The Dance of Resilience:
Swinging Nature with Nurture ... Over Time

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Clinical Professor,
UTSW Medical Center
The Dance of Resilience

* Resilience - our “North Star” goal for children
* “Toxic stress”
* Adverse Childhood Experiences: Correlations & Concern
* “Biology of stress”, the developing brain, mental health
* What to Do...
Resilience – A Case for Consideration

- 5 year old observed the accidental death of a family member with residual emotional issues
- In year thereafter, developed chronic disease
- Poverty and lack of medical / social service access resulted in visual impairment – otherwise preventable
- Eventually removed from the home and institutionalized
- Victim of racial / social biases – again blocking access to multiple opportunities for self actualization
Resilience – At the End of the Talk ...

- Resilience is –
  - the capacity of a human being to adapt positively to adversity or threats to viability.
  - Describes a way of moving through stressors that then leads to a variety of outcomes

- Resilience is not –
  - A fixed trait
  - Physical "hardiness"
  - Easily measured
Highly **Stressful** Early Bio-psycho-social circumstances

- Secure attachments
- Responsive adults
- (+) Peer relations
- Self-regulation
- (+) Self-image

Suboptimal Outcomes

Relatively Positive Outcomes
- Social
- Emotional
- Physical
- Career
- Other
Proposed 3 Distinct types of Stress Responses

1. Positive
   - a physiologic state that is brief and mild – moderate in severity
   - available responsive (protective) adult to model and assist in coping
   - anxiety of 1st day at child care
   - growth-promoting element of normal
Proposed 3 Distinct types of Stress \textit{Responses}

1. Positive

2. \textit{Tolerable}
   - exposure to non-normative experience(s)
   - presenting greater magnitude of adversity or threat
   - serious illness; death of family member; disaster

   \textit{essential characteristic:}
   extent to which protective adult relationships support coping and sense of control \ldots \textit{reducing physiologic stress response}
Proposed 3 Distinct types of Stress Responses

1. Positive
2. Tolerable
3. Toxic
   - strong, frequent or prolonged activation of the body's stress responses
   - in absence of a buffering, protective supportive adult relationship
Resilience is –
the capacity of a human being to adapt positively to adversity or threats to viability;
a way of moving through stressors
Toxic stress is the extreme, frequent, or extended activation of the body's stress response system, without the buffering presence of supportive adult(s).

Risk factors for toxic stress include ACE's:
- neglect, abuse,
- extreme poverty, family violence,
- substance abuse,
- parental mental health problems,
- invasive / painful experiences.
10 forms of childhood adversity: (Exposure before the age of 18)
3 categories: Abuse, Neglect, and Household Dysfunction. Score 0-10.

17,000 person study: CDC & Kaiser Permanente found higher than expected scores in middle class, adults

Higher scores – predictive of: exponential growth in your risk: chronic diseases, teen pregnancy, addiction, suicide, learning and behavior problems, serious work issues, and more
<table>
<thead>
<tr>
<th>Category</th>
<th>Type</th>
<th>Women</th>
<th>Men</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Household Dysfunction</strong></td>
<td><strong>Battered Mom</strong></td>
<td>13.7</td>
<td>11.5</td>
<td>12.7</td>
</tr>
<tr>
<td></td>
<td><strong>Substance Abuse</strong></td>
<td>29.5</td>
<td>23.8</td>
<td>26.9</td>
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<tr>
<td></td>
<td><strong>Mental Illness</strong></td>
<td>23.3</td>
<td>14.8</td>
<td>19.4</td>
</tr>
<tr>
<td></td>
<td><strong>Separation or Divorce</strong></td>
<td>24.5</td>
<td>21.8</td>
<td>23.3</td>
</tr>
<tr>
<td></td>
<td><strong>Incarceration</strong></td>
<td>5.2</td>
<td>4.1</td>
<td>4.7</td>
</tr>
</tbody>
</table>

CDC & Kaiser Permanente
[www.cdc.gov/nccdphp/ace/demographics](http://www.cdc.gov/nccdphp/ace/demographics)
# Adverse Childhood Experiences are Common

<table>
<thead>
<tr>
<th>Category</th>
<th>Type</th>
<th>Women</th>
<th>Men</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abuse</td>
<td>Physical</td>
<td>27.0</td>
<td>29.9</td>
<td>28.3</td>
</tr>
<tr>
<td></td>
<td>Sexual</td>
<td>24.7</td>
<td>16.0</td>
<td>20.7</td>
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<tr>
<td></td>
<td>Emotional</td>
<td>13.1</td>
<td>7.6</td>
<td>10.6</td>
</tr>
<tr>
<td>Neglect</td>
<td>Physical</td>
<td>9.2</td>
<td>10.7</td>
<td>9.9</td>
</tr>
<tr>
<td></td>
<td>Emotional</td>
<td>16.7</td>
<td>12.4</td>
<td>14.8</td>
</tr>
</tbody>
</table>
# Where's the Worry?

