HOPE

Healthy Outcomes from Positive Experiences

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HOPE National Resource Center
Join the path to HOPE
Vision: A world that recognizes, honors and fosters positive experiences as being fundamental to people’s health and well-being.
Learning Objectives

- Participants in this session will be able to:
  - Describe the relationship between childhood experiences and adult outcomes
  - List at least 3 of 7 kinds of positive childhood experiences that are associated with protecting adult mental health in a population survey
  - Label the positive experiences disrupted by adverse childhood experiences (ACEs)
  - Plan 1 new activity in the next 30-90 days incorporating the HOPE approach
Disclosures

- The presenter has disclosed no commercial interests related to this topic, except royalties from UpToDate for sections on youth violence prevention and the effects of media exposure on children.
- This presentation does not contain any content related to pharmaceuticals or devices, including off-label uses.
Topics

- Definitions
- The ACEs paradox
- Positive childhood experiences protect adult mental health
- Plausible biological mechanisms
- The 4 Building Blocks of HOPE
- Incorporating HOPE into ACEs work
Definitions

- The ACEs paradox
- Positive childhood experiences protect adult mental health
- Plausible biological mechanism
- The 4 Building Blocks of HOPE
- Incorporating HOPE into ACEs work
Positive Experiences

Common Positive Experiences

- Attachment
- Conversation
- Literacy
- Independence
- Mastery

Photo from Navaho Nation Region, First Things First
<table>
<thead>
<tr>
<th>Healthy Outcomes</th>
<th>Other Definitions of Health</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Health</strong> is:</td>
<td><strong>Navajos</strong> include in their health concept not only a perfect body and mind but also harmony with their surrounding environment.</td>
</tr>
<tr>
<td>“A state of complete physical, mental and social well-being and not merely the absence of disease or infirmity”</td>
<td><em>Sobralske, 1985</em></td>
</tr>
</tbody>
</table>

*World Health Organization*
- Definitions
- **The ACEs paradox**
  - Positive Childhood Experiences protect adult mental health
  - Plausible biological mechanism
  - The 4 building blocks of HOPE
  - Incorporating HOPE into ACEs work
Adverse Childhood Experiences (ACEs)

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

Image courtesy of RWJF
## ACEs cause chronic disease: Population attributable fractions by ACEs score

<table>
<thead>
<tr>
<th>Outcome</th>
<th>1 ACE</th>
<th>2-3 ACE</th>
<th>4 or more</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cor Heart Disease</td>
<td>2.6</td>
<td>3.4</td>
<td>6.6</td>
<td>12.7</td>
</tr>
<tr>
<td>Asthma</td>
<td>4.2</td>
<td>8.1</td>
<td>11.7</td>
<td>24.0</td>
</tr>
<tr>
<td>Depression</td>
<td>6.4</td>
<td>14.7</td>
<td>23.0</td>
<td>44.1</td>
</tr>
<tr>
<td>Heavy Drinker</td>
<td>5.6</td>
<td>9.0</td>
<td>9.3</td>
<td>23.9</td>
</tr>
<tr>
<td>Education &lt; HS</td>
<td></td>
<td></td>
<td>4.6</td>
<td>4.6</td>
</tr>
</tbody>
</table>

Adverse Childhood Experiences and Other Risk Factors for Toxic Stress

Additional community and societal factors that contribute to toxic stress:

- Poverty
- Institutional racism
- Historical Trauma
- War and migration
- Neighborhood effects
Adverse childhood experiences

Toxic stress

Health Outcomes
ACEs are only part of the picture

- Many people with 4 or more ACEs are OK
- Other experiences affect the brain
- Do positive experiences affect outcomes too?
Definitions

The ACEs paradox

Positive childhood experiences protect adult mental health

- Plausible biological mechanism
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We studied PCEs just like ACEs. ACEs are associated with mental and physical health. A 1998 study of employed people in Southern California found that patients answered questions about their childhood, which correlated with mental and physical health. PCEs were recently studied in a 2015 population study in Wisconsin. This study, part of the BRFSS, asked about ACEs and also about positive childhood experiences. The correlation with mental health was established.
Positive Childhood Experiences (PCEs) questions asked how often respondent:

