



Racism and Its Impact on Children's Health

October 13, 2015

American Academy
of Pediatrics



DEDICATED TO THE HEALTH OF ALL CHILDREN™



AMERICAN PUBLIC HEALTH ASSOCIATION
For science. For action. For health.

AAP Public Health Special Interest Group



Jacqueline Dougé MD, MPH, FAAP
Amanda Castel MD, MPH, FAAP

SIG Co-Chairs

- Promotes public health approaches to child health
- Promotes collaborations between pediatricians and public health professionals
- Provides a network for pediatricians to develop strategies that integrate clinical medicine and public health
- Contact: cocp@aap.org to join.

American Academy
of Pediatrics



DEDICATED TO THE HEALTH OF ALL CHILDREN™

APHA

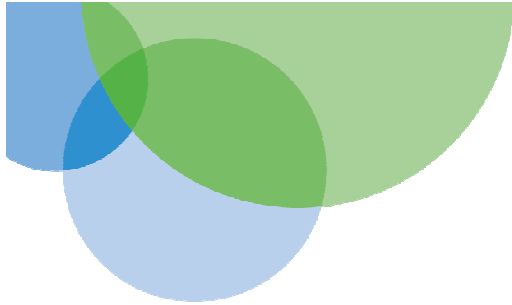
Founded on April 18, 1872



- Oldest and largest non-profit public health organization in the world
- Mission: Improve the Health of the Public and Achieve Equity in Health Status
- 54 Affiliates in every U.S. State, DC & Puerto Rico
- Over 50,000 members
- 31 Sections, 2 SPIGS, 18 Caucuses

Regina Davis Moss, PhD, MPH, MCHES
Associate Executive Director
American Public Health Association





Maternal and Child Health Section

Promotes public health policy, increases public awareness, and plans continuing education opportunities about issues impacting mothers, children, adolescents and families.



**Deborah Allen, ScD
Chair-elect**

Health Equity Work Group:

- Deepens our understanding of the nature and extent of racism in the US and of its impact on health
- Challenges policies and approaches that contribute to health inequality among children based on race/ethnic
- Develops collaborative relationships with like-minded organizations and with other sections of APHA around an anti-racist action agenda
- Incorporates a health equity perspective into all aspects of Section work, including the development of proposals and policies and the work of Section committees

Toxic Stress and Health: The Impact of Childhood Exposure to Racism

Racism and Its Impact on Children's Health
AAP/APHA Webinar
Tuesday October 13th, 2015

Roy Wade, Jr. MD, PhD, MPH
Instructor of Pediatrics
Children's Hospital of Philadelphia

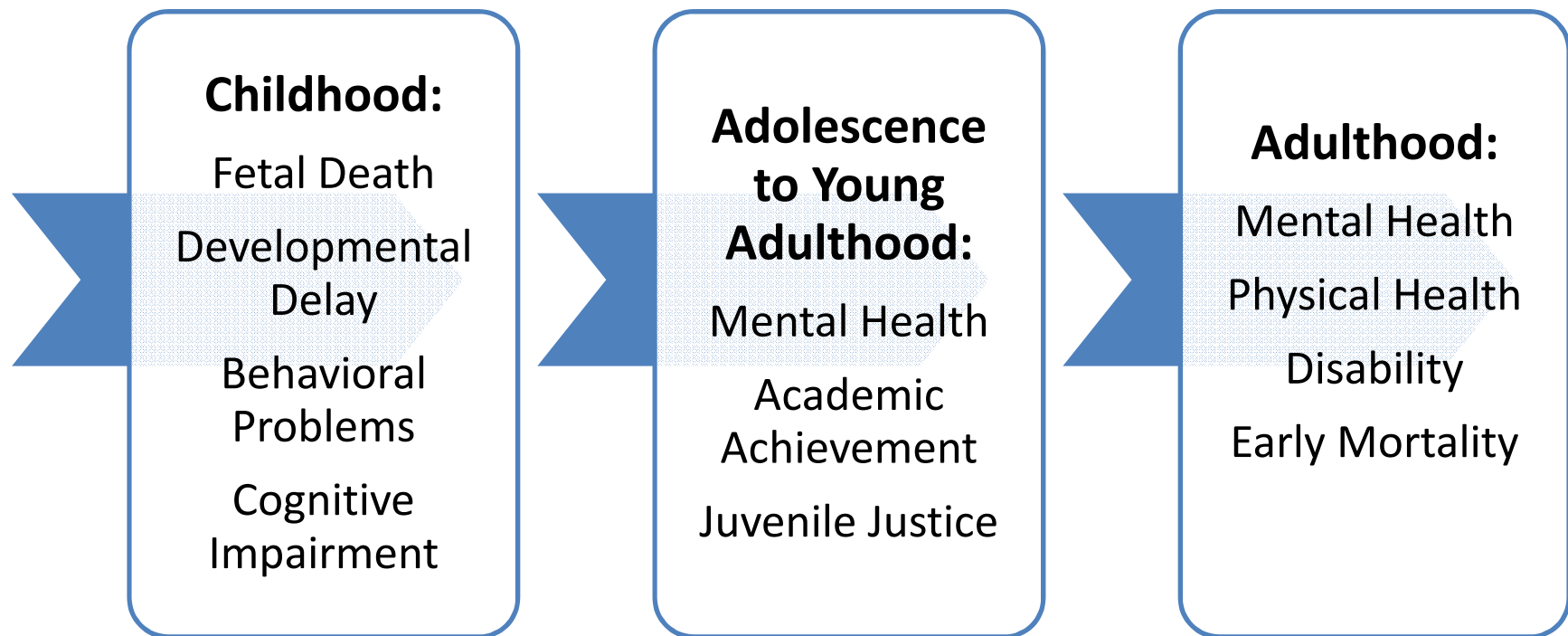
Disclosure

- I have no actual or potential conflict of interest in relation to projects discussed in this presentation.
- The projects presented today were funded by the Robert Wood Johnson Foundation and the Perelman School of Medicine at the University of Pennsylvania

Overview

- Adverse Childhood Experience Study and Toxic Stress
- Childhood Exposure to Racism as a Toxic Stress
- Approaches to Addressing Toxic Stress

Outcomes Associated with Adverse Childhood Experiences: A Life Course Perspective



Adverse Childhood Experience Study

- Published by CDC/Kaiser in 1998
- Surveyed 17,000 policy holders
- Understand relationship between childhood adversity & adult health outcomes

Childhood Exposure	Subcategory
Abuse	Psychological
	Physical
	Sexual
Household dysfunction	Substance abuse
	Mental illness
	Intimate partner violence
	Criminal behavior
	Divorce
Neglect	Emotional
	Physical

Adapted from Felitti et al., 1998

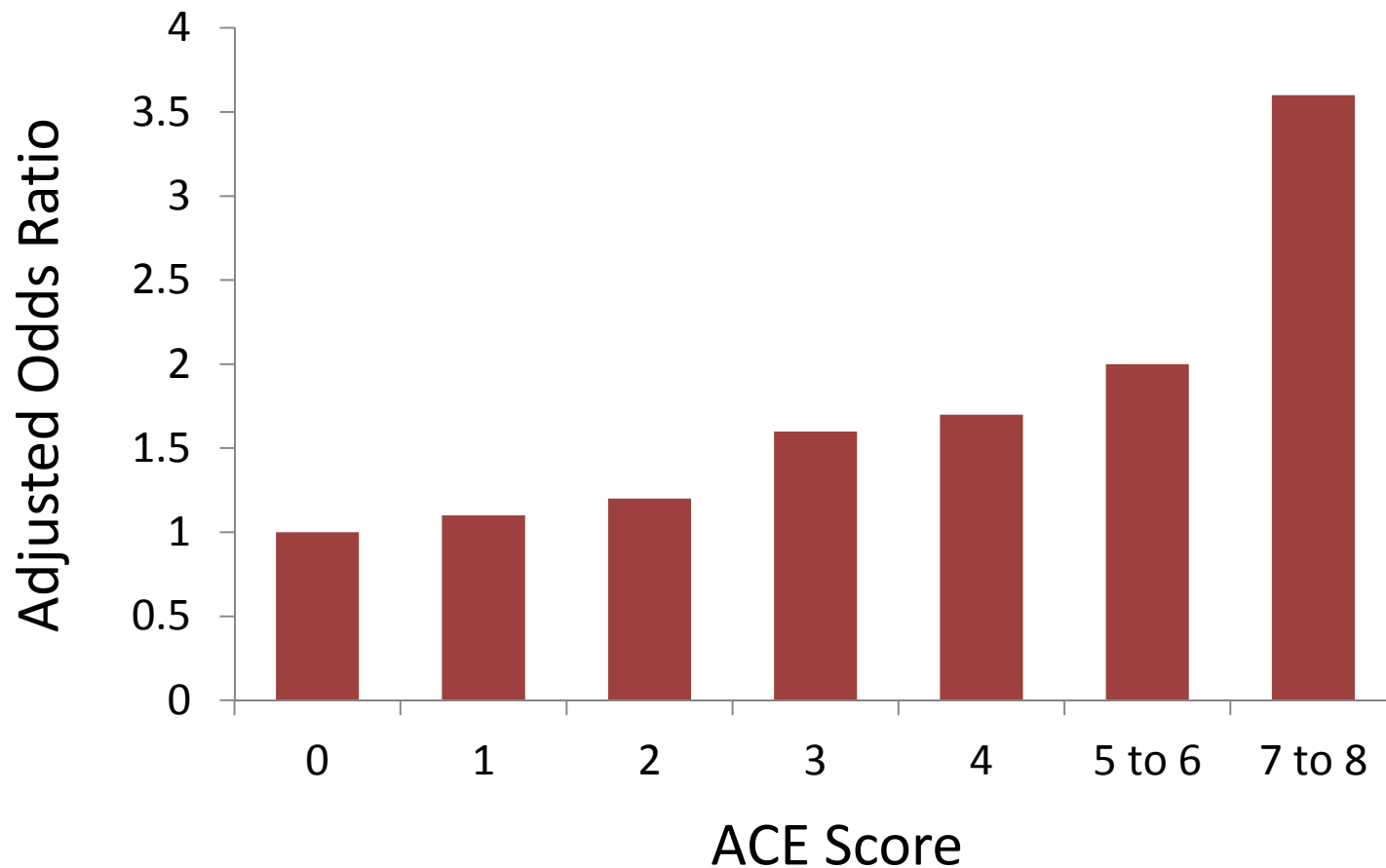
High Prevalence of Adverse Childhood Experiences among Participants

