



HOPE

HEALTHY OUTCOMES
FROM POSITIVE EXPERIENCES

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Our Mission

Develop approaches, GROUNDED IN SCIENCE, that build from the formative role of positive experiences in human development to inspire fundamental changes in how we advance health and well-being for our children, families, and communities.



Topics

■ Definitions

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



Healthy Outcomes

Healthy Outcomes

Health is:

“A state of complete physical, mental and social well-being and not merely the absence of disease or infirmity”

World Health Organization

Other Definitions of Health

Navajos include in their health concept not only a perfect body and mind but also harmony with their surrounding environment.

Sobralске, 1985



Topics

- Definitions

■ **The ACEs paradox**

- Positive Childhood Experiences protect adult mental health
- Plausible biological mechanism
- The 4 building blocks of HOPE
- Incorporating HOPE into your work



Poll #1

How much do you know about Adverse Childhood Experiences (ACEs)?

- A. Nothing – what are ACEs?
- B. A little – I have heard the term before.
- C. More than a little but probably still have a lot to learn.
- D. I am well versed in ACEs and their effects on health.
- E. I am an ACEs expert!



Adverse Childhood Experiences (ACEs)

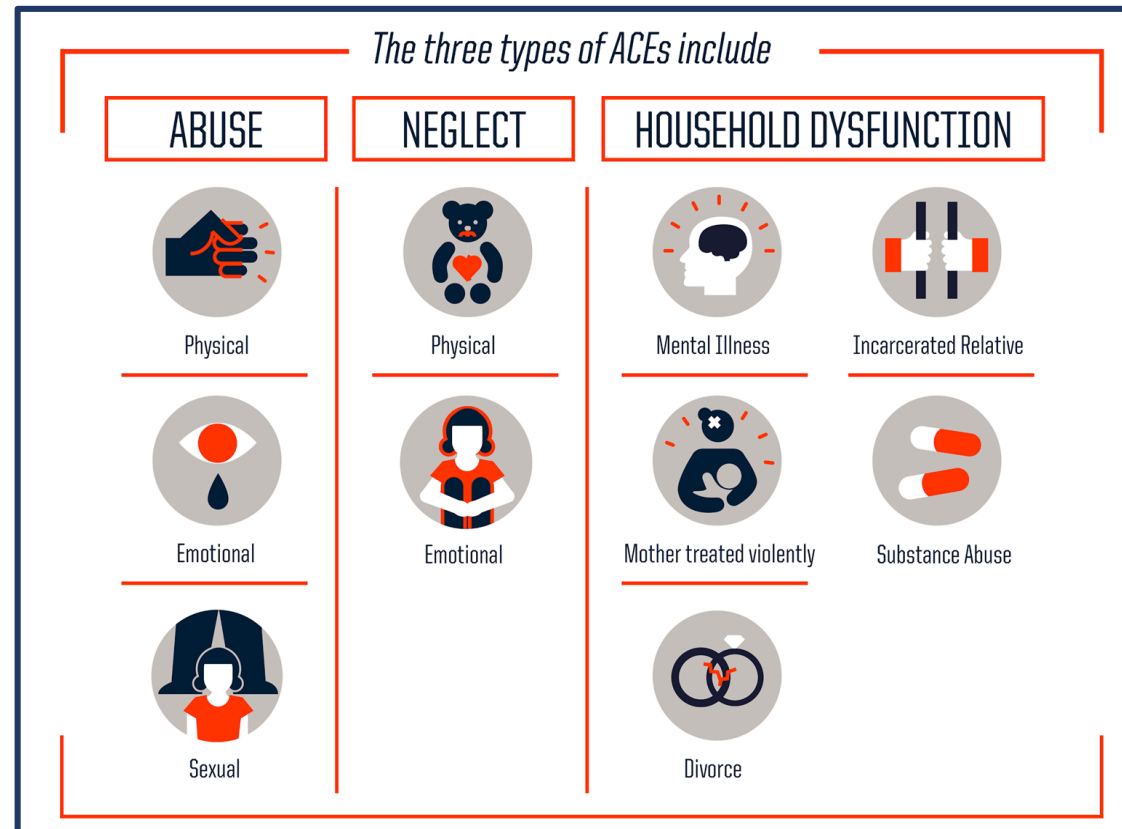


Image courtesy of RWJF



ACEs cause chronic disease: Population attributable fractions by ACEs score

Outcome	1 ACE	2-3 ACEs	4 or more ACEs	Overall
Coronary Heart Disease	2.6	3.4	6.6	12.7
Asthma	4.2	8.1	11.7	24.0
Depression	6.4	14.7	23.0	44.1
Heavy Drinker	5.6	9.0	9.3	23.9
Education < HS			4.6	4.6

Merrick MT, Ford DC, Ports KA, et al. Vital Signs: Estimated Proportion of Adult Health Problems Attributable to Adverse Childhood Experiences and Implications for Prevention — 25 States, 2015–2017. MMWR Morb Mortal Wkly Rep. ePub: 5 November 2019



