

Beyond Toxic Stress:

Why Preventing Childhood Adversity is NOT Enough

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Andrew Garner, MD, PhD, FAAP

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Learning Objectives

- Define **toxic stress** and describe how it helps to elucidate “**the problem.**”
- Define **relational health** and describe how it helps to elucidate “**the solution.**”
- Define at least 3 components of a **public health approach** to build relational health.

Linking Childhood Experiences and Adult Outcomes



Slide adapted from *Thinking Developmentally: Nurturing Wellness in Childhood to Promote Lifelong Health*, Garner and Saul, 2018. Used with permission.

Defining Adversity or Stress

Positive Stress Response

- Brief, infrequent, mild to moderate intensity
- In response to normative childhood adversities
 - Inability of the 15 month old to express their desires
 - The 2 year old who stumbles while running
 - Beginning school or childcare
 - The big project in middle school
- **Safe, Stable, Nurturing Relationships***** allow a return to **baseline** (responding to non-verbal clues, consolation, reassurance, planning assistance)
- Builds **motivation, confidence** and **RESILIENCE IN THE FUTURE!!**
- “Positive Stress” is **NOT** the **ABSENCE** of stress

Defining Adversity or Stress

Toxic Stress Response

- Long lasting, frequent, or strong intensity
- In response to the more extreme adversities of childhood (**ACEs**)
 - Physical, sexual, emotional abuse
 - Physical, emotional neglect
 - Household dysfunction
- **Insufficient social-emotional buffering (not enough SSNRs)**
(Deficient levels of emotion coaching, re-processing, reassurance/support)
- Chronic exposure to the physiologic mediators of stress (cortisol, epi) leads to **potentially permanent changes** and long-term effects
 - **Molecular level** (epigenetics)
 - **Cellular level** (brain connectivity)
 - **Behavioral level** (allostasis)

The same biology also explains how **RH** becomes biologically embedded

TS and RH are Two Sides of Same Coin!

Molecular level

Cellular level

Behavioral level

RELATIONAL HEALTH:

Refers to the ability to develop and sustain the safe, stable and nurturing relationships (SSNRs). These, in turn, provide kids with positive childhood experiences (PCEs).

- Dyadic level (parent or caregiver and child interactions)
- Familial level (intra-familial interactions)
- Community level (societal interactions and “normative” behaviors)
- Provider level (pediatric provider and patient/family interactions)
- Practice level (FCPMH and staff / community level interventions)
- Buffers adversity (toxic stress -> tolerable or positive)
- Builds the skills needed to be **resilient** in the future

Family Resilience and Connection Promote Flourishing

Bethell et al., 2019. Health Affairs 38:729-737

National Survey of Children's Health, 2016-7, ages 6-17, **n = 51,156**, parent report Child Flourishing Index (CFI), ranges from 0-3, "**definitely true**" that their child:

- 1) "shows interest and curiosity in learning new things" - **curious**
- 2) "works to finish tasks he or she starts" - **completes**
- 3) "stays calm and in control when faced with a challenge" - **control**

Family Resilience and Connection Index (FRCI), ranges from 0-6

- "When your **family** faces a problem, how often are you likely to:"

- 1) "**talk together** about what to do"
- 2) "**work together** to solve our problems"
- 3) "know we have **strengths** to draw on"
- 4) "**stay hopeful** even in difficult times"

- Asked **parents** how well they:

- 5) can "**share ideas or talk about things** that really matter"
- 6) are "**handling the day-to-day demands** of raising children"

