



ACEs in Iowa: Senate Human Resources Presentation 1.21.15



Adverse Childhood Experiences

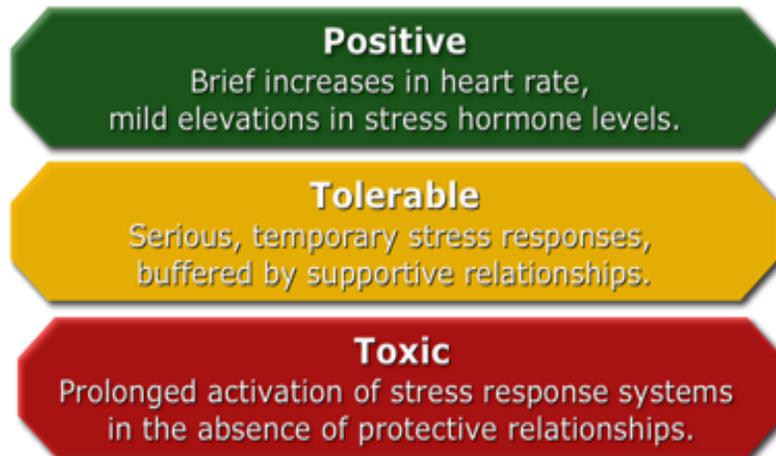
10 COMMON TRAUMAS

- CHILDHOOD ABUSE
 - Physical
 - Emotional
 - Sexual
- CHILDHOOD NEGLECT
 - Physical
 - Emotional
- HOUSEHOLD DYSFUNCTION
 - Substance Abuser
 - Mental Illness
 - Parental loss
 - Witnessing violence
 - Crime in household





