Stress and Anxiety Management: A Primer for Students (and their Parents)

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Defining "Health" Through the Years

- 1800s: "Health" associated with poor hygiene and unsanitary conditions
  - Medical Model
  - Episodic care
- By the 1970's: Comprehensive Ecological or Public Health Model added these dimensions:
  - Physical
  - Social
  - **Mental and emotional**
  - Environmental and occupational
  - Spiritual
  - **Academic dimensions**

Equating Health with "Wellness"

Health is now equated with wellness and considered more globally

"a quality of life, involving social, emotional, mental, spiritual, and biological fitness on the part of the individual, which results from adaptations to the environment."
—René Dubos

Connections between Wellness and Academic Outcomes

- For each step along the wellness continuum:
  - GPA is reduced by as much as 17%
  - Standardized test scores reduced as much as 15%
  - Increased frequency of class tardiness, school absences and office referrals

The Impact of Poor Mental Wellness on Developmental Outcomes

Youth having high mental distress more likely to engage in:

- Aggressive behaviors
- Alcohol and drug use
- School disengagement and drop out
- Peer victimization
- Suicide thoughts and behavior
- Poor school motivation and eventual dropout

What are the Major Risk Factors that Compromise Mental Wellness?

- Stress
- Anxiety

In this Presentation…..

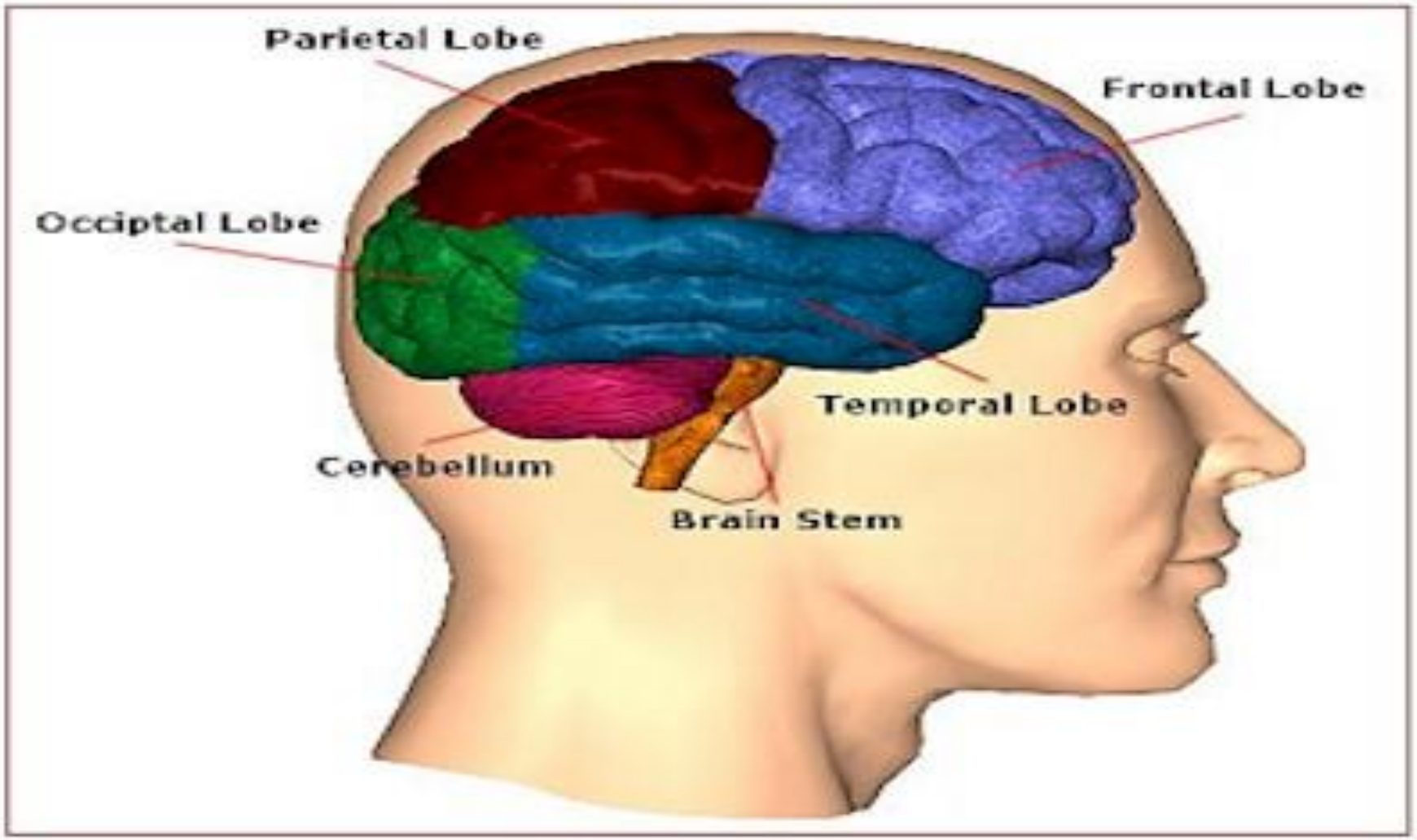
- Brief overview of stress and anxiety and its impact on students development
- The role of resiliency in helping students cope with their stress
- Empirically-based suggestions for parents