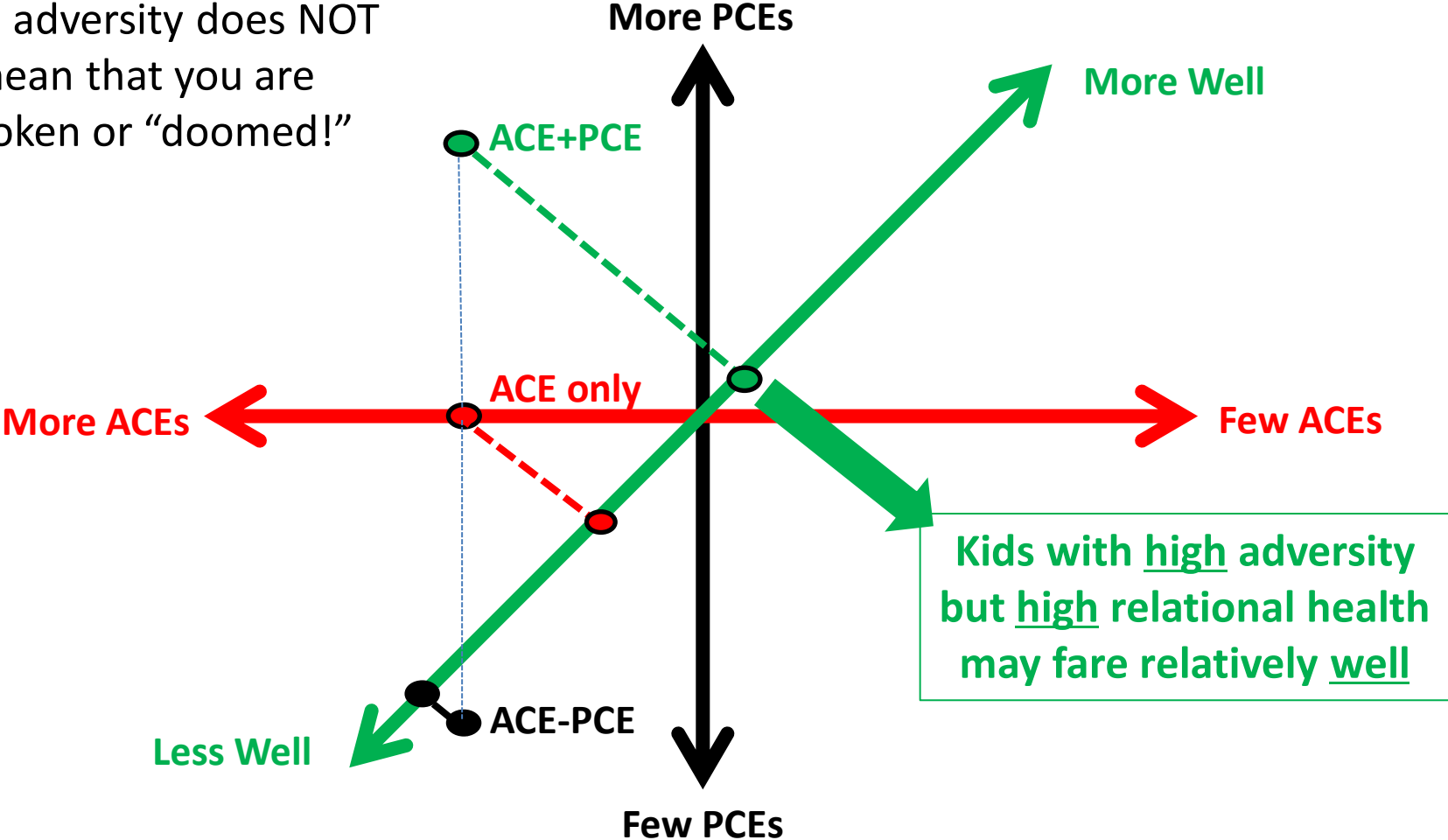
Nationally, only **40.3 %** of children are **“flourishing”**
 (**curious, complete** tasks, are **in control** when faced with a challenge)

