Research-Based Trauma-Responsive Education Practices: Research Perspective

Amy Lansing, Ph.D., University of California, San Diego

REL SOUTHWEST

3/28/19

OLDER CHILDREN - High School Sophomores and Seniors

Washington School Classroom (30 Students)

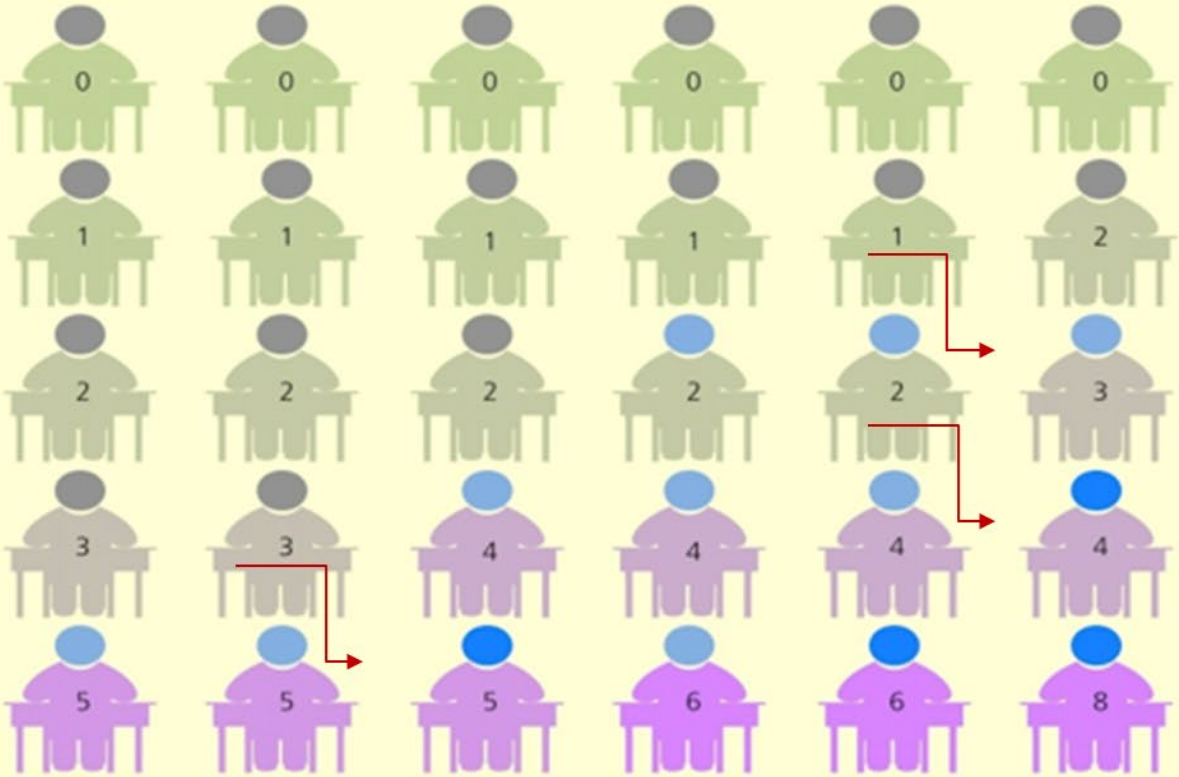
Adverse Childhood Experiences (ACEs)

6 students with no ACE
5 students with 1 ACE
6 students with 2 ACEs
3 students with 3 ACEs
7 students with 4 or 5 ACEs
3 students with 6 or more ACEs

58% (17) students with no exposure to physical abuse or adult to adult violence

29% (9) of students exposed to physical abuse or adult to adult violence

13% (4) of students exposed to physical abuse and adult to adult violence



Population Average

- 20% are ACE-*less*
- 37% have ≤1 ACE
- 63% ≥2 ACEs
- 42% DV *or* PA
- 33.3% ≥4 ACEs

Domestic violence: DV / Physical abuse: PA

SOURCE: https://acestoohigh.com/

ACE Indicators Among Delinquents

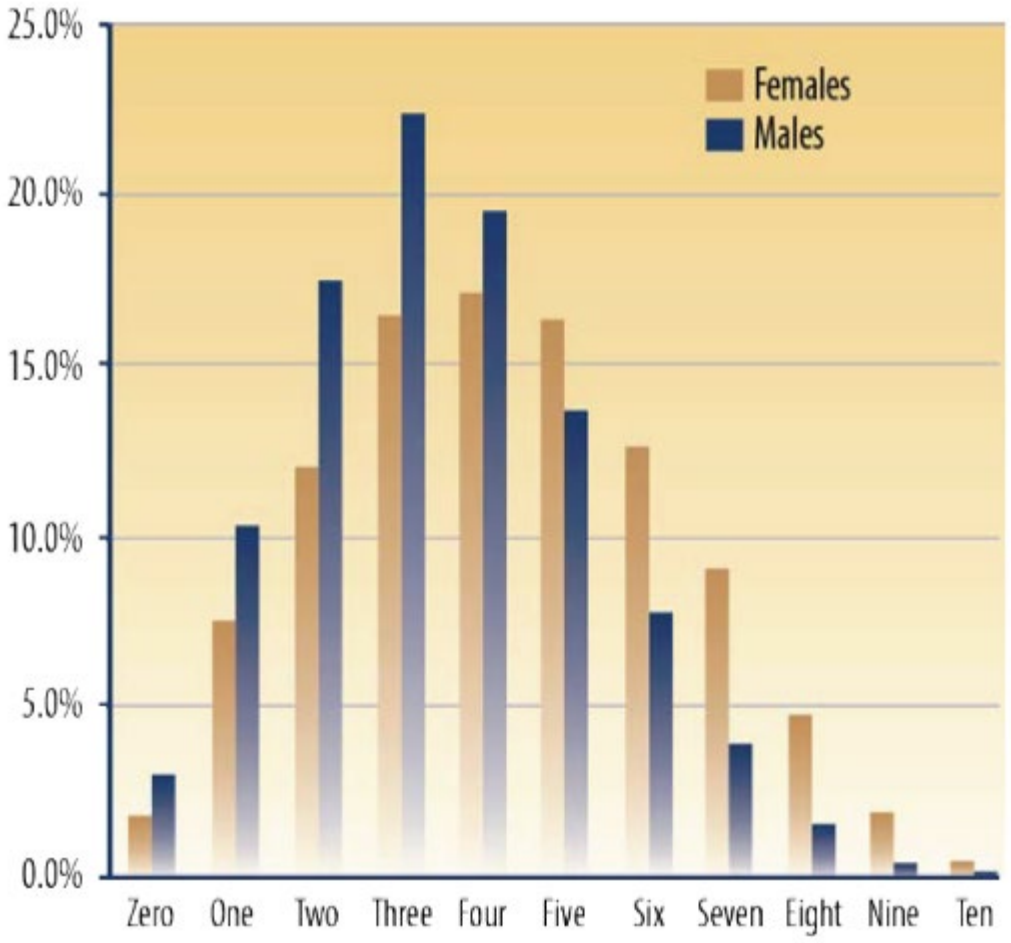
Males:

