

Creating Protective and Compensatory Experiences (PACEs) to Buffer the Damaging Effects of Early Life Adversity

Jennifer Hays-Grudo, PhD

Regents Professor of Psychiatry and Behavioral Science

OSU Center for Health Sciences

PI and Director of CIRCA (Center for Integrative Research on Childhood Adversity)

Amanda Sheffield Morris, PhD

George Kaiser Family Foundation Chair in Child Development Regents Professor of Human Development and Family Science Research Scientist, Laureate Institute for Brain Research

The Hole in the Bridge



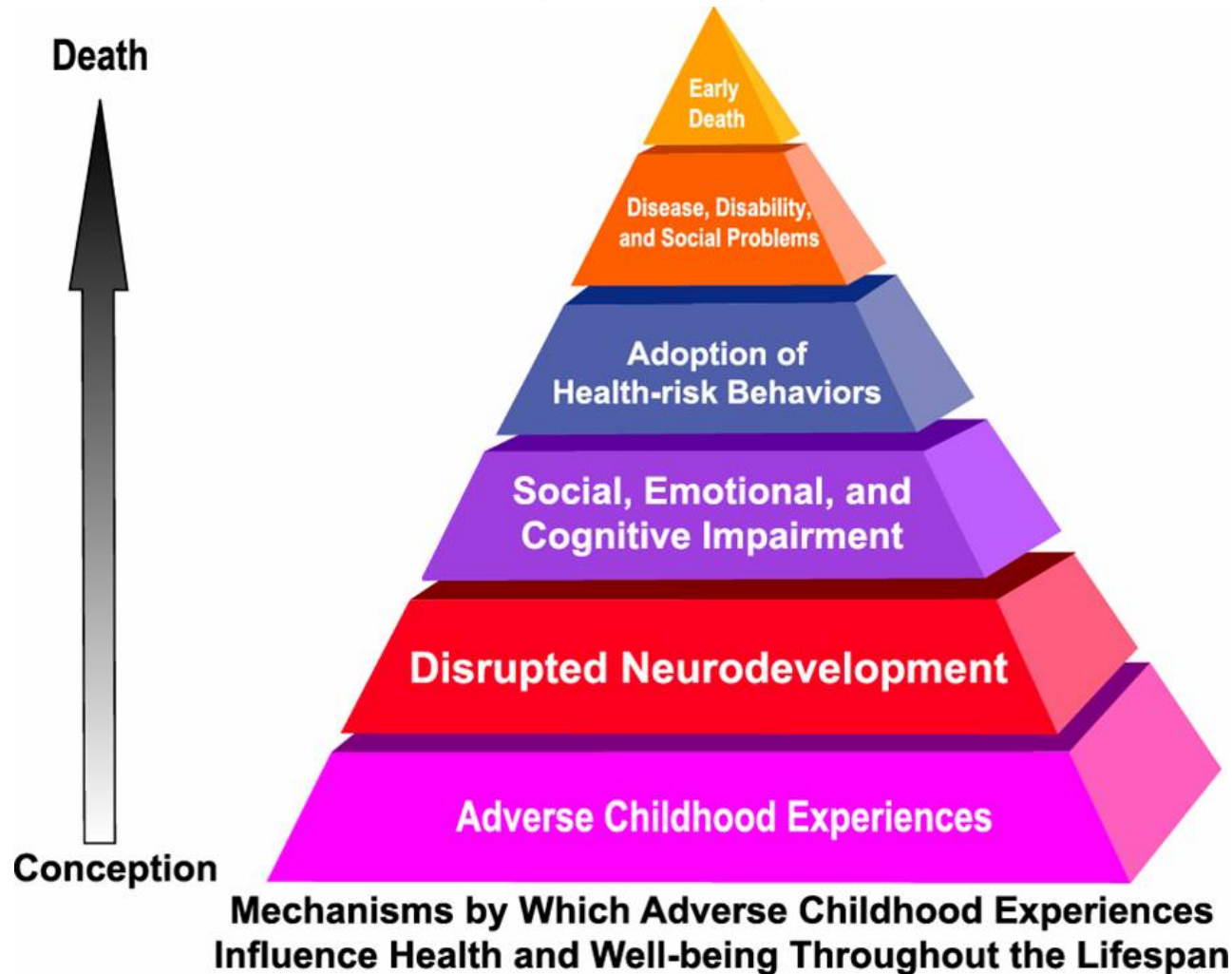
10 Categories of ACEs

- Verbal Abuse
- Physical Abuse
- Sexual Abuse
- Physical Neglect
- Emotional Neglect
- Witness IPV
- Substance Abuse in Home
- Separated/Divorced Parents
- Family Member Incarcerated
- Family Member Mentally Ill or Suicidal

