

The Buffering Effect of Family Resilience on Adverse Childhood Experiences (ACEs): Examining the Role of Race and Culture on Traumatic Stress

March 12th, 2020

Community-Based Child Abuse Prevention Grantee Meeting



THE UNIVERSITY
of NORTH CAROLINA
at CHAPEL HILL

Paul Lanier, PhD, MSW
Quinton Smith, MSW
UNC School of Social Work

Our Goal for Today:

Create a space to have a conversation, guided by evidence, about how race and racism intersects with ACEs, family resilience, and health.

Focus on White and African-American families now, Latinx and American Indian/Alaska Native families during breakout session

Outline

1. What does ACE exposure and family resilience have to do with health equity?
2. Are there racial disparities in ACE exposure in the US? Does family resilience buffer the effects of ACEs on children's health?
3. What's going on? What theoretical frameworks help us understand how ACEs and family resilience intersect with race?
4. What are the implications for policy and practice?

Keep in Mind

1. Group averages vs. individual experiences
2. Evidence-based practice must include: evidence, clinical expertise, and client preferences
3. Confronting racism and oppression can be challenging personally and professionally

Self-Reflection

1. Limits of your speakers and this presentation
2. What are your assumptions regarding ACEs among various race/ethnic groups?

Which race/ethnic group is most likely to experience each ACE?.....how large is the disparity?.....why?

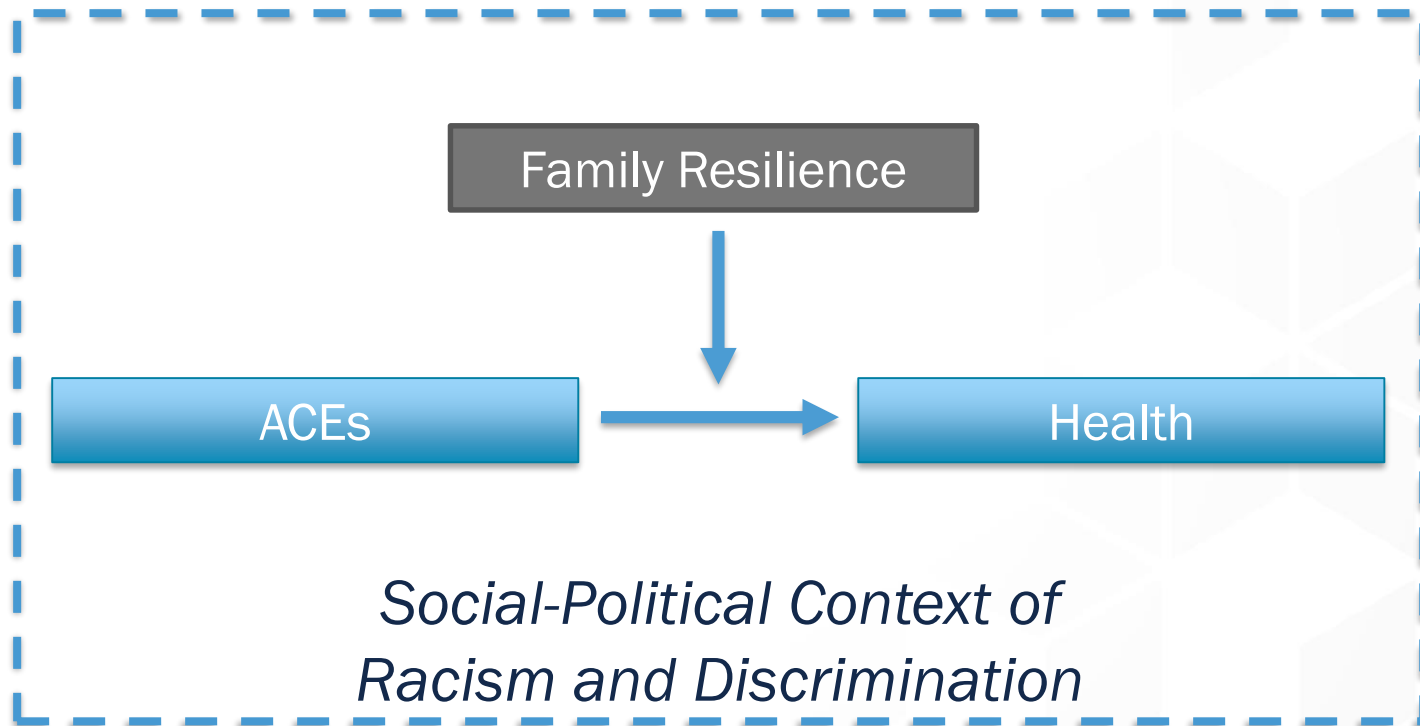
Child poverty

Parental incarceration

Parental drug/alcohol abuse



Conceptual Framework



Outline

1. What does ACE exposure and family resilience have to do with health equity?
2. Are there racial disparities in ACE exposure in the US? Does family resilience buffer the effects of ACEs on children's health?
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Clarifying Concepts - SDoH

Social Determinant of Health (SDoH)

- “Conditions in the places where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks.”

Figure 39–1. Five-domain Model of Social Determinants of Health



www.healthypeople.gov

Employment grade and coronary heart disease in British civil servants

M. G. MARMOT, GEOFFREY ROSE, M. SHIPLEY, AND P. J. S. HAMILTON
From the Department of Medical Statistics and Epidemiology, London School of Hygiene and Tropical Medicine

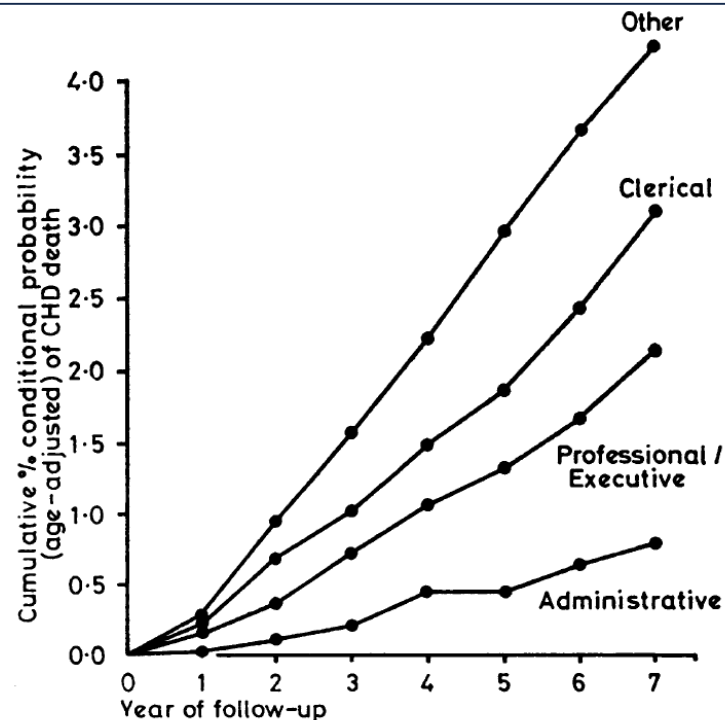
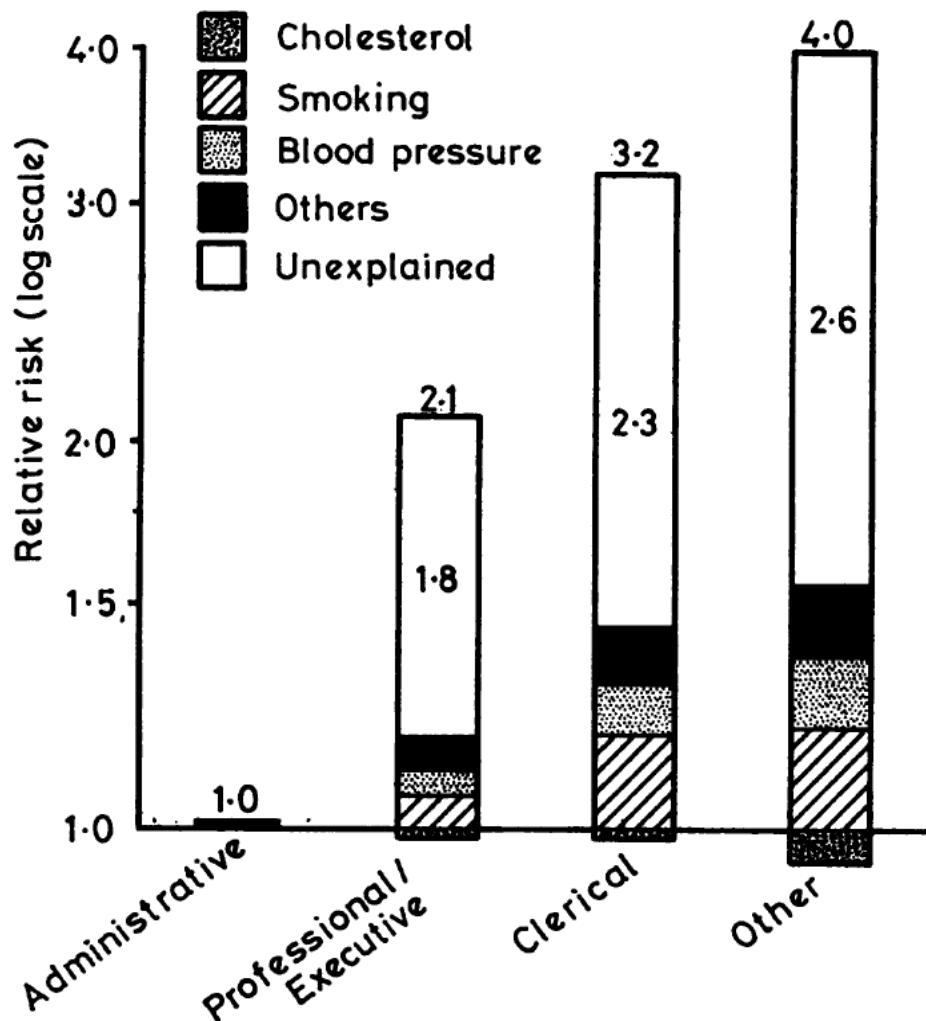


Fig. 5 CHD mortality among total population by year of follow-up.



What is health equity?

“Health equity means that everyone has a fair and just opportunity to be healthier. This requires removing obstacles to health such as poverty, discrimination, and their consequences, including powerlessness and lack of access to good jobs with fair pay, quality education and housing, safe environments, and health care.”

What is the difference between equity and disparity?

Health equity is the ethical and human rights principle that motivates us to eliminate health disparities; health disparities—worse health in excluded or marginalized groups—are how we measure progress toward health equity.



Disparities, Disproportionality, and Differences

“Not all health differences are health disparities.” (Braveman, 2014)

Health Disparity:

- Preventable differences in the burden of disease, injury, violence, or opportunities to achieve optimal health that are experienced by socially disadvantaged populations. (CDC)
- A particular type of health difference that is closely linked with social, economic, and/or environmental disadvantage (Healthy People 2020)

Braveman, P. (2014). What are health disparities and health equity? We need to be clear. *Public Health Reports*, 129, 5-8.

<https://www.cdc.gov/healthyyouth/disparities/index.htm>

<https://www.healthypeople.gov/2020/about/foundation-health-measures/Disparities>



Emotional



Mother treated violently



Incarcerated Relative



Physical



Mental Illness



Emotional



Divorce



Sexual



Physical



Substance Abuse

The CDC-Kaiser ACE Study

As the number of ACEs increases, so does the risk for negative health outcomes



Life course health consequences and associated annual costs of adverse childhood experiences across Europe and North America: a systematic review and meta-analysis



Mark A Bellis, Karen Hughes, Kat Ford, Gabriela Ramos Rodriguez, Dinesh Sethi, Jonathon Passmore



Summary

Background An increasing number of studies are identifying associations between adverse childhood experiences (ACEs) and ill health throughout the life course. We aimed to calculate the proportions of major risk factors for and causes of ill health that are attributable to one or multiple types of ACE and the associated financial costs.

Lancet Public Health 2019

Published Online
September 3, 2019

Total annual costs attributable to ACEs were estimated to be US\$581 billion in Europe and \$748 billion in north America. More than 75% of these costs arose in individuals with two or more ACEs.

Interpretation Millions of adults across Europe and north America live with a legacy of ACEs. Our findings suggest that a 10% reduction in ACE prevalence could equate to annual savings of 3 million DALYs or \$105 billion. Programmes to prevent ACEs and moderate their effects are available. Rebalancing expenditure towards ensuring safe and nurturing childhoods would be economically beneficial and relieve pressures on health-care systems.