- 3.1% reported **no** ACEs.
- 71% reported ≥ **3.**
- 28% reported ≥ **5.**
- Average composite score: 3.48

Females:

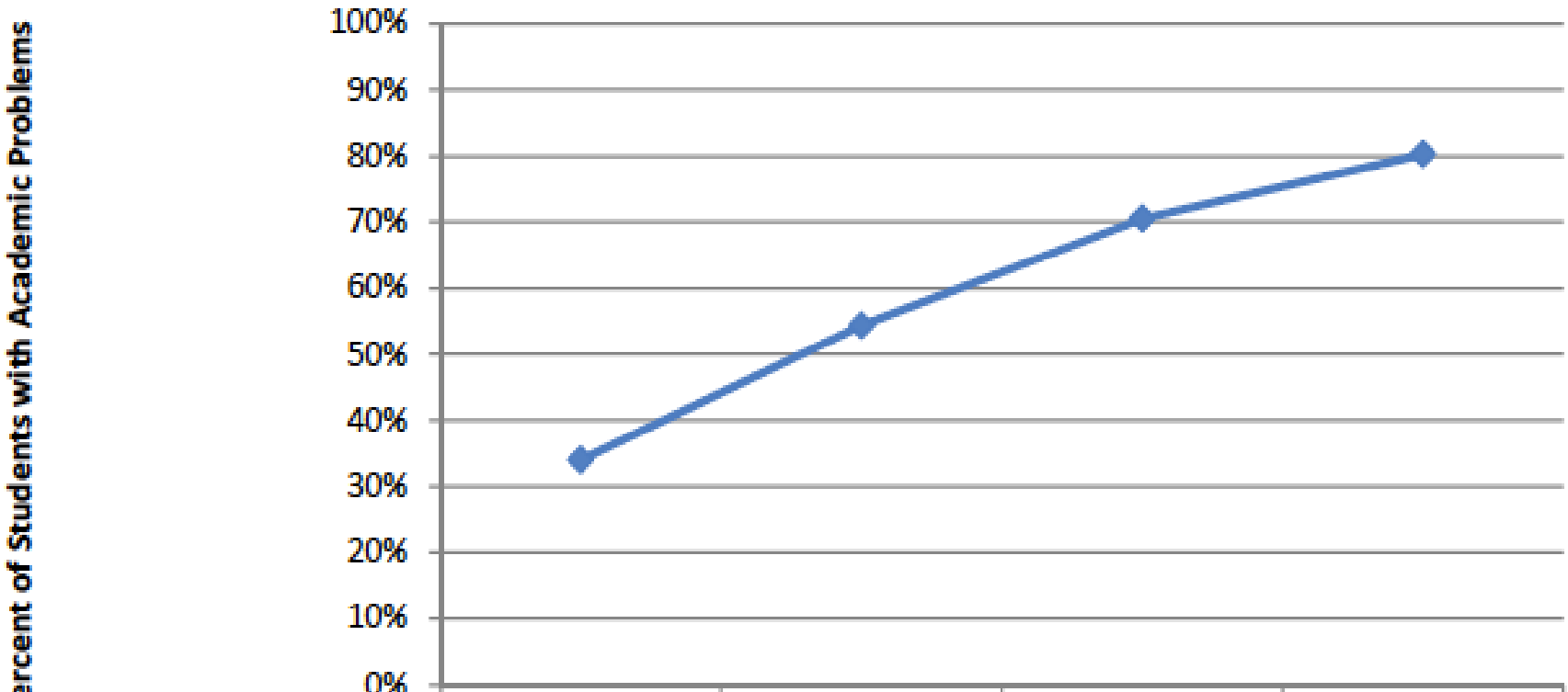
- 1.8% reported **no** ACEs.
- 80% reported ≥**3.**
- 46% reported ≥**5.**
- Average composite score: 4.29

Figure 2. Prevalence of ACE Score by Gender.



SOURCE: Baglivio et al., (2014). The prevalence of adverse childhood experiences (ACEs) in the lives of juvenile offenders. *Prevalence*, *3*(2).