Percent flourishing, by Family Resilience & Connection

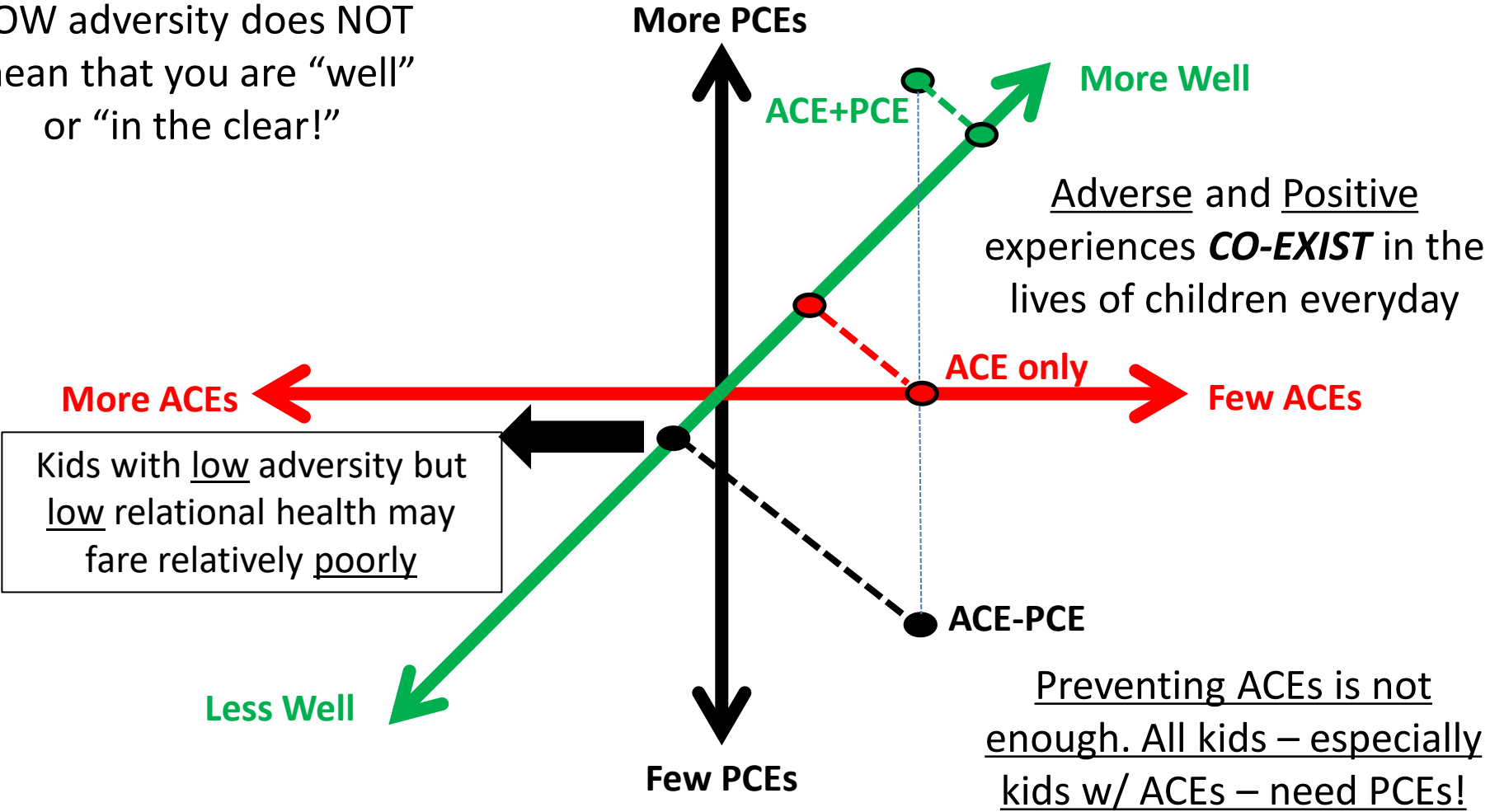
	<u>0 or 1</u>	<u>2 or 3</u>	<u>4 – 6</u>
All children:	21.5	38.1	51.5
Number of ACEs:			
0	26.8	44.3	57.6
1	20.1	36.6	48.4
2 or 3	16.8	30.6	40.8
4 – 9	11.9	21.6	30.5