10% reduction in ACEs =
savings of \$105,000,000,000/year

Outline

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Current National Data Source for ACEs



1. NCANDS (National Child Abuse and Neglect Data System)

2. BRFSS (Behavioral Risk Factor Surveillance System, 2014)



3. NSCH (National Survey of Children's Health, 2016-2017)

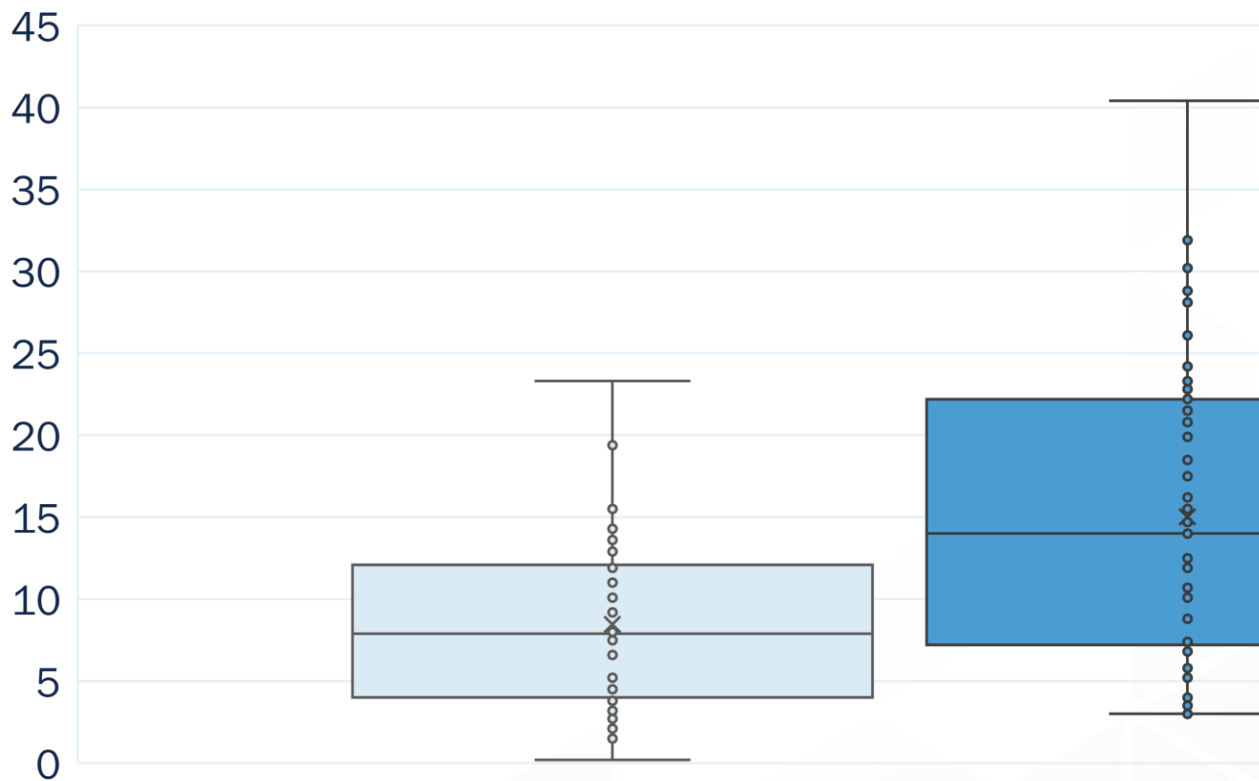






NCANDS State-level Rate of Maltreatment (2018)

□ White ■ African-American

Maltreatment Victim Rate
per 1,000 Children



	 BRFSS	 NSCH
Survey Design and Sample Size	<p>Largest continuously conducted health survey system in the world</p> <p>ACE module for 23 states = 249,000</p>	<p>Nationally representative survey of children's health and well-being</p> <p>2016-2018 n = 102,000</p>
Target Population	Adults 18+	All non-institutionalized children ages 0 – 18 years
Reporter	Self	Parent
ACE Prompt	<i>I'd like to ask you some questions about events that happened during your childhood...</i>	<i>The next questions are about events that may have happened during this child's life....</i>
ACE Items	<p>0-8 items: Mental Health, Alcohol, Drug Use, Incarceration, Divorce, Witness Domestic Violence, Physical Abuse (not spanking), Verbal Abuse, Sexual Abuse,</p>	<p>0-8 items: Mental Health, Alcohol or Drugs, Incarceration, Divorce, Parent Died, Witness Domestic Violence, Witness Neighborhood Violence, Race/Ethnic Discrimination, Poverty</p>

Prevalence of Adverse Childhood Experiences From the 2011-2014 Behavioral Risk Factor Surveillance System in 23 States

Melissa T. Merrick, PhD; Derek C. Ford, PhD; Katie A. Ports, PhD; Angie S. Guinn, MPH

Average Number of ACEs

1.80
1.70
1.60
1.50

White

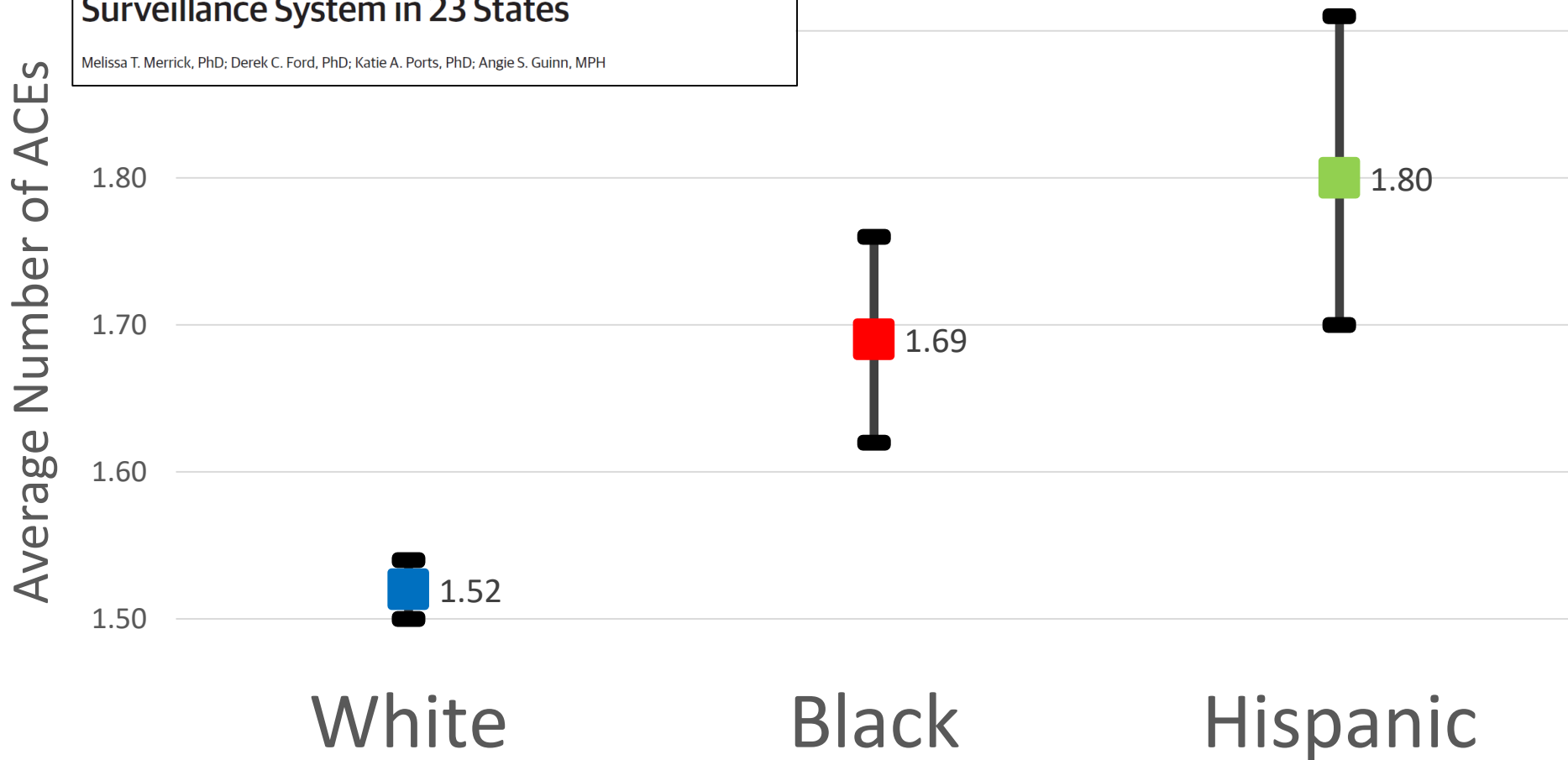
Black

Hispanic

1.52

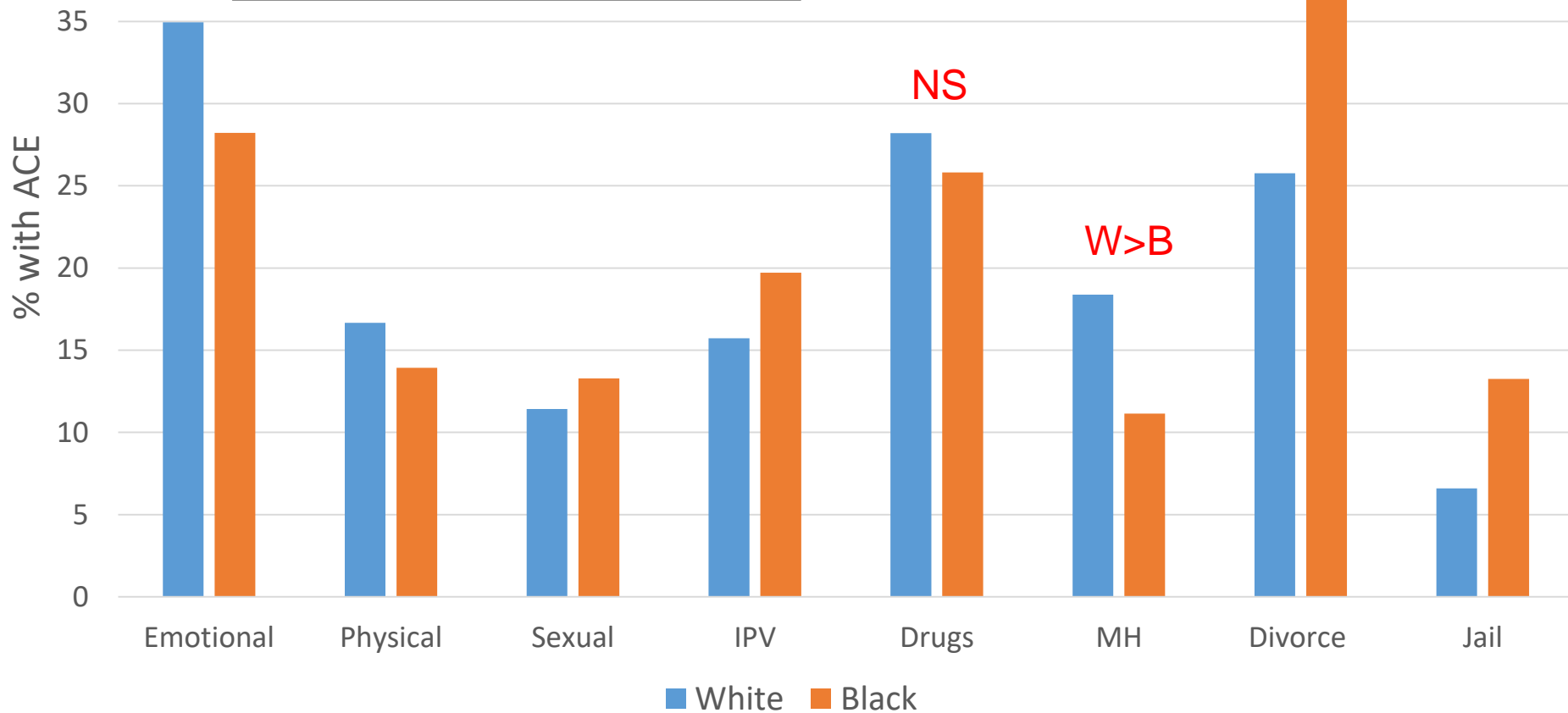
1.69

1.80



Prevalence of Adverse Childhood Experiences From the 2011-2014 Behavioral Risk Factor Surveillance System in 23 States

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2016-2018 National Survey of Children's Health (NSCH)

- **Nationally representative survey (n=102,057)**
- Web or mail-based survey conducted by the Census Bureau
- Sponsored by US DHHS Maternal and Child Health Bureau
- ~1,000 surveys collected per state
- One child randomly selected per household
- Representative of non-institutionalized children ages 0-17





NSCH Definition of “Adverse Family Experience”

“The next questions are about events that may have happened during this child’s life. These things can happen in any family, but some people may feel uncomfortable with these questions. You may skip any questions you do not want to answer. To the best of your knowledge, has this child experienced....”

1. Extreme economic hardship (**poverty**)
2. Parental divorce/separation (**divorce**)
3. Parental incarceration (**jail**)
4. Witness to violence in the home (**DV**)
5. Victim/witness of neighborhood violence (**NV**)
6. Lived with anyone with a drug or alcohol problem (**drugs**)
7. Lived with anyone with a mental illness or was suicidal (**mental health**)
8. Parent/guardian death (**death**)
9. Treated unfairly due to race/ethnic group (**discrimination**)