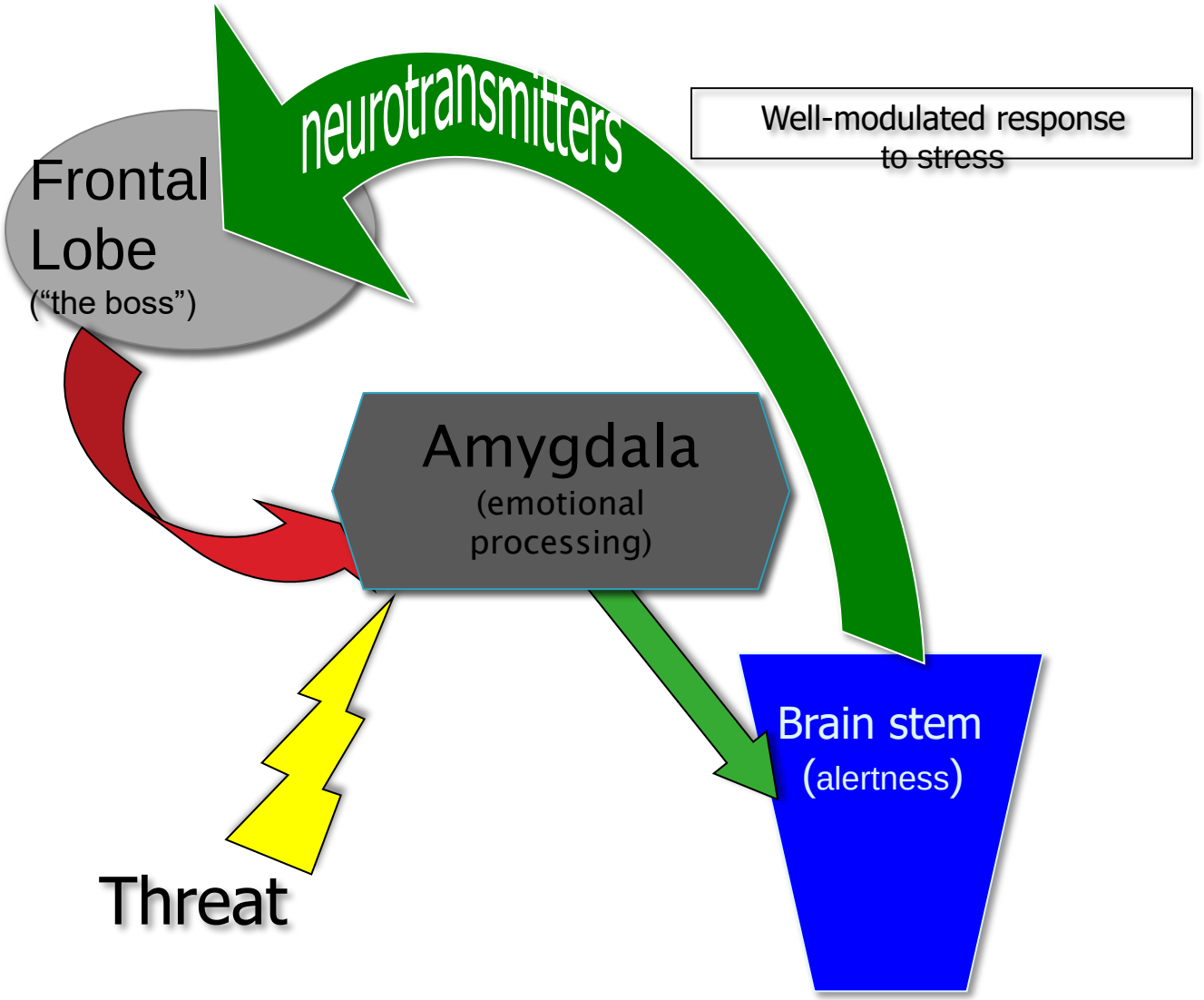
Stress

- Inevitable part of life
- A certain amount of stress is normal and necessary for survival
  - Helps children develop the skills they need to cope with and adapt to new and potentially threatening situations throughout life
- Beneficial aspects of stress diminish when it is severe enough to overwhelm an individual's ability to cope effectively