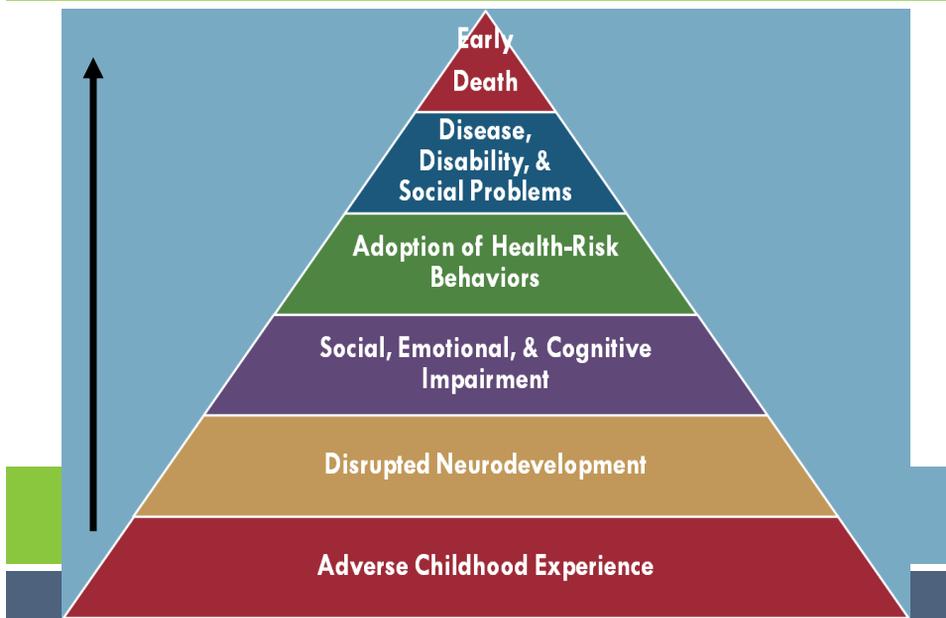
Toxic Stress Derails Health Development



Center on the Developing Child, Harvard University



ACEs Impact on Lifelong Health

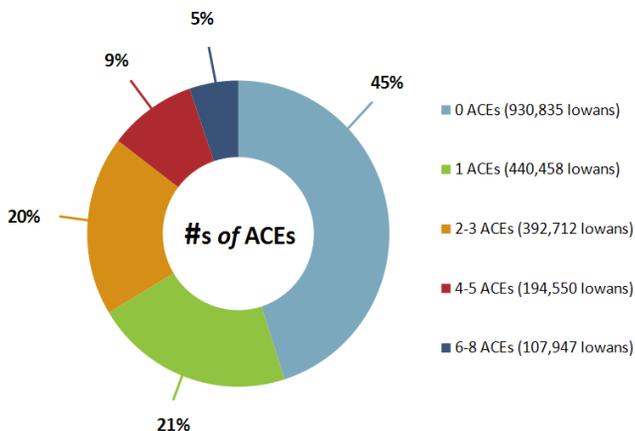


What it found

People with 4 or more ACEs compared to those with 0 ACEs

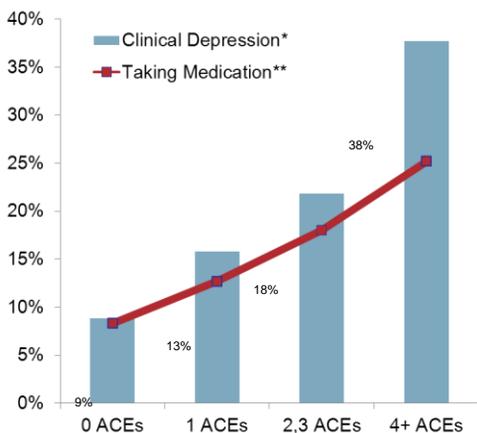
| RISK FACTOR | % INCREASE |
|-------------------------------|------------|
| Smoking | 242% |
| Obesity | 222% |
| Depression | 357% |
| Illicit drug use | 443% |
| Injected drug use | 1,133% |
| Sexually Transmitted Diseases | 298% |
| Attempted suicide | 1,525% |
| Alcoholism | 555% |

Co-occurrence of ACEs in Iowa





ACEs and depression



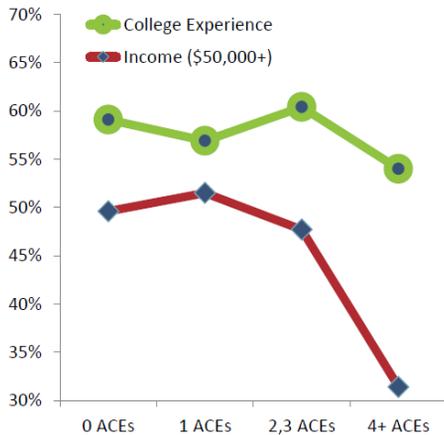
More than 33% of adults reporting four or more ACEs had received a diagnosis of clinical depression but were not currently taking any form of medication.





Socioeconomic status

ACEs and Socioeconomic Status: Percent with Any College Experience and Percent Above Median Household Income*

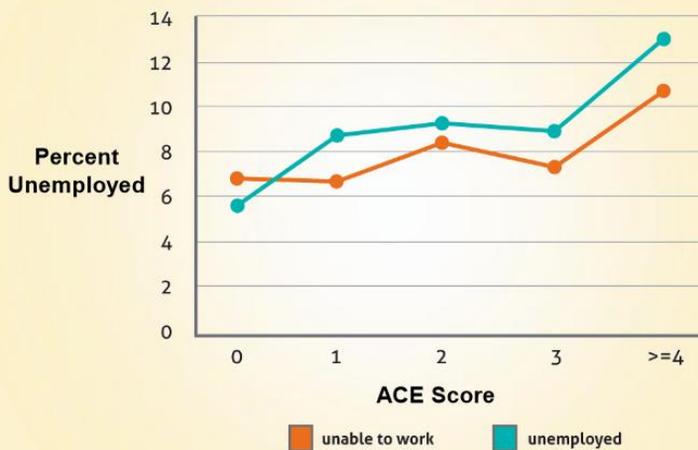


Adults with four or more ACEs had the lowest percent of college experience.

Iowa findings also showed a strong association of adults with four or more ACEs experiencing a sharp decline in income.



ACEs and Unemployment



Source: Soc Psychiatry & Epidemiology; Liu, et al., (2013)



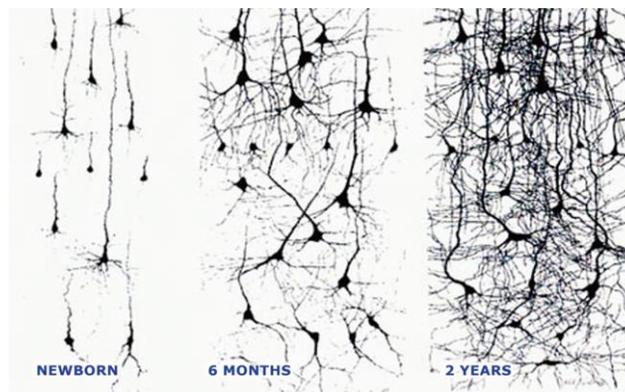
4 Tenets of Early Brain and Child Development

1. Brains are built over time, **starting before birth** and functions are cumulative, integrated, and interdependent
2. **Genes PLUS experience** shape the architecture of the developing brain
3. **Toxic stress** disrupts the developing brain and has negative lifelong effects on learning, behavior, and health
4. Building **resilience** is the key to mitigating toxic stress and promoting lifelong health