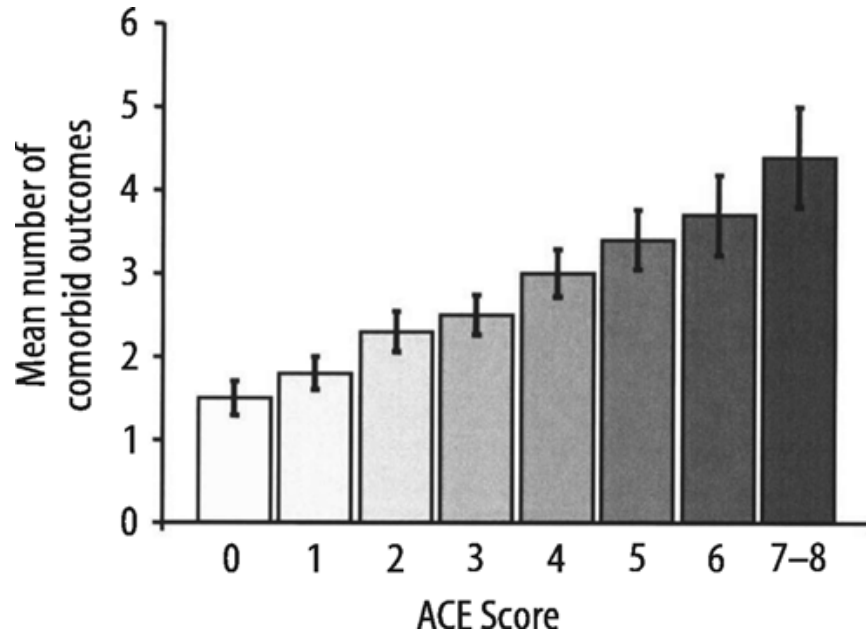


<https://www.cdc.gov/violenceprevention/cestudy/>

Adverse Childhood Experiences (ACEs)



ACEs and Mental Health



The mean number of comorbid outcomes in the study sample was 2.1 (range: 0–14); means are adjusted for age, sex, race, and educational attainment. The trend in the means is significant ($P < 0.0001$); vertical error bars represent 95% confidence intervals

64% of respondents had at least one ACE

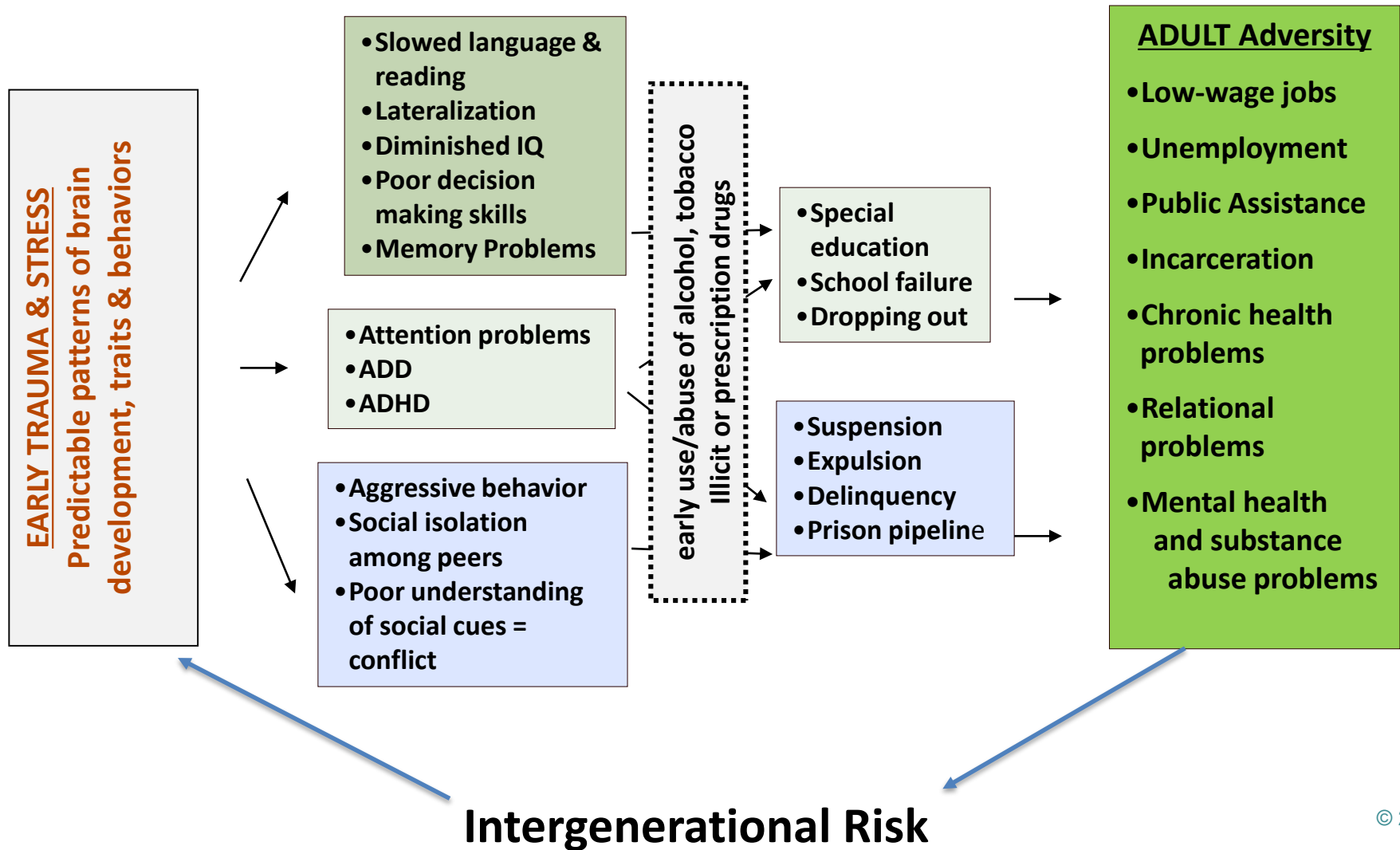
Having ≥ 4 ACEs increases risk of

- panic reactions - 250%
- depressed affect - 360%
- anxiety - 240%
- hallucinations - 270%