Percent of Students with One or More Academic Concerns by ACE Exposure

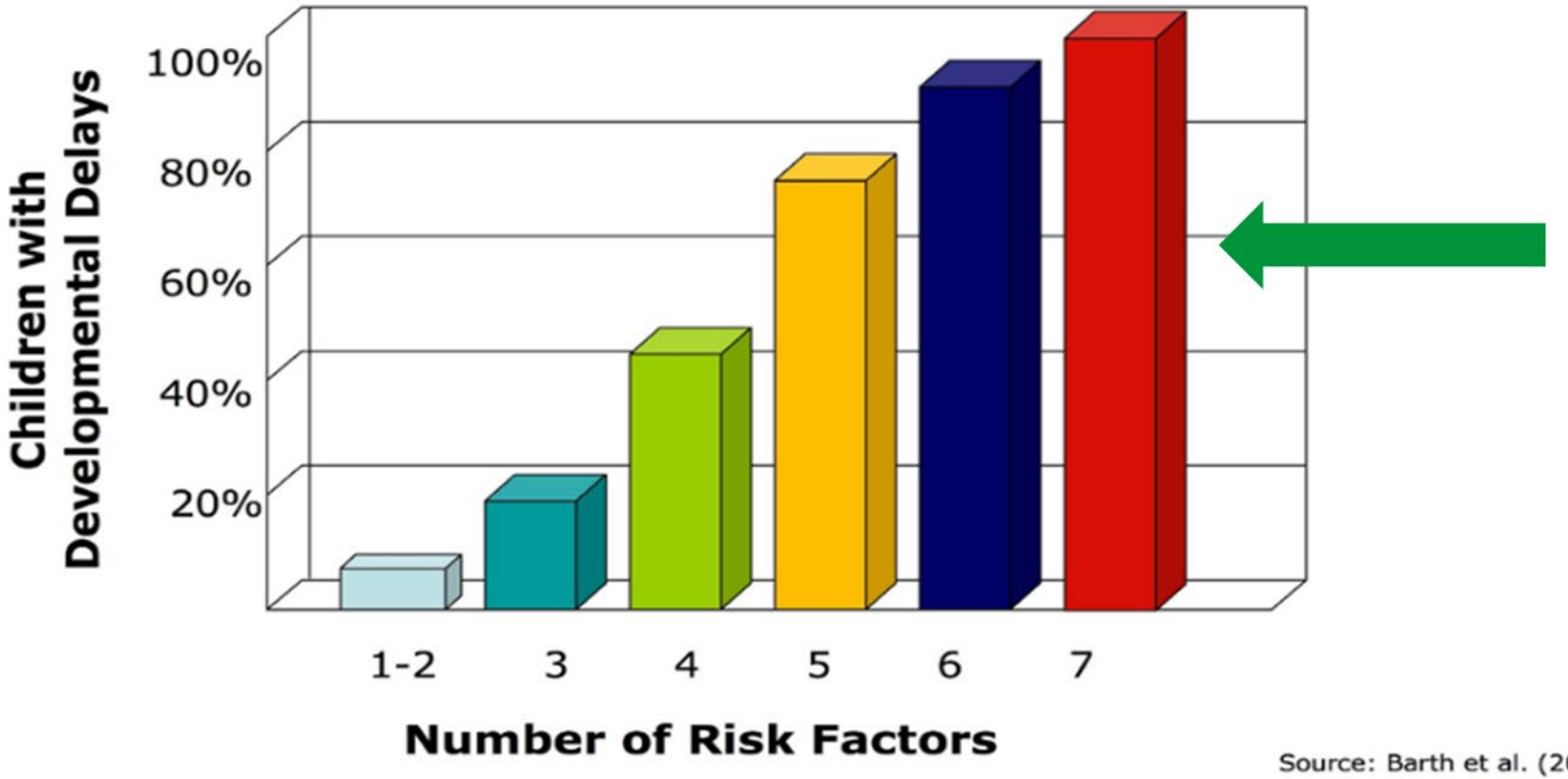


	No Known Adverse Events	One Reported Adverse Event	Two Reported Adverse Events	Three or more Adverse Events
One or More Academic Concerns	34%	54%	71%	80%

SOURCE: https://acestoohigh.com/

Center on the Developing Child
HARVARD UNIVERSITY

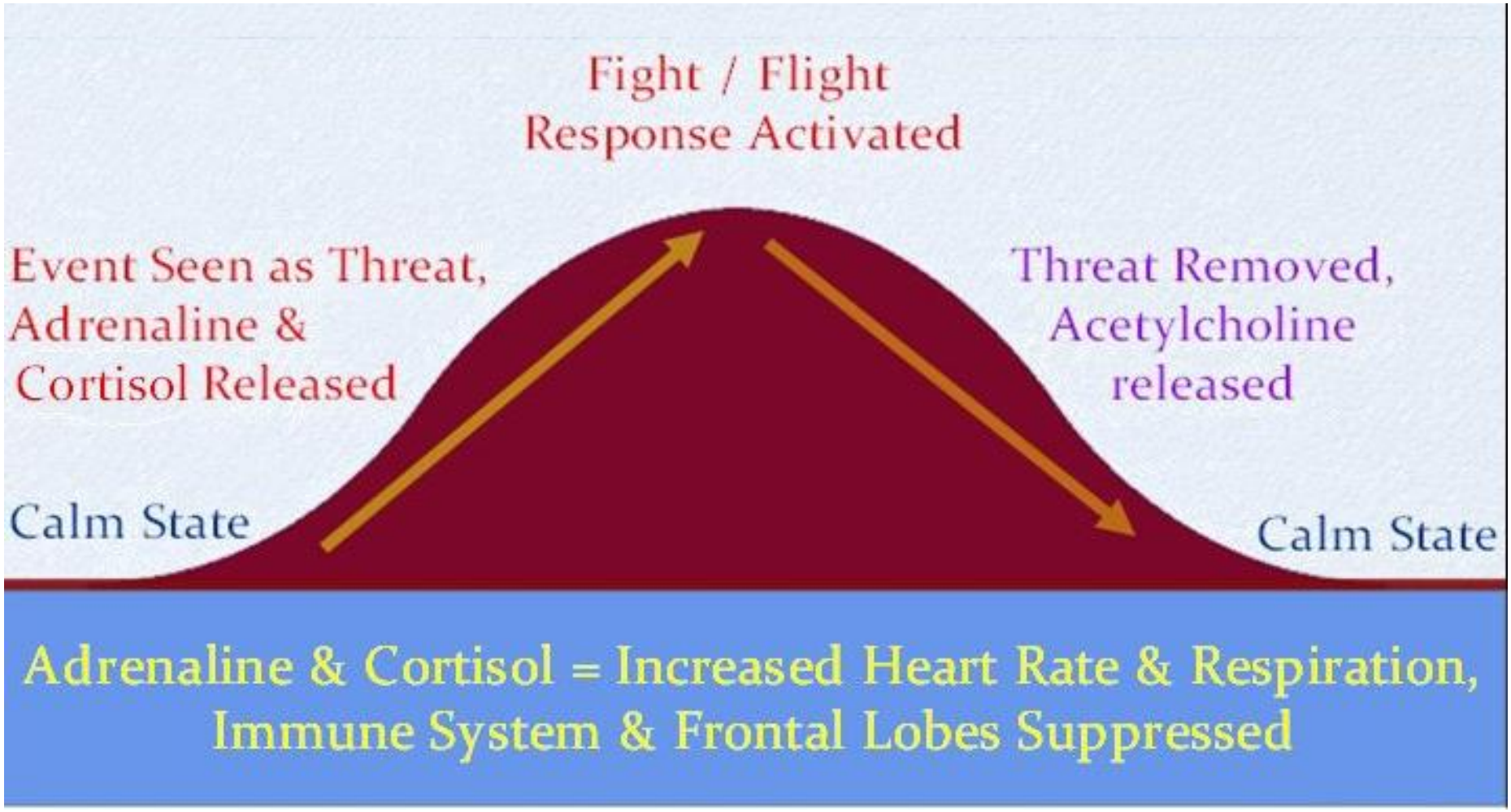
Significant Adversity Impairs Development in the First Three Years