Adverse Childhood Experiences and Other Risk Factors for Toxic Stress

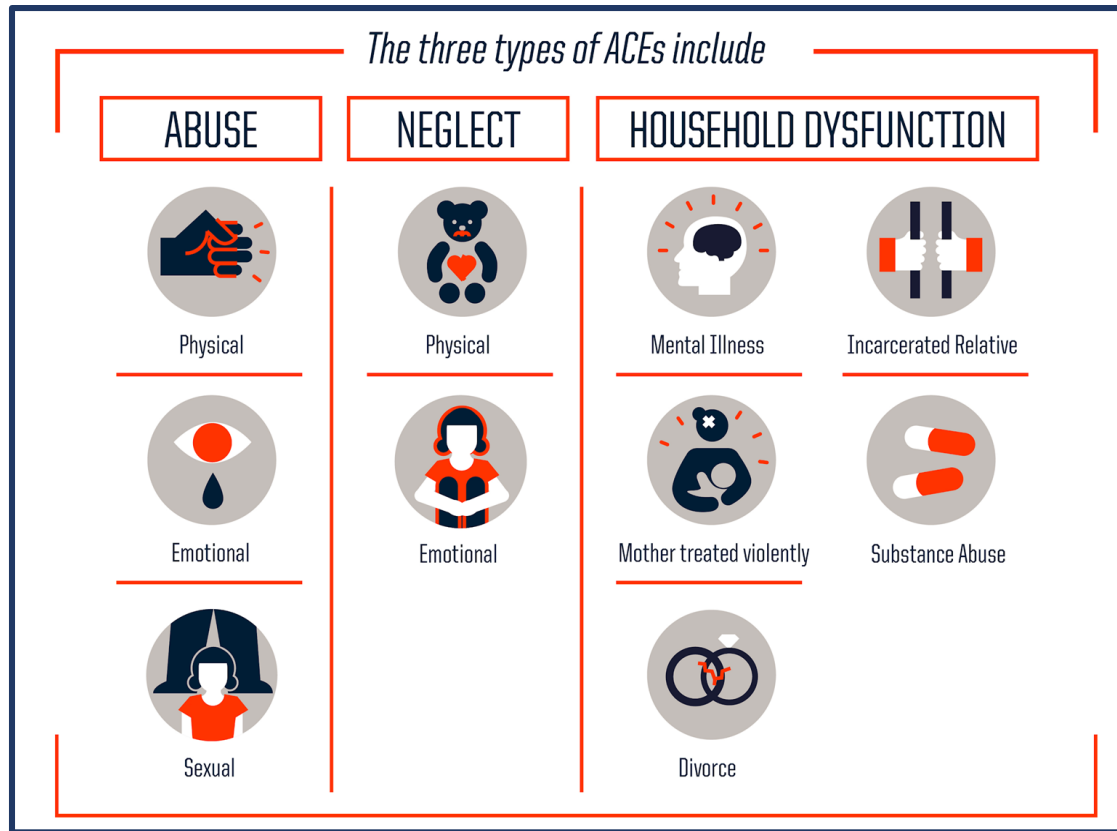
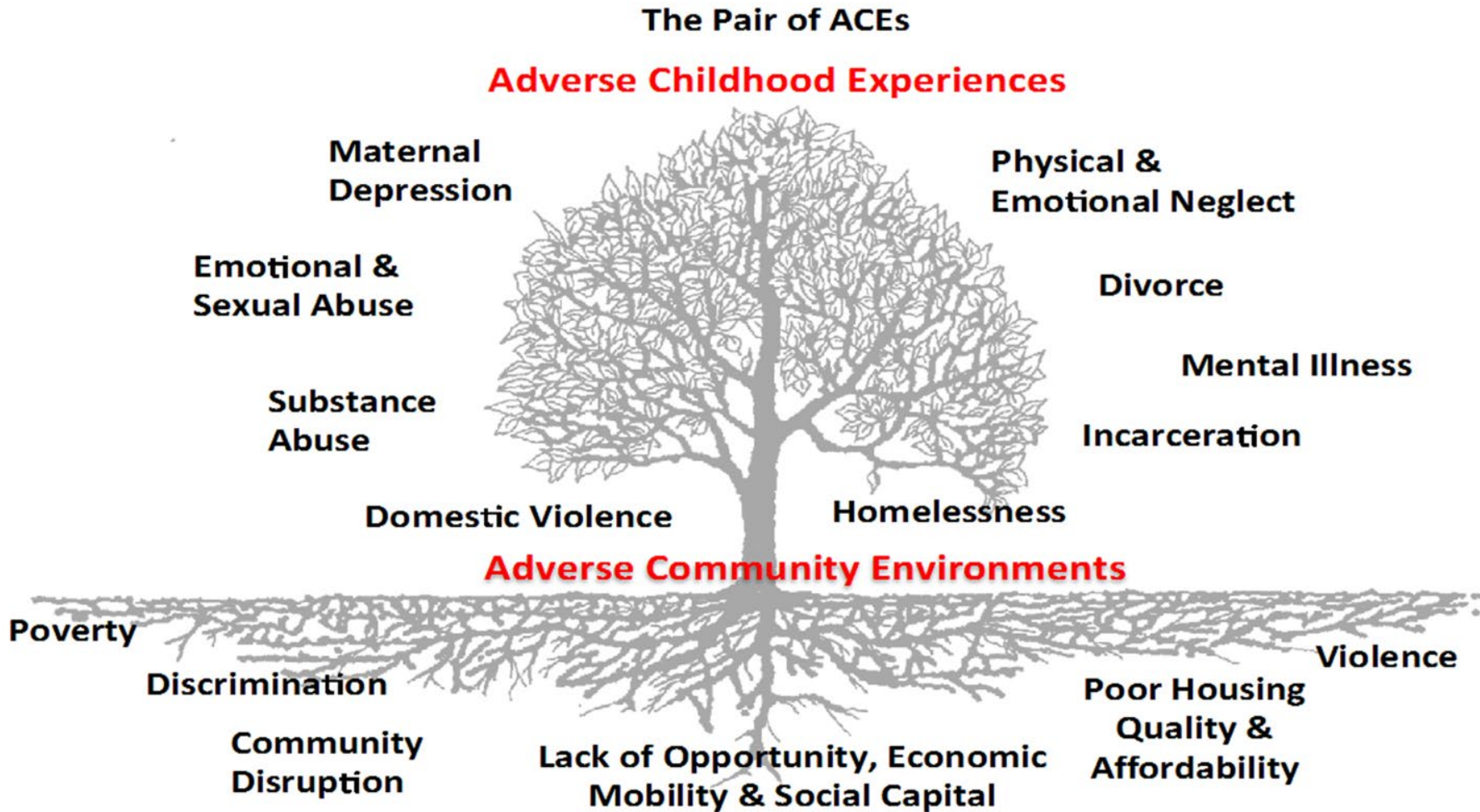


Image courtesy of RWJF

Additional community and societal factors that contribute to toxic stress:

- Poverty
- Institutional racism
- Historical Trauma
- War and migration
- Neighborhood effects