Dose effect significant – risk increases with each ACE

Anda et al Eur Arch Psychiatry Clin Neurosci (2006) 256: 174–186

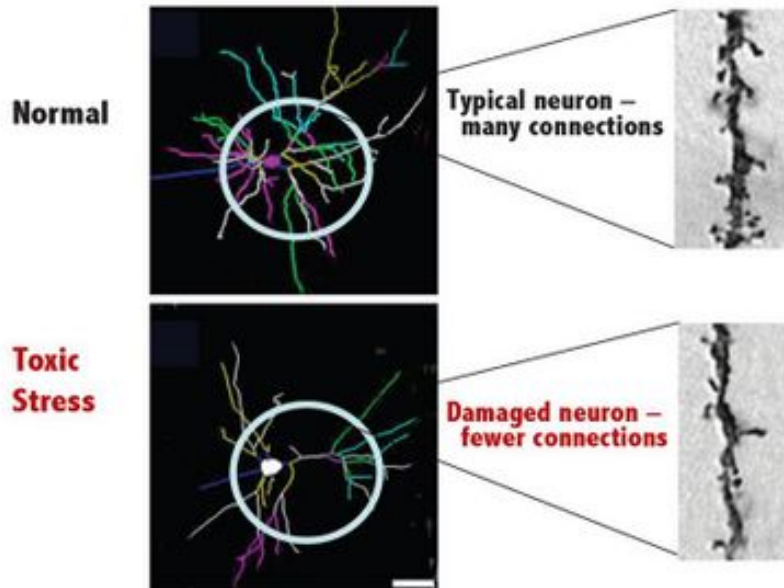
The Progressive Nature of Adversity in the Life-Course



Toxic Stress and Resilience



Persistent Stress Changes Brain Architecture



Calm center (mindful presence, emotion regulation, cognitive flexibility) = Resilience

Life Stress + ACEs = Toxic Stress

PACEs: Protective and Compensatory Experiences buffer trauma/stress

- Our communities, organizations, extended families and friends can be part of buffering the damaging effects of adversity and stress.
- Developmental psychologists have identified a number protective and compensating experiences that mitigate or reduce the harmful consequences of ACEs outside of the parent-child relationship
 - Unconditional love, connectedness, community engagement
 - Security: order, predictability, mastery/self-efficacy
- Because the brain is constantly creating new networks of synapses (based on experiences), creating protective environments can help at any age.

Protective and Compensatory Experiences (PACEs) – Morris, Hays-Grudo et al (2015)

Relationships and Connections	Resources and Contexts
Have someone who loved you unconditionally (you did not doubt that they cared about you)?	Have an engaging hobby -- an artistic or intellectual pastime either alone or in a group?
Have at least one best friend (someone you could trust, had fun with)?	Were you regularly involved in organized sports groups or other physical activity?
Do anything regularly to help others or do special projects in the community to help others?	Live in a home that was typically clean AND safe with enough food to eat?
Have an adult (not your parent) you trusted and could count on when you needed help or advice?	Have a school that provided the resources and experiences you needed to learn?
Were you an active member of at least one civic group or a non-sport social group?	Were there rules in your home that were clear and fairly administered?

PACEs - Relationships

- **Unconditional love**

- First and most basic need – assures initial survival and fosters development
- Nurturance and warmth are expressed differently across development but a constant need

- **Having a mentor**

- Provides a positive role model and supportive adult outside the family, signaling that someone other than a parent cares about them
- Source of love and care when family is unable to provide it

PACEs - Relationships

- **Having a best friend**
 - Provides opportunities to learn through play with peers
 - Protects from social rejection, bullying
 - Helps transition from family of origin to adult relationships
 - Reduces stress
 - Is a peer to turn to outside of the family, in times of need.
- **Being in a group (social, civic, faith-based)**
 - Aids in identity development, builds social connections, increases positive skills and behaviors
- **Volunteering**
 - Provides a sense of connection to the community, fosters empathy, altruism, and perspective-taking

PACEs - Resources

- **Good School with Resources to Learn**
 - A quality education predicts later success and happiness
 - Children do well when surrounded by others who do well
- **Being Physically Active**
 - Physical activity reduces stress and increases brain development
 - Organized sports foster social connection, self-discipline, setting goals, leading to improved self-regulation, competence, and self-esteem.
- **Having a Hobby**
 - Promotes discipline and self-regulation, leading to a sense of mastery, competence, and self-esteem
 - Creative hobbies provide an outlet for expression and identity exploration
 - Fosters development of problem-solving, overcoming challenges to mastering a skill