Source: Barth et al. (2008)

Source: Barth et al (2008). Credit: Center on the Developing Child.

The Stress Response Cycle



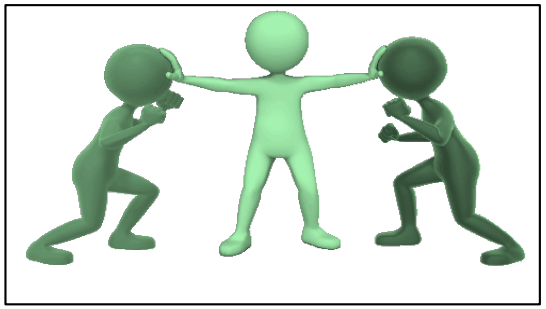
Sustained Adversity/Complex Trauma

Affective Dysregulation

- Low distress tolerance
- Mood swings
- Hyperarousal
- Dissociation
- Attachment difficulties

Cognitive Dysregulation

- Verbal deficits
- Executive dysfunction
- Attention problems
- Learning deficits
- Faulty schemas



Behavioral Dysregulation

- Disorganized
- Relational aggression
- Physical outbursts
- Tantrums
- Hyperactivity

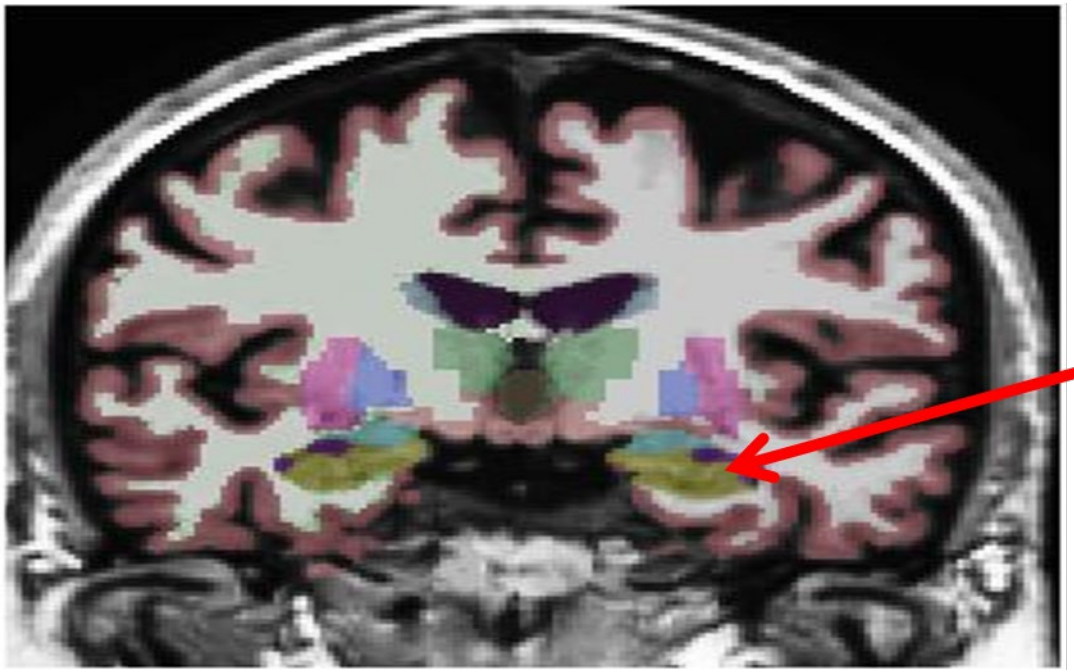
Other Contributors

- Poverty, food insecurity
- Prejudice ("-isms")
- Institutional racism
  - → Disproportionate minority contact
  - → School-to-prison pipeline
- Bullying (not just about peers!)
- Losses
- Sleep deprivation