NSCH vs. CDC-Kaiser ACEs



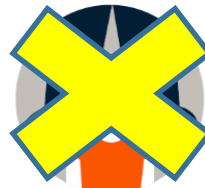
Emotional



Mother treated violently



Incarcerated Relative



Sexual



Divorce



Physical



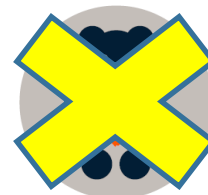
Mental Illness



Emotional



Substance Abuse



Physical



NSCH vs. CDC-Kaiser ACEs



Mental Illness



Mother treated violently



Incarcerated Relative



Divorce



Substance Abuse



Poverty



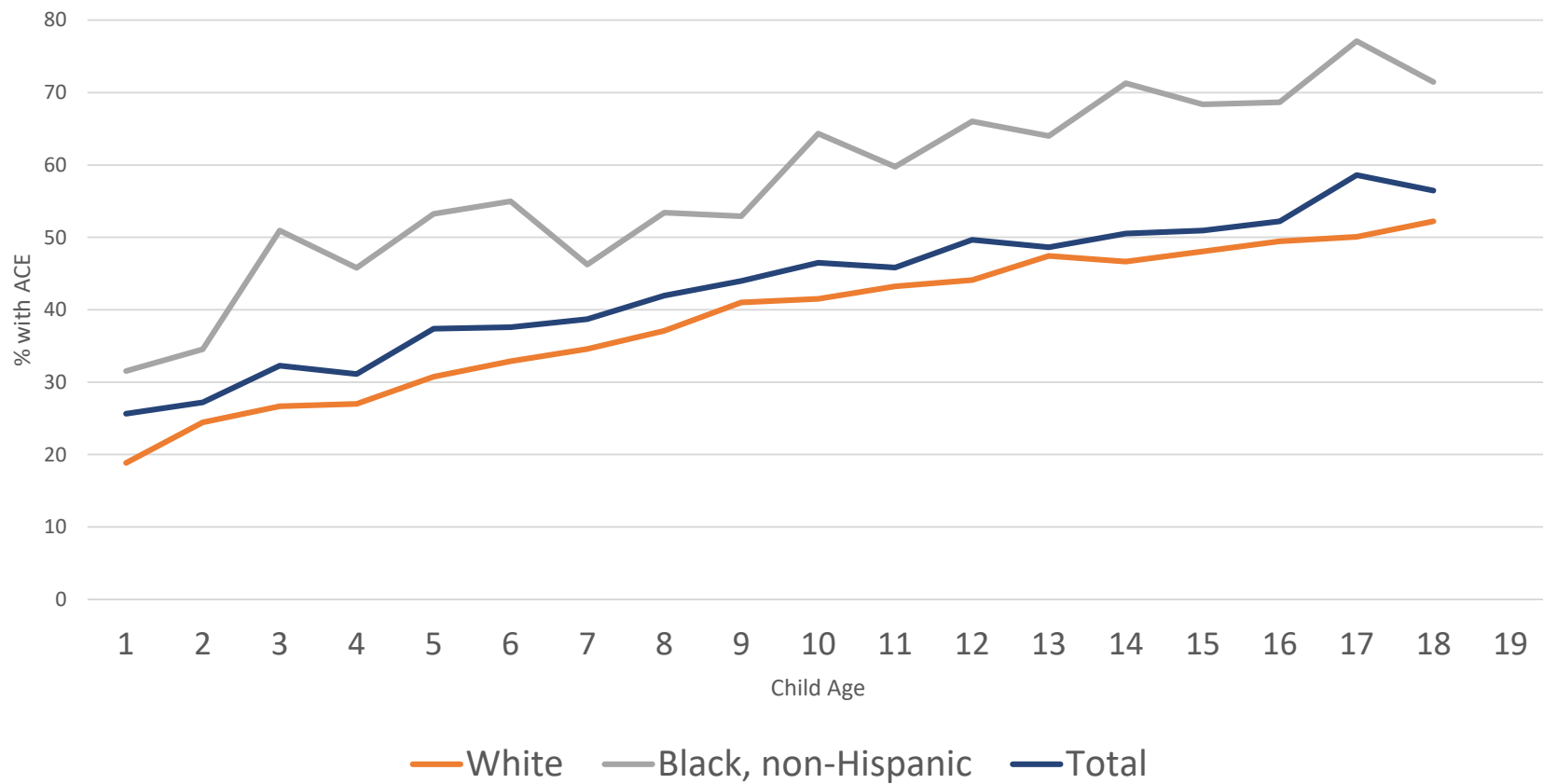
Neighborhood
Violence

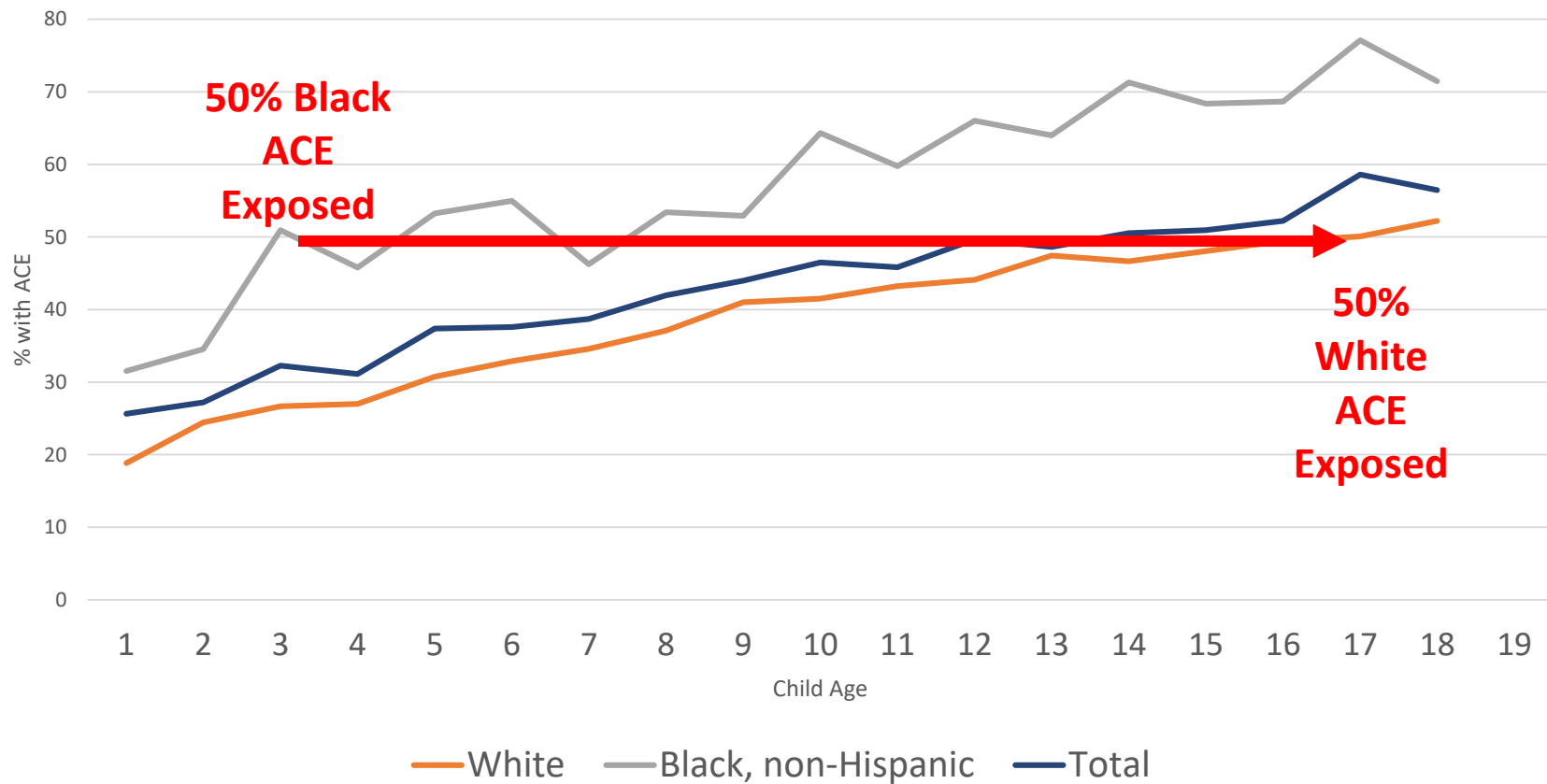


Racial
Discrimination



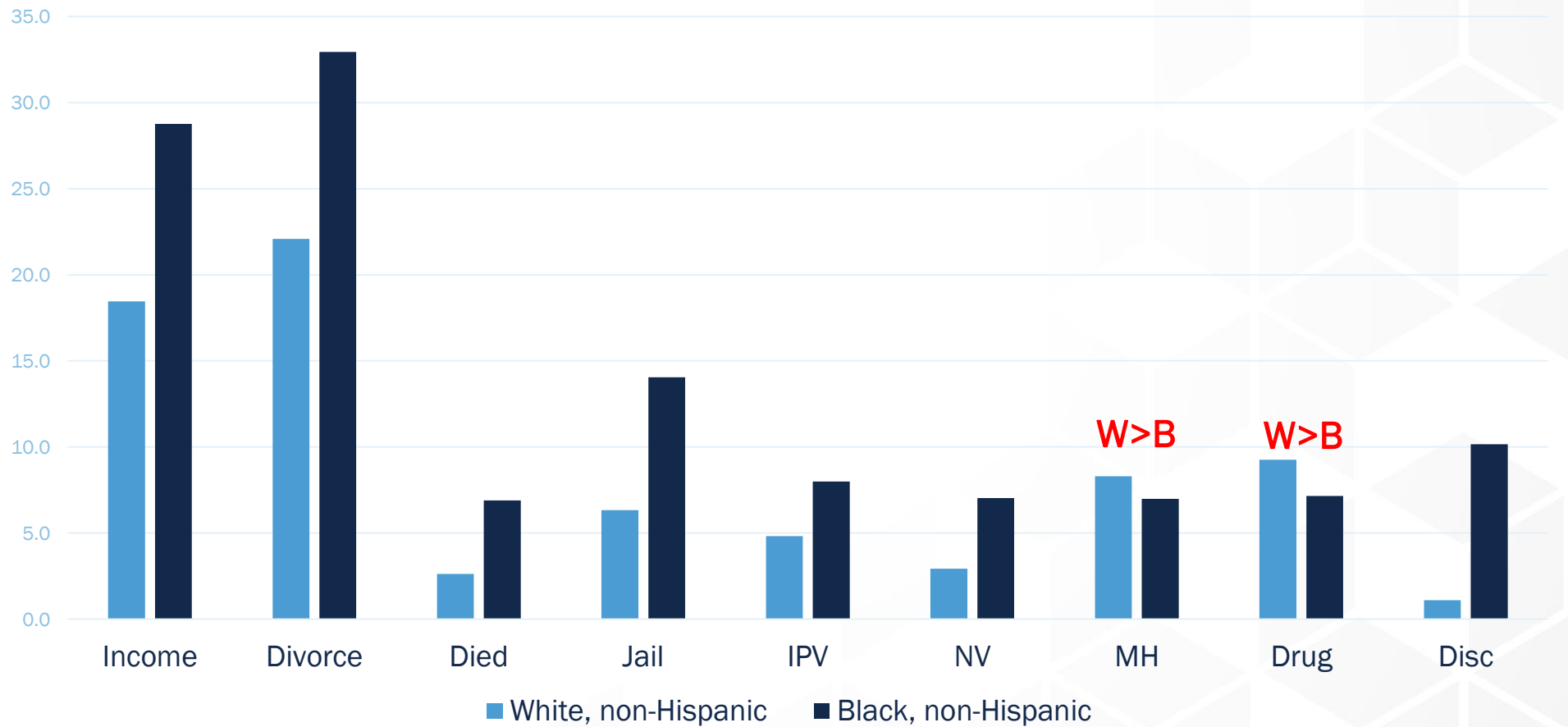
Parental Death





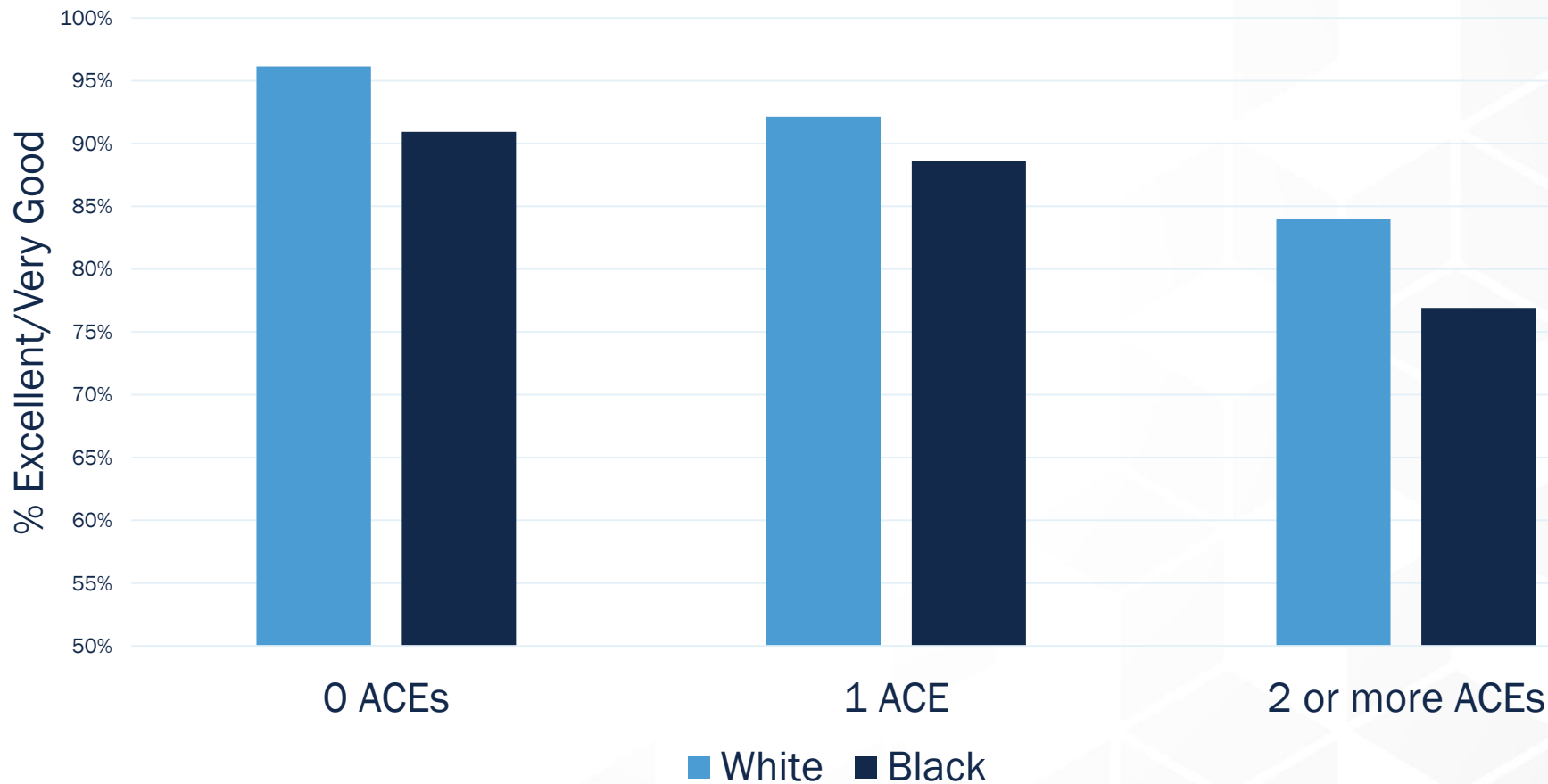


NSCH % ACE by Race





Association Between ACEs and Overall Health



Summary of Race/Ethnic Differences in ACEs		
ACE	BRFSS	NSCH
Mental Health	White > Black	White > Black
Household Substance Use	White > Black	White > Black
Incarceration	Black > White	Black > White
Divorce	Black > White	Black > White
Witness Domestic Violence	Black > White	Black > White
Physical Abuse (not spanking)	White > Black	-
Emotional Abuse	White > Black	-
Sexual Abuse	Black > White	-
Parent Died	-	Black > White
Neighborhood Violence	-	Black > White
Race/Ethnic Discrimination	-	Black > White
Poverty	-	Black > White
Total ACE Score (>0)	Black > White	Black > White

But, wait.....What about resilience?

