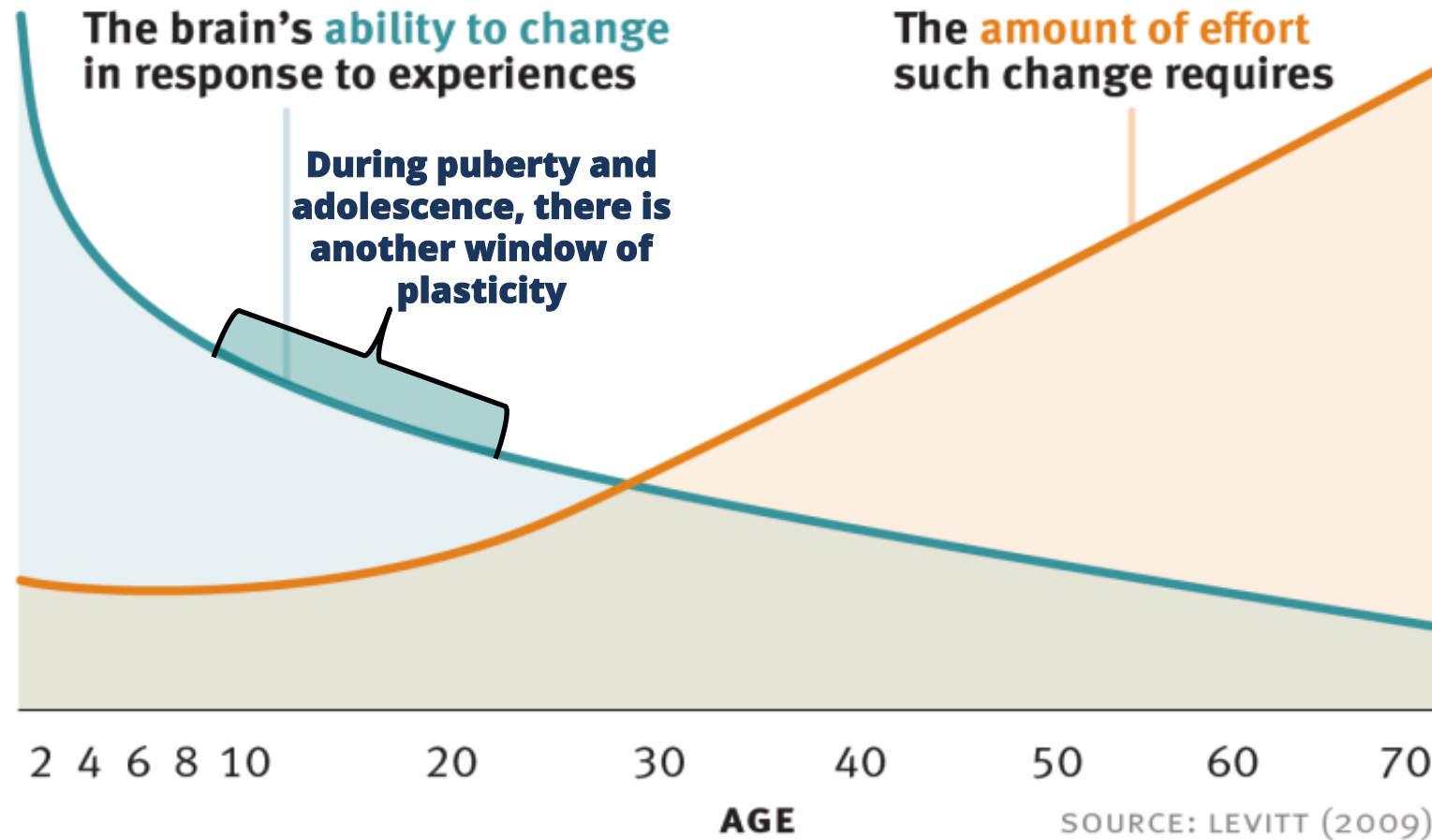
**The power to be
able to recover readily
from adversity or challenge.**

A Note on Neuroplasticity



neu·ro·plas·tic·i·ty
the ability of the
brain to **form and
reorganize synaptic
connections**,
especially in
response to learning
or experience or
following injury.

The Brain's Ability to Change Decreases Over Time





Schools should be a charging station for students!



Shifting to a Trauma-Informed Lens

From: “What’s wrong with you?”

To: “What happened to you?
(And how can I help?)”



5 Critical Steps to Implementing A Trauma-Informed School

Concept	Mantra	Strategy
1. The stress is coming from outside.	It's not about me.	Drop your personal mirror.
2. Allow the student to de-escalate and regulate before solving the issue.	Problem solving and solutions can't be worked through while "in the moment."	Designate a quiet place(s) where students can feel safe to de-escalate.
3. It's never about the issue at hand. It goes much deeper.	What's really driving this child's behavior?	Be the one who listens and values the student's voice...ask how you can help. Explore the underlying issue behind the behavior.
4. It's a brain issue, not a behavior issue.	My job is to help this school regulate, not simply behave.	Incorporate regulatory activities into the culture of the classroom and support students in their ability to learn how to self-regulate.
5. Discipline is to teach, not to punish.	Discipline should happen through the context of relationships.	Use consequences that keep students in school and foster the building of trust and safety with caring adults.

