

The Effects of Adverse Childhood Experiences

Katie Rosanbalm, PhD

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Why the focus on trauma?

Think about all of the adversity that children face:

- Physical, sexual, or emotional abuse
- Chronic neglect
- Caregiver substance abuse or mental illness
- Loss of caregiver (e.g., incarceration, custody change, deployment, death)
- Exposure to violence in communities and homes
- Poverty/homelessness/lack of basic needs
- Chronic illness or severe injury
- Peer aggression
- Natural disasters

Prevalence

Out of over 17,000 survey respondents:

- **64%** reported at least **ONE** ACE
 - **26%** reported **ONE** ACE
 - **16%** reported **TWO** ACEs
 - **9.5%** reported **THREE** ACEs
 - **12.4%** reported **FOUR OR MORE**



>6 IN 10

individuals have at least one Adverse Childhood Experience (ACE).
This statistic alone tells us that many children with ACEs are sitting in our classrooms.

<https://www.cdc.gov/violenceprevention/acestudy/about.html>

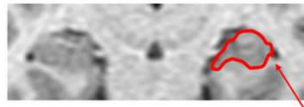
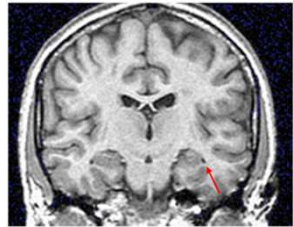


Response to Trauma

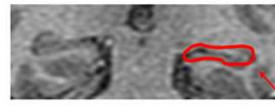
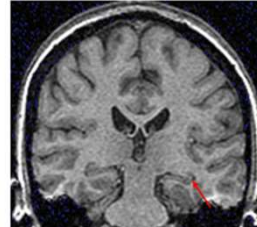
- *Toxic stress* is caused by prolonged or pronounced stress that overwhelms children's skills or support
 - Stress hormones are released and remain at high levels
 - Causes **chemically toxic effects** on brain regions involved in problem solving and decision-making
 - Enhances triggering of emotional parts of brain that respond instinctively to threat

Neurobiology & Brain Development

MRI scan of a brain with
no trauma:



MRI scan of a brain with
trauma:



Hippocampus: helps in emotion regulation,
ability to store/recall information

Importance of Starting Early

- In first few years of life, more than 1 million new neural connections are formed every second!
 - Build foundation for the brain architecture
 - Shaped by interaction with the environment
- More than 25% experience or witness traumatic event before age 4 (Briggs-Gowan et al., 2010)
 - 49% for children living in poverty



Survival Mode

- Leads to a constant state of high alert:
 - Fight – verbal and physical aggression
 - Flight – leave or hide
 - Freeze – shut down, withdraw

- At school, trauma can impact
 - Learning
 - Behavior
 - Relationships
 - Mental Health



Impact

ACEs can lead to:

- Delays and disruption in brain development
- Social and emotional problems
- Short- and long-term mental and physical health problems
- Early death



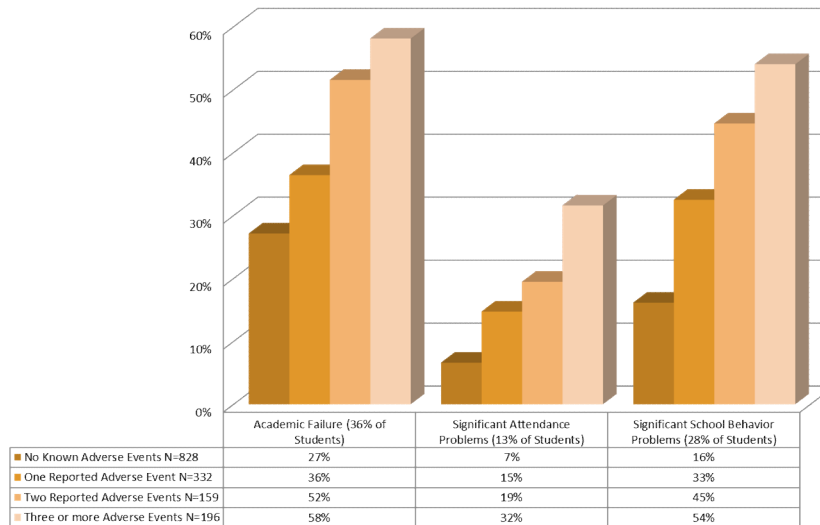
<https://www.rwjf.org/en/library/infographics/the-truth-about-aces.html>

Deficits linked to trauma

- Trauma responses and toxic stress impact:
 - Behavior regulation
 - Language
 - Memory
 - Perspective taking
 - Understanding of cause and effect
- Harder for these students to:
 - Pay attention/stay on task
 - Regulate emotions
 - Organize work
 - Follow rules
 - Problem solve
- Increased likelihood of suspension/expulsion
- Lower scores on standardized tests
- 2.5X more likely to be retained
- Up to 32X more likely to be identified as learning disabled



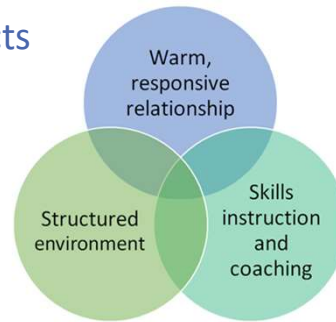
Percent of Children with Adverse Experiences Who Are Currently Experiencing Significant Academic Problems



