From ACEs to Assets

Part I
The Impact of Stress on Education
11.03.20
Learning is a Leap of Courage
Goals of the Series

01 Review the impact of stress, adversity & trauma

02 Increase the ability to recognize signs of stress or trauma

03 Introduce school-based approaches to build resilience
Understanding Stress

Its Impact on Brains, Bodies, and Behaviors
3 R’s of Trauma-Informed Care

Realize
The prevalence of trauma and adversity

Recognize
How trauma affects all individuals involved with programs, organizations and systems, including the workforce

Respond
By putting knowledge into practice
The Human Stress Continuum

- **Positive Stress**
  - Short lived
  - Promote growth & change
  - Necessary for healthy development

- **Tolerable Stress**
  - Result of more severe, long-lasting event
  - Stress response is time limited
  - Impact reduced by sufficient social supports when available

- **Toxic Stress**
  - Prolonged, intense activation of the stress-response
  - Complicated by pre-existing vulnerabilities
  - More likely when there’s an associated impact on attachment

- **Traumatic Stress**
  - Result of overwhelming event
  - Impacts multiple domains
  - Complicated by pre-existing vulnerabilities
  - Post-event activities may provide buffer
Simplified Model of the Brain

- **Frontal Cortex:** Thinking Brain
- **Brainstem:** Automatic Responses
- **Mid-Brain:** Limbic System
Fight | Flight | Freeze
Effects of Stress

Short Term

- Physical Changes occur throughout the body quickly without thought
- Inability to access Thinking – “Upstairs Brain”
- Emotionally Reactive or Shut Down
- May misperceive others’ intentions
Stress Cup
Signs of Stress

- Difficulty forming or maintaining relationships
- Increasing Anxiety
- School Refusal | Avoidance
- Emotional Outbursts
- Difficulty Sleeping
- Overeating | Loss of Appetite
- Distraction
- Procrastination
- Disorganization
Understanding Trauma

Realizing its Prevalence and Impact
Key Vocabulary

Complex Trauma
- Physical or Sexual Abuse
- Severe Neglect
- Abandonment
- Emotional | Psychological Abuse
- Domestic Violence

Toxic Stress
- Poverty
- Racism
- Microaggressions
- Discrimination
- Disparities
- Community Violence

Trauma
- Accidents
- Natural | Man-made Disaster
- Serious Illness
Adverse Childhood Experiences (ACEs)

Increases risk for...

**ABUSE**
- Physical
- Emotional
- Sexual

**NEGLECT**
- Physical
- Emotional

**HOUSEHOLD DYSFUNCTION**
- Mental Illness
- Incarcerated Relative
- Mother treated violently
- Substance Abuse
- Divorce

**BEHAVIOR**
- Lack of physical activity
- Smoking
- Alcoholism
- Drug use
- Missed work

**PHYSICAL & MENTAL HEALTH**
- Severe obesity
- Diabetes
- Depression
- Suicide attempts
- STDs
- Heart disease
- Cancer
- Stroke
- COPD
- Broken bones

Centers for Disease Control and Prevention | Credit: Robert Wood Johnson Foundation
3 Realms of ACEs

Adverse childhood and community experiences (ACEs) can occur in the household, the community, or in the environment and cause toxic stress. Left unaddressed, toxic stress from ACEs harms children and families, organizations, systems and communities, and reduces the ability of individuals and entities to respond to stressful events with resiliency. Research has shown that there are many ways to reduce and heal from toxic stress and build healthy, caring communities.

1. Household
   - divorced
   - incarcerated family member
   - physical and emotional neglect
   - domestic violence
   - maternal depression
   - sexual abuse
   - drug abuse
   - mental illness
   - homelessness

2. Community
   - discrimination
   - structural racism
   - substandard schools
   - lack of jobs
   - lack of social capital and mobility
   - violence
   - poor water and air quality
   - food scarcity
   - substandard wages
   - poverty
   - poor housing quality and affordability

3. Environment
   - climate crisis
     - record heat & droughts
     - wildfires & smoke
     - record storms, flooding & mudslides
     - sea level rise
   - natural disasters
     - tornadoes & hurricanes
     - volcano eruptions & tsunamis
     - earthquakes
     - pandemic

Thanks to Building Community Resilience Collaborative and Networks and the International Transformational Resilience Coalition for inspiration and guidance. Please visit ACEsConnection.com to learn more about the science of ACEs and join the movement to prevent ACEs, heal trauma and build resilience.
EFFECTS OF STRESS...