1. Felt able to talk to their family about feelings
2. Felt their family stood by them during difficult times
3. Enjoyed participating in community traditions
4. Felt a sense of belonging in high school
5. Felt supported by friends
6. Had at least two non-parent adults who took genuine interest in them
7. Felt safe and protected by an adult in their home

- Internal consistency reliability: 0.77
- Principal components factor analysis: single factor with an Eigenvalue > 1 (2.95).
- Factor loadings ranged from 0.57 (“felt safe/home”) to 0.72 (“family stood by/difficult times”)
Positive Childhood Experiences and Adult Mental and Relational Health in a Statewide Sample: Associations Across Adverse Childhood Experiences Levels

Christina Bethell, PhD, MBA, MPH; Jennifer Jones, MSW; Narangerel Gombojav, MD, PhD; Jeff Linkenbach, EdD; Robert Sege, MD, PhD

**IMPORTANCE** Associations between adverse childhood experiences (ACEs) and risks for adult depression, poor mental health, and insufficient social and emotional support have been documented. Less is known about how positive childhood experiences (PCEs) co-occur with and may modulate the effect of ACEs on adult mental and relational health.

**OBJECTIVE** To evaluate associations between adult-reported PCEs and (1) adult depression and/or poor mental health (D/PMH) and (2) adult-reported social and emotional support (ARSES) across ACEs exposure levels.

**DESIGN, SETTING, AND PARTICIPANTS** Data were from the cross-sectional 2015 Wisconsin Behavioral Risk Factor Survey, a random digit-dial telephone survey of noninstitutionalized Wisconsin adults 18 years and older (n = 6188). Data were weighted to be representative of the entire population of Wisconsin adults in 2015. Data were analyzed between September 2016 and January 2019.

**MAIN OUTCOME AND MEASURES** The definition of D/PMH includes adults with a depression disorder or a current mental health-related disability.
Positive Childhood Experiences (PCEs) Protect Adult Mental Health

6-7 vs. 0-2 PCES: 72% lower odds
3-5 PCEs v 0-2 PCEs  52% lower odds
of depression or poor mental health
48% v. 12.6%, OR 0.28; 95% CI 0.21-0.39. 3.8x higher rate for 0-2 vs. 6-7 PCEs.

Positive Childhood Experiences Mitigate ACEs Effects

Depression or Poor Mental Health

- 0-2 PCEs
- 3-5 PCEs
- 6-7 PCEs

Childhood experiences

Adverse Childhood Experiences

Resilience

Toxic stress

Positive Childhood Experiences

Health Outcomes

PCEs promote resilience
Topics

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PCEs and the brain

- Brain changes
- Healing
- How the phenomenon works
RCT of meditation v. relaxation

Functional Improvement
- Mindfulness (Cognitive and Affective Mindfulness Scale)
- Resilience (Resilience Quotient Test)

Brain changes
- Resting state functional connectivity (fMRI)

Brain changes with learning to read

• Pre-post evaluation of illiterate adults who learned to read

• The acquisition of literacy is associated with a reinforcement of left temporo-parietal connections**

• Learning to read changes the cortical networks for vision and language ***

Clinical improvement with therapy correlated with changes in fMRI scans.

Activity-Based Therapies
Cognitive-Based Therapies

Brain changes and healing from trauma

Post-traumatic growth (PTG) is characterized by subjective, positive psychological changes resulting from major life crises or traumatic events.

Recovery

Post Traumatic Growth following the East Japan Great Earthquake was associated with increased regional grey matter volume.*

Nakagawa et al. (2016) Effects of post-traumatic growth on the dorsolateral prefrontal cortex after a disaster. Nature/Scientific Reports. 6:34364

Resilience

Higher PTG Inventory scores had stronger activation in the executive functioning network region of the brain on fMRI.**

How it works: changing brain wiring

Experiences that **promote** oligodendrocyte development:

- Exercise
- Social interactions
- Environmental stimulation

Experiences that **suppress** oligodendrocyte development:

- Sedentary lifestyle
- Social isolation
- Environmental deprivation

Oxytocin - the love hormone:

- Supports childbirth and lactation
- Oxytocin increases in all parents, regardless of gender, after the birth of their child
- Synchronous release promotes affiliative interactions

Photo by Aditya Romansa on Unsplash
Topics

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The Four Building Blocks of HOPE

**Relationships** with other children and with other adults through interpersonal activities.

**Safe, equitable, stable environments** for living, playing, learning at home and in school.

**Social and civic engagement** to develop a sense of belonging and connectedness.

**Emotional growth** through playing and interacting with peers for self-awareness and self-regulation.

Sege and Browne. Responding to ACEs with HOPE: Health Outcomes from Positive Experiences. Academic Pediatrics 2017; 17:S79-S85
The Four Building Blocks of HOPE

Relationships

Relationships with other children and with other adults through interpersonal activities.
Environment

The Four Building Blocks of HOPE

Safe, equitable, stable environments for living, playing, learning at home and in school.