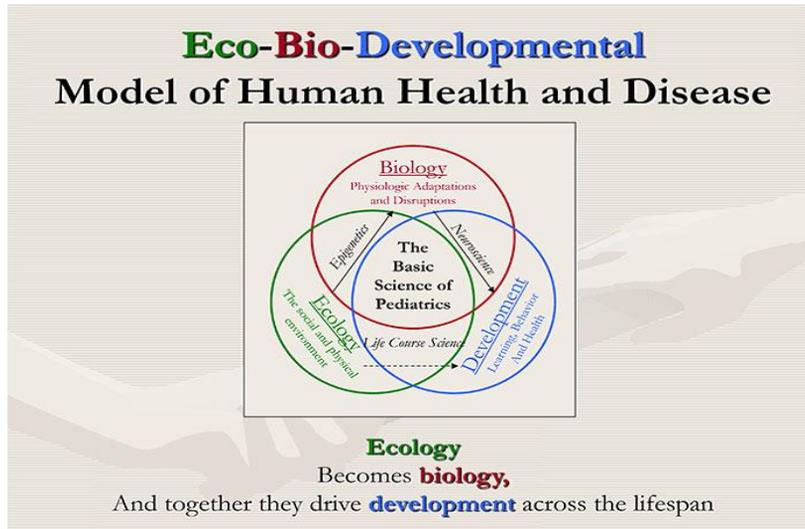
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1. Brains are built over time, **starting before birth!**
700 neural connections every second!



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2. Genes PLUS experience shape the architecture of the developing brain



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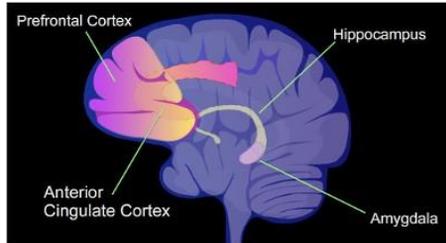
Relationships

- The active ingredient of early brain development is the **“serve and return”** nature of children’s engagement in **relationships** with their parents and caregivers



3. **Toxic stress** disrupts the developing brain and has negative lifelong effects on learning, behavior, and health

- Prolonged increase in **cortisol and epinephrine**
- **Amygdala, hippocampus, and prefrontal cortex** are particularly at risk
- May affect regulation of stress physiology, learning new skills, and dealing with adversity



Taken from NIMH image gallery

4. Building **resilience** is the key to mitigating toxic stress and promoting lifelong health



- The key is **prevention** and **early intervention**
- A multipronged, **family-focused**, public health approach
- Supporting children by supporting their families

Summing It Up

- **Healthy child development** is critical for a strong, prosperous society
- We must implement effective, evidence-based interventions that protect and nurture children's brains starting **at birth**
- A toxic stress-informed **policy agenda** promotes resilience in children and families

Thank You!

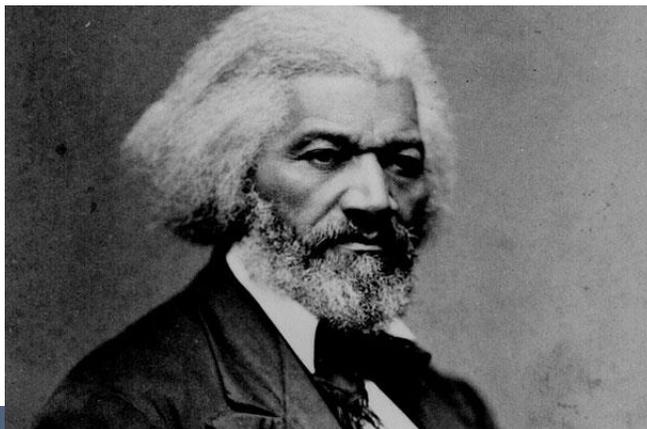
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<http://developingchild.harvard.edu/>

<http://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/EBCD/Pages/default.aspx>

“It is easier to build strong children than to repair broken men.”

— Frederick Douglass (1817–1895)



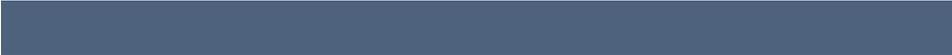
There is good news!

- Iowa has ACES information because of the funding appropriated by the legislature. Thank you for your support.
- There are research based strategies such as First Five. Thank you for leading the way and funding these prevention and treatment strategies.
- Prevention of trauma/ACEs is cost effective
- Early diagnosis and treatment are cost effective – thank you for believing that childhood emotional disturbances are diagnosable and treatable.

What Can We Do?

- Support creation and development of a **comprehensive children's system of care that incorporates a coordinated response** to Adverse Childhood Experiences across all systems and services
- Support the **affordability of quality child care** to provide stable environments for all children, especially children living in poverty.
- **Expand 1st Five Healthy Mental Development** initiative statewide to increase access to developmental health and family resources.
- Support children's mental health initiatives that are **evidence-based and community-driven**, such as Functional Family Therapy and continuation of Pediatric Integrated Health Homes.

Parent Story

- John Parmeter
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Wrap-Up

- Science tells us what happens to the developing brain
 - Science also informs us about cost effective prevention and intervention
 - Connecting the science in meaningful ways to ensure trauma informed approaches
 - When we apply research based prevention and intervention we get great outcomes including cost effectiveness.
 - Connecting the science to drive Iowa's response to these childhood issues – development of a strategic plan for the children's mental health system.
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