<table>
<thead>
<tr>
<th>Number of Adverse Childhood Experiences (ACE Score)</th>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>34.5</td>
<td>38.0</td>
</tr>
<tr>
<td>1</td>
<td>24.5</td>
<td>27.9</td>
</tr>
<tr>
<td>2</td>
<td>15.5</td>
<td>16.4</td>
</tr>
<tr>
<td>3</td>
<td>10.3</td>
<td>8.6</td>
</tr>
<tr>
<td>4 or More</td>
<td>15.2</td>
<td>9.2</td>
</tr>
</tbody>
</table>
Crittenton Family of Agencies

53% of women surveyed in Crittenton study had ACE score > 4

CDC previously reported 15% ACE > 4

* Operating in urban and rural communities in 31 states and the District of Columbia.

* Providing innovative, comprehensive, strength-based, developmentally-appropriate, gender and culturally-responsive, trauma-informed and specific services grounded in research, respect and results.

"Supporting young women through technical assistance, training, organizational assessments, a peer-to-peer network, and more"

Crittenton Family of Agencies from 18 states participated in the pilot, including Arizona, California (Southern), Florida, Georgia, Illinois, Iowa, Kansas, Kentucky, North Carolina, Mississippi, Missouri, Montana, New York, Pennsylvania, South Carolina, Tennessee, Texas and West Virginia.
Crittenton Family of Agencies Study

ACE Survey Pilot at Crittenton Family of Agencies

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Crittenton Family of Agencies from 18 states participated in the pilot, including Arizona, California (Southern), Florida, Georgia, Illinois, Iowa, Kansas, Kentucky, North Carolina, Mississippi, Missouri, Montana, New York, Pennsylvania, South Carolina, Tennessee, Texas and West Virginia.

http://www.nationalcrittenton.org
Adversity is the context. Resilience is the goal. Vicious Cycle shows us that we need to address root causes. A parent’s ACE score does not have to become their child’s but it often does – intergenerational. Define the population, inform interventions, justify advocacy.
Concepts of Development

Eco-Bio-Developmental (EBD) Framework
*Pediatrics. 129:e232+. 2011*
Biology of Stress - "A Brief History"

- Brain Architecture is “experience dependent”
- Ecology influences how brain architecture is formed and remodeled
- Diminished cellular remodeling (plasticity) limits remediation
- Vicious Cycles of Stress arise from significant adversity + variable maturation
- Early experiences can permanently alter structure and functioning of the developing brain.

Modified from A. Gardner, MD
Biology of Stress in Early Childhood

- Childhood Stress
  - Hyper-responsive stress response; calm/coping
  - Changes in Brain Architecture
- Chronic "fight or flight;" cortisol/norepinephrine

Modified from A. Gardner, MD
Biology of Stress

Science of Early Life Toxic Stress for Pediatric Practice and Advocacy.

Johnson S, et al

Pediatrics, 2013
Biology of Stress

Longitudinal Patterns of Cortisol Regulation Differ in Maltreated and Non-maltreated Children.

Neural Responses to Social Rejection in Children with Early Separation Experiences.
Puetz VB, et al. JAACAP. 53: 1328. 2014


Effects of Poverty on Childhood Brain Development.
Luby Joan, et al. JAMA Pediatr 2013
Toxic Stress --- Where to Start?

A parent’s ACE score does not have to become their child’s.

But it often requires “2-generational” interventions:

* Informed interventions
* Justified advocacy

**What To Do ????**

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Adverse Childhood Experiences (ACEs) → (+) Child Parent Dyad → Adverse Childhood Experiences (ACEs)

Poverty, Other → Positive Support → Preferred Cycles
Core Components: 2-Generation Concept

- Asset building, housing, etc
- Mental health, adverse childhood experiences
- Networks, friends, neighbors
- Social capital
- Early childhood education
- Postsecondary & employment pathways
- Economic supports
- Asset building, housing, etc
- Health & well-being

Mental health, adverse childhood experiences
## Protective Factors:
\[ \downarrow \text{risk of child abuse / neglect} \]