**Shouldn't we also consider protective
factors!?**

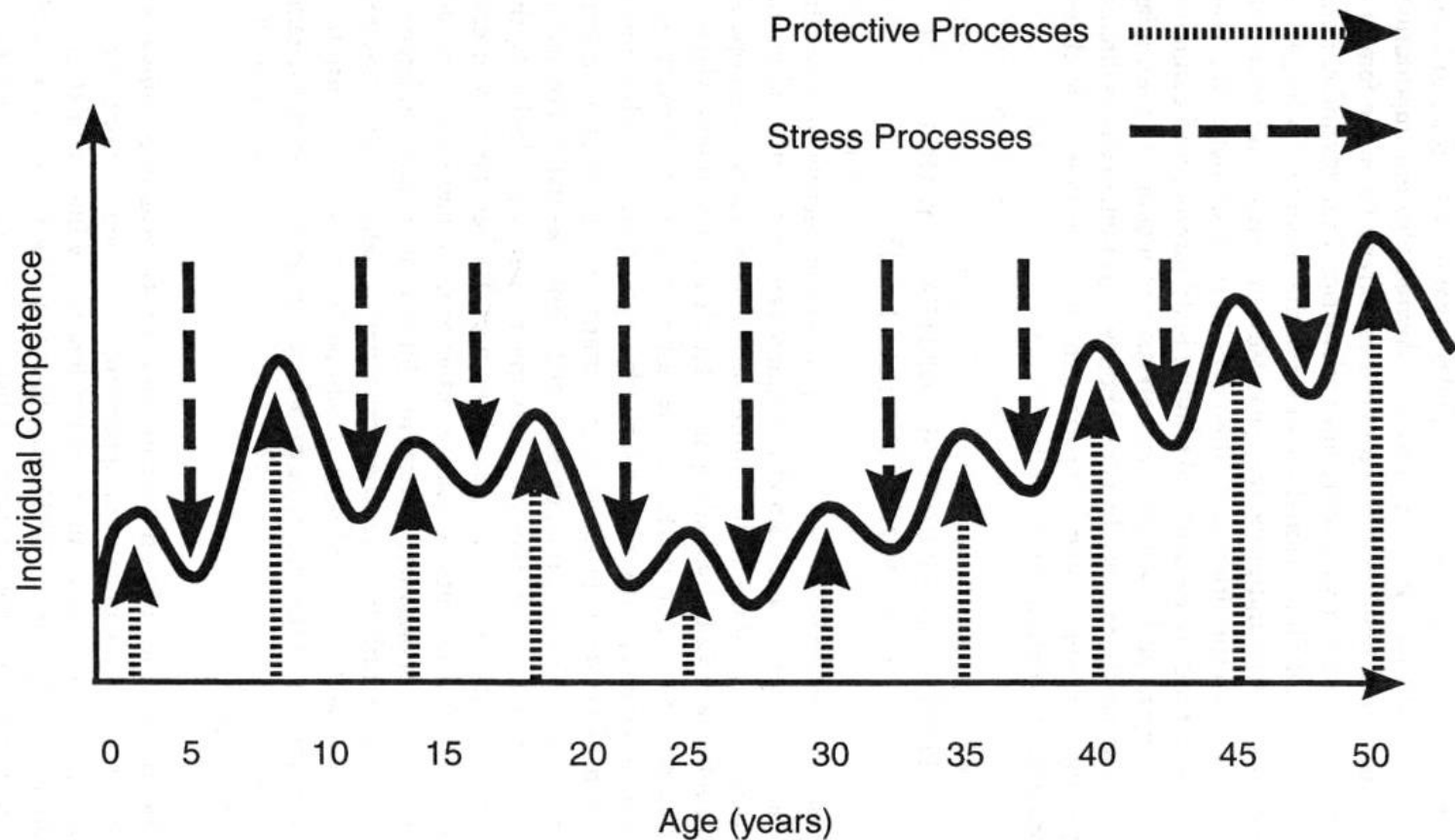
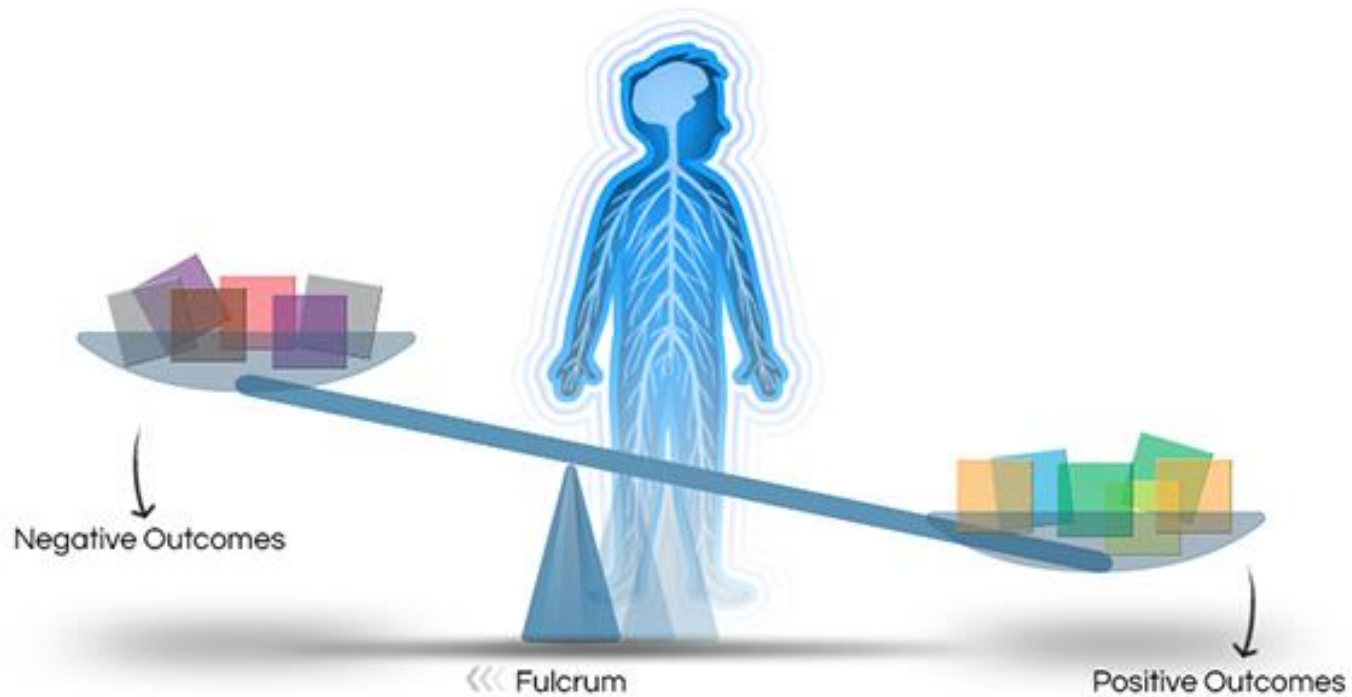


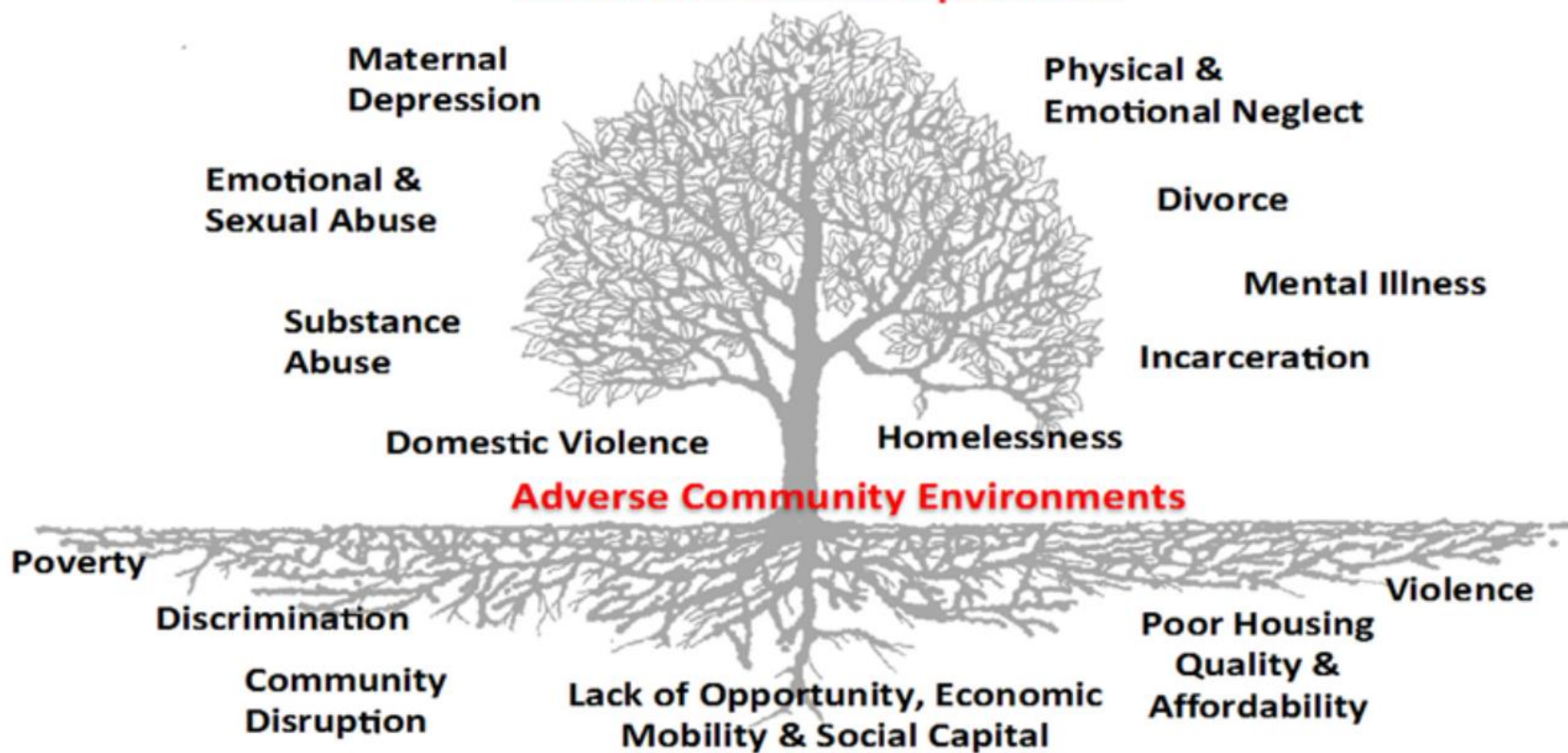
Figure 2.1. Interplay of protective and stress processes and their influence on individual competence across the life span.



National Scientific Council on the Developing Child, Center on the Developing Child at Harvard University, 2015

The Pair of ACEs

Adverse Childhood Experiences



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







- Each child/family is a unique ecosystem
- “The capacity of a system to absorb disturbance and reorganize while undergoing change so as to still retain essentially the same function, structure, identity, and feedbacks.”
 - Panarchy: the resilience of a system at a particular focal scale will depend on the influences from states and dynamics at scales above and below.



- Adaptability
 - The capacity of actors in a system to influence resilience
 - Adaptability of the system is mainly a function of the social component—the individuals and groups acting to manage the system
- Transformability
 - The capacity to create a fundamentally new system when ecological, economic, or social (including political) conditions make the existing system untenable
- We want families/children to be resilient. But, are our prevention programs and systems adaptable and transformable?



What does it mean to be “Resilient” or display “Resilience” from Child Maltreatment?