PACEs - Resources

- **Clean and Healthy Home**

- Clean and uncluttered home environments improve outcomes independent of parenting and other resources
- Good nutrition and food security
- Being physically safe in and around home

- **Clear Rules and Routines**

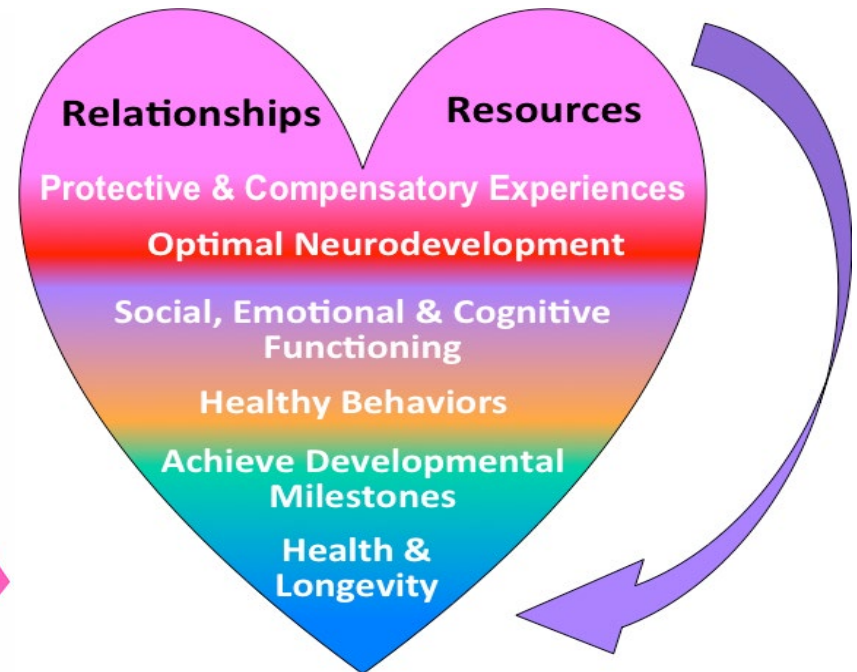
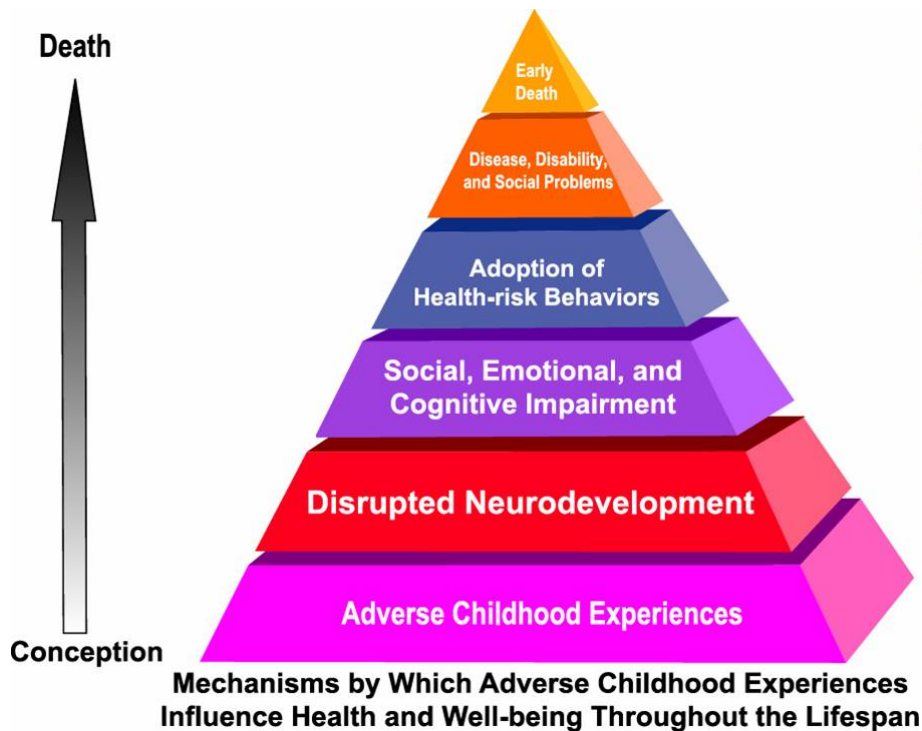
- Daily routines and family rituals create sense of order and safety
- Routines foster healthy personal habits (hygiene, sleep, nutrition) and social responsibilities
- Consistent rules fairly administered, and monitoring older children and teens' activities

PACEs - Resources

- **and Routines**

- Children who have no rules or limits (we call this permissive parenting), often grow up to be irresponsible adults, they engage in risky behavior as teens, and do not do well in school.
- During adolescence, parents need to know where their teens are, who they are spending their time with, and what they are doing. This has been linked to less aggression, drug and alcohol use, and higher achievement in school.
- As children grow older it is important for them to have a say in the rules.