Childhood Exposure	Subcategory	Prevalence
Abuse	Psychological	11 %
	Physical	28 %
	Sexual	21 %
Household dysfunction	Substance abuse	27 %
	Mental illness	19 %
	Intimate partner violence	13 %
	Criminal behavior	5 %
	Divorce	23 %
Neglect	Emotional	15 %
	Physical	10 %

Adapted from Felitti et al., 1998

Graded Relationship Between ACE Score and Cardiovascular Disease

Association between ACE Score and Risk for Cardiovascular Disease



Adapted from Dong et al., *Circulation* 2004

Health Outcomes Associated with Adverse Childhood Experiences

Health Risk Behaviors	Mental Health Conditions	Physical Health Conditions
Smoking	Depression	Cardiovascular Disease
		Diabetes
Alcohol Abuse	Anxiety	Emphysema
		Cancer
Drug Abuse/Illicit Drug Use	PTSD	Obesity
		Liver Disease
High Risk Sexual Behavior	Hallucinations	Headaches
	Suicide	Autoimmune Disease
		Sexually Transmitted Infections
		Self-Reported Health
		Disability
		Fetal Death
		Mortality

Health outcomes highlighted in red are among the top ten leading causes of death in the US

Three Levels of Stress

Positive Stress:

Brief increases in heart rate, mild elevations in stress hormone levels

Tolerable Stress:

Serious, temporary stress responses buffered by supportive relationships

Toxic Stress:

Prolonged activation of stress response systems in the absence of protective relationships

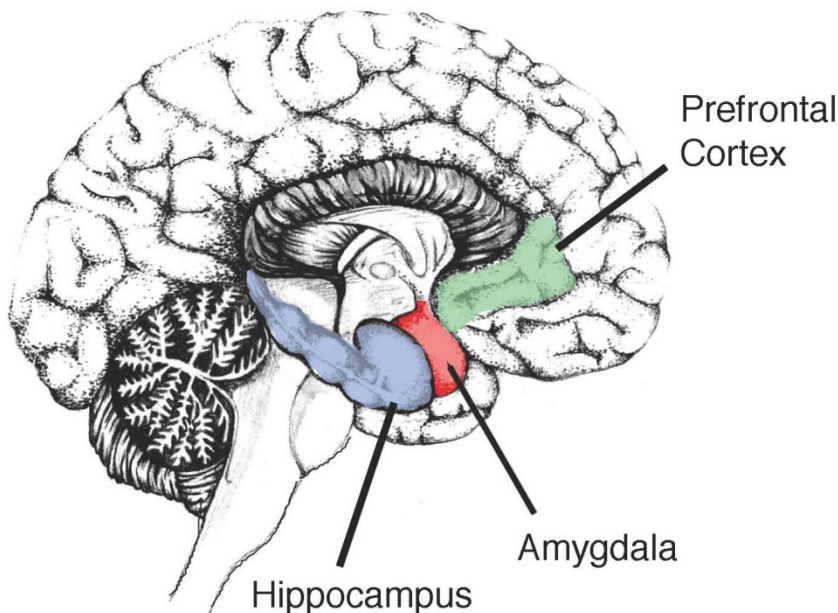
Early Experience Shapes Developing Brain Architecture



!!!!!!!!!!!!!!" #&!!!!!!!





!!!!!!!!!!!!!!" !() *\$+!!!!!!!!!!!!!!!!!!!!!!!!!!!!, - !() *\$+!

Key Areas of Brain Impacted by Toxic Stress



- Prefrontal Cortex
 - Center of executive functioning
 - Regulates thoughts, emotions, and actions
- Hippocampus
 - Center of short term memory
 - Connects emotion to fear
- Amygdala
 - Triggers emotional responses

Changes in Brain Architecture Due to Toxic Stress

Area of the Brain	Volume Change
Hippocampus	
Amygdala	
Prefrontal Cortex	
Cerebral	

Toxic Stress Disrupts Developmental Trajectories

Developmental outcomes impacted by adversity

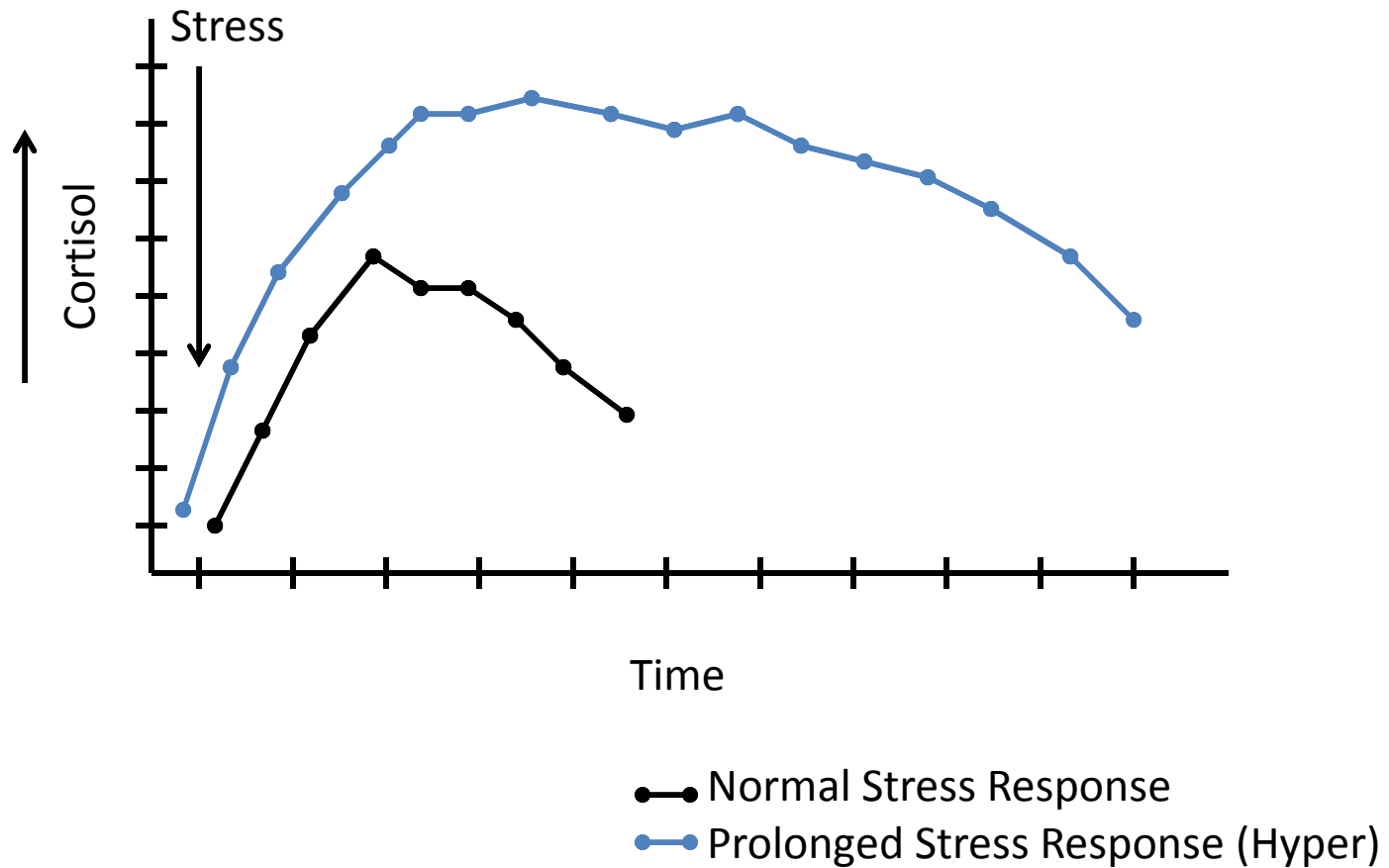
- Social Development
- Emotional Development
- Behavior
- Cognition

Romanian orphanage studies – impact of neglect on cognitive skills

IQ	Foster Care	Orphanage	Control
Verbal Comprehension	87.48	81.22	110.18
Perceptual Reasoning	83.81	82.30	106.79
Working Memory	87.80	83.88	108.92
Full Scale IQ	81.46	76.16	107.00