ELSEVIER

Child Abuse & Neglect 31 (2007) 255–274

Child Abuse
& Neglect

Predictors of resilience in abused and neglected children grown-up: The role of individual and neighborhood characteristics[☆]

Kimberly A. DuMont^a, Cathy Spatz Widom^{b,*}, Sally J. Czaja^b

Development and Psychopathology, **13** (2001), 1021–1038

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Resilience among abused and neglected children grown up


JEAN MARIE MCGLOIN^a AND CATHY SPATZ WIDOM^b

^aRutgers University; and ^bNew Jersey Medical School

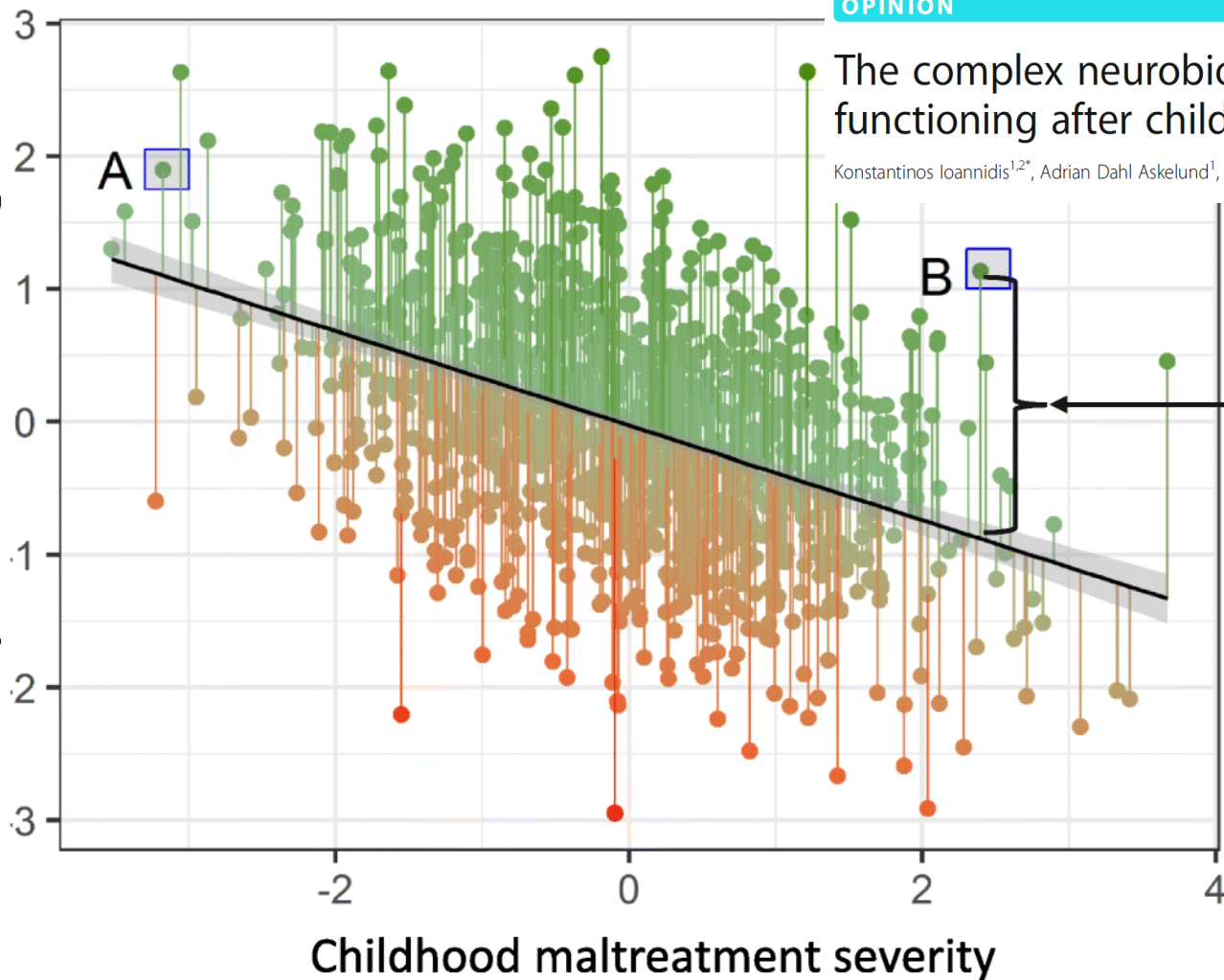
- Resilience = successful in 6 out of 8 domains:
 1. Education
 2. Psychiatric disorder
 3. Substance abuse
 4. Arrests
 5. Violent behavior
 6. Employment
 7. Homelessness
 8. Social activity
- 50% resilient in adolescence, 30% in young adulthood
- Key predictors of resilience:
 - African-American race
 - Female gender
 - Fewer stressful life events
 - High relationship support



The complex neurobiology of resilient functioning after childhood maltreatment

Konstantinos Ioannidis^{1,2*}, Adrian Dahl Askelund¹, Rogier A. Kievit³ and Anne-Laura van Harmelen^{1*} 