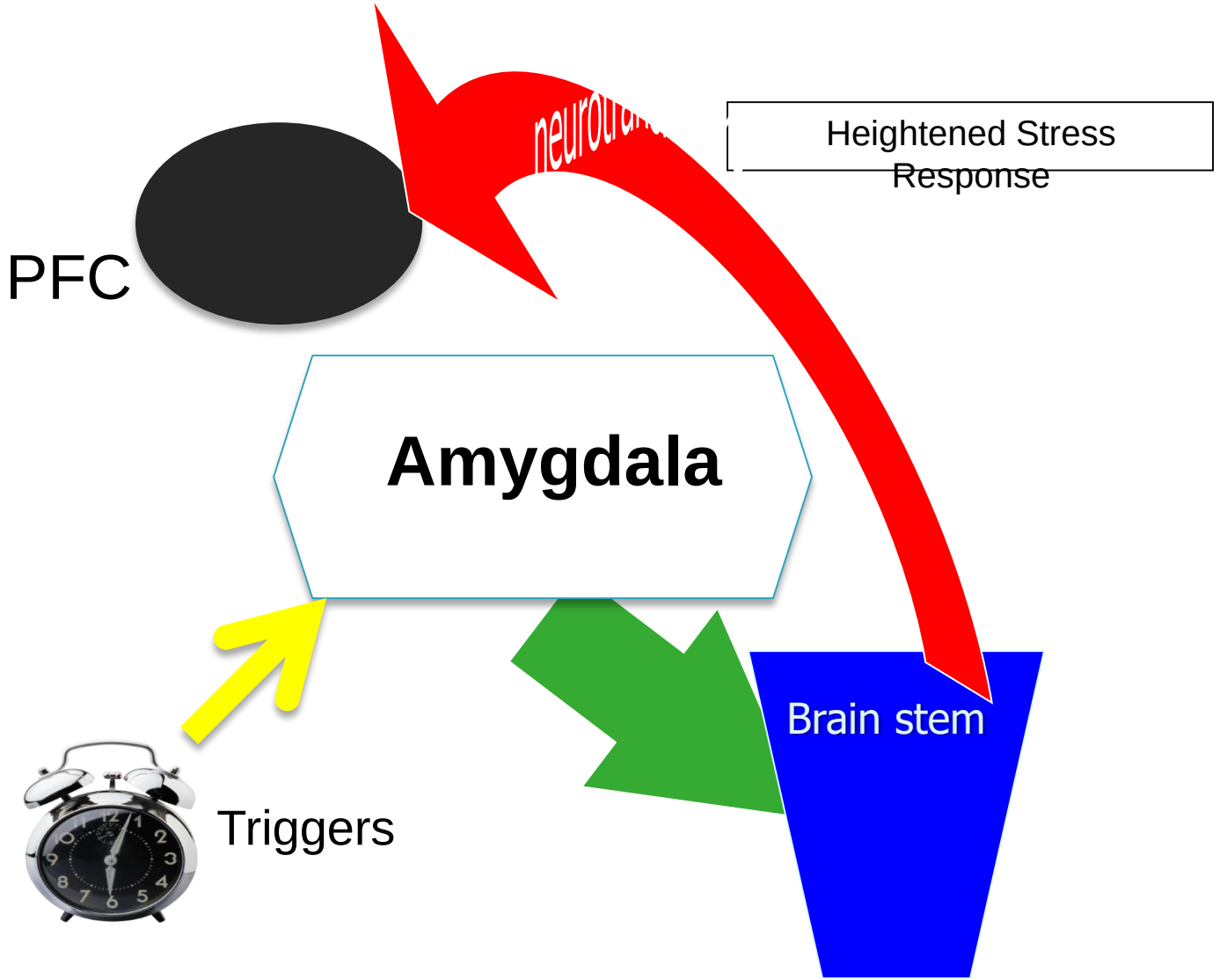
Three Types of Stress

- **Positive stress**
  - Results from adverse experiences that are short-lived.
- **Tolerable stress**
  - Adverse experiences that are more intense but still relatively short-lived (e.g., death of a loved one, natural disaster, frightening accident, family disruptions)
- **Toxic stress**
  - Intense adverse experiences that may be sustained over a long period of time—weeks, months or even years.
  - Stress response system gets activated for a prolonged amount of time, leading to changes in brain development and response to stress reminders.