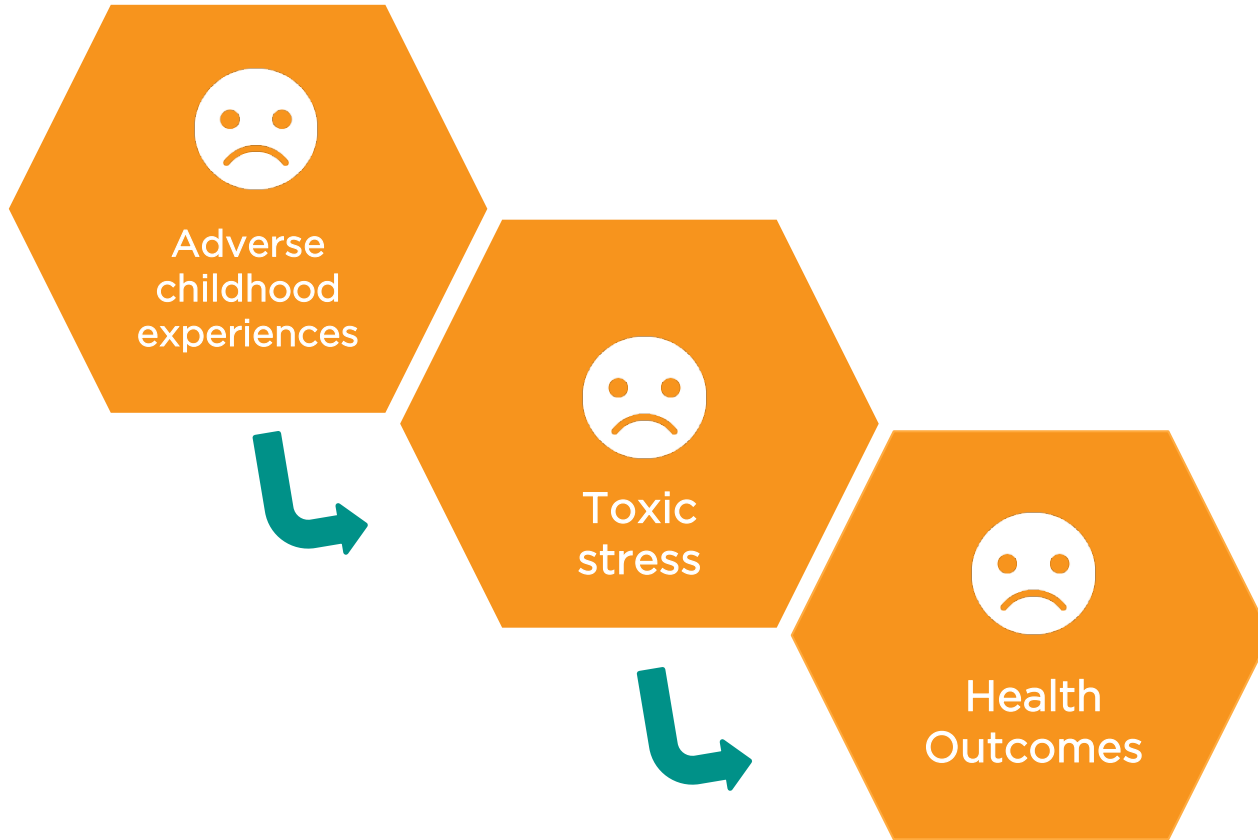
Ellis, W., Dietz, W. (2017) A New Framework for Addressing Adverse Childhood and Community Experiences: The Building Community Resilience (BCR) Model. *Academic Pediatrics*. 17 (2017) pp. S86-S93. DOI information: 10.1016/j.acap.2016.12.011



ACEs are part of the toxic stress picture



- ✓ Racism and other factors affect health
- ✓ Positive experiences affect 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?



Topics

- Definitions
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- **Positive childhood experiences protect adult mental health**
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- The 4 Building Blocks of HOPE
- Incorporating HOPE into ACEs work



Poll #2

How much do you know about Positive Childhood Experiences (PCEs)?

- A. Nothing – what are PCEs?
- B. A little – I have heard the term before.
- C. More than a little but probably still have a lot to learn.
- D. I am well versed in PCEs and their effects on health.
- E. I am a PCEs expert!



ACEs

- 1998 study of employed people in Southern California
- Patients answered questions about their childhood
- Correlated with mental and physical health

PCEs

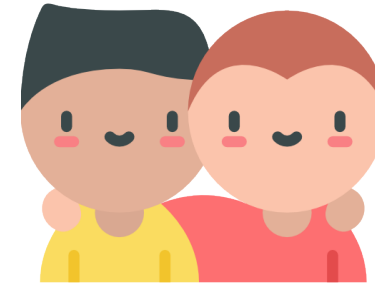
NEW

- 2015 population study in Wisconsin
- Part of the BRFSS
- Asked about ACEs
- Asked about Positive Childhood experiences
- Correlated with mental health



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”)



Research

JAMA Pediatrics | [Original Investigation](#)

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

[+ Supplemental content](#)

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.

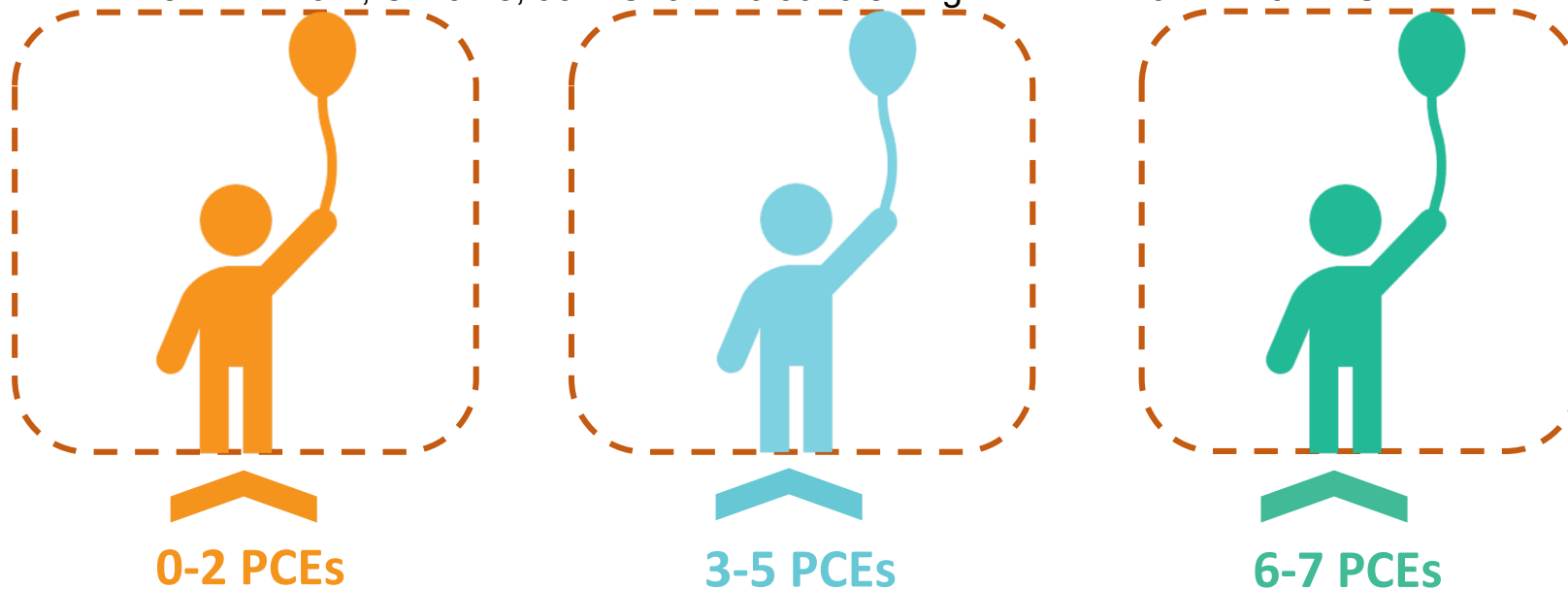
DESIGN, SETTING, AND PARTICIPANTS Data were from the cross-sectional 2015 Wisconsin Behavioral Risk Factor Survey, a random digit-dial telephone survey of noninstitutionalized Wisconsin adults 18 years and older (n = 6188). Data were weighted to be representative of the entire population of Wisconsin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