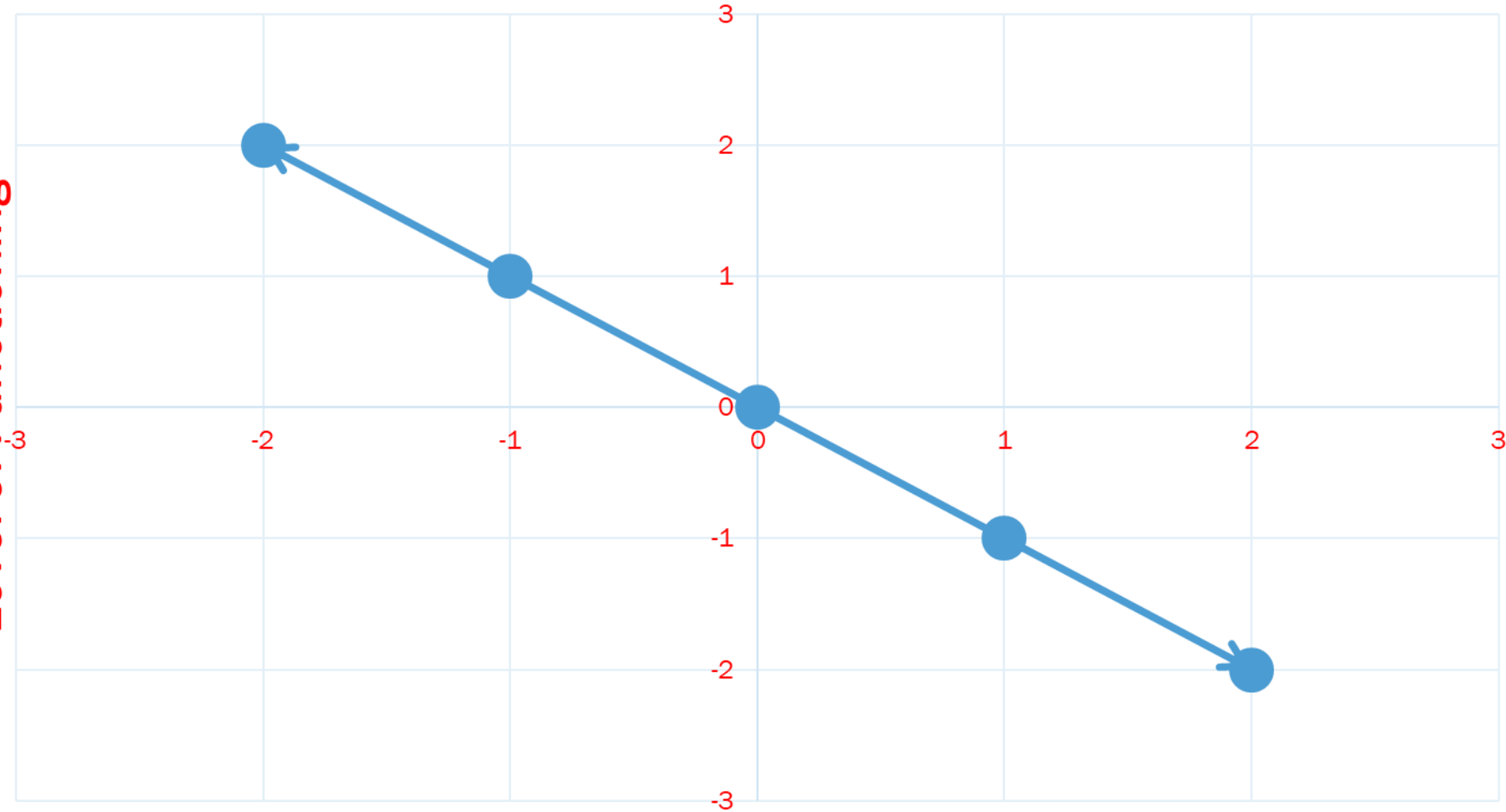
Psychosocial functioning

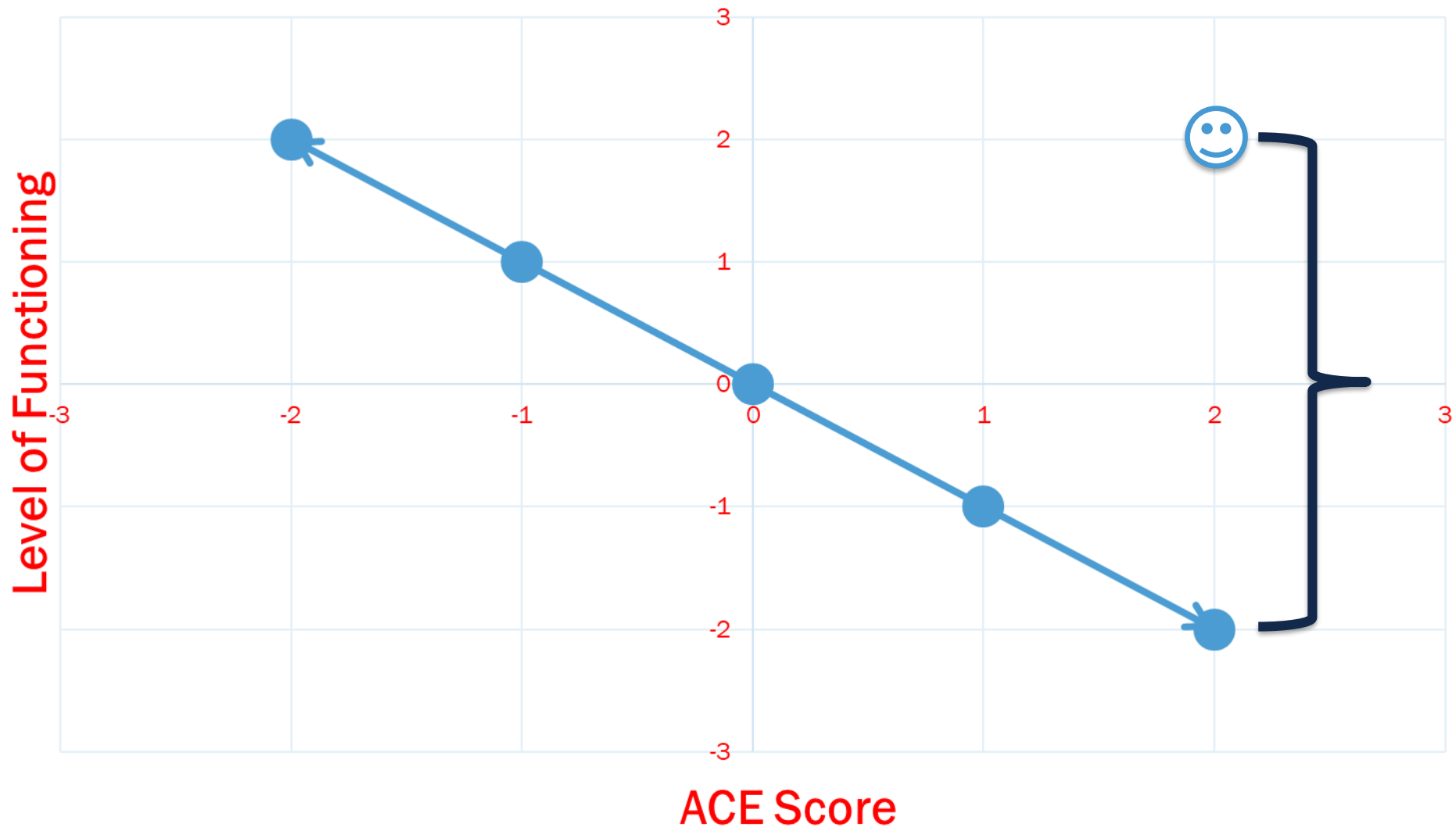


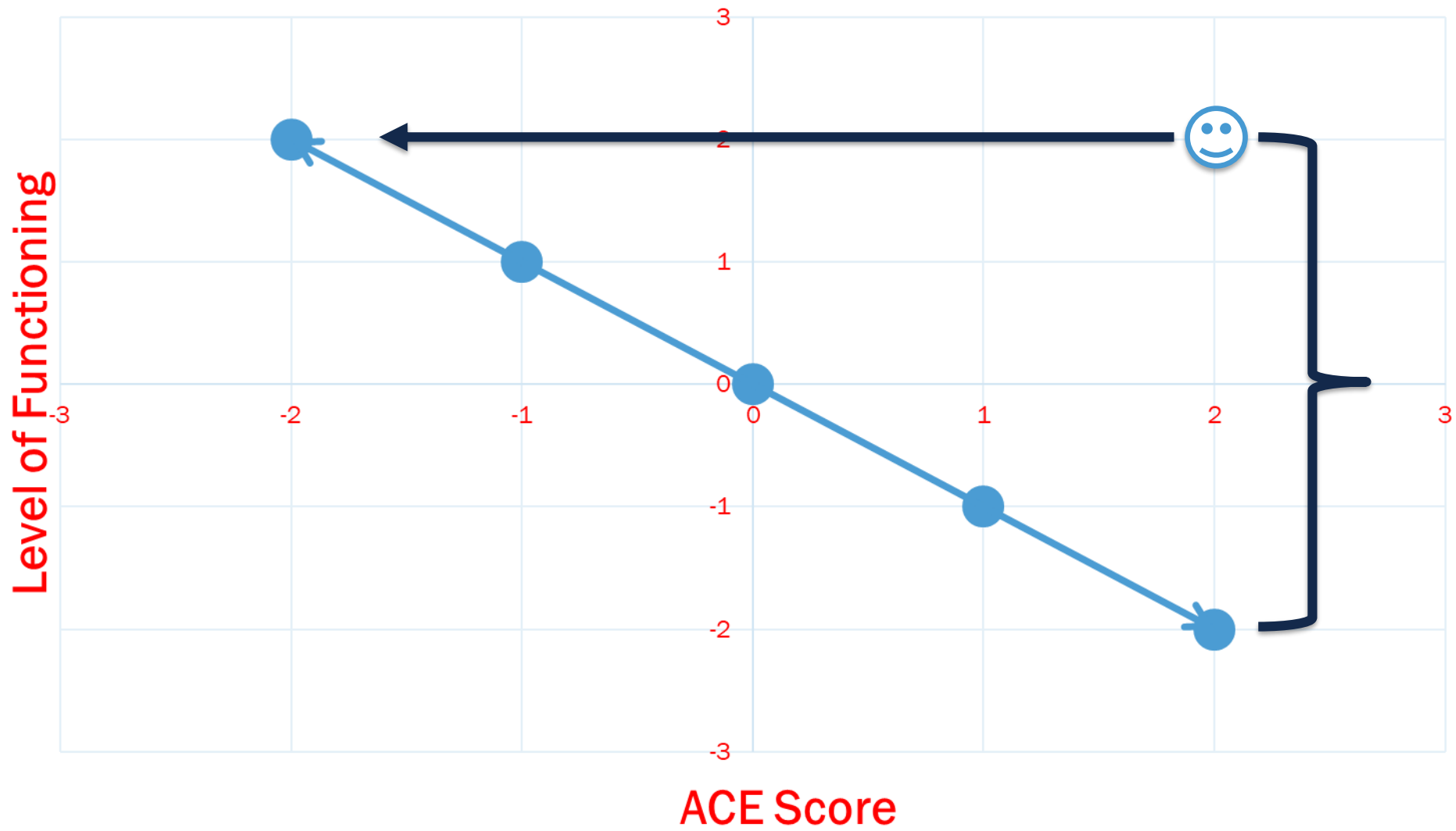
Childhood maltreatment severity

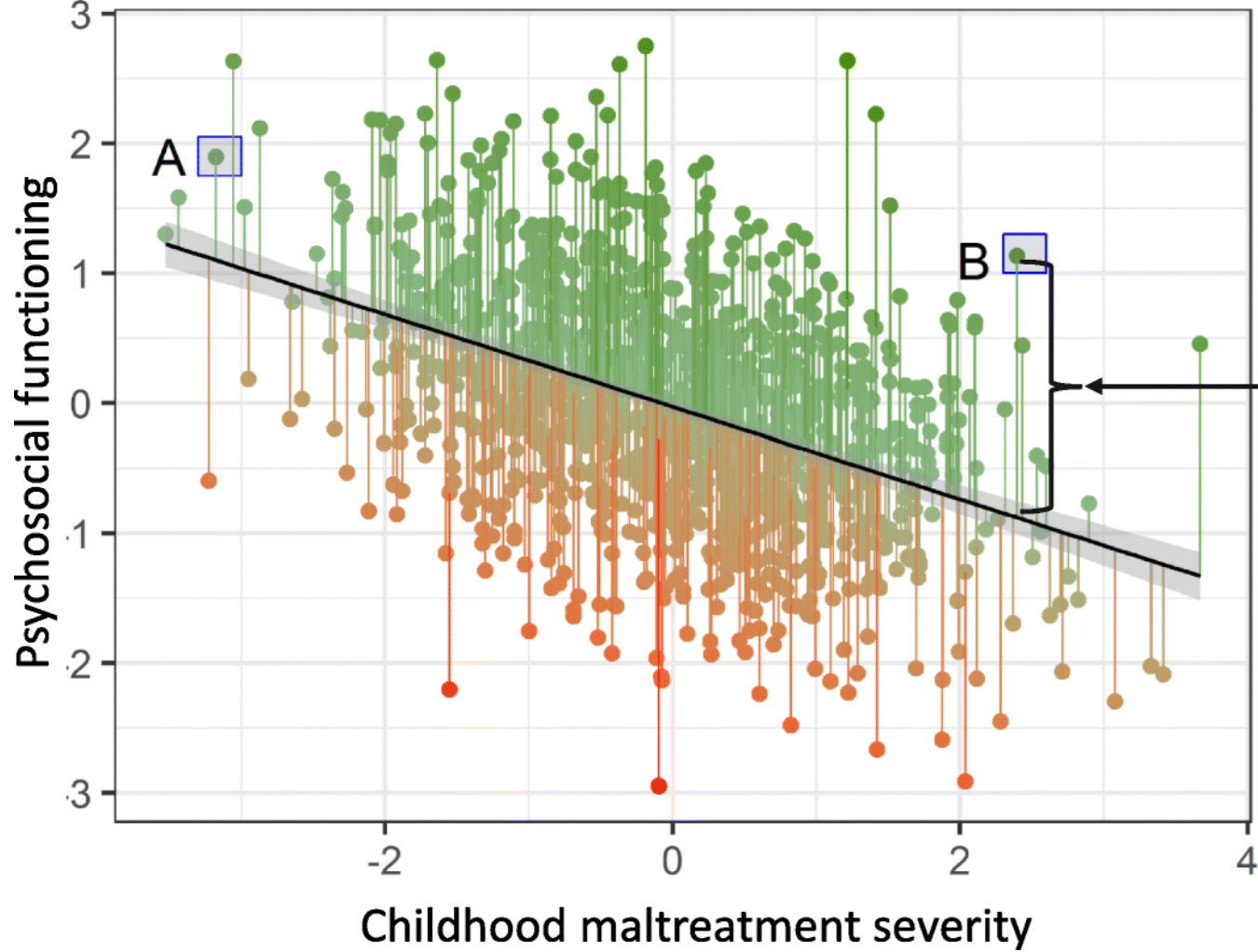
Level of Functioning

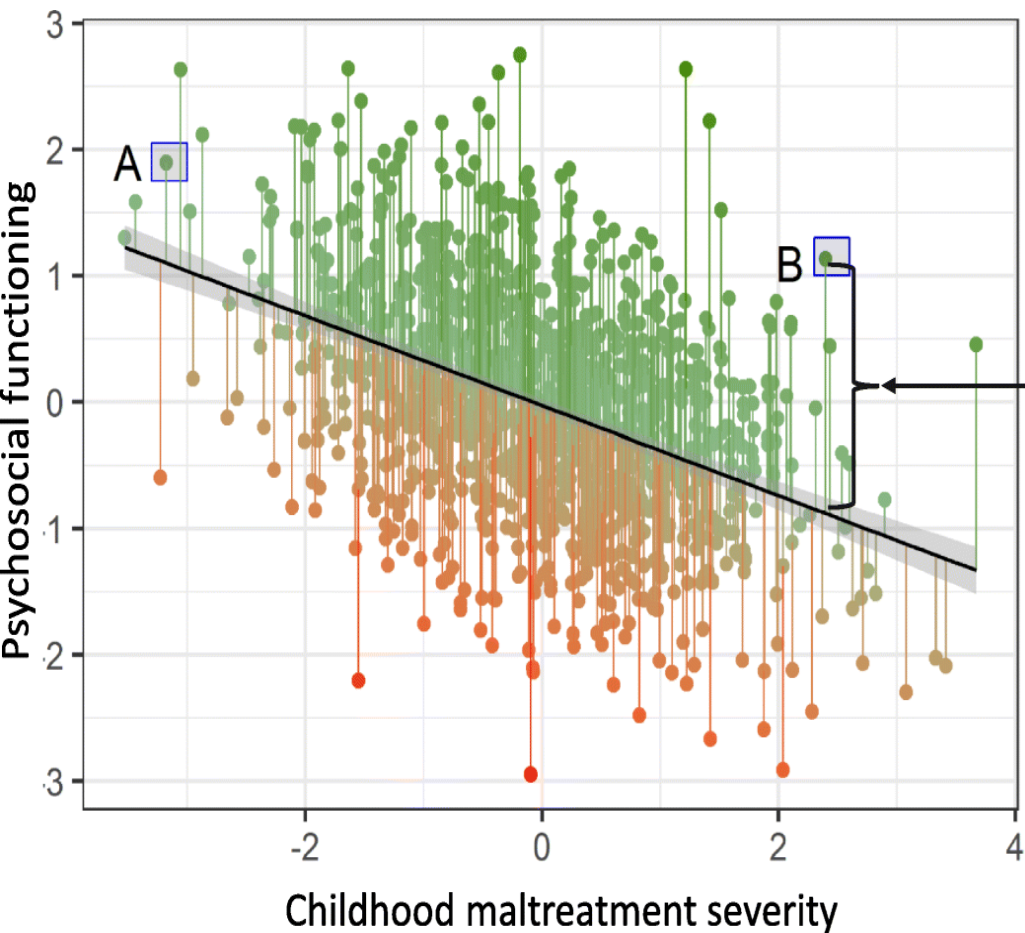
ACE Score











ENVIRONMENTAL INFLUENCES

i.e. caring parents, friendships, intimate relationships

COGNITION

i.e. self-esteem, positive self schemas, happiness

BRAIN FUNCTION

i.e. mPFC, limbic activity, fronto-limbic connectivity

BRAIN STRUCTURE

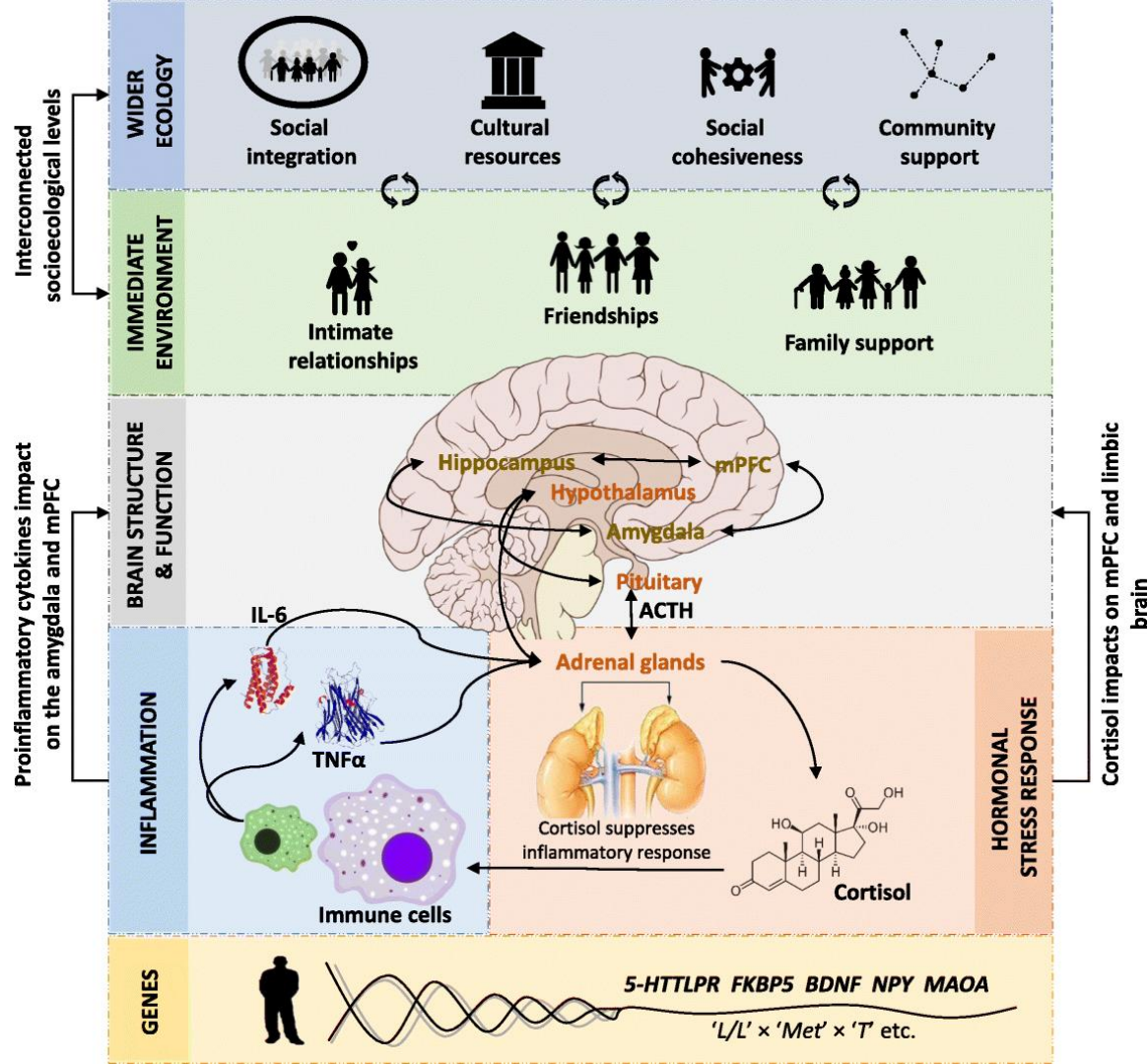
i.e. mPFC, limbic areas