Parietal Lobe
Frontal Lobe
Occiptal Lobe
Temporal Lobe
Cerebellum
Brain Stem



Resick and Rasmusson, 2010


neurotra
Heightened Stress Response
PFC
Amygdala
Brain stem
Triggers

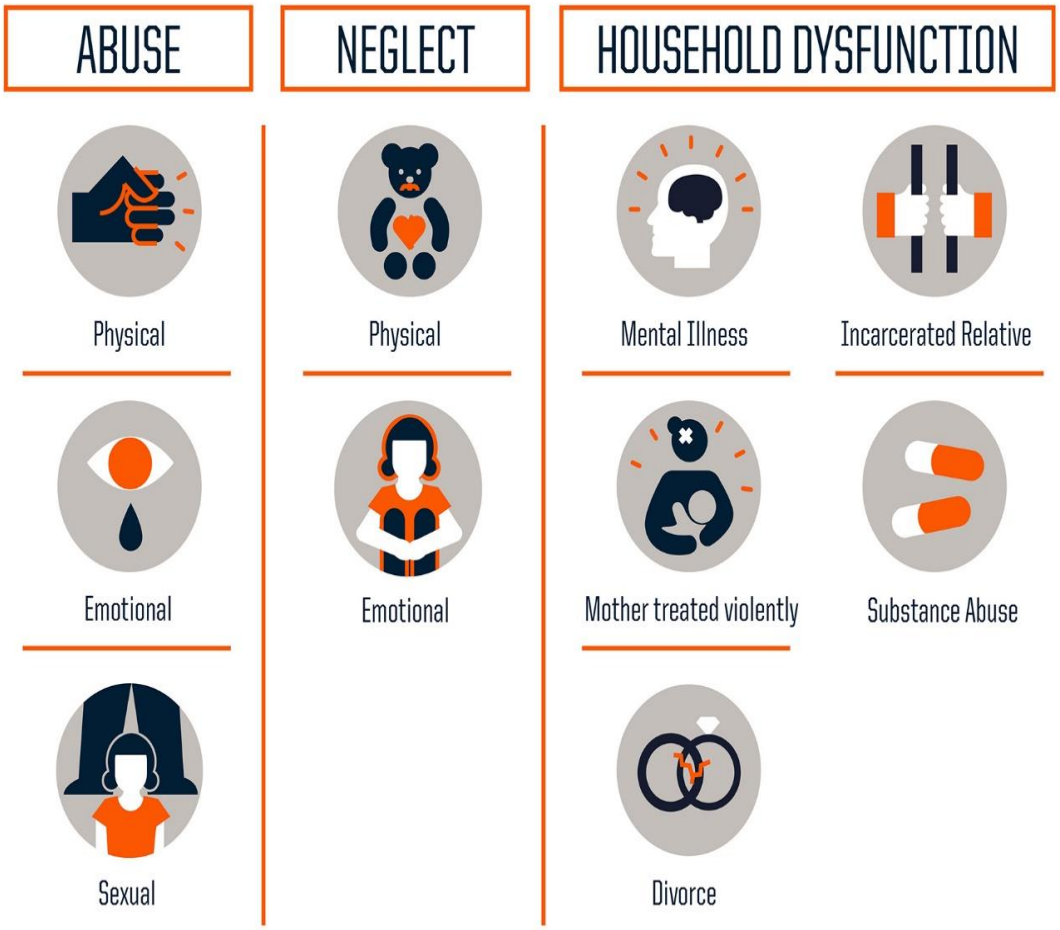
Physiological Changes due to Toxic Stress

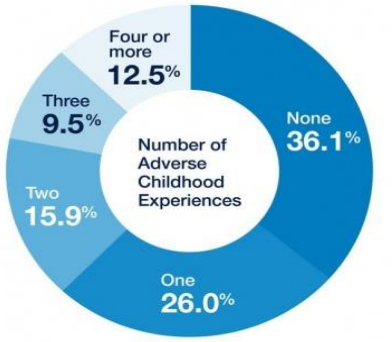
- **Can disrupt neural circuitry**
  - lower threshold for handling stress, thereby becoming overly reactive to adverse experiences
  - High level of stress hormones (e.g. cortisol), which can suppress the immune system
  - Sustained high levels of cortisol can damage areas of the brain responsible for learning and memory

- **Can Disrupt Social System**
  - Parents of youth with mood issues report highest levels of distress, hopelessness, and depression
  - 1 in 5 parents report toxic levels of stress themselves
    - Reciprocal influences

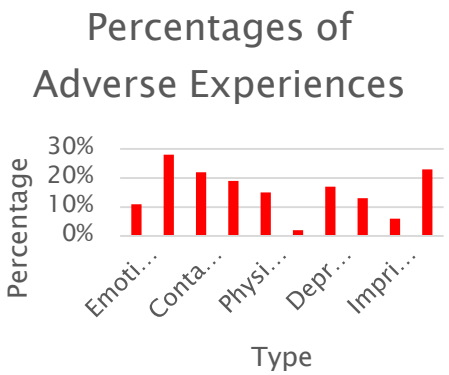
Chronic Stress and its Impact on Learning