MAIN RESULTS AND MEASURES The definition of D/PMH includes adults with a depression

Bethell C, Jones J, Gombojav N, Linkenbach J, Sege R. Positive Childhood Experiences and Adult Mental and Relational Health in a Statewide Sample: Associations Across Adverse Childhood Experiences Levels. JAMA Pediatr. 2019:e193007.

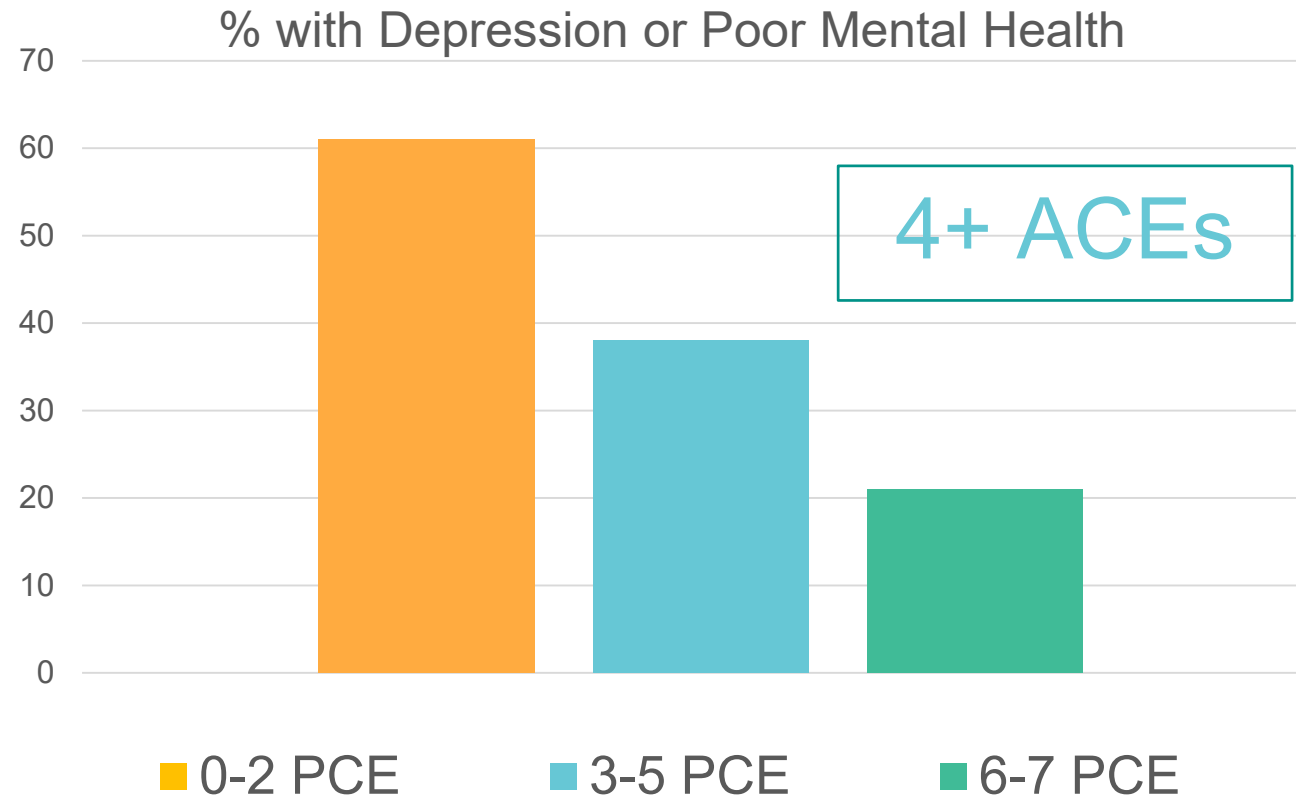
Positive Childhood Experiences (PCEs) Protect Adult Mental Health

- 6-7 vs. 0-2 PCEs: 72% lower odds of depression or poor mental health
- 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.



Bethell C, Jones J, Gombojav N, Sege R, Positive Childhood Experiences and Adult Mental and Relational Health in a Statewide Sample: Associations Across Adverse Childhood Experiences Levels, *JAMA Pediatr.* 2019; e193007