<table>
<thead>
<tr>
<th>Protective Factors</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parental Resilience</td>
<td>Parents’ abilities to problem-solve, sustain trusting relationships, know where &amp; how to seek help when needed</td>
</tr>
<tr>
<td>Social Connections</td>
<td>Family has (+) interactions with family/community members who provide emotional support, advice, concrete assistance</td>
</tr>
<tr>
<td>Concrete Support</td>
<td>When family encounters crisis {domestic violence, mental illness issues, etc) ready access to stabilizing services and intervention are available and known &amp; accessible</td>
</tr>
<tr>
<td>Knowledge of Parenting &amp; Child Development</td>
<td>Parent has good information re appropriate child behavior at different ages &amp; stages of development – to better see child in positive light and help development</td>
</tr>
<tr>
<td>Child’s Social/Emotional Competence</td>
<td>Child shows ability to interact, self-regulate behavior, communicate their feelings with others</td>
</tr>
</tbody>
</table>

*Source: Center for the Study of Social Policy*
## Parental Resilience

### Family Health

- Overall Family Health
- Parent(s)/Caregiver(s)'s Physical Health
- Parent(s)/Caregiver(s)'s Disability
- Parent(s)/Caregiver(s)'s Mental Health

### Family Safety

- Overall Family Safety
- Absence/Presence of Domestic Violence Between Parents/Caregivers
- Absence/Presence of Other Family Conflict
- Absence/Presence of Access to Weapons

### Family Interactions

- * Mutual Support within the Family
- * Relationship Between Parents/Caregivers

### Parental Capabilities

- Use of Drugs/Alcohol Interferes with Parenting
<table>
<thead>
<tr>
<th>Social Connections</th>
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</thead>
<tbody>
<tr>
<td><strong>Community Life</strong></td>
</tr>
<tr>
<td>Overall Social/Community Life</td>
</tr>
<tr>
<td>Social Relationships</td>
</tr>
<tr>
<td>Relationships with Child Care, Schools, and Extracurricular Services</td>
</tr>
<tr>
<td>Connection to Neighborhood, Cultural/Ethnic Community</td>
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<tr>
<td>Connection to Spiritual/Religious Community</td>
</tr>
<tr>
<td>Parent(s)/Caregiver(s)'s Initiative and Acceptance of Available Help/Support</td>
</tr>
<tr>
<td>Concrete Support in Times of Need</td>
</tr>
<tr>
<td>----------------------------------</td>
</tr>
<tr>
<td>Environment</td>
</tr>
<tr>
<td>Overall Environment</td>
</tr>
<tr>
<td>Safety in the Community</td>
</tr>
<tr>
<td>Habitability of Housing</td>
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<tr>
<td>Learning Environment</td>
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<td></td>
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<tr>
<td>Self-Sufficiency</td>
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<tr>
<td>Overall Self-Sufficiency</td>
</tr>
<tr>
<td>Caregiver Employment</td>
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<tr>
<td>Family Income</td>
</tr>
<tr>
<td>Financial Management</td>
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<tr>
<td>Food and Nutrition</td>
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<tr>
<td>Transportation</td>
</tr>
<tr>
<td>Family Health</td>
</tr>
<tr>
<td>Family Access to Health/Mental Care</td>
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<tr>
<td>Knowledge of Parenting and Child Development</td>
</tr>
<tr>
<td>---------------------------------------------</td>
</tr>
<tr>
<td><strong>Parental Capabilities</strong></td>
</tr>
<tr>
<td>Overall Parental Capabilities</td>
</tr>
<tr>
<td>Supervision of Child</td>
</tr>
<tr>
<td>Disciplinary Practices</td>
</tr>
<tr>
<td>Provision of Developmental/Enrichment Opportunities</td>
</tr>
<tr>
<td>Promotes Child's Education</td>
</tr>
<tr>
<td>Controls Access to Media/Reading Material</td>
</tr>
<tr>
<td>Parental/Caregiver's Literacy</td>
</tr>
<tr>
<td><strong>Family Interactions</strong></td>
</tr>
<tr>
<td>Overall Family Interactions</td>
</tr>
<tr>
<td>Bonding with Child</td>
</tr>
<tr>
<td>Communications with Child</td>
</tr>
<tr>
<td>Family Routines/Rituals</td>
</tr>
<tr>
<td>Family Recreation and Play Activities</td>
</tr>
<tr>
<td>Social and Emotional Competence of Children</td>
</tr>
<tr>
<td>--------------------------------------------</td>
</tr>
<tr>
<td><strong>Child Well-Being</strong></td>
</tr>
<tr>
<td>Overall Child Well-Being</td>
</tr>
<tr>
<td>Child's Behavior</td>
</tr>
<tr>
<td>Child's Relationship with Parent(s)/Caregiver(s)</td>
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<tr>
<td>Child's Relationship with Sibling(s) / Peers</td>
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<tr>
<td>Cooperation/Motivation to Maintain the Family</td>
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<tr>
<td><strong>Family Health</strong></td>
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<td>Child's Physical Health</td>
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<td>Child's Mental Health</td>
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<td>Child's Disability</td>
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<td><strong>Family Safety</strong></td>
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<tr>
<td>Absence/Presence of Physical Abuse of Child</td>
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<tr>
<td>Absence/Presence of Emotional Abuse of Child</td>
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<tr>
<td>Absence/Presence of Sexual Abuse of Child</td>
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<tr>
<td>Absence/Presence of Neglect of Child</td>
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</table>
Integration of Practices and Tools