- Most Information from The Understanding Adverse Childhood Experiences (ACEs) Study
  - Collaboration between CDC and Kaiser Permanente HMO (California)
  - 17,000 adult members of Kaiser Permanente HMO participated
  - Follow-up 5-state study conducted in 2010
  - Largest study of its kind to examine long-term impact of childhood adversity





Source: The ACE Study Survey Data [Unpublished Data]. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention; 2016



How Trauma Impacts Four Different Types of Memory

EXPLICIT MEMORY

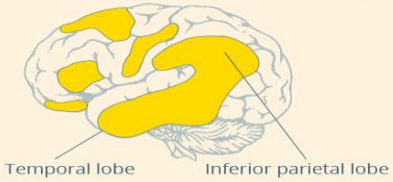
SEMANTIC MEMORY

What It Is
The memory of general knowledge and facts.

Example
You remember what a bicycle is.

How Trauma Can Affect It
Trauma can prevent information (like words, images, sounds, etc.) from different parts of the brain from combining to make a semantic memory.

Related Brain Area
The temporal lobe and inferior parietal cortex collect information from different brain areas to create semantic memory.



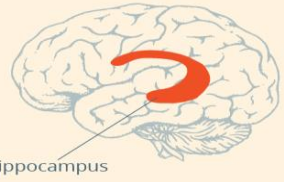
EPISODIC MEMORY

What It Is
The autobiographical memory of an event or experience – including the who, what, and where.

Example
You remember who was there and what street you were on when you fell off your bicycle in front of a crowd.

How Trauma Can Affect It
Trauma can shutdown episodic memory and fragment the sequence of events.

Related Brain Area
The hippocampus is responsible for creating and recalling episodic memory.



IMPLICIT MEMORY

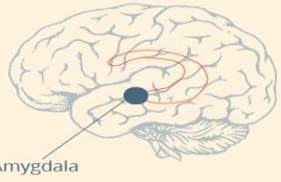
EMOTIONAL MEMORY

What It Is
The memory of the emotions you felt during an experience.

Example
When a wave of shame or anxiety grabs you the next time you see your bicycle after the big fall.

How Trauma Can Affect It
After trauma, a person may get triggered and experience painful emotions, often without context.

Related Brain Area
The amygdala plays a key role in supporting memory for emotionally charged experiences.



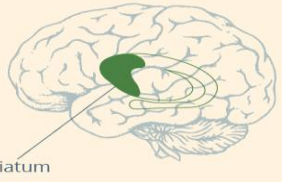
PROCEDURAL MEMORY

What It Is
The memory of how to perform a common task without actively thinking

Example
You can ride a bicycle automatically, without having to stop and recall how it's done.

How Trauma Can Affect It
Trauma can change patterns of procedural memory. For example, a person might tense up and unconsciously alter their posture, which could lead to pain or even numbness.

Related Brain Area
The striatum is associated with producing procedural memory and creating new habits.