- Areas of Brain Adaptively Develop
- Genetic Expression Affected
- Immune System is Compromised
- Possible Extended State of Over/Under Arousal
- Body Adapted for Survival
ACEs and Readiness to Learn

*Students dealing with trauma are experiencing difficulty with:*

- Sequencing
- Perspective-taking
- Higher order thinking
- Memory storage and retrieval
- Development of appropriate mental models
- Cause and effect | Locus of Control
- Forming and sustaining relationships
- Directing and sustaining attention
Considering Students
Increasing Our Ability to Recognize Trauma and Adversity
ACEs and School Performance

Students who have experienced trauma are...

- 2 ½ times more likely to fail a grade
- Score lower on standardized assessments
- Have more receptive & expressive language difficulties
- Are suspended or expelled more often
- Are designated to special education more frequently

Correlations Between Number of ACEs and Risk for Struggles with School and Health

<table>
<thead>
<tr>
<th>Number of ACEs</th>
<th>Academic Failure</th>
<th>Severe Attendance Problems</th>
<th>Severe School Behavioral Concerns</th>
<th>Chronic Health Problems</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 or more</td>
<td>2.9x</td>
<td>4.9x</td>
<td>6.1x</td>
<td>2.5x</td>
</tr>
<tr>
<td>2 ACEs</td>
<td>2.5x</td>
<td>2.6x</td>
<td>4.3x</td>
<td>1.6x</td>
</tr>
<tr>
<td>1 ACE</td>
<td>1.5x</td>
<td>2.2x</td>
<td>2.4x</td>
<td>1.8x</td>
</tr>
</tbody>
</table>

Spokane Childhood ACEs Study, 2013

The Heart of Learning and Teaching: Compassion, Resiliency, and Academic Success by Ray Wolpow, et. al. (2009)
Prevalence in Student Lives

Monroe County Office of Mental Health YRBS/ACEs Analysis 2019
Impact on World View

• I am not safe
• I cannot trust others
• I cannot trust myself
• I cannot depend upon others
• I am not worthy of care
• I am powerless
• It’s my fault
• I deserve the bad things that happen to me
As ACEs Increase, Risk Increases

Mental Health
Violence
Substance Use
Sexual Activity
Suicide Indicators by ACES Score

<table>
<thead>
<tr>
<th>1 ACES Flag</th>
<th>2 ACES Flags</th>
<th>3 ACES Flags</th>
<th>4 or More ACES Flags</th>
<th>No ACES Flags</th>
</tr>
</thead>
<tbody>
<tr>
<td>7%</td>
<td>14%</td>
<td>27%</td>
<td>40%</td>
<td>4%</td>
</tr>
<tr>
<td>8%</td>
<td>14%</td>
<td>29%</td>
<td>40%</td>
<td>4%</td>
</tr>
<tr>
<td>4%</td>
<td>6%</td>
<td>13%</td>
<td>27%</td>
<td>4%</td>
</tr>
<tr>
<td>4%</td>
<td>6%</td>
<td>13%</td>
<td>27%</td>
<td>1%</td>
</tr>
</tbody>
</table>

% Total Non-Suicidal Self-Injury Ever

% Total Seriously Considered Suicide in Past year

% Total Made a Suicide Attempt in Past Year

Monroe County Office of Mental Health YRBS/ACES Analysis 2019
Academic Impact

Distribution of ACES Score by Academic Grades

ACES Score Category
- 4 or More ACES Flags
- 3 ACES Flags
- 2 ACES Flags
- 1 ACES Flag
- No ACES Flags

Monroe County Office of Mental Health YRBS/ACEs Analysis 2019
Other Trauma Cues...

- May be described as easily upset, easy to provoke, reactive
- May display what others view as inappropriate emotions or behavior
- Can display symptoms of flashbacks
- May be diagnosed as “Oppositional Defiant,” “Hyperactive,” or “Conduct Disorder
- May be perceived as untruthful, lying; Confabulated Reality
Burn - Out

Compassion Fatigue

Vicarious | Secondary Trauma
So now what?
“What is Predictable is Preventable”
Amy H Scheel-Jones, MS Ed
Resources

**Books:**
- Onward: Cultivating Emotional Resilience in Educators by Elena Aguilar
- Reaching and Teaching Children Who Hurt by Susan Craig
- Reaching Teens by Dr. Kenneth Ginsburg et al

**Apps:**
- CALM, 10% Happier, Insight Timer

**Websites:**
- 3 Minute Breathing Meditation
- TEND Academy Resources
- Compassion Resilience Toolkit
- Center for Parent-Teen Communication