Adapted from the Bucharest Early Intervention Project

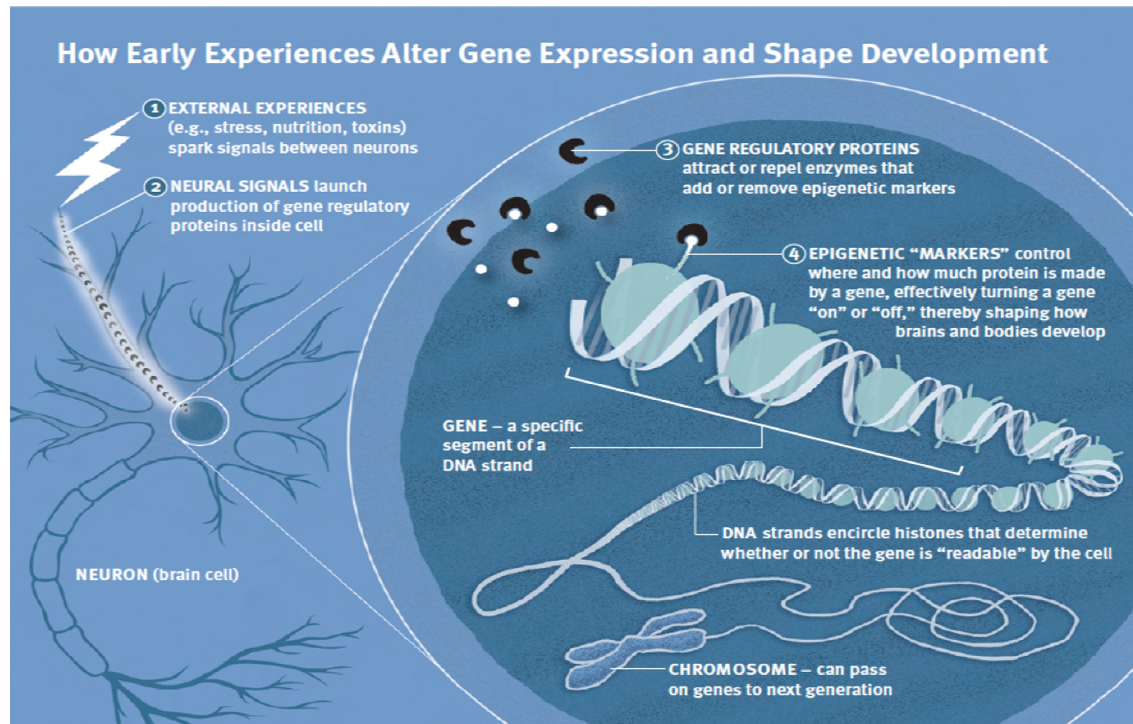
Toxic Stress Alters Normal Cortisol Stress Response



Effects of Too Much Cortisol on the Body

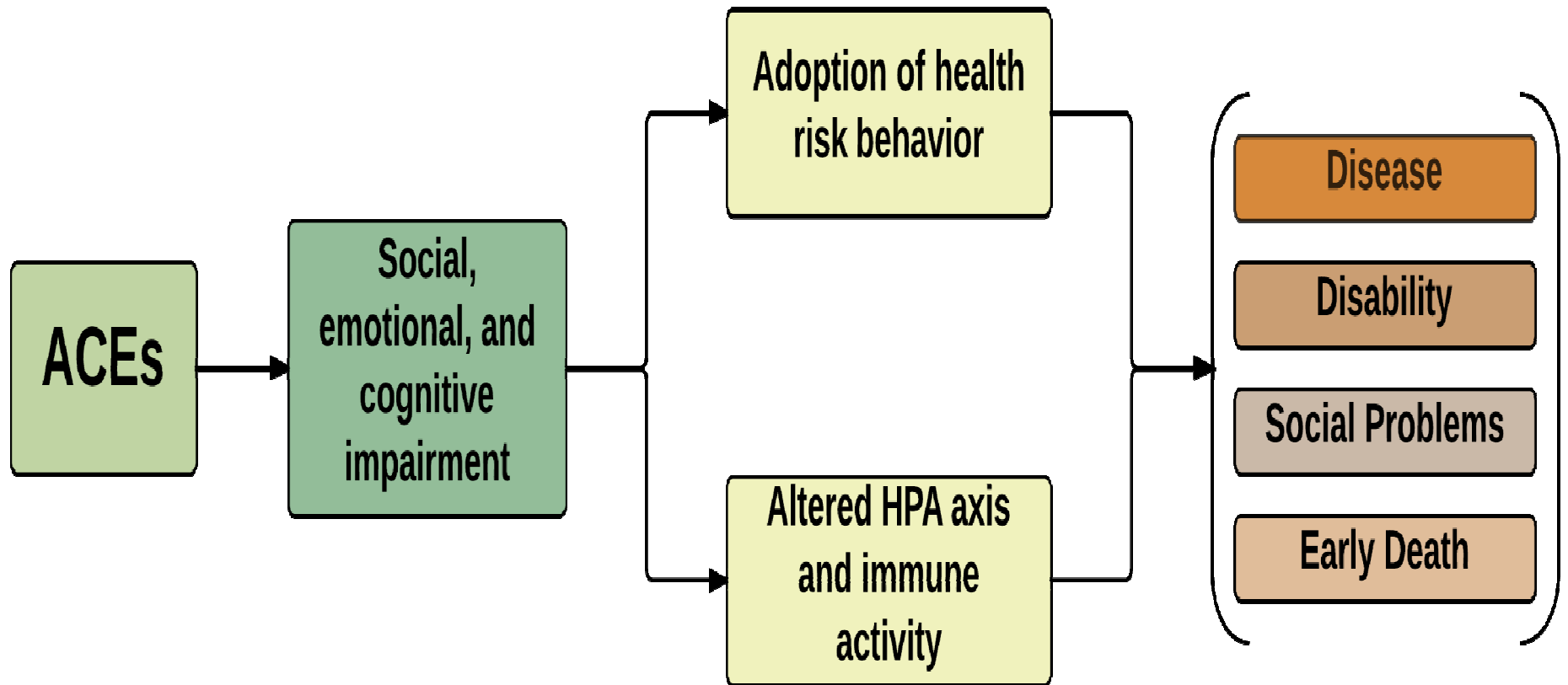
Cortisol Actions	Disease
Impair Immune Cell Function	Infections/Cancer
Change Fat Metabolism	Obesity
Hyperglycemia	Diabetes
Increased Blood Pressure	Hypertension
Decrease Bone Formation	Osteoporosis/Fractures
Toxic to Brain	Depression/Anxiety/Decreased Brain Volumes

Toxic Stress Alters Gene Expression



Adapted from the Center on the Developing Child

How Do Adverse Childhood Experiences Get Under the Skin?



Overview

- Adverse Childhood Experience Study and Toxic Stress
- Childhood Exposure to Racism as a Toxic Stress
- Approaches to Addressing Toxic Stress

The Philadelphia ACE Study

A collaborative, led by the Institute for Safe Families (ISF), to develop and implement research, practice, and policies in urban pediatric settings based on the Adverse Childhood Experiences (ACE) study.



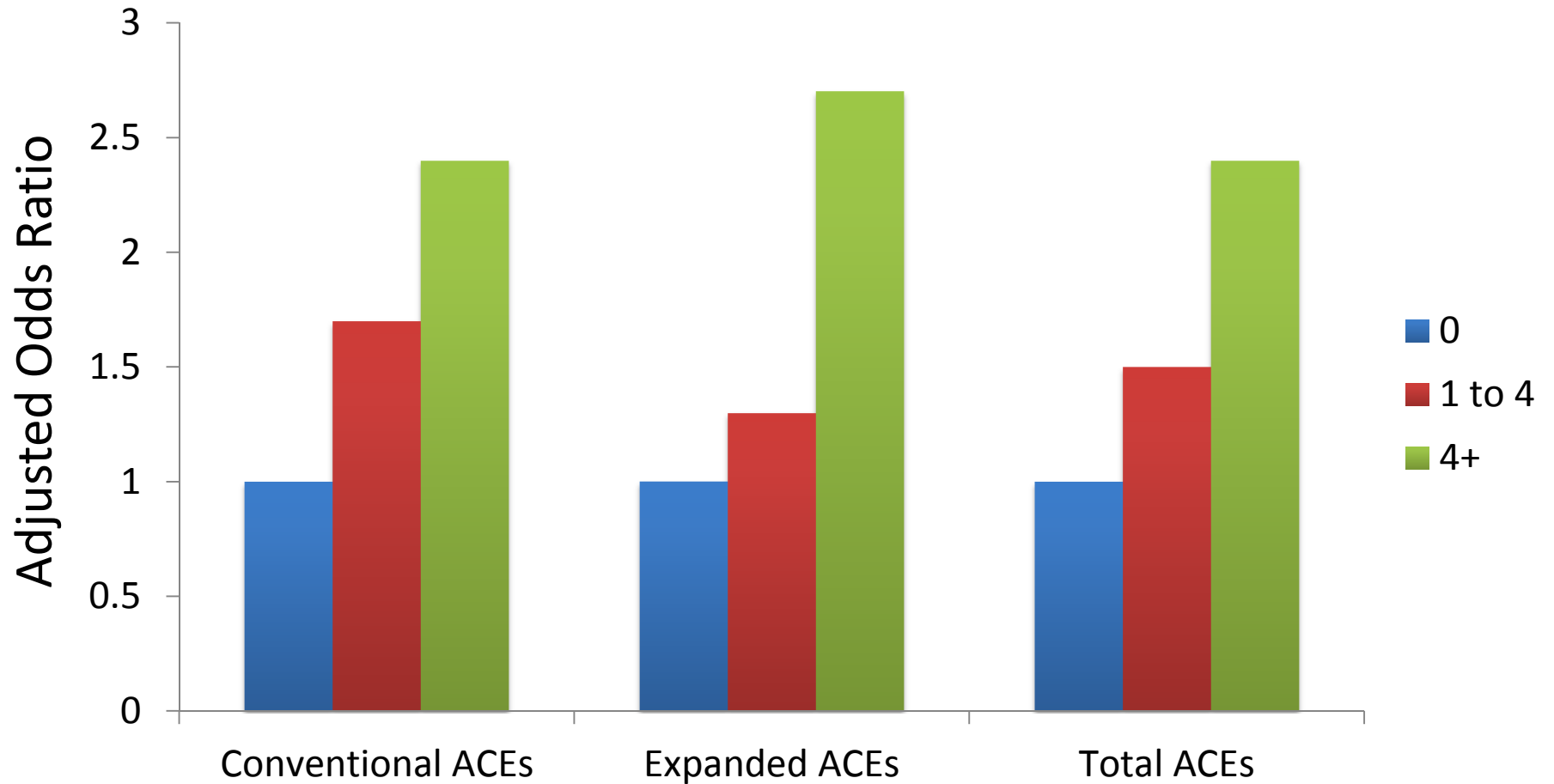
Survey Methods

- Survey was completed as a follow up to the Southeastern Pennsylvania Household Health Survey (SEPA HHS).
 - Survey of over 13,000 children and adults in Southeastern Pennsylvania
 - Comprehensive survey on a broad range of topics
- Philadelphia ACE Survey re-contacted original SEPA HHS Philadelphia respondents who were 18 years or older
- Telephone survey (landline and cell phones)
- Completed by trained male and female interviewers
- Interviews were conducted in English and Spanish
- Interviewed 1,784 Philadelphia adults age 18 and older
- Response rate 67.1%