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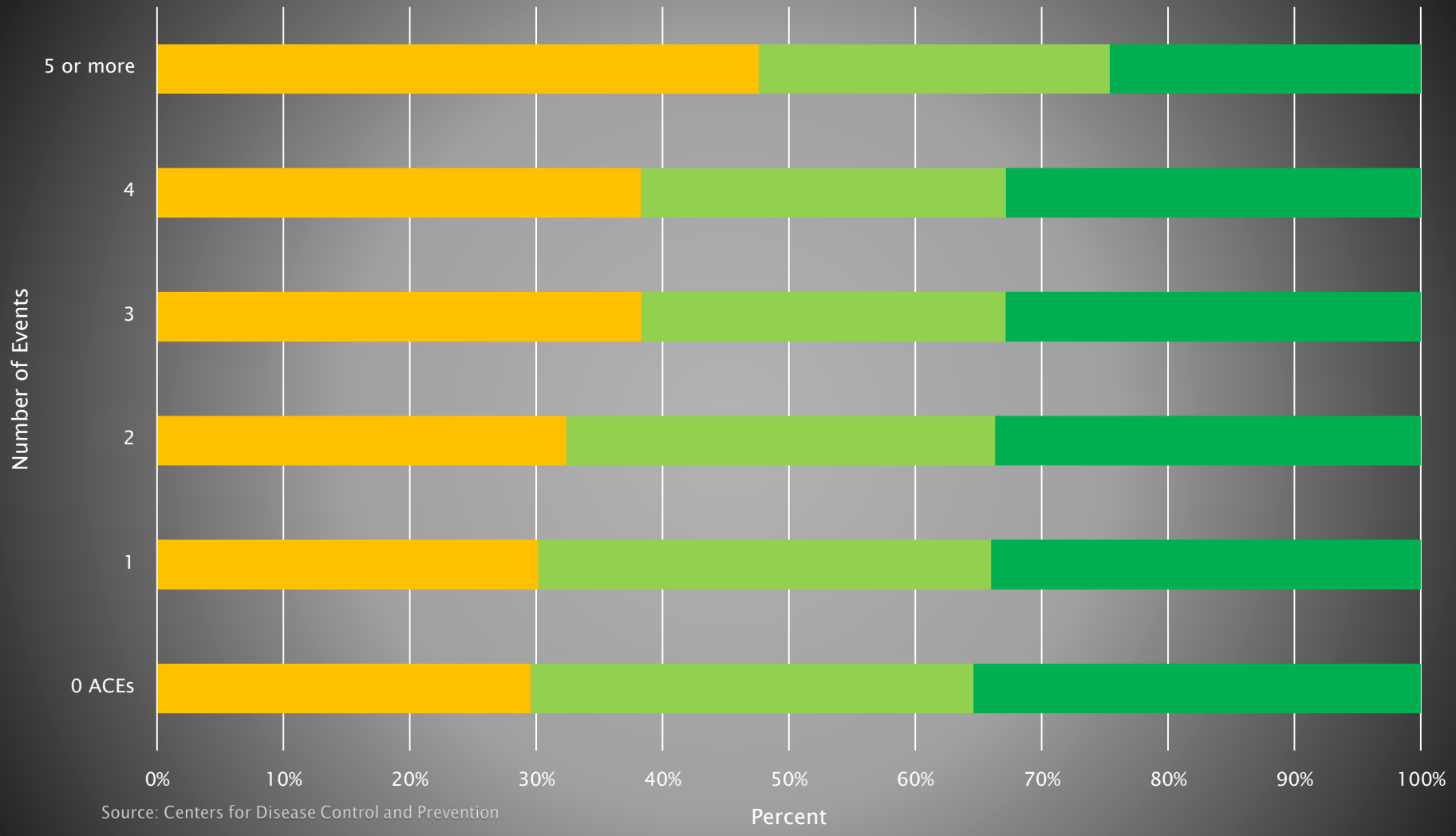
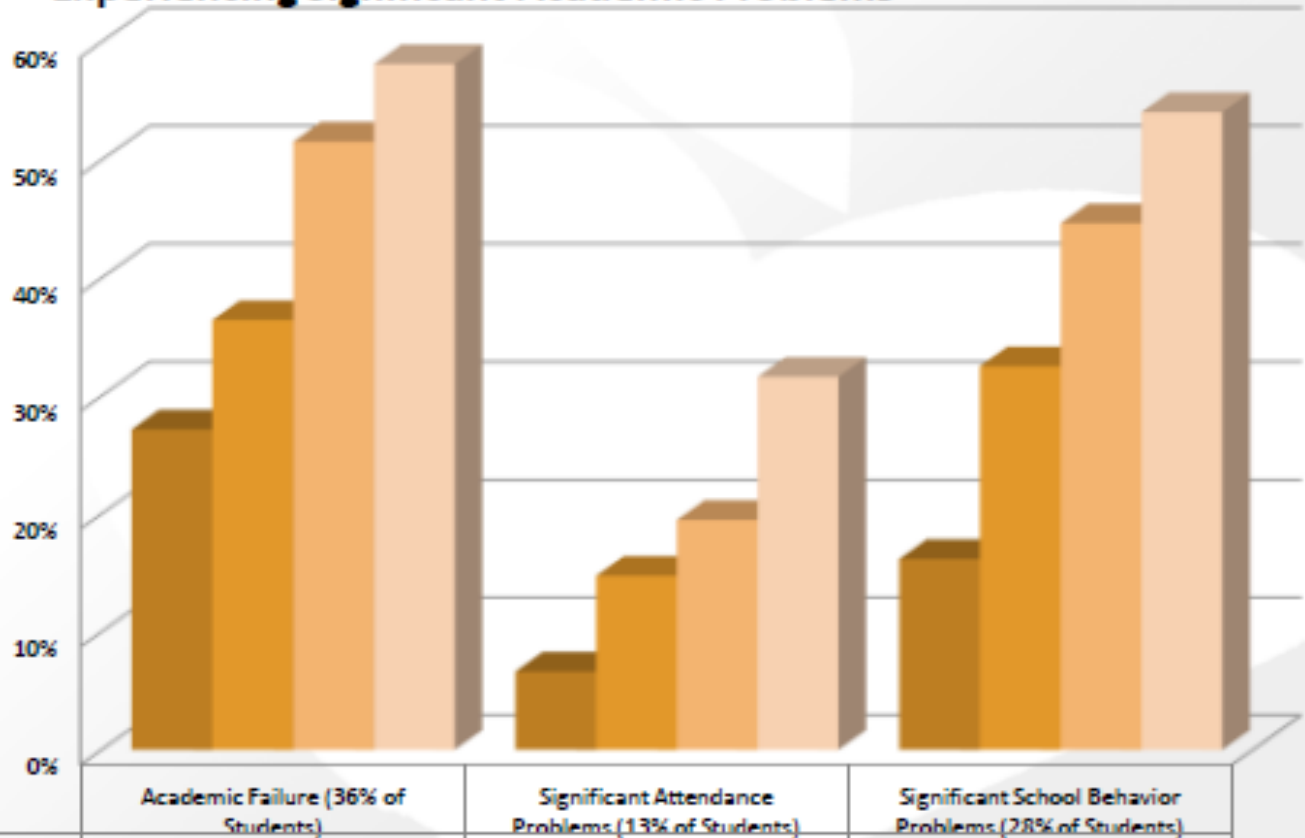
Impact of Childhood Trauma on Education