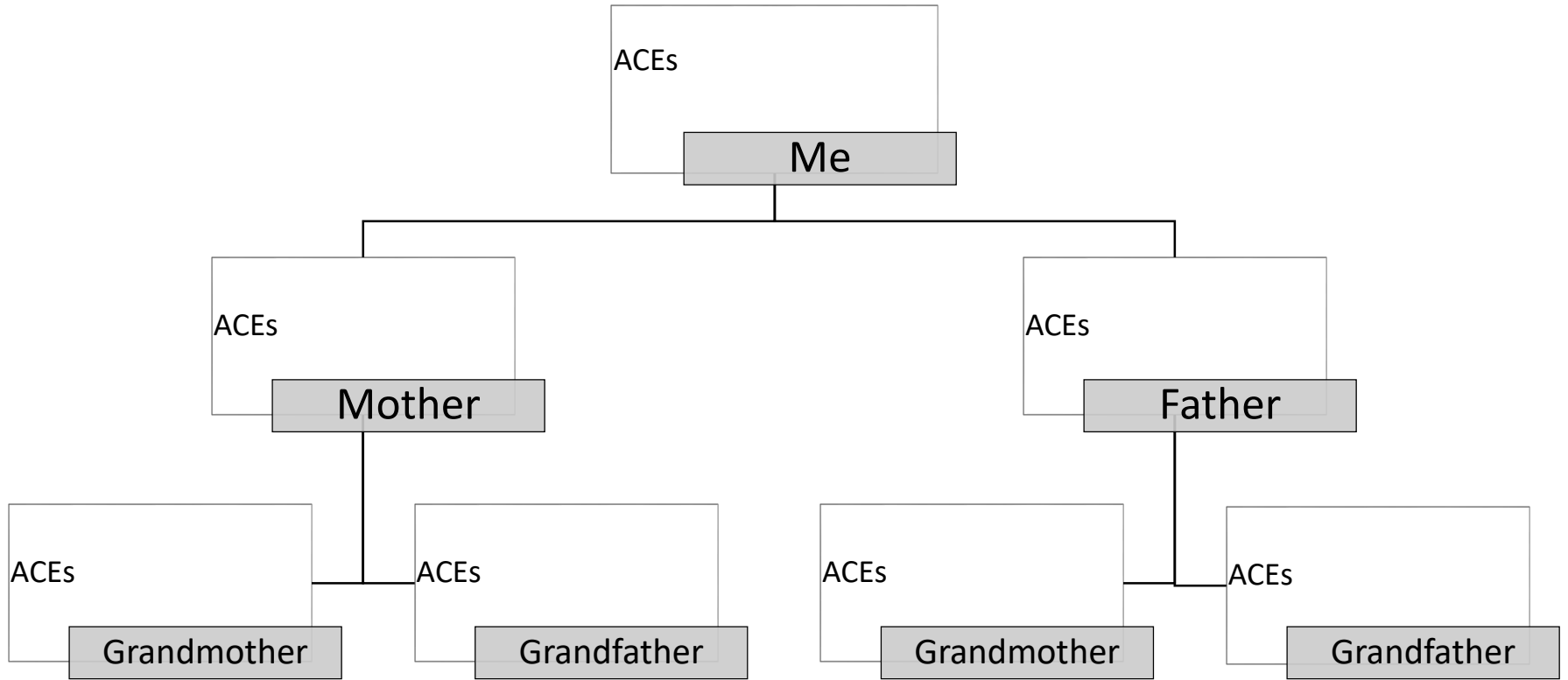
ACEs and PACEs



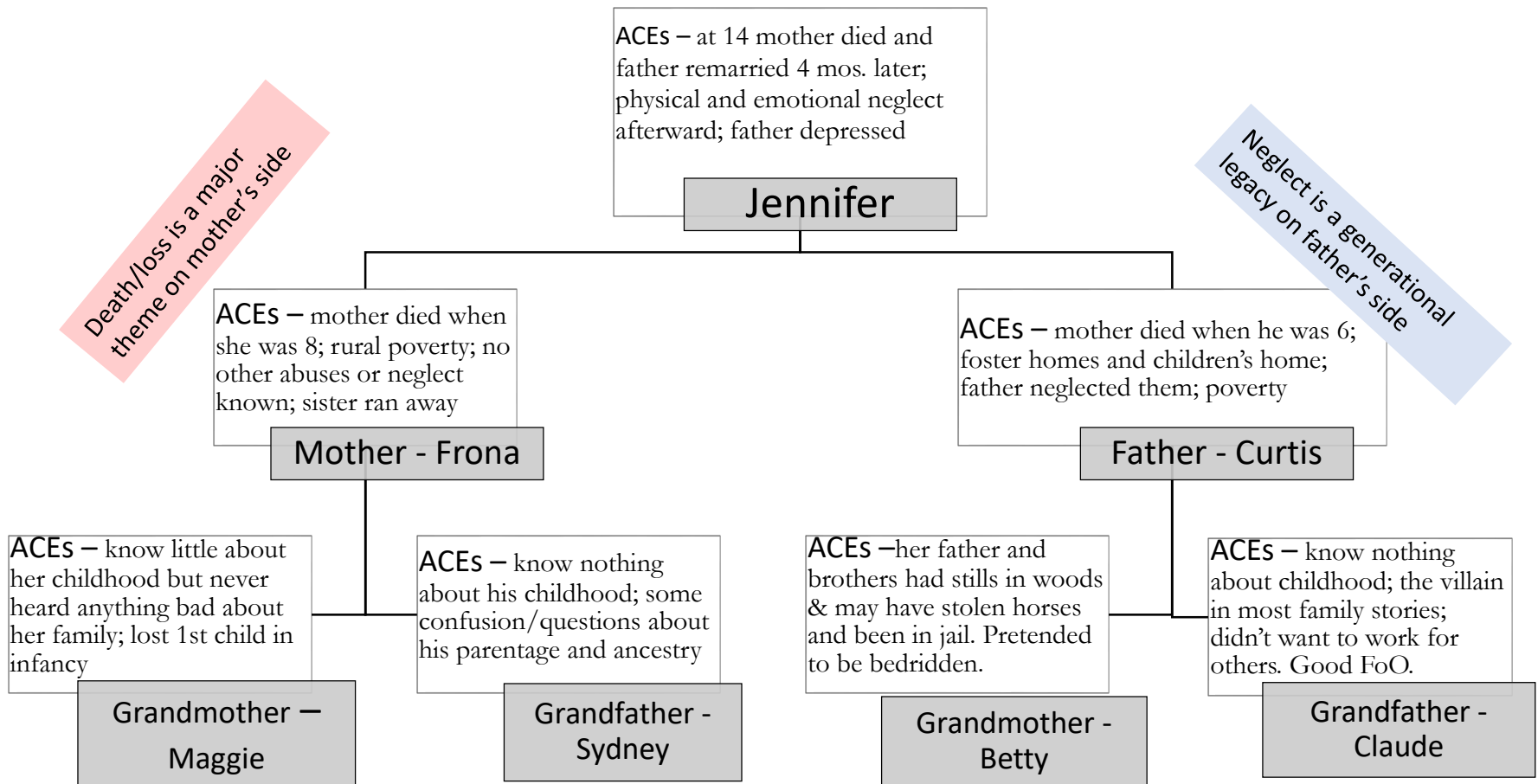
Breathe



ACEs Genogram



ACEs Genogram - Jennifer



ACEs Genogram - Jennifer

ACEs – at 14 mother died and father remarried 4 mos. later; physical and emotional neglect afterward; father depressed

Jennifer

Death/loss is a major theme on mother's side

Neglect is a generational legacy on father's side

ACEs – mother died when she was 8; rural poverty; no other abuses or neglect known

