Melting Polar Icebergs: Teaching Law Students to Access Empathy and Channel Their Passion to Empower Their Clients and Themselves

Intro to ACES Science and Resiliency
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ACEs Science is the Foundation

**Epidemiology**
the ACE Study and expanded ACE surveys

**Impact on the Brain**
the neurobiology of toxic stress caused by ACEs on children’s developing brains

**Impact on the Body**
the short- and long-term health consequences of toxic stress

**Epigenetics**
how the effects of ACEs are passed on from generation to generation

**Resilience**
the brain is plastic and the body wants to heal
Adverse Childhood Experiences: ACE Study

- The ACE Study – probably the most important public health study most people have not ever heard of – had its origins in an obesity clinic on a quiet street in San Diego.

- The mystery on the irrefutable impact of childhood trauma affecting adult health turned into a 25-year quest involving researchers from the Centers for Disease Control and Prevention and more than 17,000 members of Kaiser Permanente in San Diego.

- It would reveal that adverse experiences in childhood were very common – the study was primarily with educated, employed, white middle-class individuals - and that these experiences are linked to every major chronic illness and social problem that the United States grapples with – and spends billions of dollars on.
ACEs Score Categories

The three types of ACEs include:

**ABUSE**
- Physical
- Emotional
- Sexual

**NEGLECT**
- Physical
- Emotional

**HOUSEHOLD DYSFUNCTION**
- Mental Illness
- Incarcerated Relative
- Mother treated violently
- Substance Abuse
- Divorce
Prevalence
Adverse Childhood Experiences (ACEs) Study
Centers for Disease Control & Prevention (CDC)

Household Dysfunction
- Substance Abuse 27%
- Parental separation/divorce 23%
- Mental illness 19%
- Battered mother 13%
- Incarcerated household member. 5%

Abuse
- Psychological 11%
- Physical 28%
- Sexual 21%

Neglect
- Emotional 15%
- Physical 10%
What is Trauma?

“Experts explain that trauma is not the event itself, but rather a response to a highly stressful experience in which a person’s ability to cope is dramatically undermined.”

Many individuals and families have experienced **Acute, Chronic, Complex, and/or System-Induced Trauma** which create **Toxic-Stress** and impact their well-being and capacity to thrive.

ACE Study: Adverse Childhood Experiences

[http://www.cdc.gov/violenceprevention/acestudy/about.html](http://www.cdc.gov/violenceprevention/acestudy/about.html)

ACEs Connection and ACEsTooHigh
Rethinking the Emotional Brain: Neuron

- **Frontal Lobes (High Road)**: Makes conscious choice based on time and context.
- **Amygdala (Low Road)**: Releases stress hormones, cortisol, and adrenaline.
- **Thalamus**:


The Impact of Stress on Our Brain

Source: Dr. Harry Chugani M.D., Chief, Division of Pediatric Neurology, Director, Positron Emission Tomography (PET) Center, Children’s Hospital of Michigan
Understanding Trauma Effects on Learning and Behavior

Trauma effects on children interfere with their development of social-emotional and behavioral skills needed to learn and thrive.

- Attention and information processing
- Executive functions: Planning and problem-solving
- Attentiveness to tasks
- Emotional regulation
- Aggression, impulsivity and reactivity

Service Providers may describe them as:

- Spacey or zoned out
- Disrespectful or rude
- Lacking intelligence
- “out of control”
- Anxious
- Annoying
- Aggressive
Cascade of Often Co-Occurring Effects: Societal Response Matters

- Historic Trauma
- Epigenetics; Critical & Sensitive Periods
- Adverse Childhood Experience

Intergenerational Transmission

- Psychiatric Disorders
- Early & Problem Alcohol, Tobacco, Drugs
- Relationship Problems
- Crime
- Disability
- Homelessness
- Risky Sex
- Chronic Disease
- Poverty
- Unemployment
- Job Injury
- Social Isolation
- Learning & Memory Problems
- Disregulated Emotion
Building Resilience: The Answer to ACES

“The roots of resilience...are to be found in the sense of being understood by and existing in the mind and heart of a loving, attuned, and self-possessed other.”

-Diana Fosha

“The natural capacity to navigate life well.”

- HeavyRunner and Marshall, 2003
Resilience through socio-ecological model

**Individual**
- Intellectual & employable skills
- Self-regulation – self-control, executive function, flexible thinking
- Ability to direct and control attention, emotion, behavior, positive self-view
- Efficacy

**Relationships**
- Bonds with parents and/or caregivers
- Positive relationships with competent and nurturing adults
- Friends or romantic partners who provide sense of security/help with emotion coaching
- Social/emotional support

**Community**
- Faith, hope, meaning
- Engagement with effective organizations – schools, work, pro-social groups
- Network of supports/services & opportunity to help others
- Cultures providing positive standards, expectations, rituals, relationships & supports
Trauma-Informed Career & Community Schools (TICCS)

TICCS supports well-being of youth, families, and staff through building resilience, self-care, and integration of ACEs Science (impact of trauma neurologically, biologically, toxic stress, epigenetics, and resilience-building)

Engaging students, following graduation, TICCS Alumni Ambassadors program provides additional wrap-around support through on-the-job training, work experience, and exposure to career pathways.

Beating the Odds instructors utilize a holistic approach to help students develop empathy, resilience, and life skills.

Small group instruction, with a focus on collaboration, through projects-based learning, career preparation, and work experience with CTE students.

Teen parents, with their babies and toddlers, in the HOPE Program, experience a positive school environment. Supporting teen parents self-efficacy, through restorative practices, and multi-generational mentoring with community partners, the prevention-oriented skill-building and education attainment impacts teen parents, and their children.

Trauma-Informed Career & Community Schools (TICCS) Meditation Resiliency Program

Meditation instructors support development of self-regulation, coping skills, and increased well-being through increased sense of calm and intentional breathing practices.

Role of Resiliency Support

Oversees the TICCS resiliency programs, based upon ACEs Science, in support of all resiliency programs.
The Impact of Stress on Our Brain

Source: Dr. Harry Chugani M.D., Chief, Division of Pediatric Neurology, Director, Positron Emission Tomography (PET) Center, Children’s Hospital of Michigan
Resources

- **ACEs 101** – FAQs about adverse childhood experiences research with links to reports, stories and videos.

- **Got Your ACE Score?** – Do your ACE score and your resilience score, and find out more about the consequences of each.

- **ACEsTooHigh.com** – A news site for the general public. It covers research about ACEs and how people, organizations, agencies and communities are implementing trauma-informed, resilience-building practices based on ACEs research.

- **ACEsConnection.com** – A social network for people who are implementing – or thinking about implementing – trauma-informed and resilience-building practices based on ACEs research.

- **The CDC-Kaiser Permanente ACE Study** – The official ACE Study site, provided by the CDC.

- **The Center on the Developing Child at Harvard University** – Here, take a deep dive into a site rich with reports, tools and videos about the neurobiology of toxic stress and resilience.

- **SAMHSA’s Concept of Trauma and Guidance for a Trauma-Informed Approach** -- Introduces a concept of trauma and offers a framework for how an organization, system, or service sector can become trauma-informed. Includes a definition of trauma (the three "E's"), a definition of a trauma-informed approach (the four "R's"), 6 key principles, and 10 implementation domains.