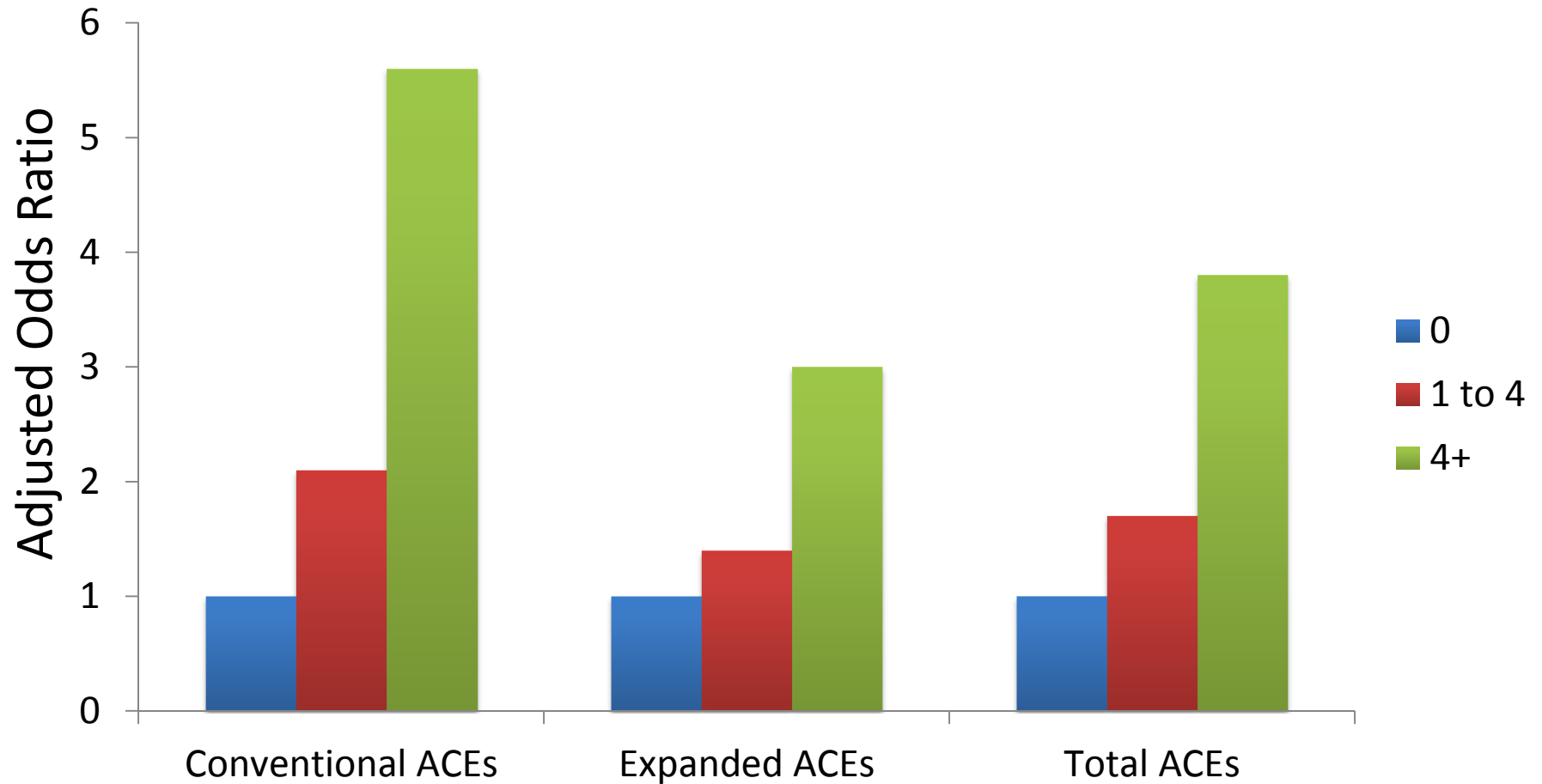
Philadelphia ACE Study Questions

Conventional ACEs	Expanded ACEs
Physical Abuse	Witnessing Violence
Emotional Abuse	Living in Unsafe Neighborhoods
Sexual Abuse	Experiencing Racism
Emotional Neglect	Living in Foster Care
Physical Neglect	Experiencing Bullying
Domestic Violence	
Household Substance Abuse	
Incarcerated Care Provider	
Mental Illness in the Home	

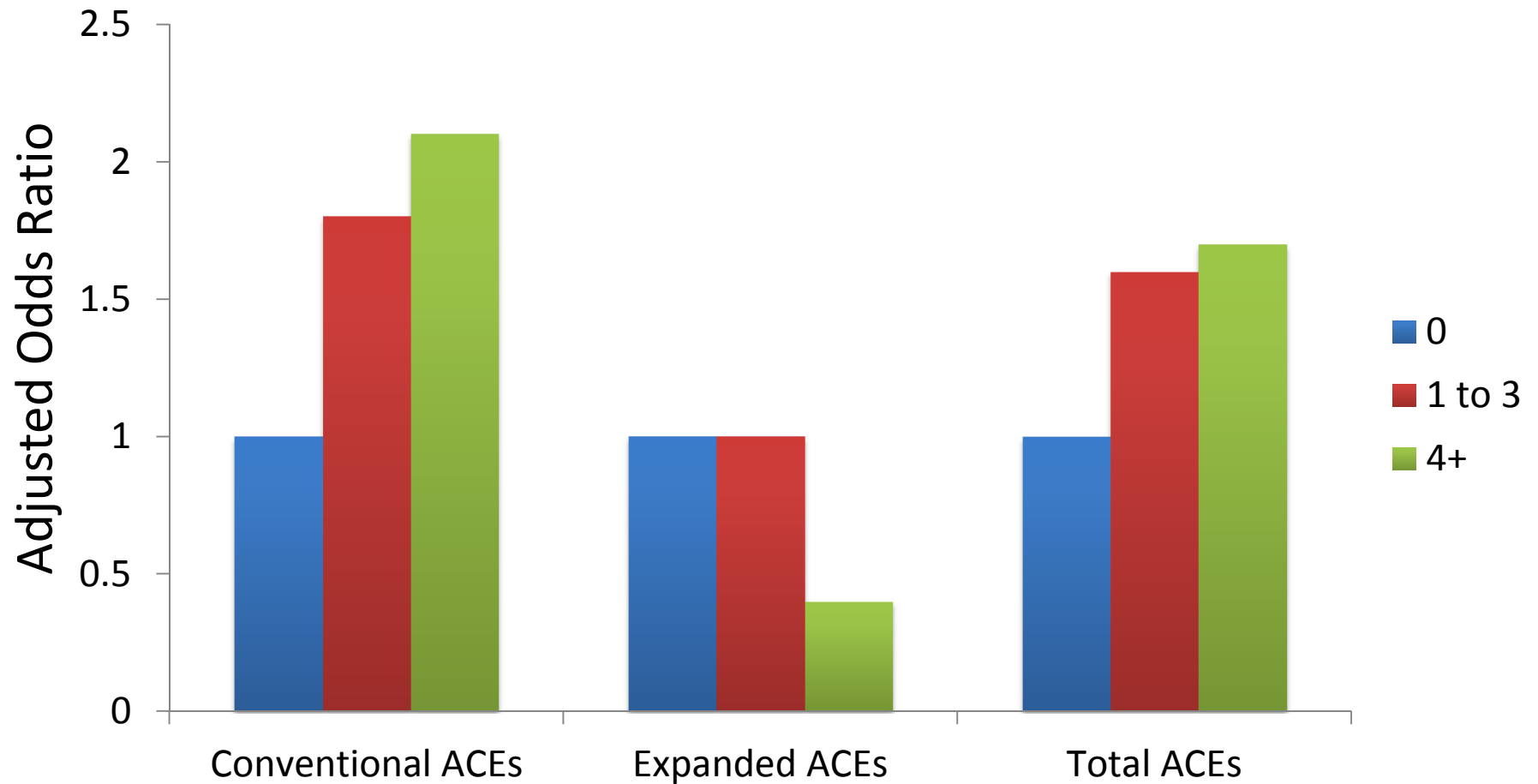
Relationship Between Philadelphia ACE Score and Smoking History



Relationship Between Philadelphia ACE Score and Mental Health



Relationship Between Philadelphia ACE Score and Cardiovascular Disease



Perceived Racial Discrimination is Associated with Poor Child Health

Health Outcomes	Key Findings
Health Behaviors	Perceived racial discrimination associated with Number of alcoholic drinks per week for black adolescents Alcohol and drug use amongst 9 to 16 year old Native Americans Tobacco smoking status for African American girls ages 11 to 19
Mental/Behavioral Health	Perceived racial discrimination associated with Depression among African American Adolescents Higher depressive symptoms amongst Puerto Rican children Internalizing and externalizing behaviors and delinquency amongst children and youth
Physical Health	Perceived racial discrimination associated with Insulin resistance amongst girls ages 14 to 16 but not boys Adverse pregnancy outcomes Low birth weight Prematurity No association found between perceived racial discrimination and high blood pressure