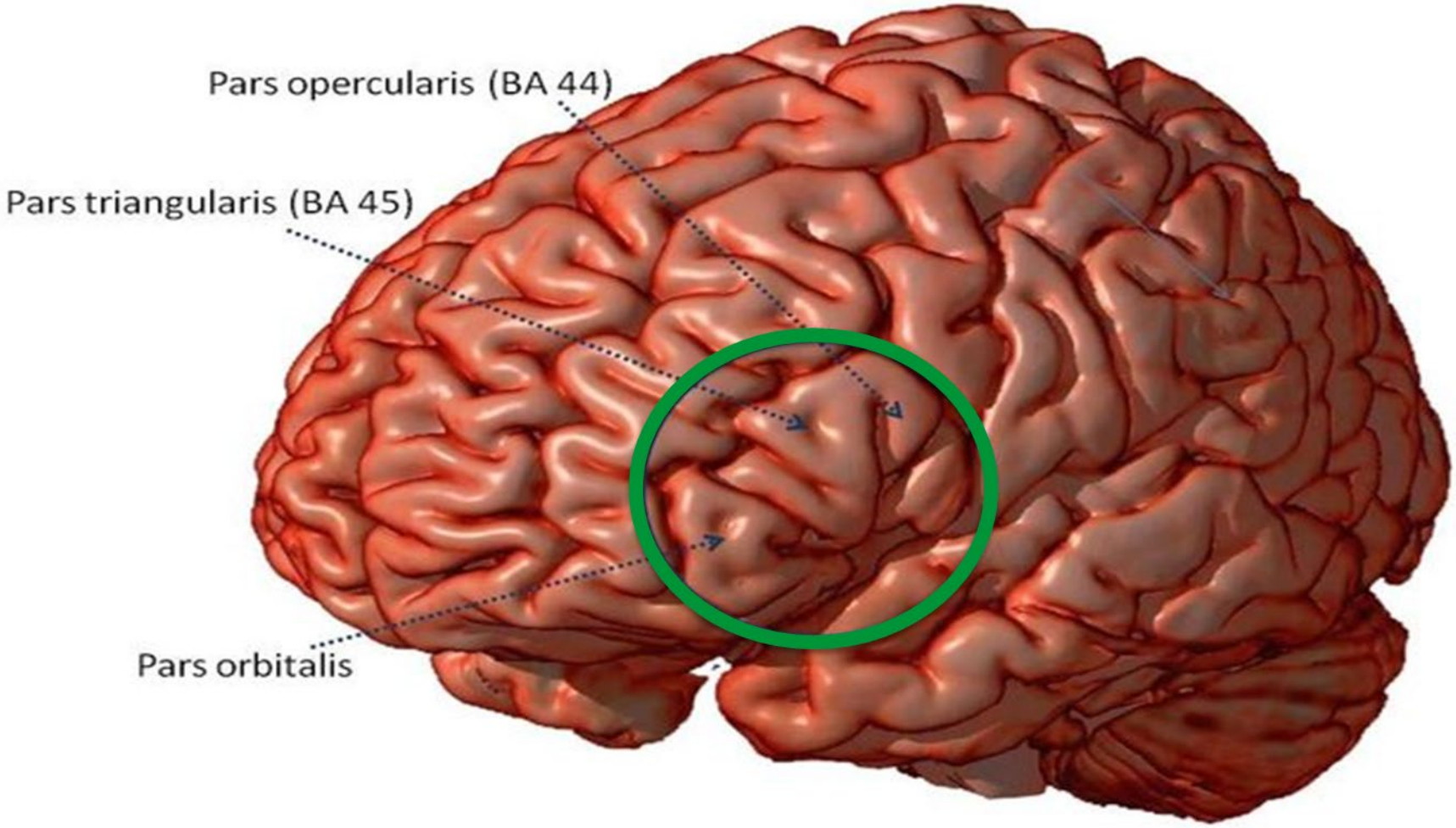
Structural Brain Imaging in Early-Onset Persistently Delinquent Boys