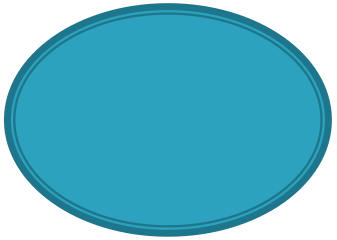
Percent of Children with Adverse Experiences Who Are Currently Experiencing Significant Academic Problems



	Academic Failure (36% of Students)	Significant Attendance Problems (13% of Students)	Significant School Behavior Problems (28% of Students)
No Known Adverse Events N=828	27%	7%	16%
One Reported Adverse Event N=332	36%	15%	33%
Two Reported Adverse Events N=159	52%	19%	45%
Three or more Adverse Events N=196	58%	32%	54%

Blodgett et al, 2010

What's Missing in this Slide?

ABUSE	NEGLECT	HOUSEHOLD DYSFUNCTION	
 Physical	 Physical	 Mental Illness	 Incarcerated Relative
 Emotional	 Emotional	 Mother treated violently	 Substance Abuse
 Sexual		 Divorce	

Don’t Overlook Chronic, Mundane Experiences

Social Rejection One of the Strongest and Most Common Traumatic Experiences

Results of Recent NIH Study

Indicators	**Socially Adjusted (n = 451)**		**Socially Ostracized /Disruptive (n = 151)**		**Ostracized Passive (n = 105)**			
	M	SD	M	SD	M	SD	F	ES
Depression	**4.27**[a]	5.07	**5.86**[b]	5.95	**8.19**[c]	6.98	38.97	.10
Social Stress	**5.30**[a]	4.44	**7.05**[b]	4.88	**12.37**[c]	6.78	115.02	.25
Self-Esteem	16.05[a]	3.79	15.58[a]	3.90	**12.19**[b]	5.16	56.27	.14
Global Satisfaction	**4.60**[a]	.90	**4.32**[b]	1.01	**3.99**[c]	1.09	25.24	.07
Social Anhedonia	8.73[a]	1.26	8.82[a]	1.31	**10.10**[b]	1.97	57.58	.14
Self-Control	**33.70**[a]	9.10	36.97[b]	8.68	36.78[b]	8.90	11.02	.03

Anxiety in Children/Adolescents

-Frequent occurrence of fears and anxiety in normal development

-Often overlooked given the invisible nature of the symptoms

-Not nearly as problematic as conduct issues

Social Anxiety Disorder (social phobia)

- Strong, irrational fear in the presence of social or performance situations in which possible humiliation or embarrassment is perceived to be likely
- Usually diagnosed after child reaches puberty.
- One of the most common disorders among adults, and appears to be increasing among adolescents
- Approximately 13% of youths affected at one time

Social Anxiety Disorder (social phobia)

- Adolescent girls slightly more prone to disorder than boys
- About 20% of adolescents with disorder also suffer from major depression
- 90% of children with selective mutism meet diagnosis

Generalized Anxiety Disorder

- Excessive, unrealistic worry and anxiety about a number of areas of life
- Along with SAD, most common in youths (3-10%)
- Average age of onset is 9-14 years, usually older than children with SAD

Generalized Anxiety Disorder

- Perfectionism is a big marker among such children
- Typically require frequent reassurances from others (often characterized as ‘little worries’)
- They may appear as ‘little adults’, creating an illusion of maturity that are often valued by teachers and parents

Post-Traumatic Stress Disorder

- Disorder was not seriously considered among youth until 1980.
  - between 6-7% of the U.S. population are exposed annually to extreme stressors
  - each year, 33,000 children under the age of 15 are hospitalized for burns
  - as many as 150,000-200,00 new incidences of child abuse are reported each year
  - Prevalence rate of PTSD: is 4-7% of youth