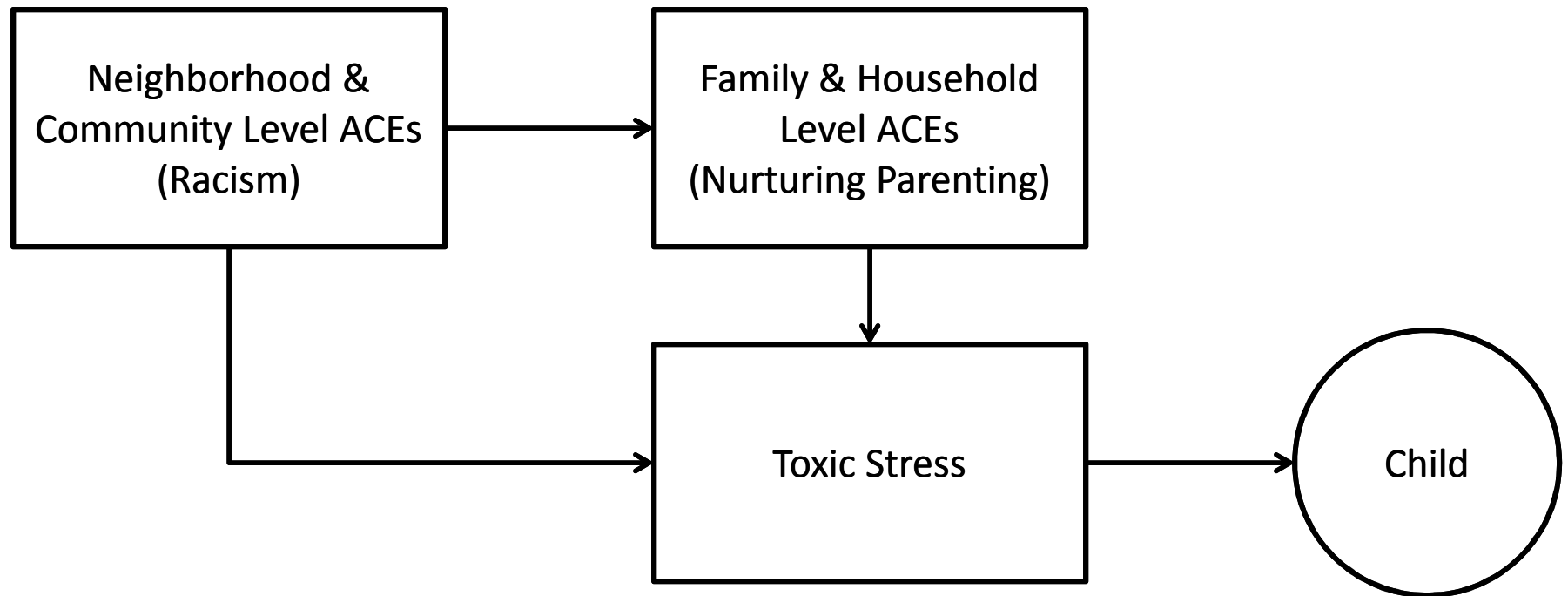
Adapted from Pachter and Garcia Coll, Journal of Developmental & Behavioral Pediatrics 2009

Association Between Racial Discrimination and Child Health by Age Group

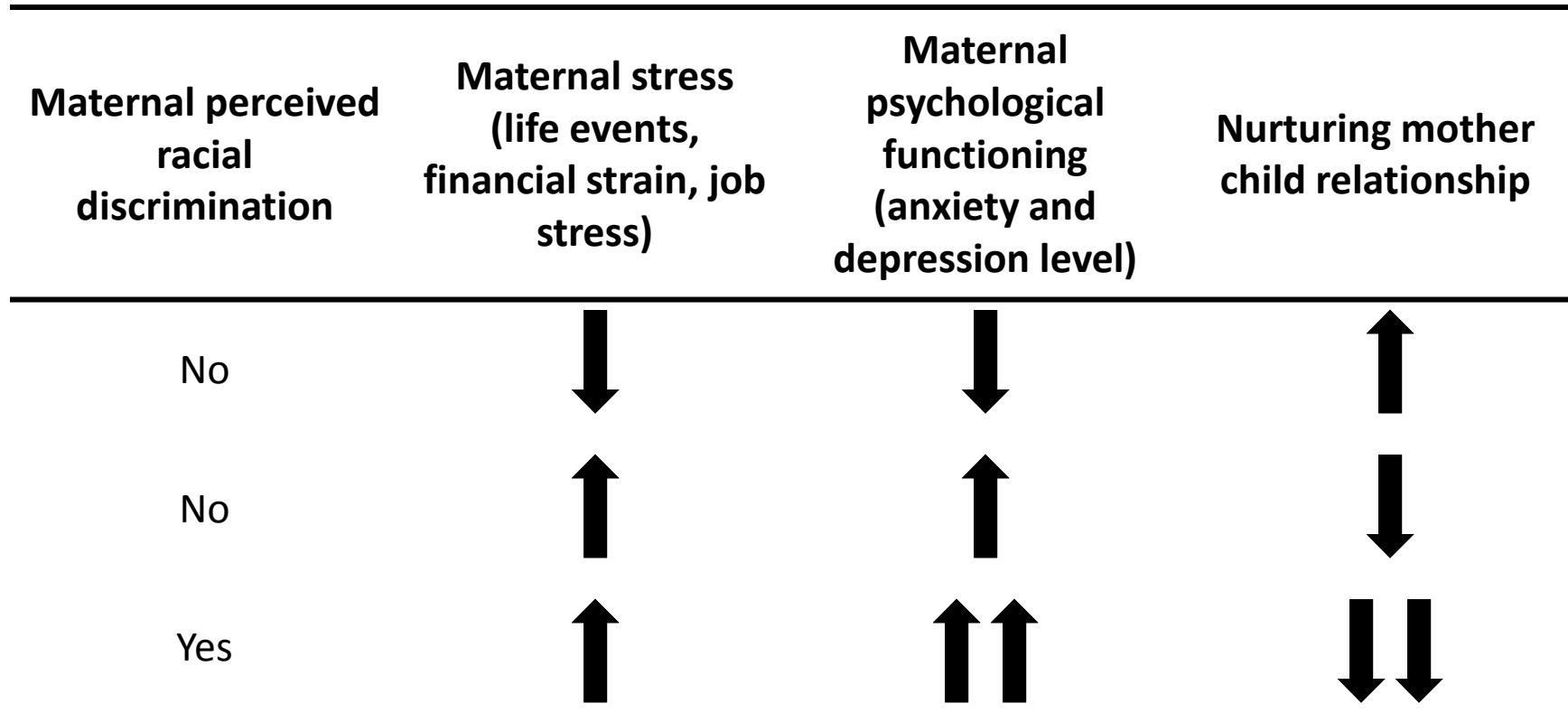
Age	Number of studies with positive association between perceived racial discrimination and poor health outcomes				
	Total studies	Health risk behaviors	Mental health conditions	Behavioral problems	Physical health conditions
3 to 5 years	7	--	3	1	1
6 to 11 years	43	15	30	37	1
12 to 18 years	114	38	87	54	2

Adapted from Priest et al., *Social Science & Medicine*, 2013

Direct and Indirect Influences of Racism on Toxic Stress



Perceived Discrimination Decreases the Quality of Mother-Child Relationships



Adapted from Murry et al., *Journal of Marriage and Family* 2001

Overview

- Adverse Childhood Experience Study and Toxic Stress
- Childhood Exposure to Racism as a Toxic Stress
- Approaches to Addressing Toxic Stress