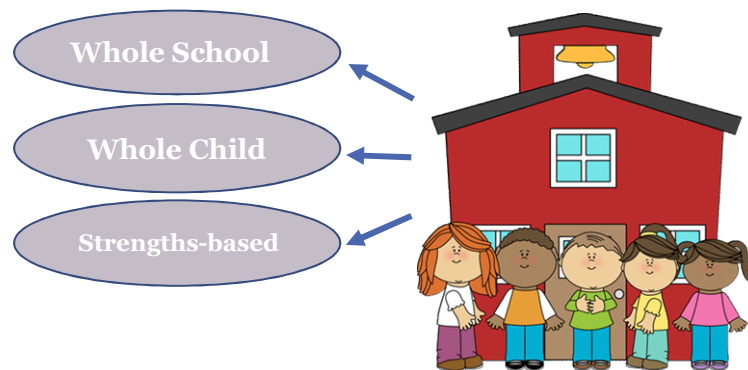
Blodgett et al, 2010

What will help?

- Building trauma-informed, trauma-sensitive environments
 - All adults understand impacts of trauma
 - Focus on relationship-building, structure, and support for skill-building
 - Strategies selected are setting-specific



What will a trauma-sensitive environment look like?



This is **not** a one-time, one-year program, but rather a **shift** in the way caregivers think and interact

Perspective Shift

Traditional View	Trauma-informed View
Impulsive	Difficulty regulating emotions
Aggressive/Defiant	Trauma response triggered, trying to gain control and find safety
Withdrawn/"unmotivated"	Afraid, overwhelmed, world is a dangerous place
Over-reacting	Seeking to get needs met
ADHD	Lacking necessary skills
Reaction: STUDENT NEEDS TO BE PUNISHED	Reaction: STUDENT NEEDS SKILLS AND SUPPORT

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Framework, not a program!

- Solutions are setting-specific, led and owned by the school/program/organization
- Components may include
 - Leadership capacity/infrastructure
 - Professional development
 - Staff support/self-care
 - Relationship-building with students
 - Clear expectations and routines
 - Structure of environment
 - Tiered system of self-regulation instruction/coaching
 - Discipline policies and procedures
 - Family/community connections

NC Examples

- NC Resilience and Learning Project
 - Public School Forum of NC
- Incredible Years preschool programs
 - IES-funded study in 120 classrooms
- Trauma-Informed Infant/Toddler Care
 - DCDEE planning grant, to be piloted in 2019-20
- Trauma-Informed Leadership Training
 - Center for Child and Family Health
- Compassionate Schools
 - Buncombe County
- Community Resiliency Model
 - Wake County

Early Findings from Trauma-Sensitive Schools

Decrease in:

- Student depression symptoms
- Behavioral outcomes after 1 year:
 - Suspension rates by 30-90%
 - Office referral rates by 20-44%
 - Incidents of physical aggression by 43%
- Behavioral outcomes after 5 years:
 - Suspension rates by 95%



Dorado, et al (2016) & Stevens (2012)

Early Findings from Trauma-Sensitive Schools

Increase in:

- Student self-esteem
- Academic outcomes:
 - Students' ability to learn by 28%
 - Student time on task while in class by 27%
 - School attendance rate by 34%
 - Test scores



Dorado, et al (2016) & Stevens (2012)

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Questions?

Katie Rosanbalm
Research Scholar
Center for Child and Family Policy
Duke University

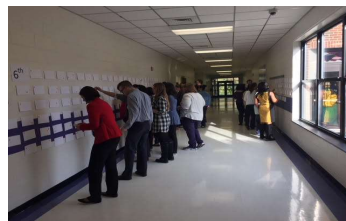
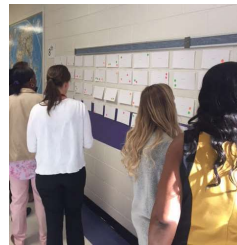
katie.rosanbalm@duke.edu

919-668-3294

Examples and Feedback from Pilot Programs

Strategies Targeted in Pilot Schools

- Relationship-building
 - Sticky note activity and student survey
 - Student check-ins
 - POWER hour
 - Kindness club
 - Girls and boys mentor program
 - Relationship-focused child play therapy



Strategies Targeted in Pilot Schools

- Staff Self-Care
 - Self-care Thermometer / Goal-setting and monitoring
 - Staff group lunches
 - Wellness initiative through a local healthcare provider
 - Staff shout-out box
 - Teacher-of-the-month recognition program
- Discipline Strategies
 - Considering context, looking for alternatives to suspension
 - Reflection writing as “ticket” back to class
 - Creating a new behavior matrix/flow-chart

Strategies Targeted in Pilot Schools

- Student Self-Regulation
 - Calm-down areas
 - Homeroom empowerment time for social-emotional learning (e.g., empathy, coping skills)
 - SPARCS training for support staff
 - Mindfulness breaks
 - De-escalation training



Teacher Comments



- Instead of having a chaotic environment that feeds INTO the school, we are building an organized caring effort that extends OUT of the school
- When you see teachers chatting in the break room, it used to be just a venting session. Now they are problem-solving and brainstorming ideas.
- Teachers feel more empathic and students notice it. Students are more respectful in class and have far fewer blow-ups.

Teacher Comments



- Great for whole staff to have same information and understand possible reasons for misbehavior.
- Facilitated resilience team meetings are critical to keep the work moving forward and on the front burner.
- At the same time, great to have facilitators that let staff take the lead rather than telling them “what to do.”