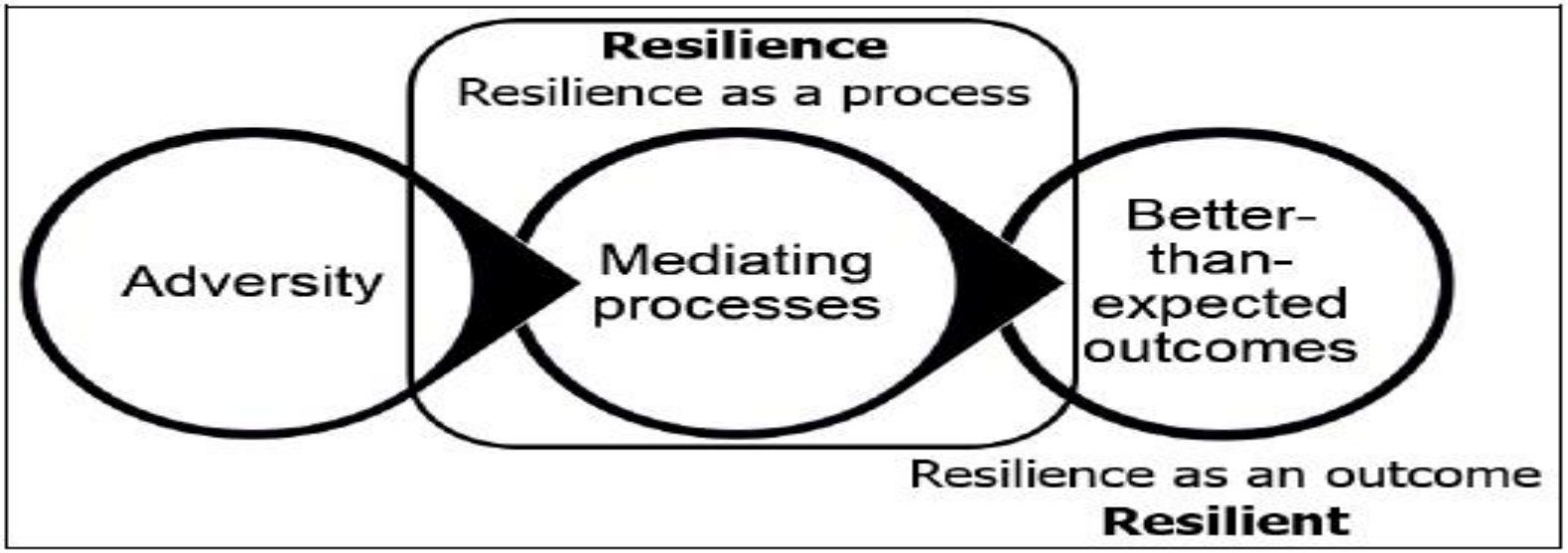
Three core symptoms of PTSD

- Re-experiencing the traumatic event
- Avoidance of associated stimuli and numbing of general responsiveness
- Symptoms of extreme arousal
- For youth with PTSD, they do not tend to forget the experience, and emotional blunting can be less common.

How Educators Can Help: Creating Resilient Classrooms

- *Resiliency: ability of an individual to adapt, and to withstand challenges to functioning*

FIGURE 1
RESILIENCE AS PROCESS AND OUTCOME



Why Important?

- **Resiliency explains up to 50% of variance when predicting school outcomes**
  - Values are higher for “at risk” students

- Two Types of Protective Factors:

Individual Assets

e.g., life satisfaction, hope, “grit”, leadership, academic expectations

External Resources

e.g., social connections, positive school relationships

Data-Supported Ideas to Improve Resiliency Domains

- 3:1 positive/criticism ratio
- Practice Gratitude
- Physical Activity
- Structured Extracurricular Activities
- Student-Directed Activity

- Promoting Mastery Goals
- Active Parent Involvement
- Assign Peer Advocates, a Peer Mentor, or a Buddy
- “Feeding the Hungry Bee”
- Encourage Expression of Thoughts and Feelings

Ways to Help Children (and parents!) Reduce Toxic Stress

- Recognize your own stress triggers, don't ignore them
  - how exactly do you respond to stress?
- Talk about it: communication is the key
- Make a conscious decision to take care of yourself
  - Sleeping habits
  - Dietary habits
  - Other habits….

- Relax your standards
- Careful of destructive thoughts: challenge your beliefs
- Every day, do at least one thing that you really enjoy
  - Take a break everyday for 15 minutes; get out of the classroom/home
- Seek professional assistance if you have difficulty coping with stress

For Children…

- (for younger children) recognize the symptoms of stress for them
- (for older) teach them to recognize their symptoms and triggers
- Communication! Don't force them to talk, but offer numerous opportunities through benign events

- Spend 1:1 time
- Teach (and practice with them) the relaxation skills you've mastered
- Be clear about rules and consequences
- Role-play or tell stories about current/pending stressors and how they were solved
- Schedule relaxing activities
- Stay calm and never give up

Thank you!!