Mitigating the Impact of Toxic Stress

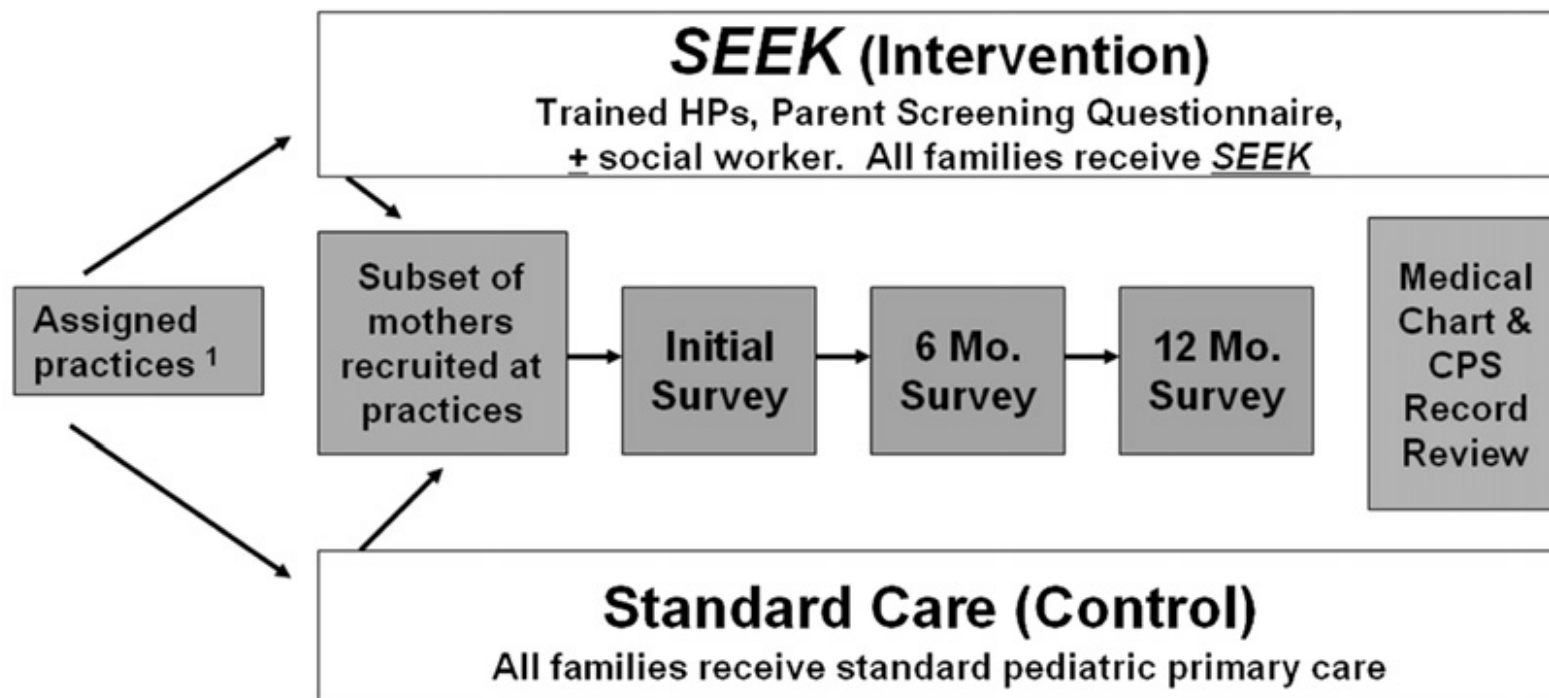
Nurturing Supportive Relationships



Strategies to Address Toxic Stress

- Parent support programs
 - Home visiting programs
 - Parent Child Interaction Therapy
- Promoting healthy coping skills (exercise and mindfulness)
- Social emotional skill development
- Leveraging relationships with community based programs and services that address family stressors

The Safe Environment for Every Kid Model



Adapted from Dubowitz et al., *Academic Pediatrics* 2012

Decreased CPS Reports and Physical Assault in SEEK Intervention Group

	Intervention (N = 308)	Control (N = 250)	Odds Ratio	p
Families With at Least 1 CPS Report, n(%)	41 (13.3)	48 (19.2)	1.5	0.045
Physical assault severe or very severe, Mean (SD)*	0.11 (0.75)	0.33 (1.96)	--	0.04

* Scores from Parent-Child Conflict Tactics Scale

- Health professionals endorsed increased comfort in screening and addressing risk factors for ACEs
- Intervention increased clinic screening rates for risk factors for ACEs – 25% increase
- Addressing patient psychosocial problems DID NOT require additional provider time
- Implementation of SEEK cost approximately \$5.12 per family

Adapted from Dubowitz et al., *Academic Pediatrics* 2012

Summary

- Toxic stress negatively influences life long health through changes in brain architecture, stress reactivity, and gene regulation
- Racial discrimination and other stressors external to the home can have direct and indirect influences on toxic stress
- Emerging strategies to decrease childhood exposure to toxic stress

Thank you



Racial Socialization & Health: The Child Advocate's Role

Ashaunta T. Anderson, MD, MPH, MSHS, FAAP

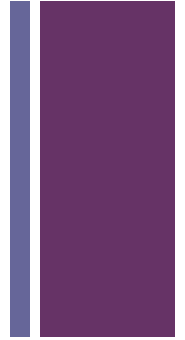
Racism and Its Impact on Children's Health

APA/APHA Webinar

October 13, 2015

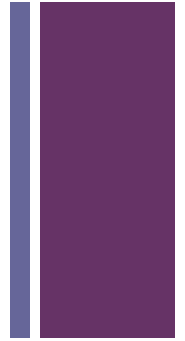
UNIVERSITY OF CALIFORNIA
UC RIVERSIDE | School of
Medicine





What is racial socialization?

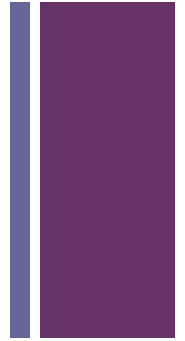
+ Racial Socialization Defined



Messages and practices that communicate race status pertinent to:

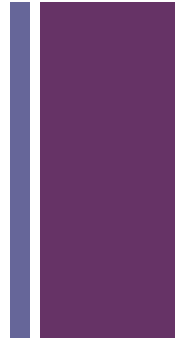
- 1) Personal and group identity
- 2) Intergroup and interindividual relationships
- 3) Position in the social hierarchy

Thornton MC, et al. *Child Development*. 1990;61(2):401-409.



Why do we care about this?

+ Racial Socialization and Health



- Racial socialization leads to positive racial and ethnic identity

Hughes D, et al. *Developmental Psychology*. 2006;42:747-770.

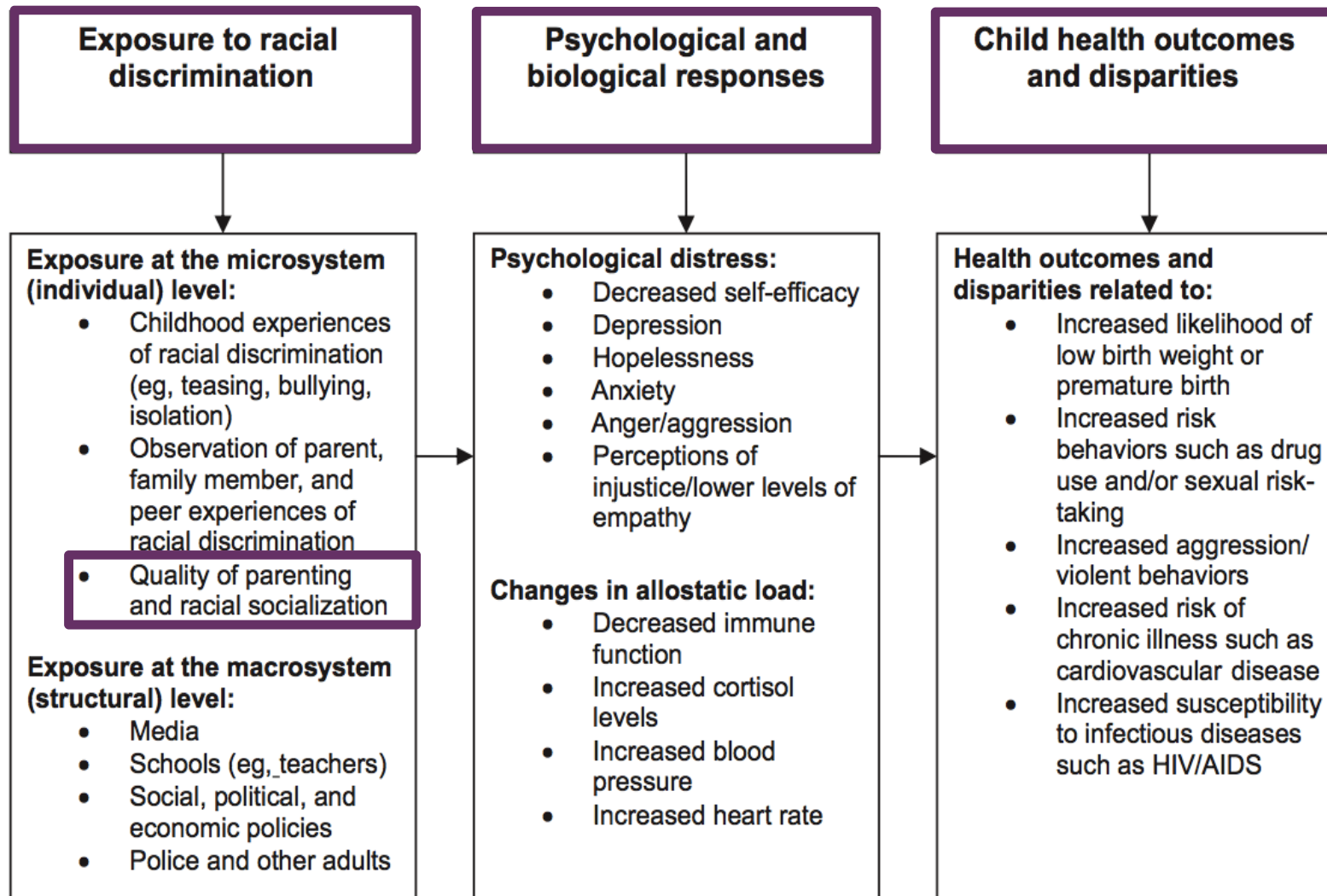
- Ethnic identity is a protective factor for health in the adult minority population

- The mechanisms of how these effects occur are poorly understood

Williams DR, et al. In *Self, Social Identity, and Physical Health*. 1999;71-100.