**IF WE ARE ONLY LOOKING AT ADVERSITY, WE ARE MISSING THE POINT:
 ALL KIDS NEED RELATIONAL HEALTH TO FLOURISH**

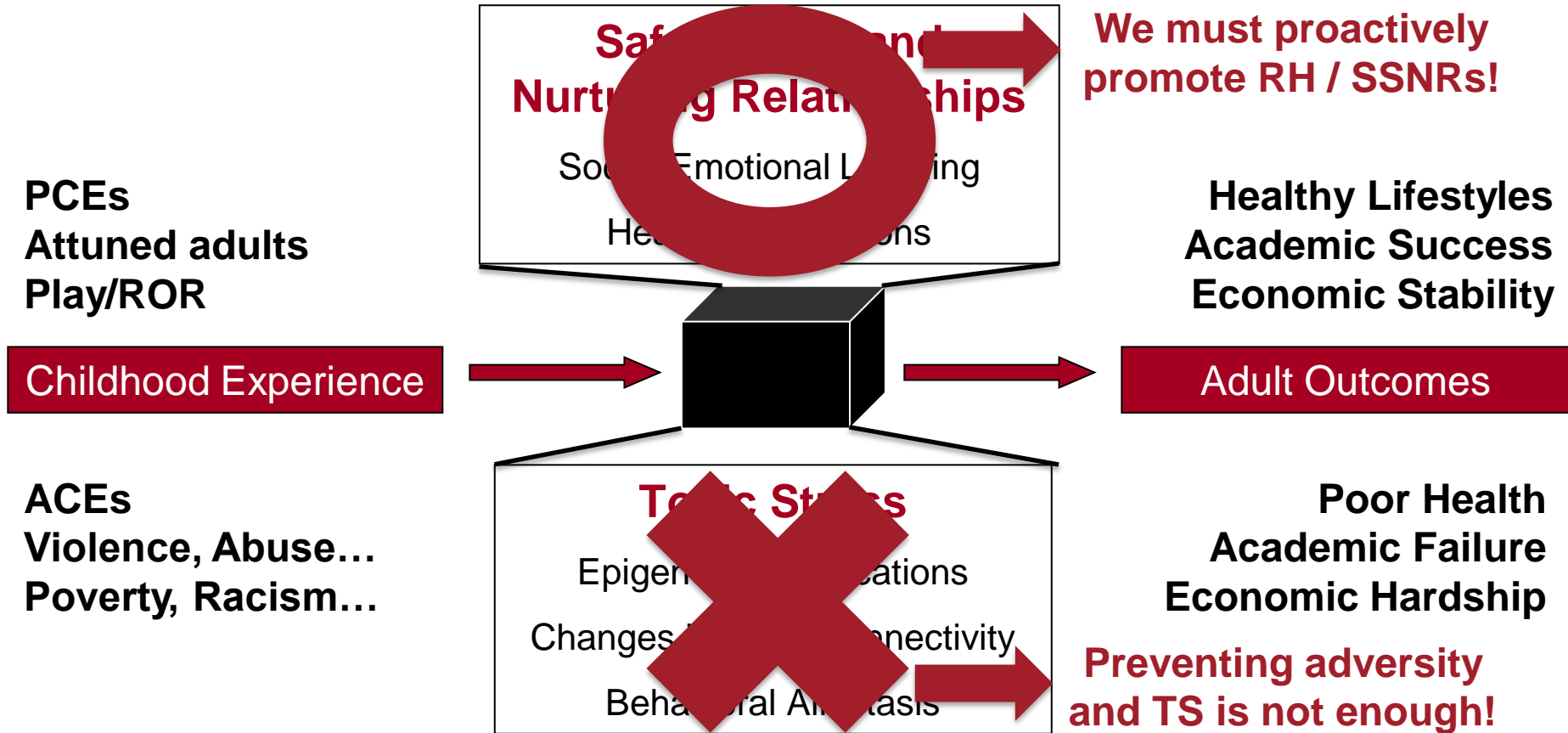
HIGH adversity does NOT mean that you are “broken or “doomed!”



LOW adversity does NOT mean that you are “well” or “in the clear!”



What's Inside the Proverbial Black Box?