Structural Magnetic Resonance Imaging

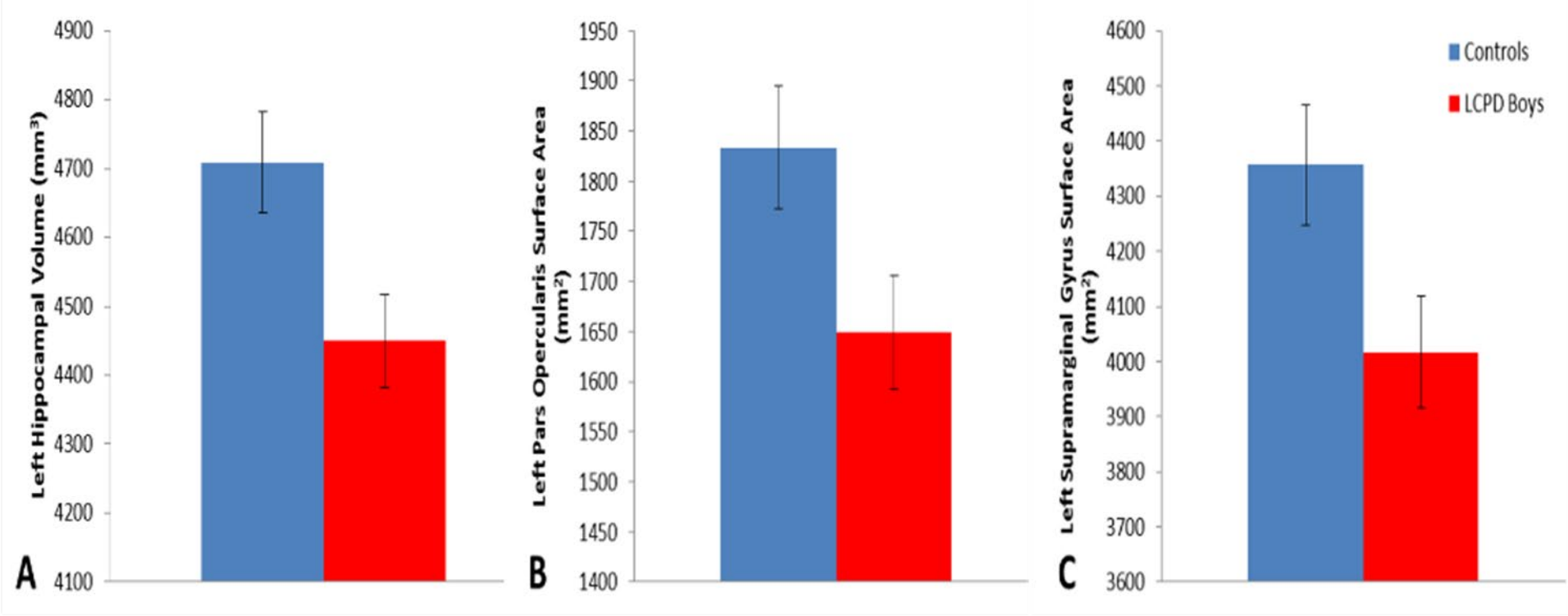
Probabilistic Segmentation



Cumulative trauma, adversity & grief impact the left inferior frontal gyrus



Early-Onset Persistent Delinquent & Control Boys



(A) Left hippocampal volume

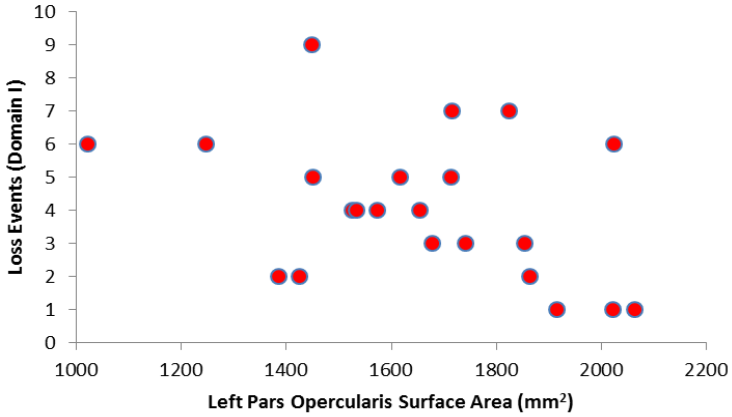
(B) Left pars opercularis surface area

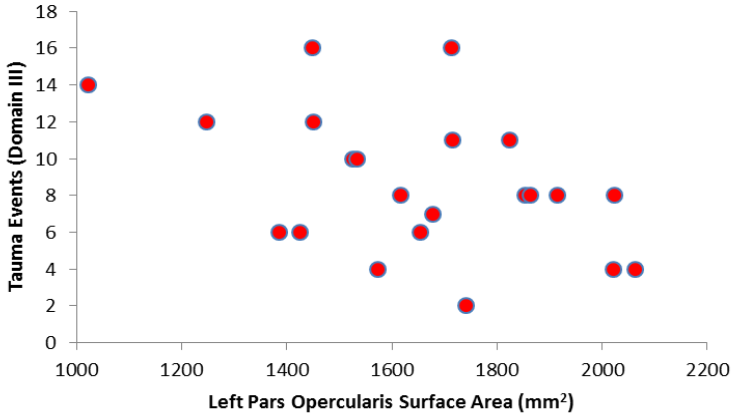
(C) Left supramarginal gyrus surface area

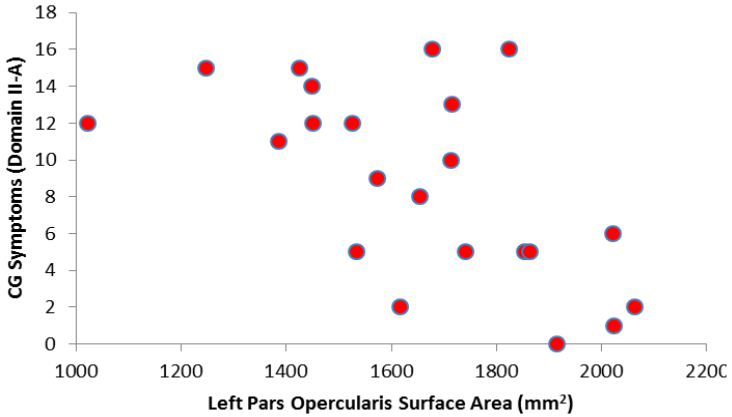
all $p<0.05$, and accounts for intracranial vault size

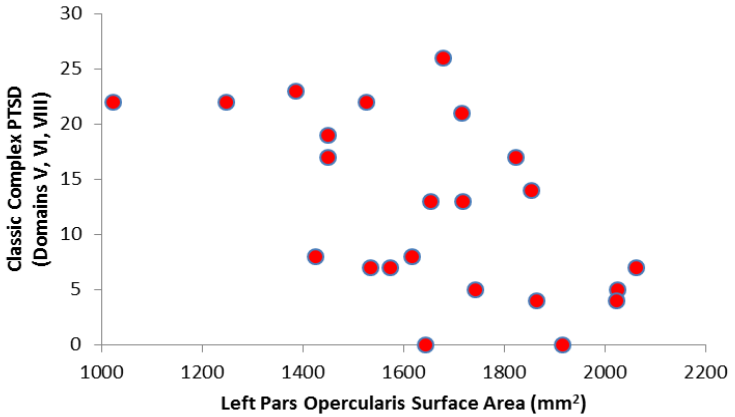
MRI Findings: Delinquent boys

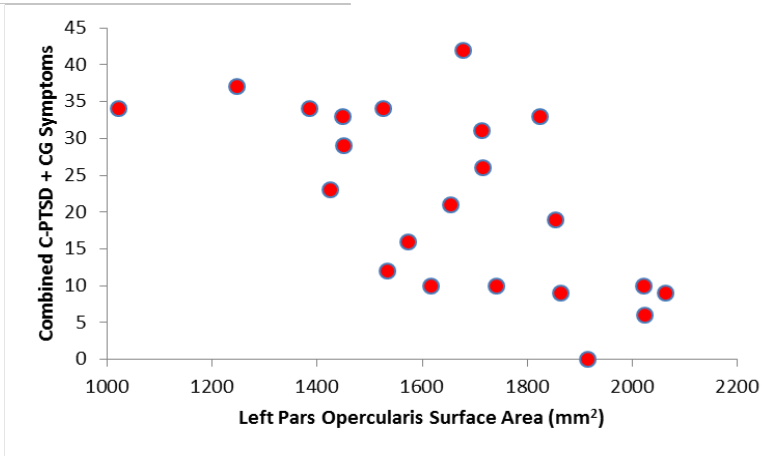
- Smaller intracranial vaults → worse **performance** intellectual abilities (block design, matrices)
- Altered white matter microstructures → worse **verbal** intellectual abilities (vocabulary, similarities)
- ↓ total gray matter
- ↓ surface area in the pars opercularis correlated with poor auditory processing
- ↓ cortical folding in frontal areas, especially in left pars orbitalis