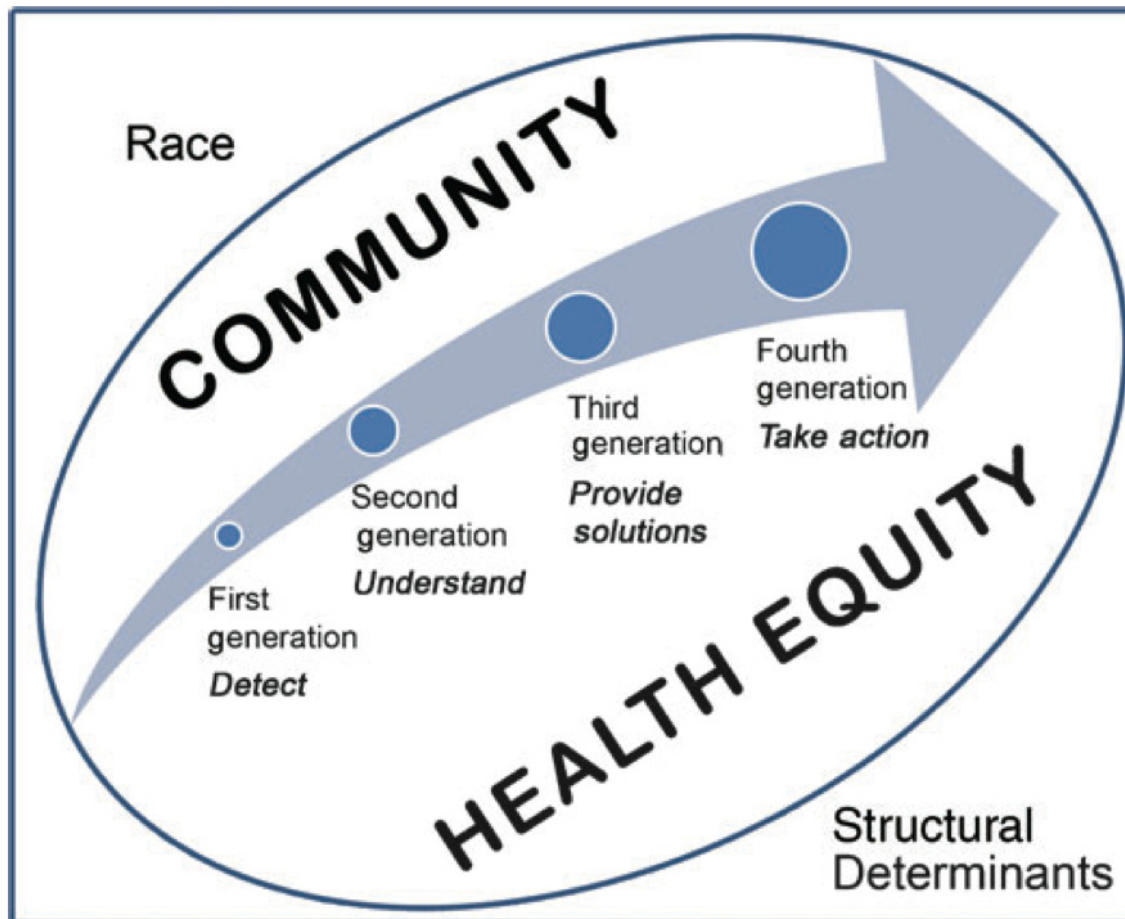


Racial Socialization and Health

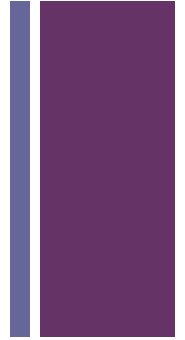


Sanders-Phillips K, et al. Pediatrics. 2009;124:S176-186.

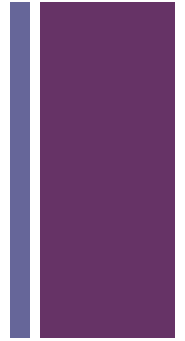
+ Health Equity Action Research Trajectory (HEART)



Thomas SB, et al. Annu Rev Public Health. 2011;32:399-416.



Do children even
experience racism?



The development of racial
prejudice or feelings of
inferiority is reliably assessed
at age 3

Wilson AN. *The Developmental Psychology of the Black Child*. 1978.

+ Clark Doll Studies

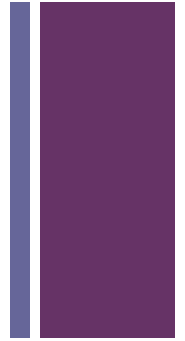
- Give me the doll you like to play with or the doll you like best
 - 67% of black children preferred the white doll
 - 5-year-olds chose the white doll 75% of the time

Clark & Clark. *Journal of Social Psychology*. 1939;591-599.

- Replicated in other studies
 - CNN: “Study shows how children view race bias”

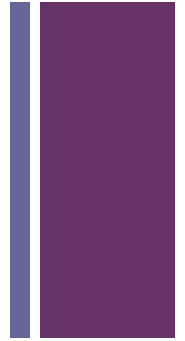


Video at: <https://www.youtube.com/watch?v=EQACkg5i4AY>. 2010.



What can we do about it?

+ Racial Socialization Defined



Messages and practices that communicate race status pertinent to:

- 1) Personal and group identity
- 2) Intergroup and interindividual relationships
- 3) Position in the social hierarchy

Thornton MC, et al. *Child Development*. 1990;61(2):401-409.

+ Racial Socialization Outcomes

■ Ethnic pride

Wills TA, et al. Health Psychology. 2007;26(1):50-59.

■ Dose-dependent use of coping methods associated with increased self-efficacy and less distress

Scott LD. Journal of Black Studies. 2003;33(4):520-38.

N

670

Race

Black

Mean Age

11.2 y

N

88

Race

Black

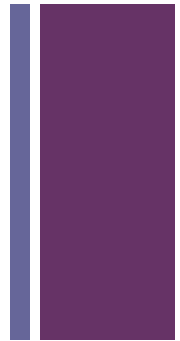
Mean Age

15.6 y

+ Racial Socialization Outcomes

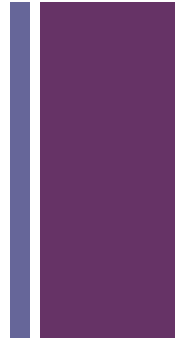
■ Improvements in:

- Socioemotional function
- Self-esteem
- Behavioral competence
- Depression and anger
- Parental involvement in children's schooling
- Quality of mother-child interactions



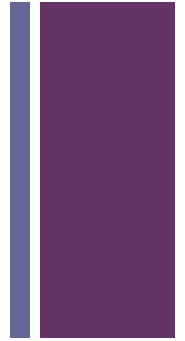
N
169 parent- child dyads
Race
Black
Child Age
9-11 y

Cavaleri MA, et al. Soc Work Ment Health. 2008;6(4):55-64.



**What are these researchers
counting as racial
socialization?**

+ Racial Socialization Categories



- Cultural Pride Reinforcement

- Preparation for Bias

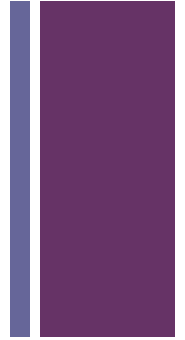
- Promotion of Mistrust

- Spirituality/Religiosity

- Extended Family Caring

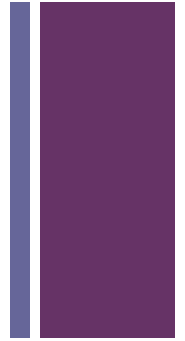
+ Racial Socialization: The Basics

- Cultural Pride Reinforcement is good.
- Preparation for Bias is okay.
- Promotion of Mistrust is bad.



Why is cultural pride
reinforcement good?

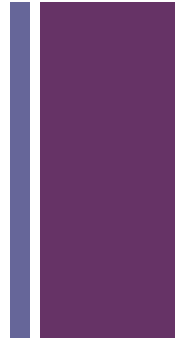
+ Cultural Pride Reinforcement Outcomes



- Positive associations with:
 - Academic achievement
 - Anger control
 - Less frequent physical aggression

+ Cultural Pride Reinforcement and Self-Esteem

- Pride and knowledge of African American culture positively associated with self-esteem

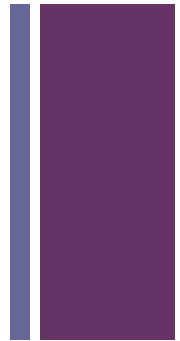


N
115
Race
Black
Child Age
6-8 th grade

Constantine MG, et al. Journal of Black Studies. 2002;32(3):322-35.

+ Cultural Pride Reinforcement (CPR) and Anxiety

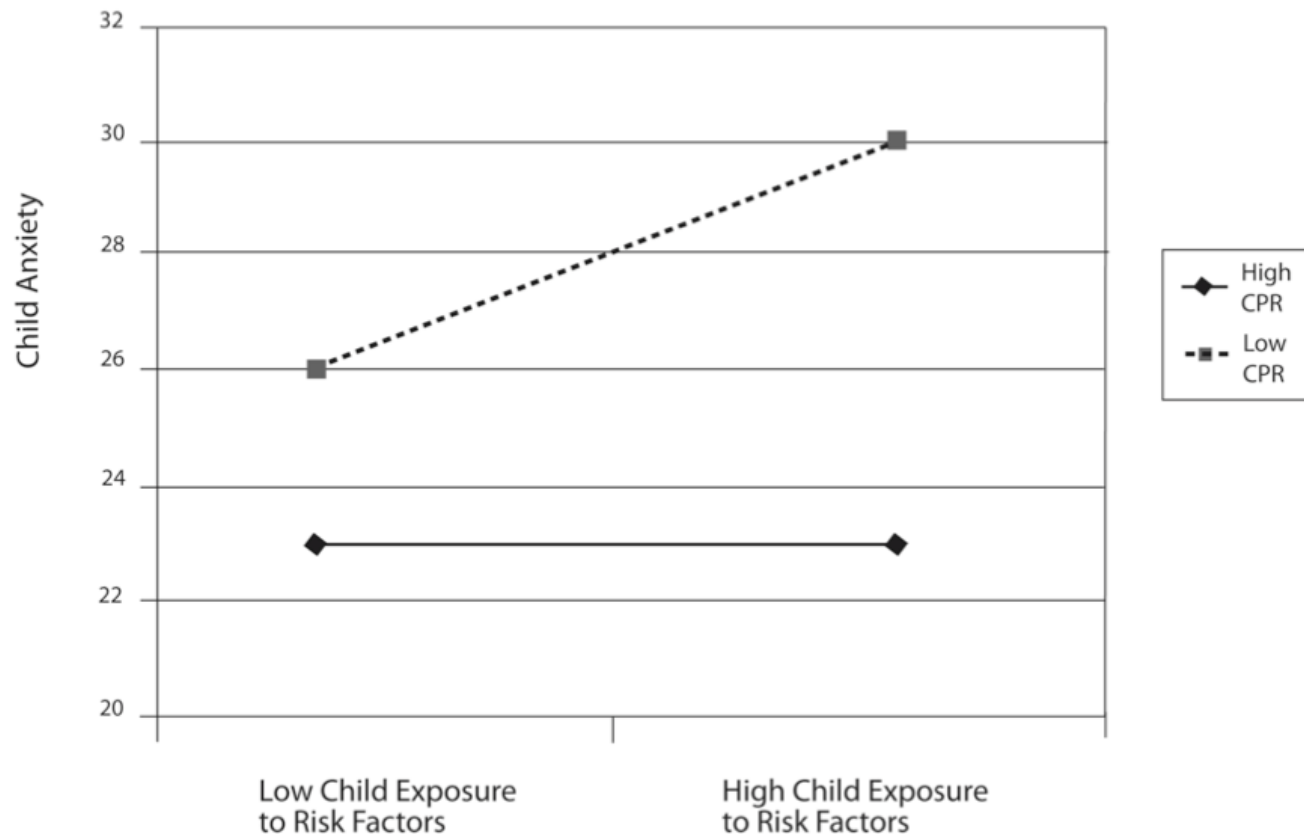
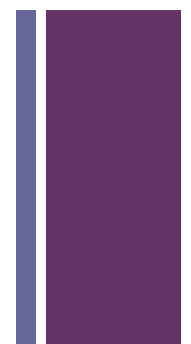
- Stronger CPR predicted less child anxiety
- For children with high exposure to mental health risk factors, those whose parents used more CPR had lower anxiety