Positive Childhood Experiences (PCEs) Mitigate ACEs Effects

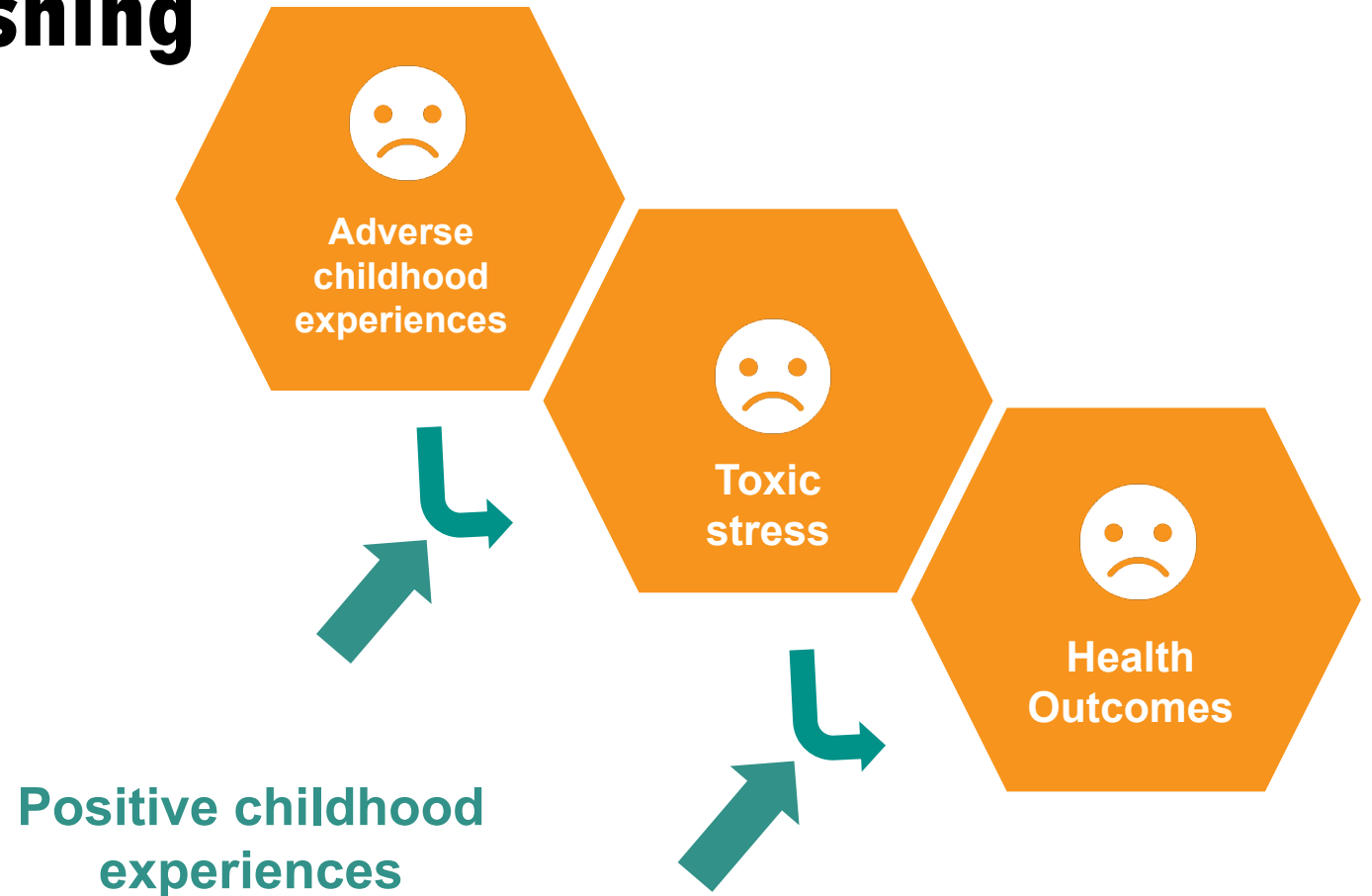


Bethell C, Jones J, Gombojav N, Sege R, Positive Childhood Experiences and Adult Mental and Relational Health in a Statewide Sample: Associations Across Adverse Childhood Experiences Levels, *JAMA Pediatr.* 2019; e193007

HOPE Promotes Flourishing

POSITIVE CHILDHOOD EXPERIENCES:

- Prevent ACEs
- Block toxic stress
- Promote healing





PACE D2A Project – MA DPH



- 3 year CDC funded project
- **Overall goal:** Develop and maintain a surveillance system for ACEs and PCEs for children ages 0 – 22
- Utilize data to inform ACE prevention and PCE promotion activities
- **HOPE** will develop and provide PCE focused training to different sectors



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- **Plausible biological mechanism**
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Biological mechanisms of action

Toxic stress model built on observed changes in brain architecture
from adversity

Growing evidence of broader brain plasticity

Meditation

Learning to read

Post-traumatic brain growth

Oligodendrocytes

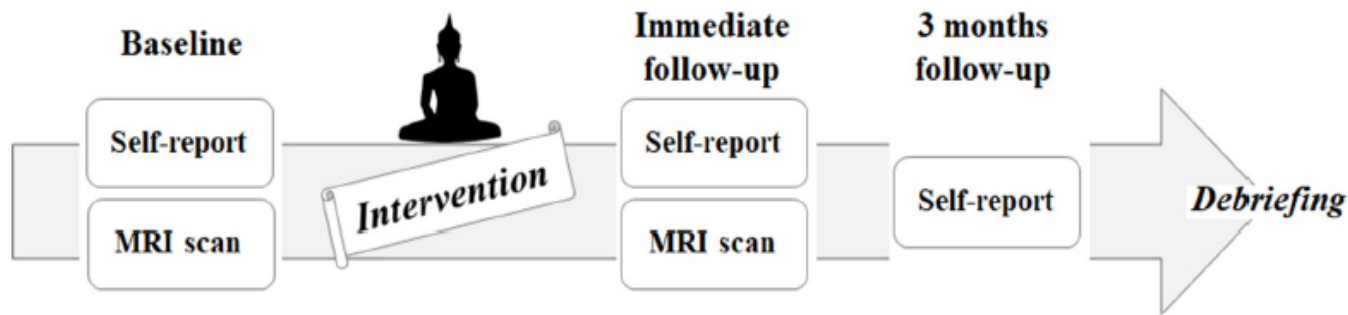




Brain changes observed with positive experiences

Meditation

Intense meditation training v attention control (relaxation).



**Kwak et al., (2019) The Immediate and Sustained Positive Effects of Meditation on Resilience Are Mediated by Changes in the Resting Brain. Front. Hum. Neurosci. 13:101.*



Brain changes observed with positive experiences

Meditation

- Meditation participants :
 - ^Cognitive and Affective Mindfulness Scale (CAMS) and
 - ^Resilience Quotient Test (RQT)*
 - ^ increased resting state functional connectivity measured by fMRI