Activity: Five Critical Steps

Pair and Share

- Does the step you chose resonate with particular experiences or patterns you notice in the school community?
- How is the step currently being practiced (or not) in your classroom/school community?
- What might make this step easy or hard to practice in your classroom/at your school?



Responding vs. Reacting

- Give emotional space.
- Ask yourself the right questions.
- Tune into your own experience.

Traditional Reactions	Trauma-Informed Responses
"Go to the principal's office."	"I'm here. You're not in trouble."
"Stop crying."	"It's okay to feel."
"Detention is waiting for you."	"Sit with me."
"Don't you talk to an adult like that."	"You're allowed to have a voice. Let's talk together."
"Stop acting like a baby"	"That really set you back, didn't it?"
"You're old enough to handle this on your own."	"Let's handle this together."

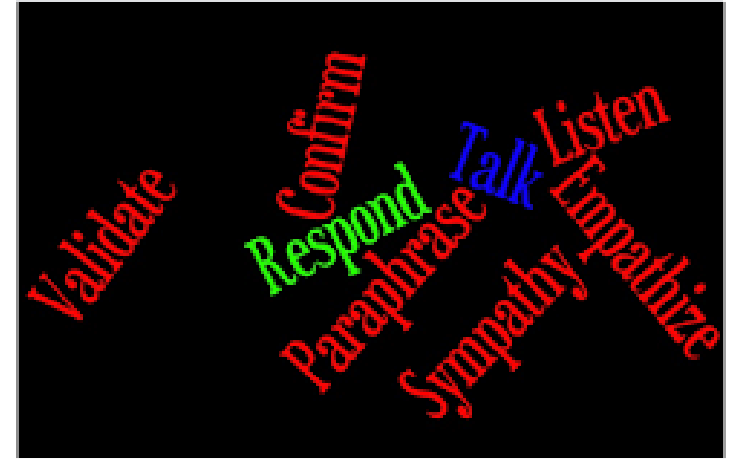
Traditional Reactions

- “Go to the principal’s office.”
- “Stop acting like a baby.”
- “Don’t you talk to an adult like that.”
- “It’s not that difficult.”
- “You should have never acted like that.”
- “Act your age.”
- “Stop whining.”



Trauma-Informed Responses

- “I’m here. You’re not in trouble.”
- “That really set you back, didn’t it?”
- “You’re allowed to have a voice. Let’s talk together.”
- “I need to know how hard this is for you.”
- “Sometimes life just gets too hard, doesn’t it?”
- “Let’s talk about it.”
- “I want to understand you better. If I know how you feel, I’ll be able to help you better. Use your voice.”



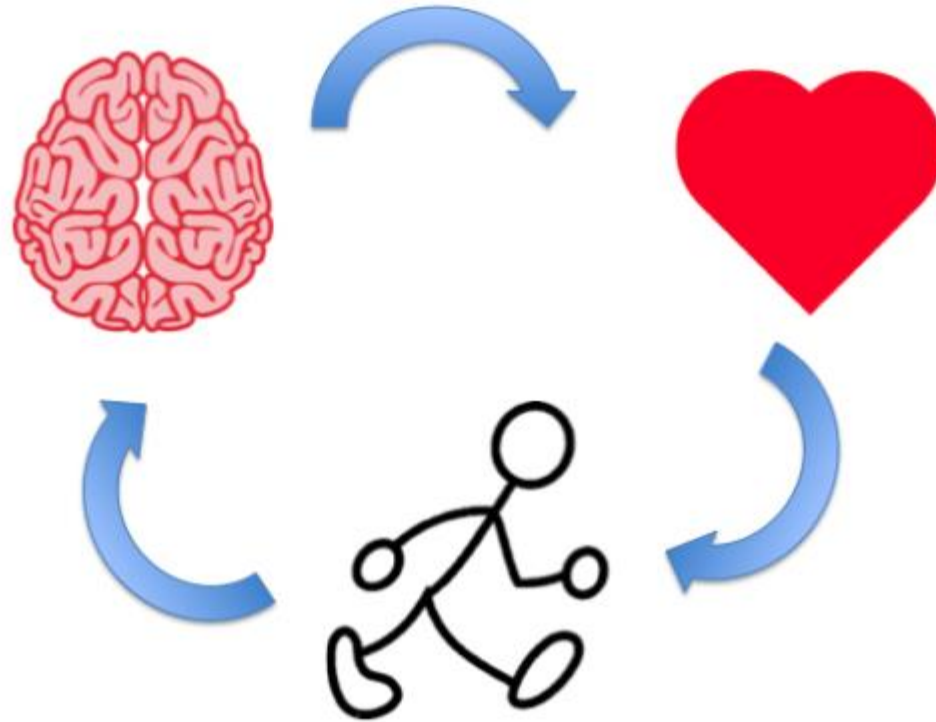
See it in action: Pearl Cohn High School - Building School Culture



What if teachers knew?



Head, Heart, Feet





Districts and schools in Tennessee will exemplify excellence and equity such that all students are equipped with the knowledge and skills to successfully embark on their chosen path in life.

Excellence | Optimism | Judgment | Courage | Teamwork