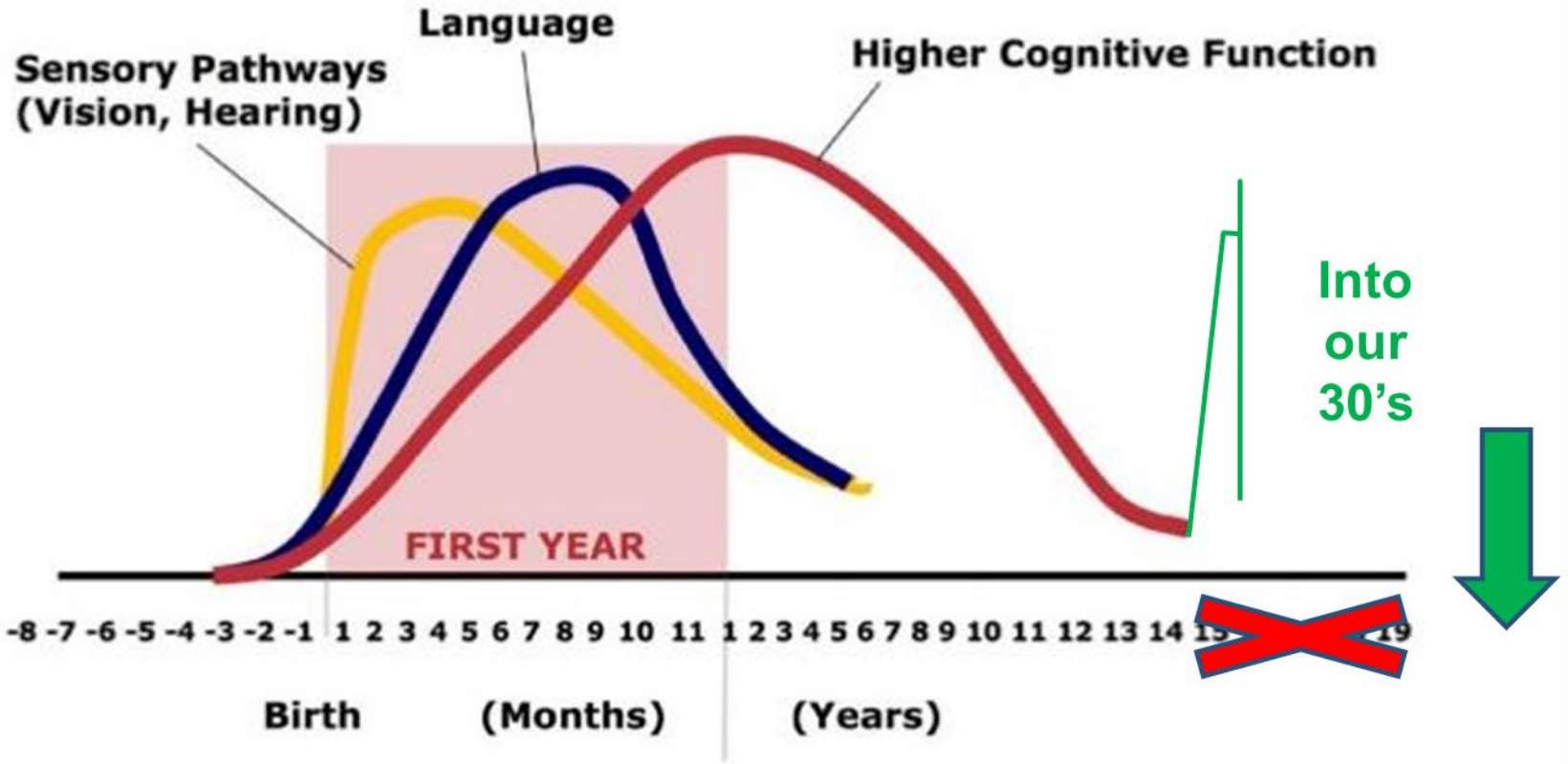


SOURCE: Lansing, et al., 2016. Psychiatry Research: Neuroimaging.

Center on the Developing Child
HARVARD UNIVERSITY

Human Brain Development

Neural Connections for Different Functions Develop Sequentially



SOURCE: Center on the Developing Child (2007).

Trauma-Responsive Schools

"Trauma Informed"

Trauma-Informed Approaches

- **Not** necessarily a service or program. **Not** specifically designed to *treat symptoms* related to sexual or physical abuse or other trauma. *A way of interacting* that is informed about, and sensitive to, trauma-related issues present in survivors.

  - Understanding triggers, suicide response procedures in place, and so on, VERSUS passive-aggressive interactions, loud/booming voices, or "dropping bombs"