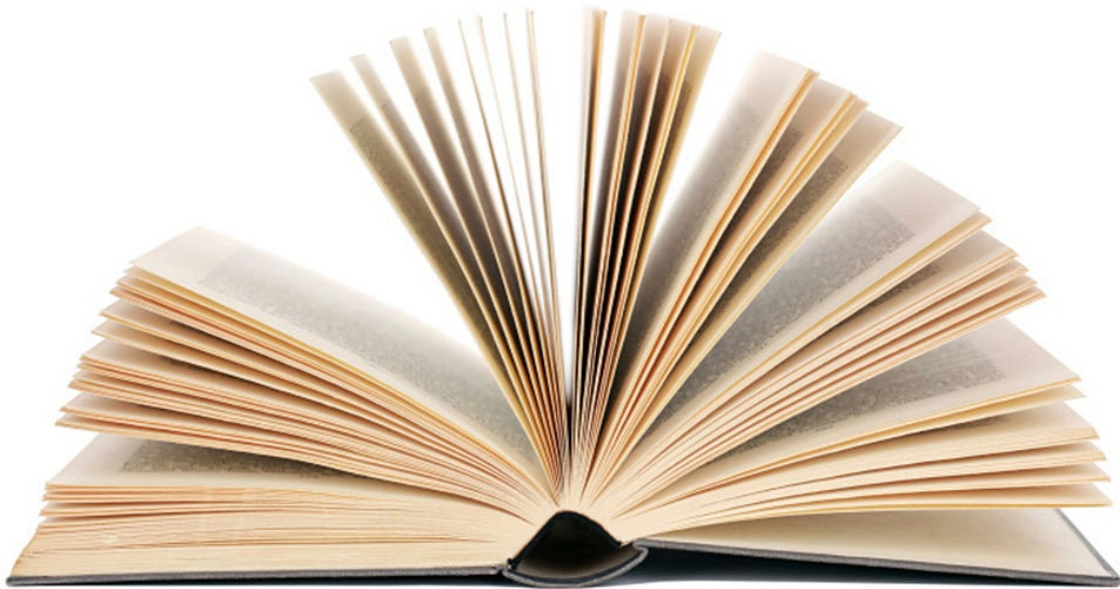


**Kwak et al., (2019) The Immediate and Sustained Positive Effects of Meditation on Resilience Are Mediated by Changes in the Resting Brain. Front. Hum. Neurosci. 13:101.*



Brain changes observed with positive experiences

Learning to Read



- Earlier studies showed neural activation when 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 ***

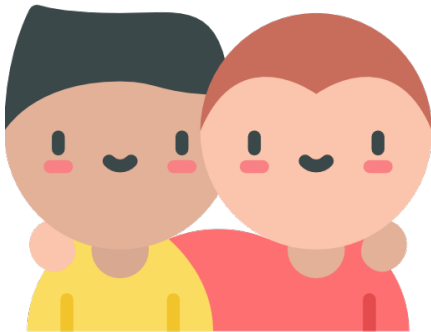
** Thiebaut de Schotten et al., (2014). *Cerebral Cortex*. 24:989-995. and *** T Dehaene, et al *SCIENCE* DEC 2010 : 1359-1364



Post-Traumatic Growth (PTG)

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.*

Resilience



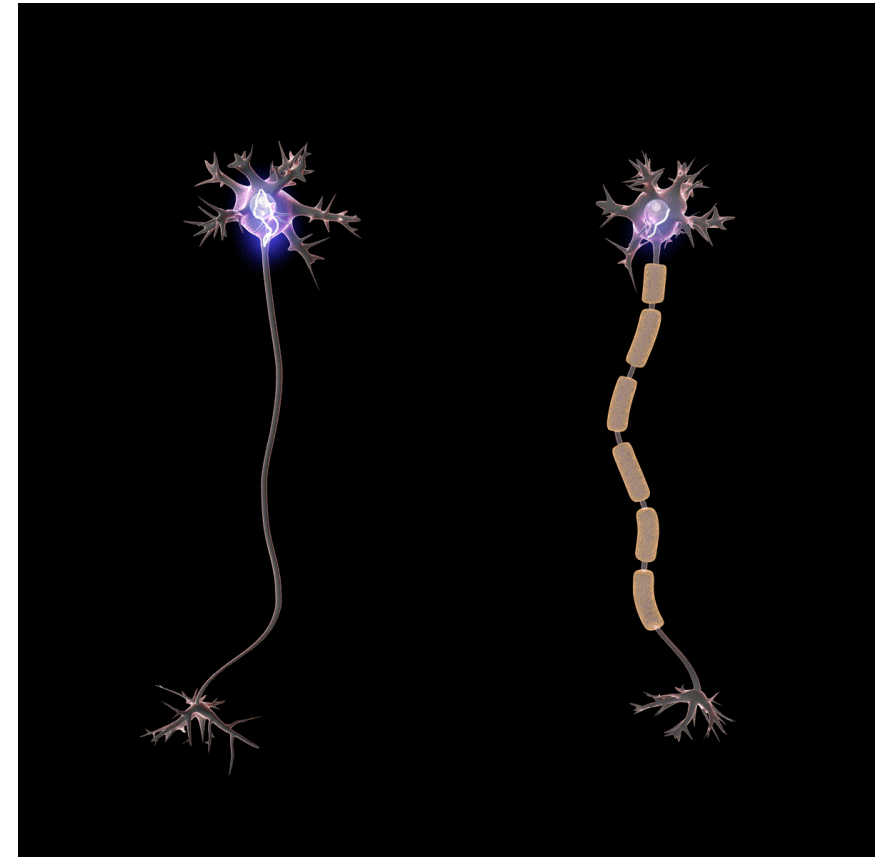
Higher PTG Inventory scores had stronger activation in the executive functioning network region of the brain on fMRI.**

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

**Fujisawa et al., (2015) Neural Basis of Psychological Growth following Adverse Experiences: A Resting-State Functional MRI Study. *PLoS ONE* 10(8)