N
72 parent-child dyads
Race
Black
Child Age
9-15 y
Location
Urban

Bannon WM, et al. Fam Soc. 2009;90(1):79-86.

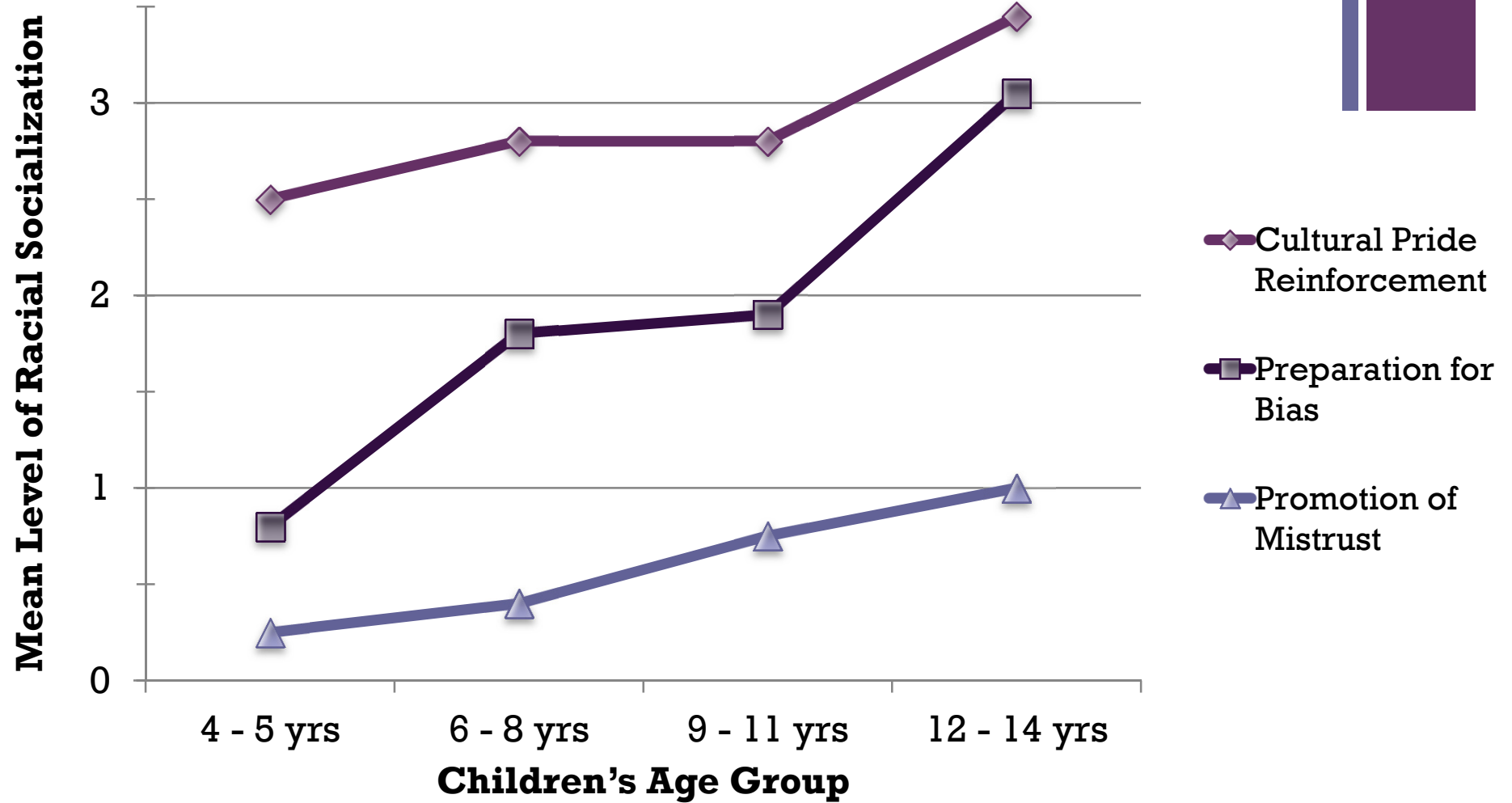
+ Cultural Pride Reinforcement (CPR) and Anxiety



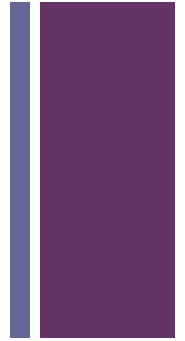
Bannon WM, et al. Fam Soc. 2009;90(1):79-86.



Racial Socialization and Age

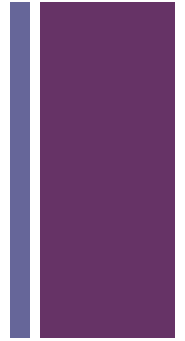


Hughes D, et al. Applied Developmental Science. 1997;1(4):200-14.



5 Action Items for Child Advocates

+ 1. Know the Basics



- Cultural Pride Reinforcement is good.
- Preparation for Bias is okay.
- Promotion of Mistrust is bad.

+ 2. Listen to Parents

- Learn how parents in your community feel and act when their children encounter race-related issues

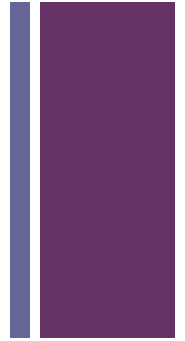
Anderson AT, et al. Acad Pediatr. 2015;15(4):405-411.

- Parent training programs should incorporate teaching of appropriate racial socialization strategies

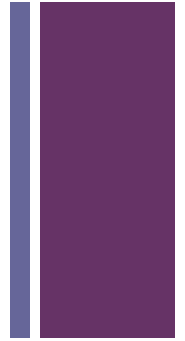
Rodriguez J, et al. Soc Work Mental Health. 2008;6(4):30-54.

- Effective Parenting Program has race-specific curricula with racial socialization content

<http://www.ciccparenting.com/parenting-programs.php>.

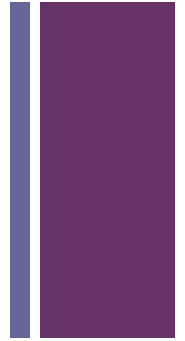


+ 3. Talk with Parents



- Consider experiences with racial discrimination when screening for adverse childhood experiences
- Pediatric anticipatory guidance may incorporate counseling on racial socialization strategies

+ 3. Talk with Parents: Enhance Anticipatory Guidance



■ Screen time

- Parents screen & discuss racialized content of media with children

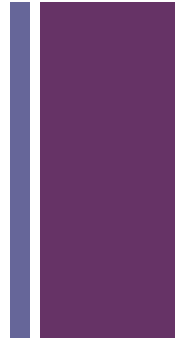
■ School readiness

- Promote cultural pride through book sharing programs

■ Race-based bullying

- Reserve preparation for bias for older children

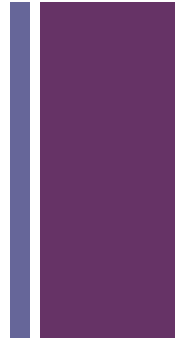
+ 4. Know Your Local Partners



- Partner with social support agencies and mental health professionals
- Knowledge on racial socialization informs intervention design to promote positive mental health in children

Bannon WM, et al. *Fam Soc.* 2009;90(1):79-86.

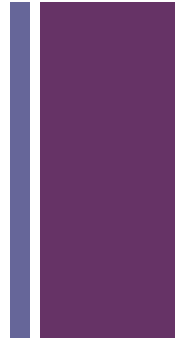
+ 5. Know Your National Partners



- Partner with national organizations like NAACP, Children's Defense Fund, & National Urban League
- Children's Defense Fund has posted 10 Rules to "Get Home Safely" regarding police encounters

<http://www.childrensdefense.org/newsroom/child-watch-columns/child-watch-documents/ten-rules-to-help-black-boys-survive.html>

Video at: <https://www.youtube.com/watch?v=wqJ-psD9vJw&feature=youtu.be>



Thank You!



Questions?