Caregivers in Survival Mode

STEP 1: Provide Social Supports,
Meet Caregiver Deficiency Needs

**Social Determinants of Health,
Unmet Caregiver Deficiency Needs**

Caregivers in Relational Mode

STEP 2: Develop **Safe, Stable and
Nurturing Relationships** with Child

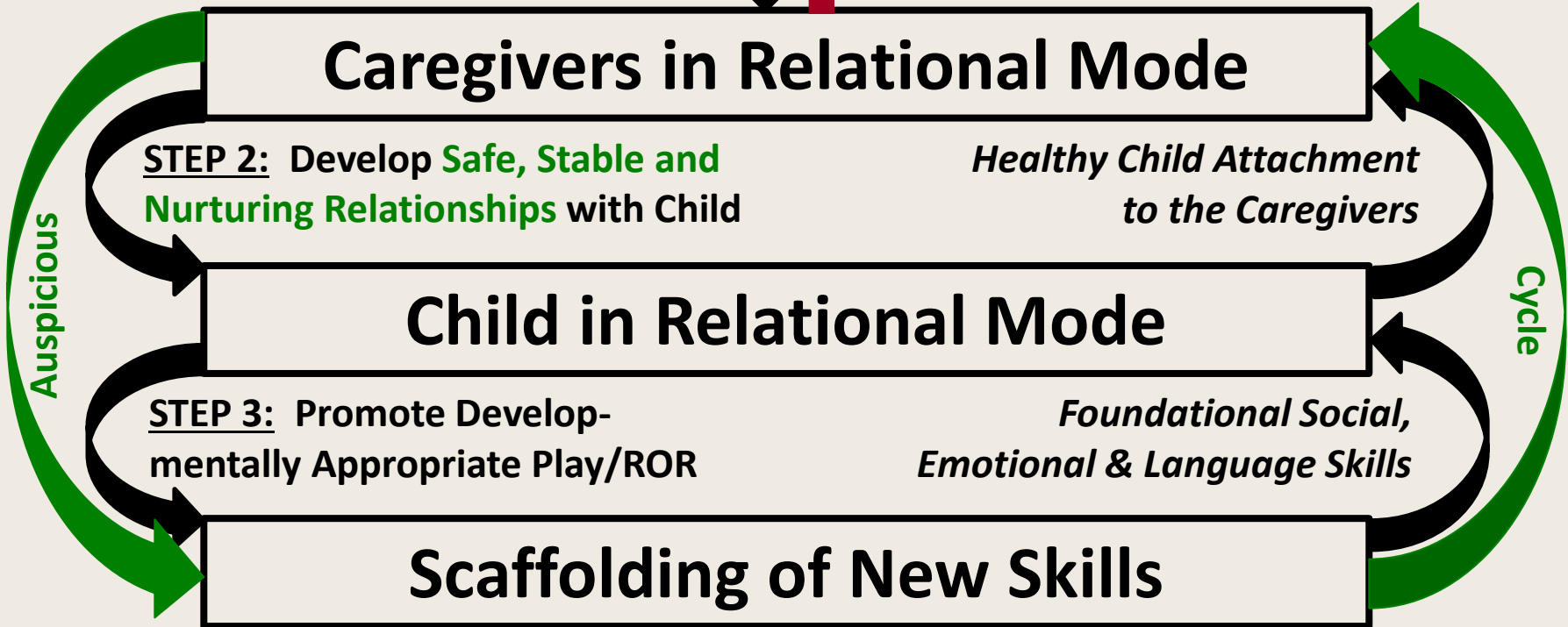
*Healthy Child Attachment
to the Caregivers*

Child in Relational Mode

STEP 3: Promote Develop-
mentally Appropriate Play/ROR

*Foundational Social,
Emotional & Language Skills*

Scaffolding of New Skills



Public Health Level	Types of Prevention	Population Being Served	Primary Objectives	Examples Regarding Lead Poisoning
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Tertiary

Secondary

Primary

ALL LEVELS ARE NECESSARY ... NONE ARE SUFFICIENT!

A Layered Public Health Approach to Relational Health is the Objective!

Public Health Level	Types of Prevention	Approaches to Toxic Stress	Examples	Approaches to Relational Health
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**A Public Health Approach to Prevent Toxic Stress ...
IS a Public Health Approach to Promote Relational Health!**

Slide adapted from *Thinking Developmentally: Nurturing Wellness in Childhood to Promote Lifelong Health*, Garner and Sauti, 2018. Used with permission.