Mother - Frona

ACEs – mother died when he was 6; foster homes and children's home; father neglected them; poverty

Father - Curtis

ACEs – know little about her childhood but never heard anything bad about her in infancy

Grandmother - Maggie

ACEs – know nothing about his childhood; some confusion about his parentage and ancestry

Grandfather - Sydney

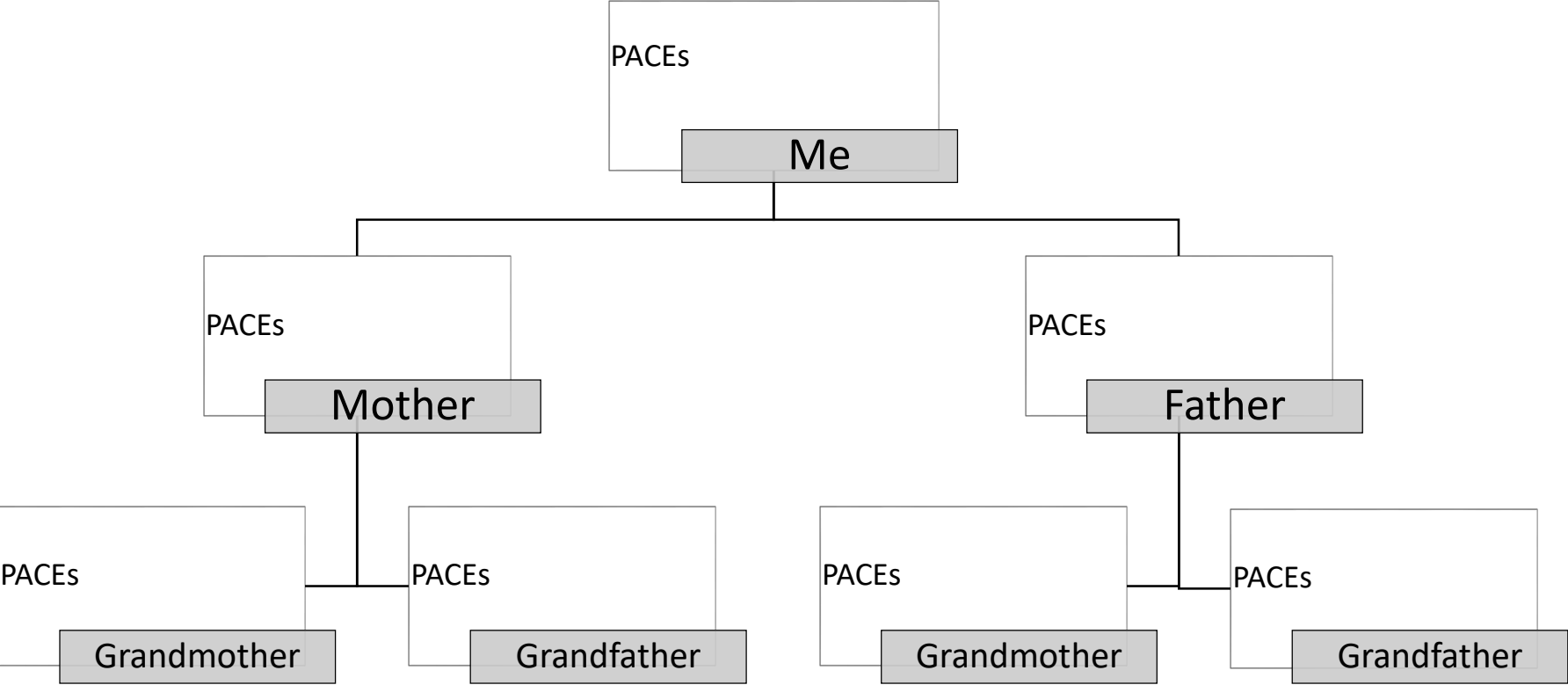
ACEs – know her father and brothers had stills in woods of E. Texas; may have stolen heret and beer in jail