**Evidence-Based Practices**
- Positive Parenting Education (Group)
- Adults & Children Together Against Violence (Parenting Education Group)

**Evidence-Informed Practices**
- Trauma-informed care in Playroom
- Psycho-education groups
  - Anger management,
  - mindfulness,
  - parenting young children
- On-going training for therapists in trauma-informed treatment

**Evidence-Based Assessment Tools**
- North Carolina Family Assessment Scale
- Protective Factors Survey
- Parenting Stress Index
- Family Development Matrix
- Ages and Stages Questionnaires
Health and Well-being for 2 Generations

- Physical Health
  - Primary health care
  - Health promotion activities

- Early Care and Education
  - Education
  - Screening

- Domestic Violence
  - Safety planning
  - Shelter
  - Counseling

- Targeted Special Needs Programs
  - Screening and assessment
  - Early intervention services
  - Parent/child activities
  - Support groups
  - Parent education

- Parents Family Child
  - Mental health consultation
  - Counseling

- Children's Mental Health
  - Home visits
  - Group activities

- Family Resource Centers
  - Safety planning
  - Substance abuse treatment

- Child Welfare
  - Home Visiting Programs

- Scottish Rite Hospital for Children
Family-Centered Care Through ECI {Part C of IDEA}
A Two-Generation Intervention

Comprehensive services promoting physical, developmental, and mental HEALTH

- Early Learning and Development
  - Nurturing relationships, safe environments, enriching experiences, supportive responses

- Resilience

Health

Direct Therapy

Family Leadership and Support
Trauma-Focused Cognitive Behavioral Therapy – (TF-CBT)

- TF-CBT is a family-focused treatment so that “parents” and child are equally supported.
- TF-CBT is *component based* and *phase based* with emphasis on proportionality and gradual exposure.
- “Parents” & Child receive TF-CBT in parallel sessions.
- Families also participate in several conjoint parent-child sessions.
- Research documents that “parental” participation significantly benefits TF-CBT for the child.
Trauma-Focused Cognitive Behavioral Therapy – (TF-CBT)

TF-CBT addresses the child’s domain(s) of trauma

- **Affective:** anxiety, sadness, anger, other
- **Behavioral:** self-injurious, maladaptive, avoidance
- **Cognitive/Perceptual:** intrusive thoughts, maladaptive trauma-related beliefs, dissociation, etc
- **Social / School:** withdrawal, impaired relationships, decline in performance and/or attendance
Evidence-Based Clinical Strategies

Promoting early childhood mental health based on attachment theory

**VIPP** - Video Feedback Intervention  Promote Positive Parenting

*high-risk family; home-based; ≥ 4 months old child*

**ABC** – Attachment and Bio-behavioral Catch-Up

*10 session home-based; focus on foster care; coach*

**COS** – Circle of Security

*20 week; group; “secure base” & “safe haven”*

**CPP** - Child-Parent Psychotherapy

*dyadic model; addresses early M.H. issues related to stress, trauma, relationship issues*
Mind in the Making: 
The 7 Essential Life Skills Every Child Needs

_Given Galinsky_

I. Focus and Self Control
II. Perspective Taking
III. Communicating
IV. Making Connections
V. Critical Thinking
VI. Taking on Challenges
VII. Self-Directed Learning
Optimal Development Depends On

1. Relationship Security
2. Relationship Safety to Mediate Stress
3. Working Through Relationships to Promote Infant / Early Childhood Mental Health
Resilience – Breaking the Cycle
2 – Generational Approach

http://ascend.aspeninstitute.org/media/entry/two-generations-in-action-jeremiah-program