Public Health
Level

Types of
Prevention

Approaches to
Relational Health

Why this isn't working (the pyramid is upside down):



Tertiary

Repair strained
or compromised
relationships
(ABC, CPP, PCIT, TF-CBT)

Secondary

Identify / Address
potential barriers
to SSNRs
(SDoH, ↑ ACEs, ↓ PCEs)

Primary

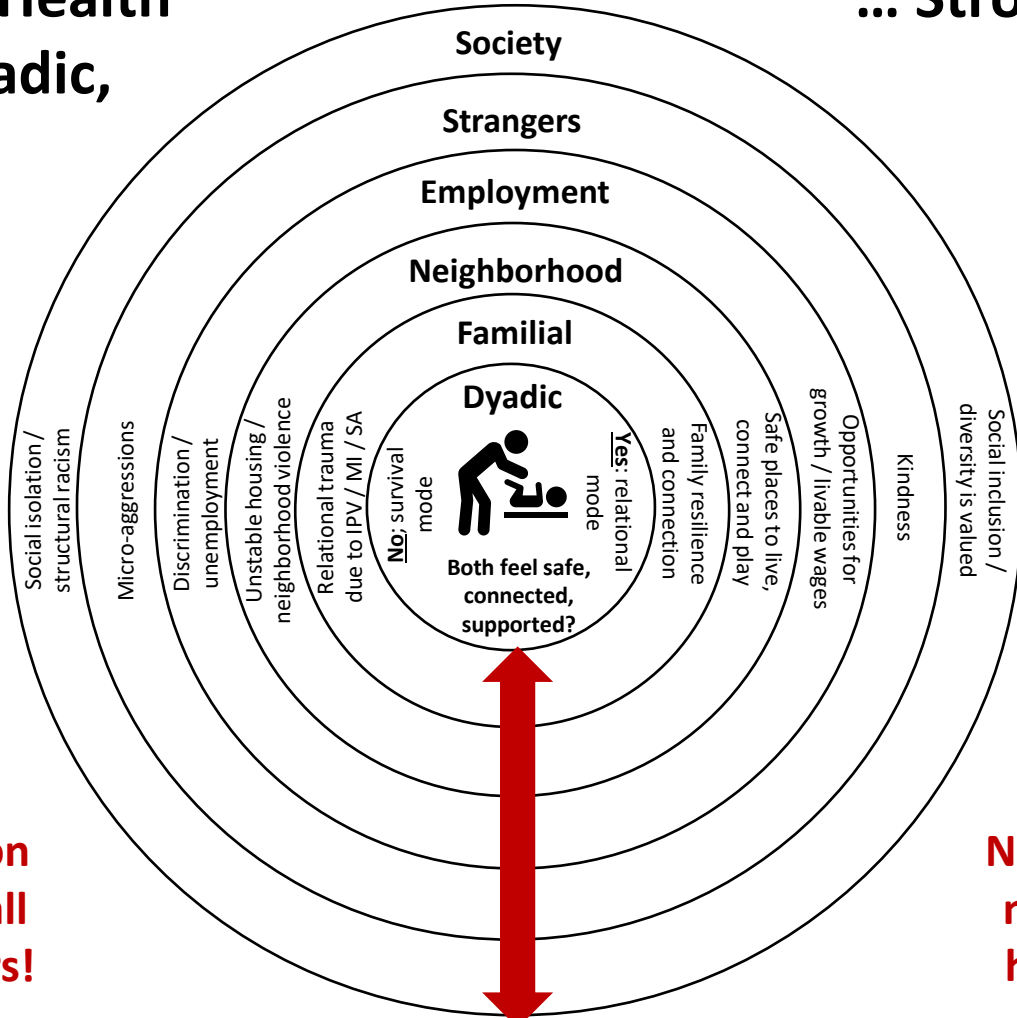
Promote SSNRs
by building 2-Gen
relational skills
(PPP, play, ROR, VIP)

Early Relational Health is Essentially Dyadic, But it is ...

... Strongly Influenced by Many Other Relationships

Hinders Relational Health

Promotes Relational Health



Horizontal integration is necessary across all family serving sectors!

No magic bullets! We need layered public health approaches!

Moving Beyond Toxic Stress ... Towards Relational Health

Toxic stress defines the problem.

Toxic stress explains how many of our society's most intractable problems (disparities in health, education and economic stability) are rooted not in our shared biology but in our divergent experiences and opportunities.

CONCLUSION:

(with apologies to Frederick Douglass)

It is easier

to **help the caregivers**

as they **build strong children**

than to **repair broken men [and women].**

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