Grandmother - Betty

ACEs – know nothing about childhood; the villain in most family stories; didn't want to work for others

Grandfather - Claude

PACEs Genogram



PACEs for Adults with ACEs

Relationships and connections	Resources and contexts
Have someone who loves you unconditionally (you did not doubt that they care about you)?	Have an engaging hobby -- an artistic or intellectual pastime either alone or that you share with others?
Have at least one best friend (someone you can trust, relax and have fun with)?	Get regular exercise, especially something you really enjoy doing or do with others?
Do something regularly to help others or do special projects in the community to help others?	Live in a physically safe home (clean, uncluttered, healthy meals) and neighborhood?
Have a mentor – access to someone whose advice about work or relationships is reliable and helpful?	Have paid or unpaid work that provides opportunities for growth and meaning?
Are you an active member of at least one civic, social, or faith-based group?	Have regular routines and habits that promote well-being (sleep, time for self)?

PACEs Plan
Name:

Age

Relationships and connections	Resources and contexts
Unconditional love	Hobby
Best friend	Exercise
Volunteer	Physical (uncluttered, clean, safe) space
Mentor	Work
Social group	Routines (sleep, meals, meditation)

Parenting with ACEs – Sample Program

Super Parents

Pre- to post-test results

- **Significant increases** in
 - Positive parenting attitudes
 - Parenting efficacy
 - Parent executive function
- **Significant decreases** in
 - child emotional problems and hyperactivity

Three-month Follow-up

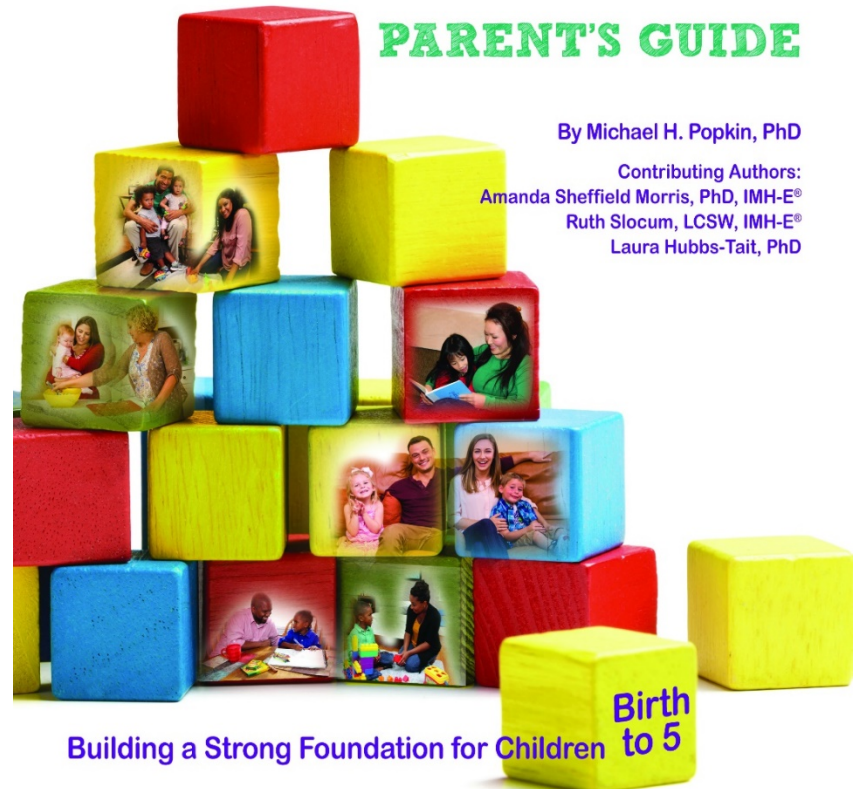
- **Significant increases** in
 - parenting efficacy
 - parent self-compassion
 - parent mindfulness
- **Significant decreases** in
 - parent perceived stress
 - child emotional problems