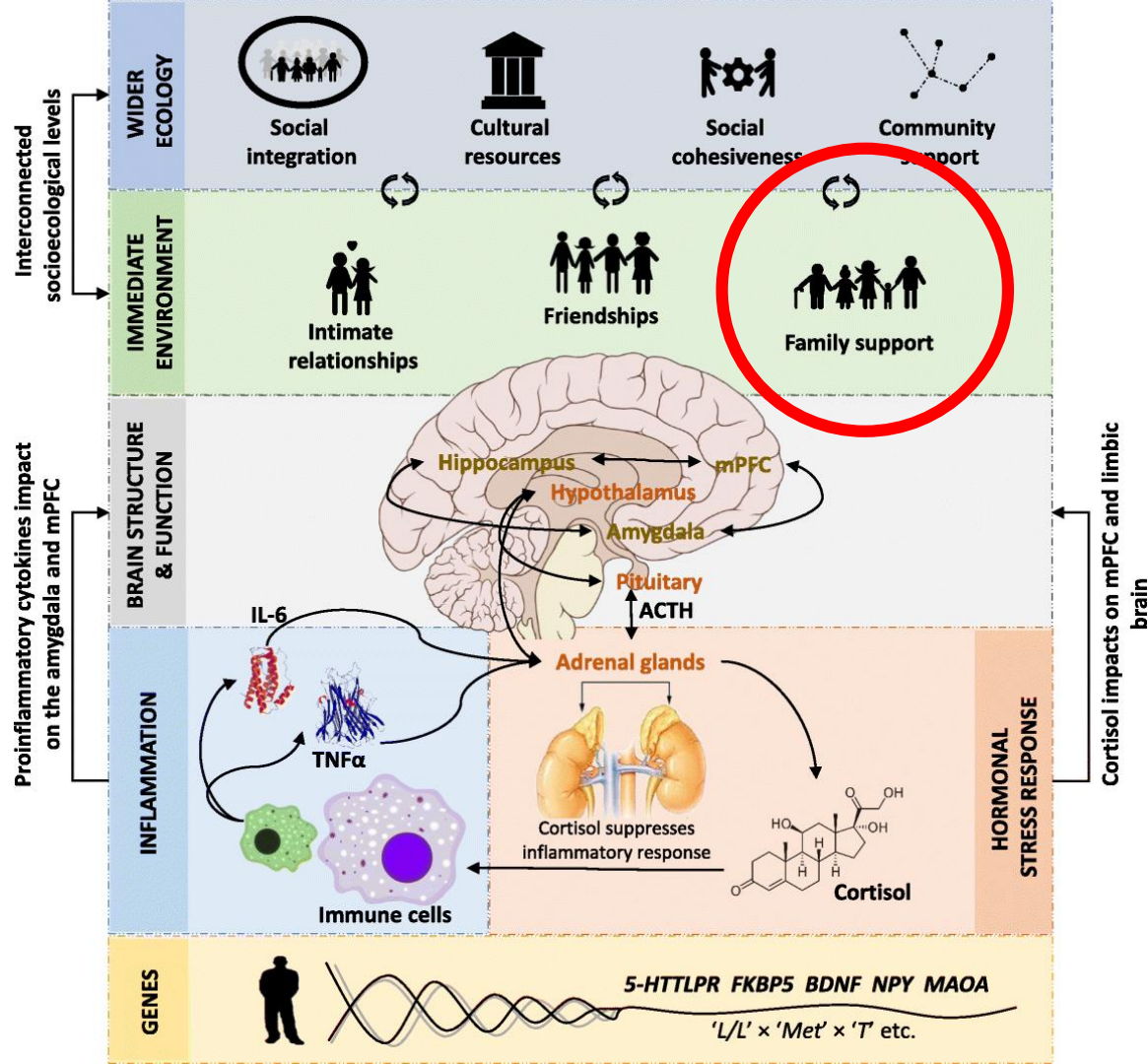
NEUROENDOCRINE/INFLAMMATORY

i.e. Cortisol, CRP, IL-6, IL-18

(POLY)GENETIC

i.e. 5-HTTLPR, FKBP5, BDNF, NPY





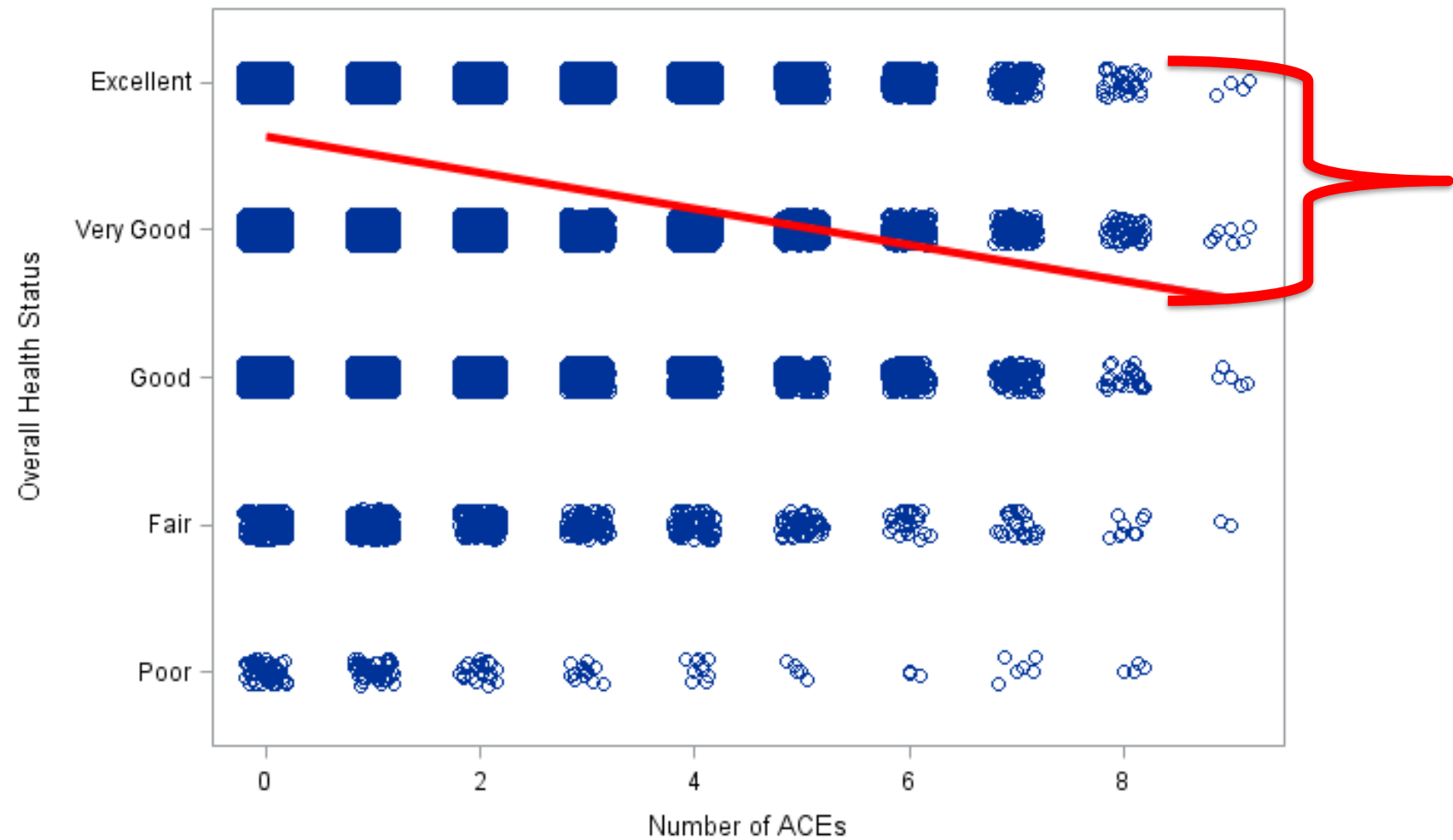


NSCH Family Resilience

A composite measure based on responses to the following 4 survey items:
“When your family faces problems, how often are you likely to do each of the following?”

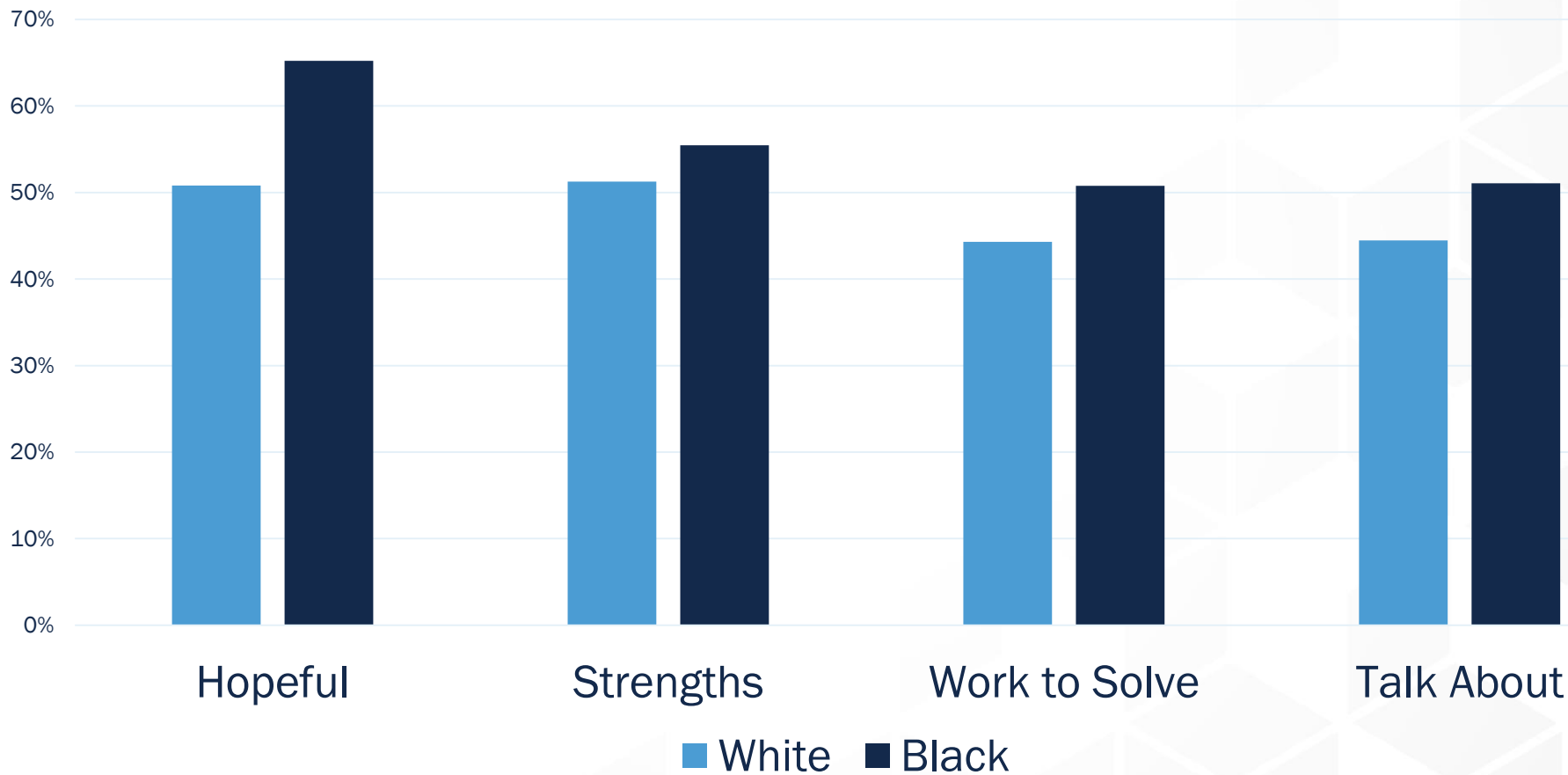
- 1. Talk together about what to do.**
- 2. Work together to solve our problems.**
- 3. Know we have strengths to draw on.**
- 4. Stay hopeful even in difficult times.**

ACEs and Health Status (NSCH)