Superhighways in the brain



https://upload.wikimedia.org/wikipedia/commons/4/48/Saltatory_Conduction.gif



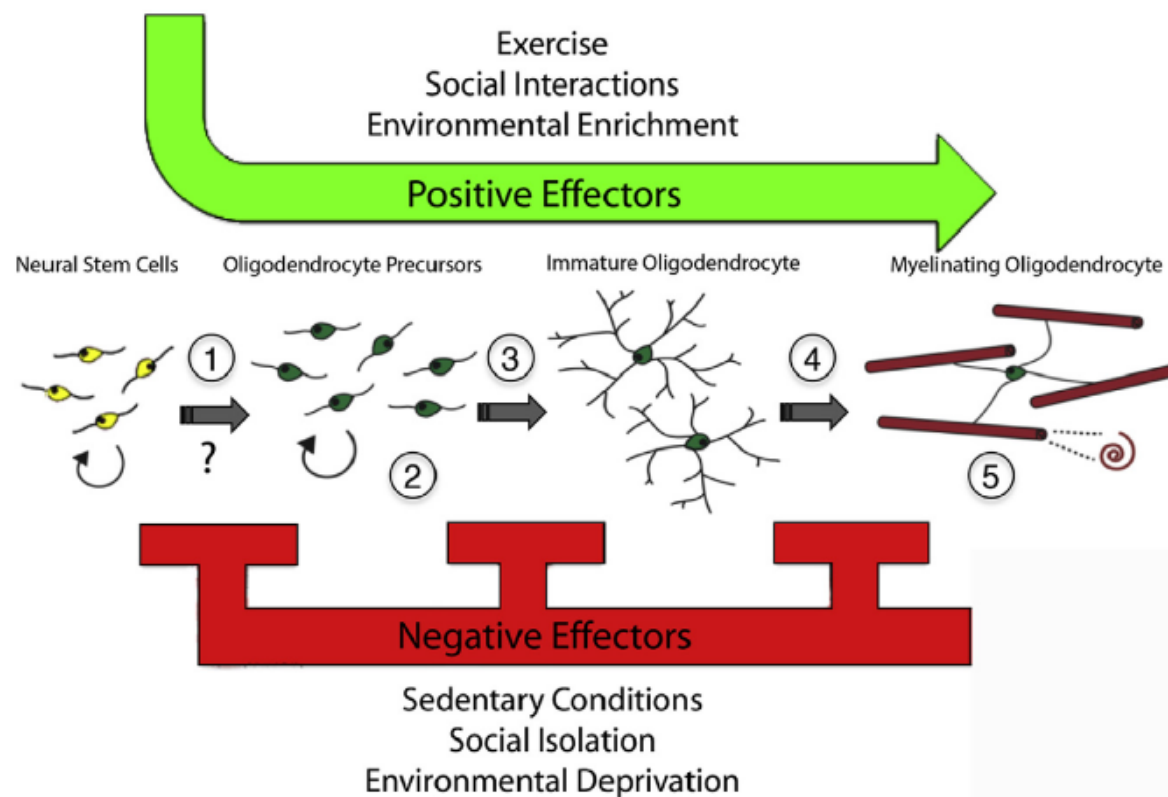
Experiences build brain super highways

Experiences that **promote** oligodendrocyte development:

- Exercise
- Social interactions
- Environmental stimulation

Experiences that **suppress** oligodendrocyte development:

- Sedentary lifestyle
- Social isolation
- Environmental deprivation





QUESTIONS





ACTIVITY

Take a moment to think about someone or something that defined your childhood in a positive way in the following four categories:

- One adult
- One place
- One friend
- One learning moment



The Four Building Blocks of HOPE



RELATIONSHIPS

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



ENVIRONMENT

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



ENGAGEMENT

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

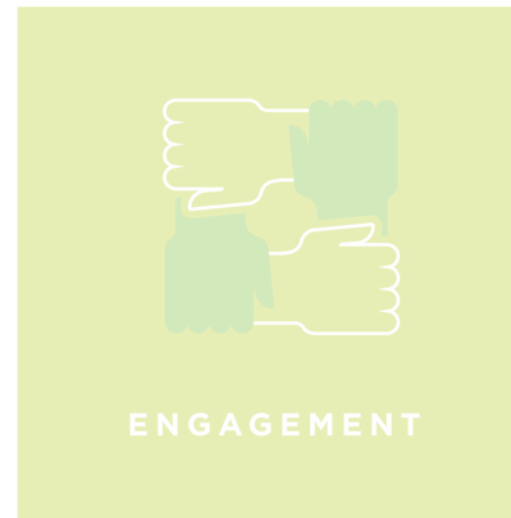


EMOTIONAL GROWTH

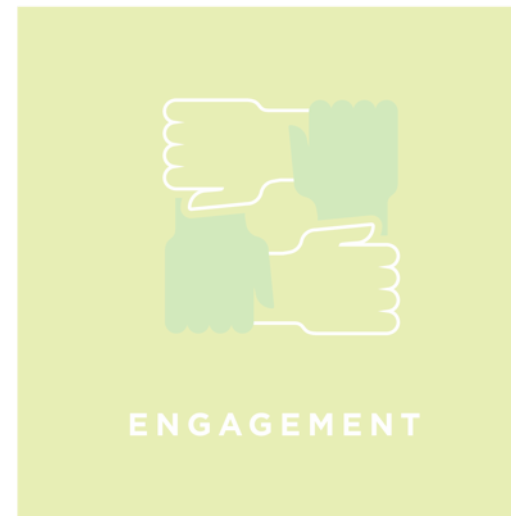
Emotional growth through playing and interacting with peers for self-awareness and self-regulation.

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

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



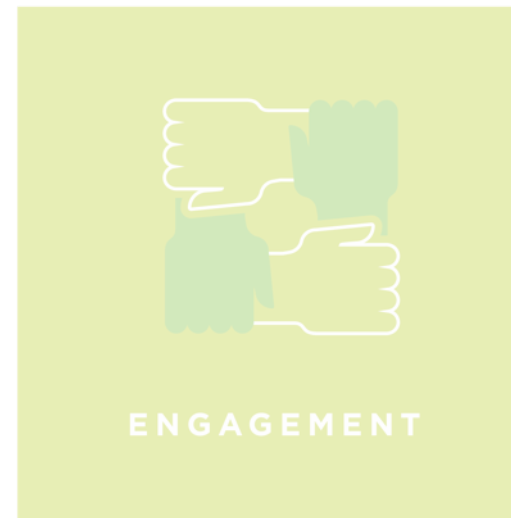
Safe, equitable, stable environments
for living, playing, learning at home and
in school.



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.



Adversity blocks **Positive** **Childhood Experiences**



Child Abuse & Neglect

- Disrupts foundational *relationships*
- Disrupts safe home *environments*

Family Disruption

- Disrupts safe *environments* (home and SDoH)

Adverse Community Environments

- Reduce *engagement*
- Reduce opportunities for *emotional growth* (peer play)

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



Type 1 vs. Type 2 thinking

Type 1 thinking

- ✓ Fast, intuitive, unconscious thought
- ✓ Everyday activities
- ✓ Effortless
- ✓ Training and experience



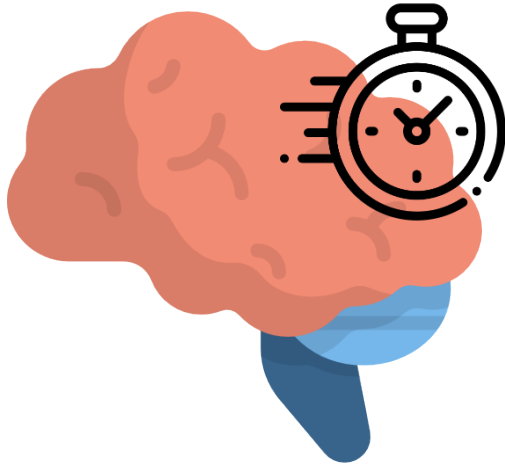
Type 2 thinking

- ✓ Slow, calculating, conscious thought
- ✓ Solving a problem
- ✓ Takes more effort!
- ✓ Something novel