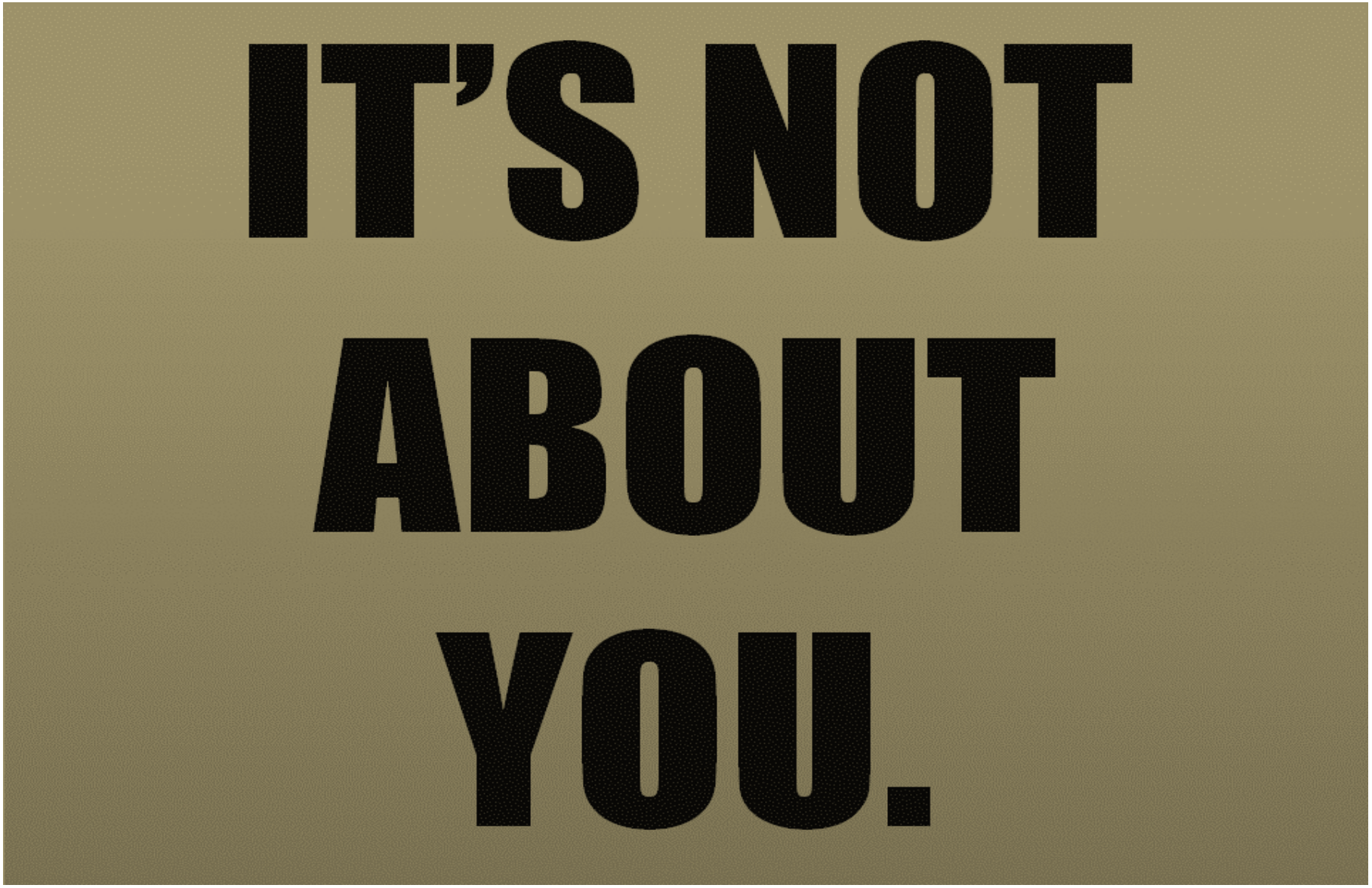
Trauma-Informed Systems

- Systems in which all components of a given service system have been reconsidered and evaluated in light of a basic understanding of the role that violence plays in the lives of people with mental health issues and addictions (Harris & Fallot, 2001).

SOURCE: Harris, M. E., & Fallot, R. D. (2001). Using trauma theory to design service systems. Jossey-Bass.

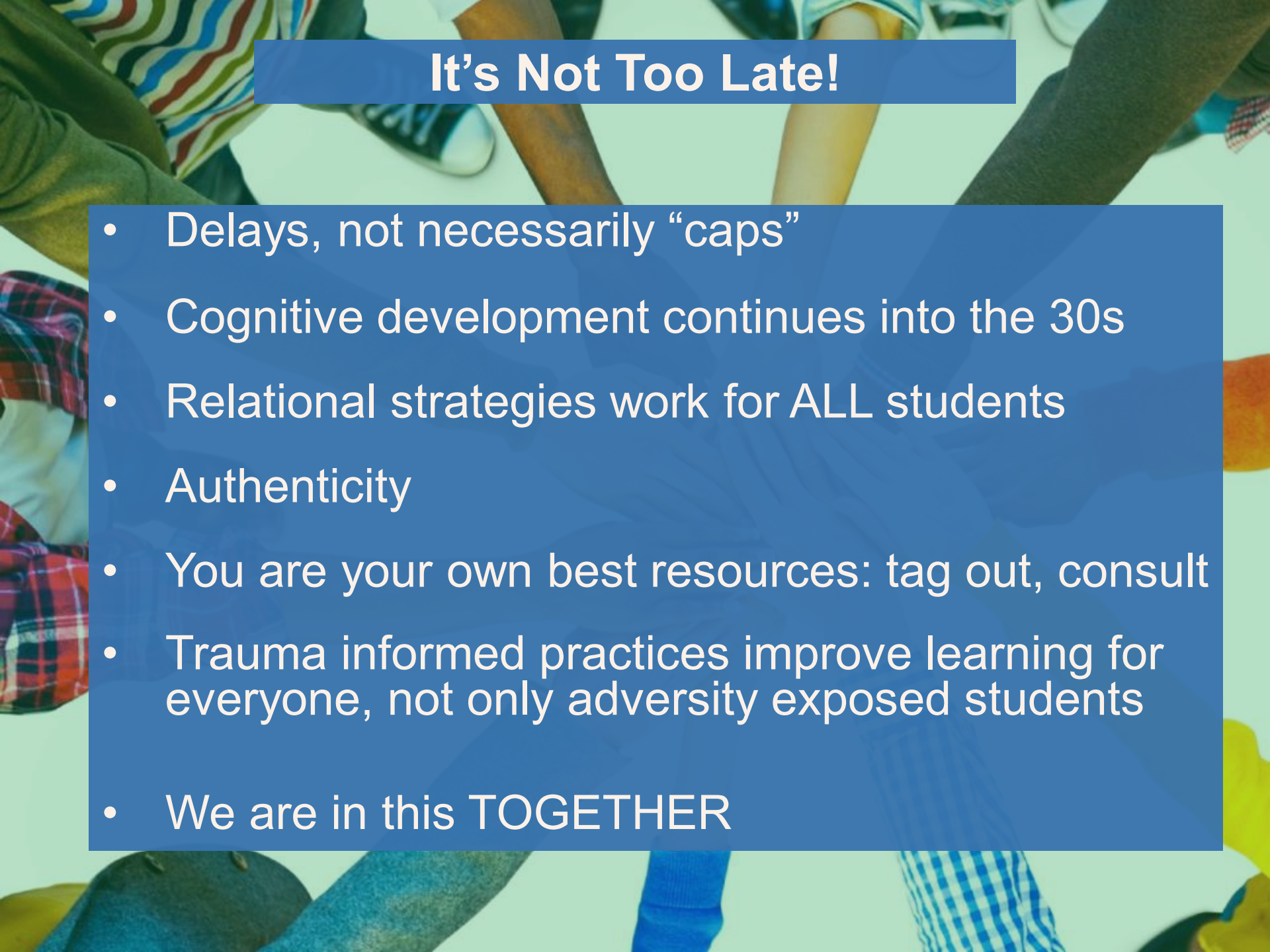
Triggers

Remember….



SERIOUSLY!! Don't personalize.

It's all fun and games until someone figures out the function of your behavior.



It's Not Too Late!

- Delays, not necessarily "caps"
- Cognitive development continues into the 30s
- Relational strategies work for ALL students
- Authenticity
- You are your own best resources: tag out, consult
- Trauma informed practices improve learning for everyone, not only adversity exposed students
- We are in this TOGETHER

Thank you!

Questions?