Sege and Browne. Responding to ACEs with HOPE: Health Outcomes from Positive Experiences. Academic Pediatrics 2017; 17:S79-S85
Engagement

The Four Building Blocks of HOPE

Social and civic engagement to develop a sense of belonging and connectedness.

Sege and Browne. Responding to ACEs with HOPE: Health Outcomes from Positive Experiences. Academic Pediatrics 2017; 17:S79-S85
Emotional Growth

The Four Building Blocks of HOPE

Emotional growth through playing and interacting with peers for self-awareness and self-regulation.

Sege and Browne. Responding to ACEs with HOPE: Health Outcomes from Positive Experiences. Academic Pediatrics 2017; 17:S79-S85
ACEs affect the Building Blocks of HOPE

Child Abuse
• Disrupts foundational relationships

Child Neglect
• Disrupts relationships
• Disrupts safe environments (food, education)

Family Disruption
• Disrupts safe environment & relationships

Adverse Community Environments
• Reduce engagement
• Reduce opportunities for peer play
- Definitions
- The ACEs paradox
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- The 4 Building Blocks of HOPE

**Incorporating HOPE into ACEs work**
Pediatrics

Using HOPE to pull out intertwined benefits, and coordinate approaches for an expanded PCMH

Fostering Social-Emotional Health

HRSN, Playing, and Growth

Parental Mental Health and Resilience
HOPE involvement in Pediatrics

Policy / AAP
- AAP policies
- Bright Futures
- healthychildren.org content
- Podcasts
- Projects

Programs
- CSSP
  - DULCE
  - Strengthening Families
  - Early Relational Health
Workflow

- Intake and assessment
- Anticipatory guidance
What RISK factors do you see?

Share in Chat Box
What protective factors do you see?
Which was easier to see—RISK or PROTECTIVE factors?

Zoom Poll
Type 1 vs. Type 2 thinking

**Type 1 thinking**
- Fast, intuitive, unconscious thought
- Everyday activities
- Effortless
- Training and experience

**Type 2 thinking**
- Slow, calculating, conscious thought
- Solving a problem
- Takes more effort!
- Something novel
What differences did you see in this video vs. the first one?

In chat box

OR

Turn on your video and unmute to share with the group.
Workflow

- Intake and assessment
- Anticipatory guidance
Positive Experiences to AG
Step One

✓ How do we see ourselves and our clients?
✓ Risk and strengths
✓ Cognitive re-framing

Courtesy – change in Mind Initiative, National Alliance for Strong Families and Communities
How were the 4 Building Blocks used in the second video?

**Relationships** with other children and with other adults through interpersonal activities.

**Safe, equitable, stable environments** for living, playing, learning at home and in school.

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Promising Early Learnings

**HOPE Supports Practice Transformation**

Workshop surveys show an improvement in provider-client relationship three months after a workshop:

“It is providing an opportunity to have the parents be proud of things they are doing well instead of focusing on areas that need improvement. I feel this has increased their willingness to engage and work with me.”

**HOPE Supports Families**

Stanford Pediatric Clinic – piloting a HOPE informed screening tool:

“Parents love hearing that they're doing something well. I've never had a parent not say something akin to ‘Oh my gosh, thank you for saying that!’ or ‘I'm not used to people saying I'm doing something well.’"
We carry our pasts with us
Join us in the HOPE transformation

**LEARN**
- Visit our website
- Download our material
- Watch our videos
- Complete our online modules

**SHARE**
- Tell your colleagues
- Encourage your agency to sign up for a workshop about implementing HOPE

**ACT**
- Sign up for a Train the Trainer
- Use the Anti-racism Toolkit to increase access to the 4 Building Blocks in your community
- Revise your intake and assessment forms to be HOPE-informed