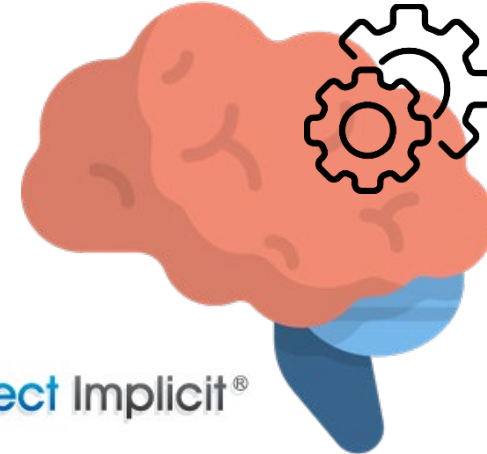
Type 1 vs. Type 2 thinking

Implicit biases are
imbedded in Type 1
thinking



Unconscious, immediate
reactions to
difference

Type 2 thinking can help us
notice and navigate our
biases



Project Implicit®

Slow, conscious
strategies to mitigate
bias



Interacting with adults with histories of trauma

- ✓ Courtney has been sober for 18 months. At a recent community event, she calculated that her ACE score was 5.
- ✓ She mentions this to you, and wonders how her history will affect her 2 month old son.
- ✓ Armed with knowledge of PCEs, how would you talk with her?





HOPE for Challenging Interactions

Typical response to challenging behavior: What did you do?

Child is *perpetrator* and practitioner is *doling out punishment*

Trauma-informed Response: What happened to you that led to this behavior?

Child is seen as a *victim* and practitioner *offers therapy*

HOPE-informed Response: You can do better. What happened here and how could it be different next time?

Child is *resilient*, systems contribute, and practitioner *acts as a coach*





Screening for ACEs

Universal Screening

- CA uses a modified (PERLS) screen for Medicaid patients
- AAP does not recommend universal screening
- Baldwin et al JAMA peds 2021: individual screening is not sensitive or specific

Focused screening

- Case 1: child with problems that might be related to a history of ACEs (TIC model)
- Case 2: Assessing for behavioral manifestations of known ACEs



Screening for PCEs

Checklists

- Benevolent Childhood Experiences scale
 - 10 items
 - Validated in small samples
- Positive Childhood Experiences
 - 7 items
 - Validated in population surveys

Conversational

- Based on four building blocks
- "tell me about a time when things worked out OK for you"
- **Identify**, honor, and promote PCEs



Simulated Encounter

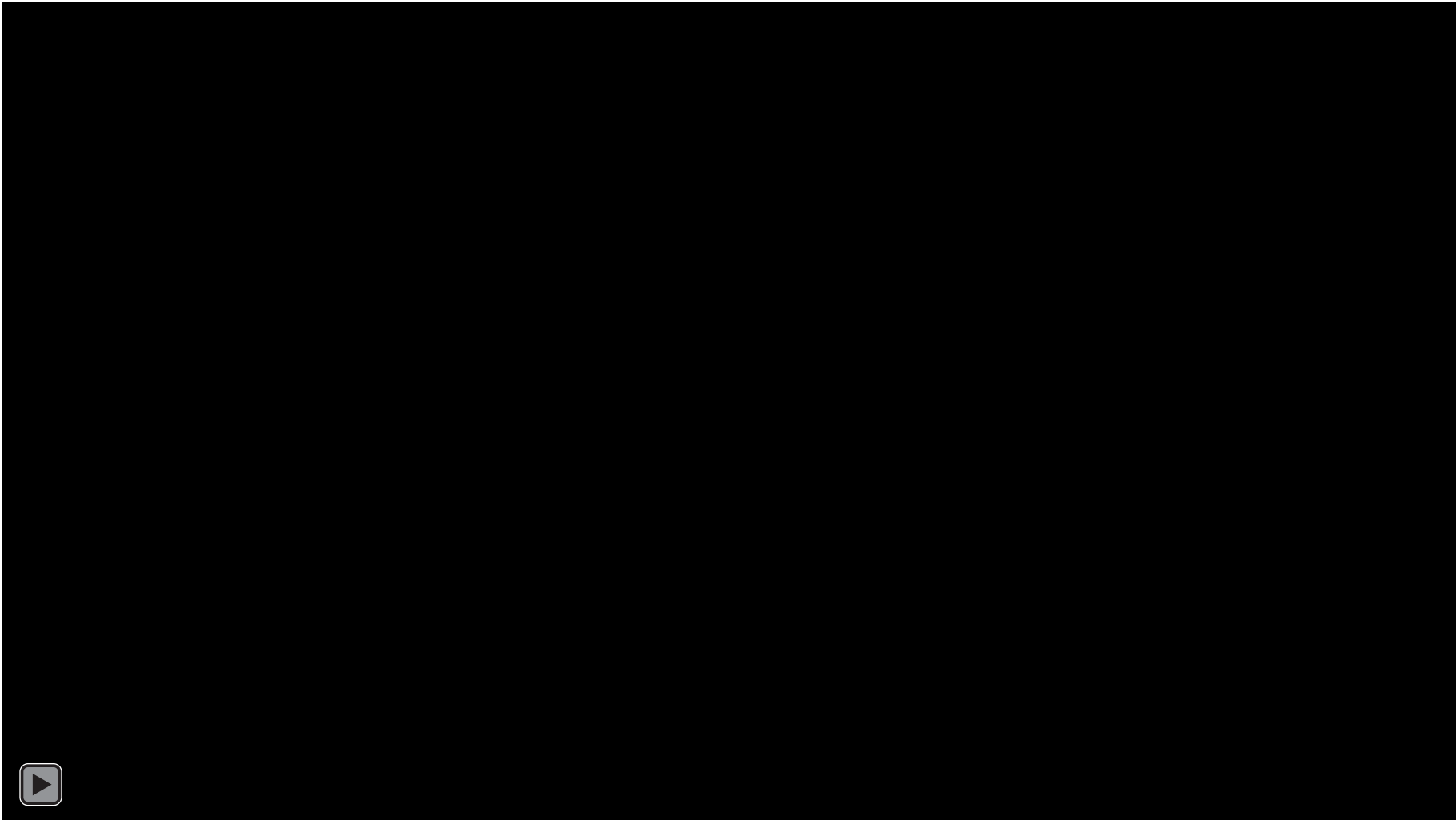
With a HOPE-informed approach



Watch out for the
Building Blocks!



HOPE in Practice





MORE QUESTIONS??



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

Use the HOPE resources
to increase access to
the 4 Building Blocks
Revise your screening
tools to be HOPE-
informed





Spreading HOPE



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