ACTIVE PARENTING First Five Years™

PARENT'S GUIDE

By Michael H. Popkin, PhD

Contributing Authors:
Amanda Sheffield Morris, PhD, IMH-E®
Ruth Slocum, LCSW, IMH-E®
Laura Hubbs-Tait, PhD

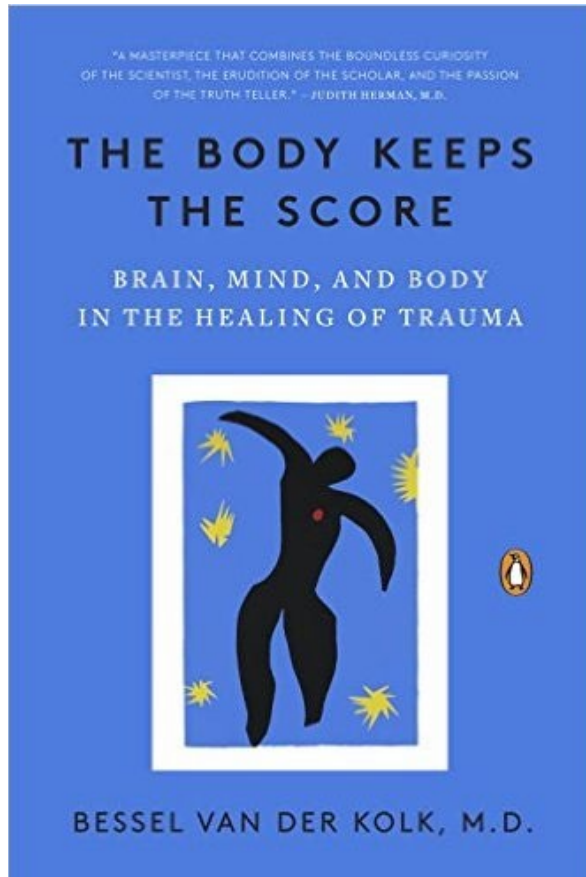


Mindfulness and Parenting

Corthorn & Milicic (2016)

- Significant relationship between mindfulness and mindful parenting in non-meditating mothers of preschoolers
- Significant negative correlation of mindfulness and parenting stress, depression and general stress
- Mindful parenting related to parent-child interactions and perceptions about child

Trauma – New knowledge



Following birth of three new branches of science:

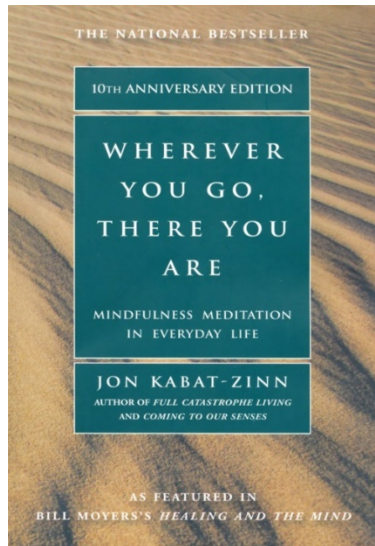
- **Neuroscience:** how the brain supports mental processes
- **Developmental psychopathology:** how adverse experiences impact development of the mind and brain
- **Interpersonal neurobiology:** how behavior influences emotions, biology & mind-sets of those around us

Three avenues for treatment

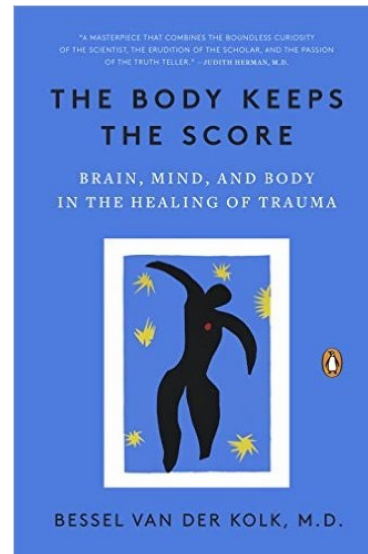
- Top down – by talking, (re-)connecting with others, allowing past and current experiences to be acknowledged and processed
- Medications that shut down inappropriate alarm reactions, or other technologies that change the way the brain organizes information
- Bottom up – by allowing the body to have experiences that viscerally contradict the helplessness, rage, or collapse that result from trauma.

Resources

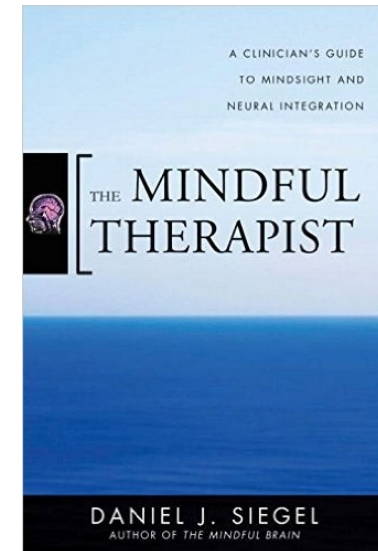
Kabat-Zinn



Van Der Kolk



Dan Siegel



Overcoming Childhood Adversity: A Developmental Perspective

Jennifer Hays Grudo and Amanda Sheffield Morris

American Psychological Association Press, forthcoming