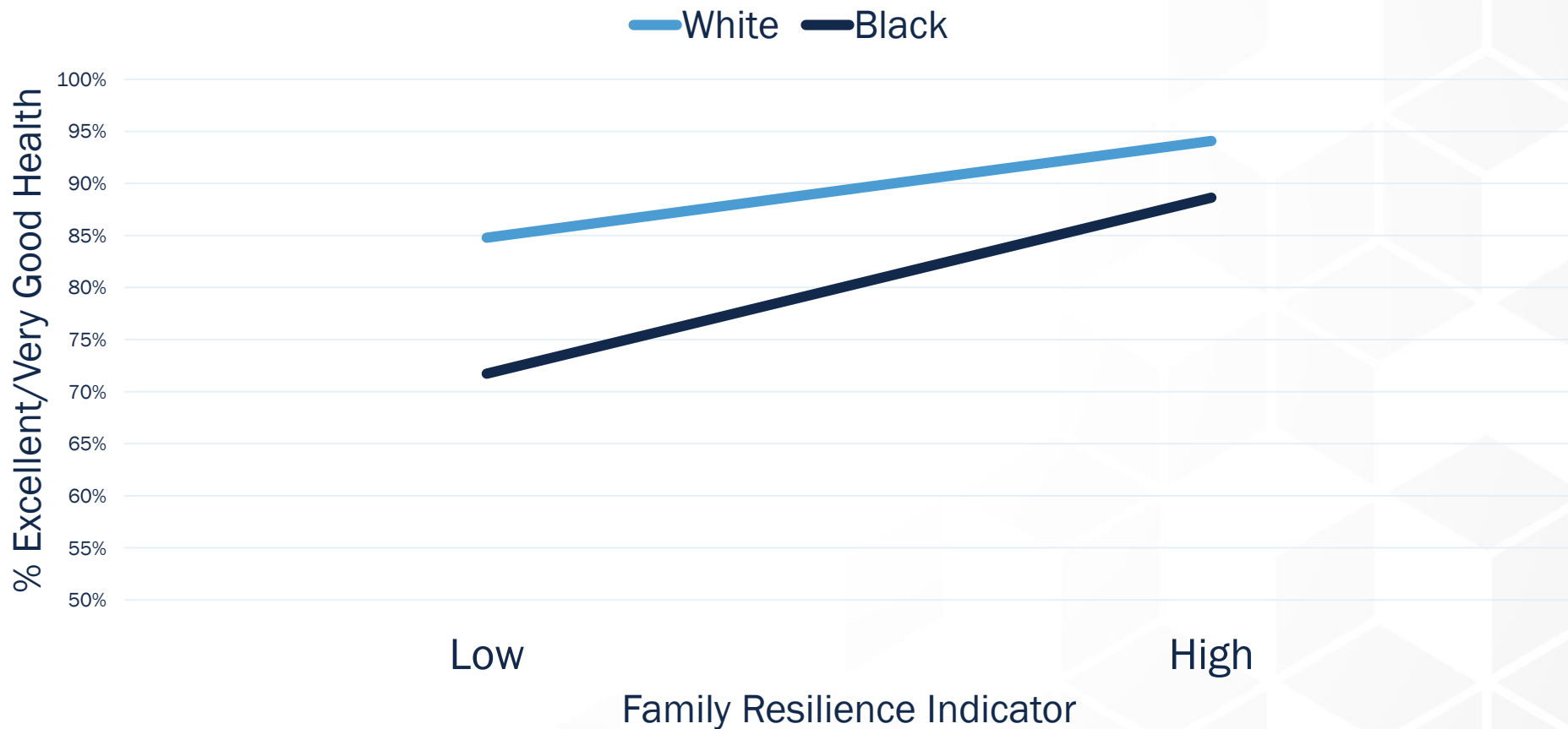


Family Resilience by Race



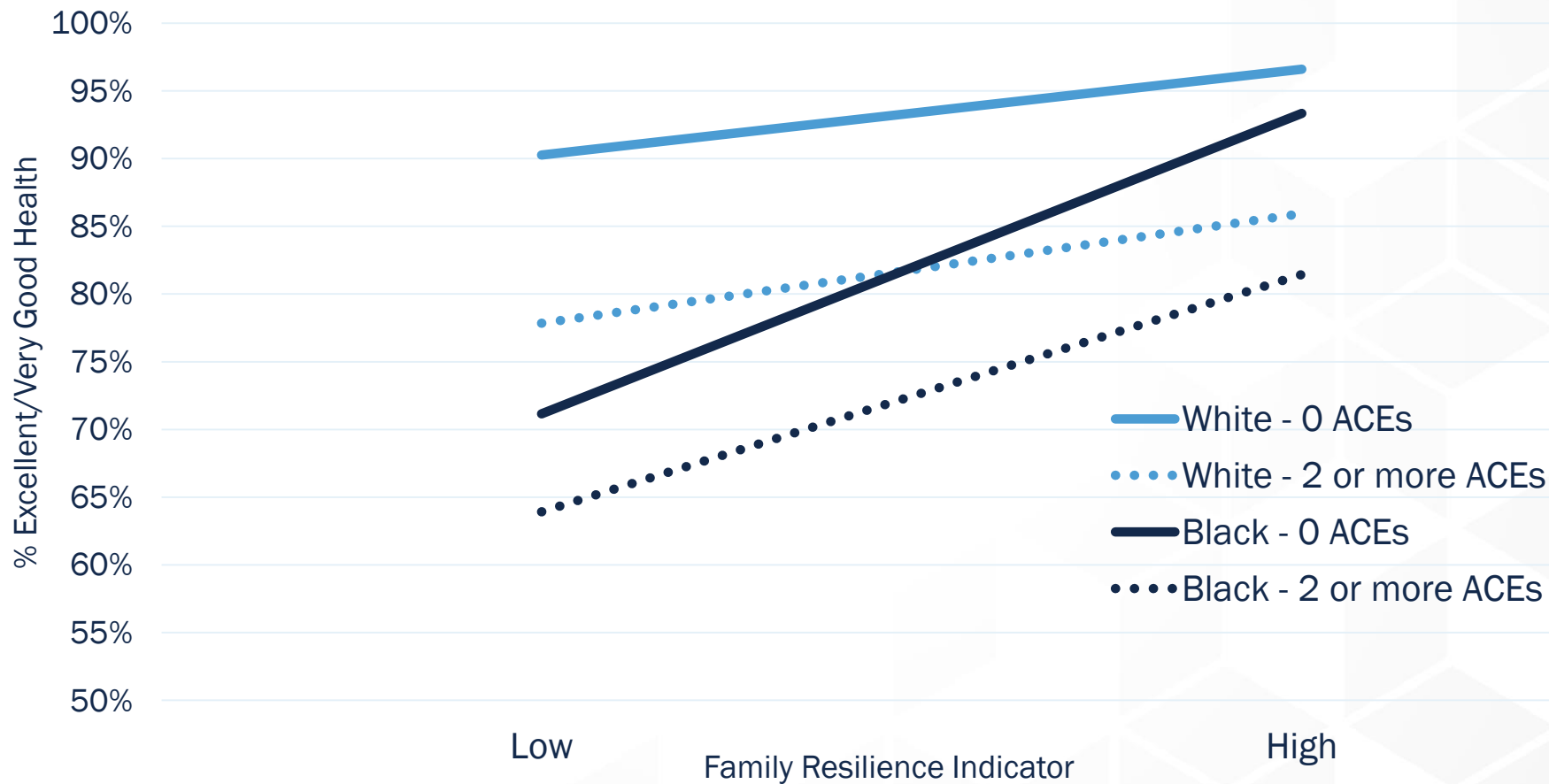


Association Between Family Resilience and Child Health by Race



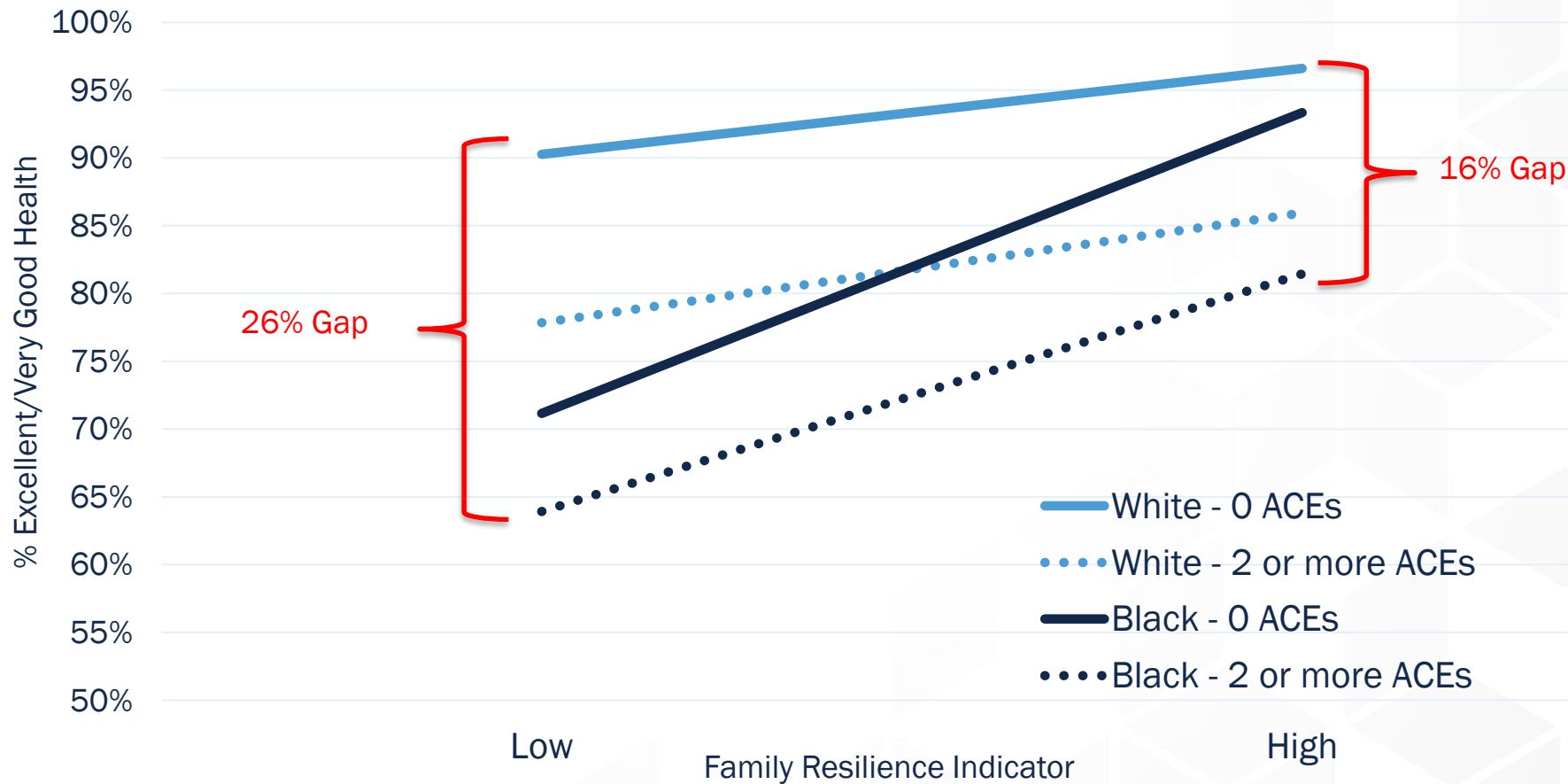


Does Family Resilience Moderate the Association Between ACEs and Child Health by Race?





Does Family Resilience Moderate the Association Between ACEs and Child Health by Race?



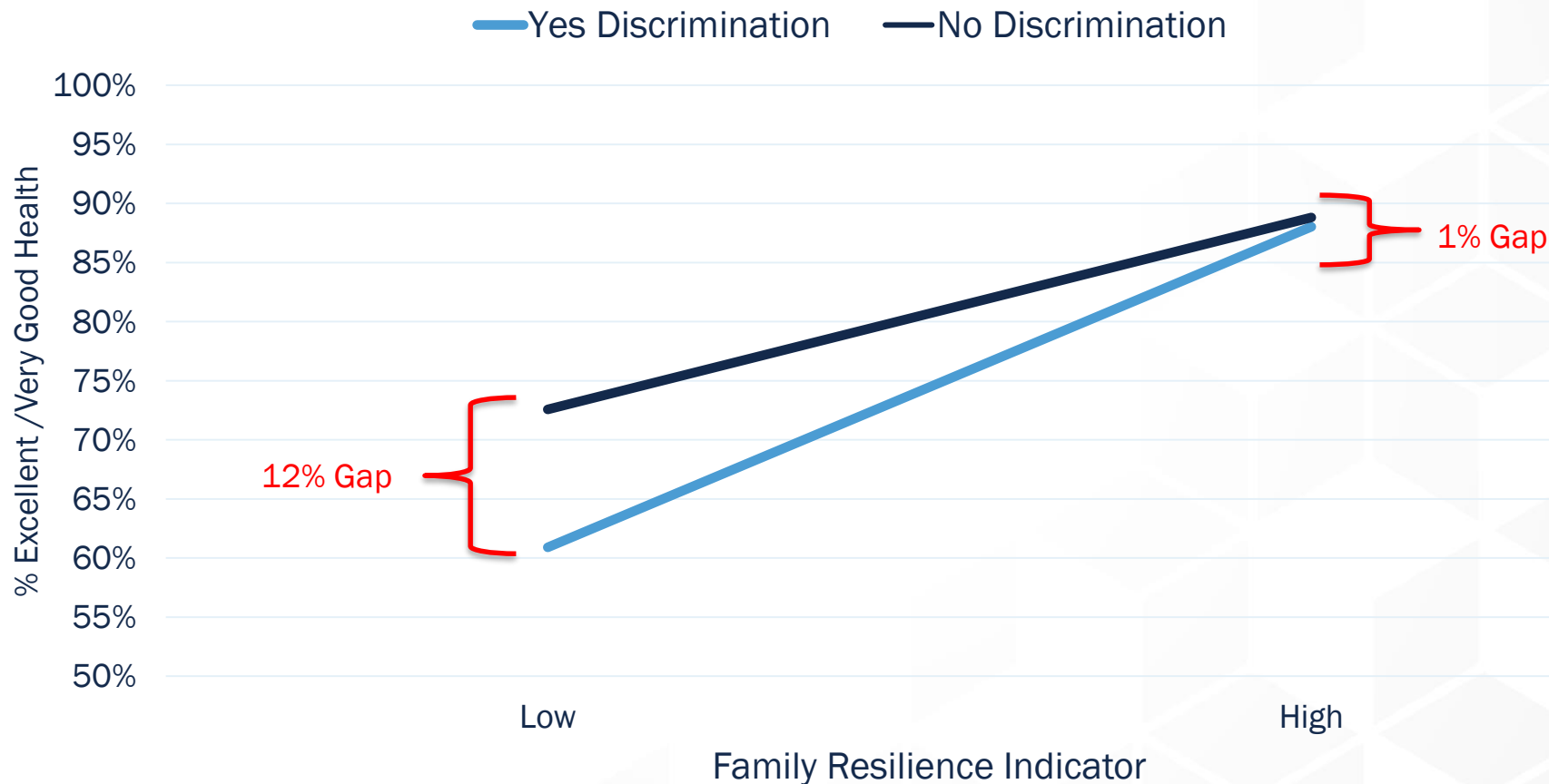


Does Family Resilience Buffer the Effects of Discrimination on Child Health for Black Children?





Does Family Resilience Buffer the Effects of Discrimination on Child Health for Black Children?





Conclusions

- Black children experience greater cumulative exposure to ACEs compared to white children in the United States
- Exposure to ACEs is associated with worse overall child health, contributing to racial health disparities
- Family resilience is equal, if not greater, among black families compared to white families
- Family resilience buffers the relationship between ACEs and child health, reducing racial health disparities

Outline

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Why?

Why is family involvement so impactful for health outcomes?

Why does it moderate the impact ACEs has on these outcomes?

Why is this so impactful for Black families in particular?



In the context of culture

- We don't exist in a vacuum.
- What is systemic racism?
 - Racial ingroup bias that has been made a part of legal, social, and cultural operations.
 - Often masks itself in structures that are supposed to be nonracial or race-neutral in ideology

Racial Equity Institute: The Groundwater Approach

“We live in a racially structured society, and that is what causes racial inequity.”

A Groundwater Approach is based on several key observations about racial inequity:



- Racial inequity looks the same across systems
- Socio-economic differences does not explain racial inequity
- Systems contribute significantly to disparities, regardless of people's culture or behavior

Source: *The Groundwater Approach: Building a practical understanding of structural racism*, Racial Equity Institute

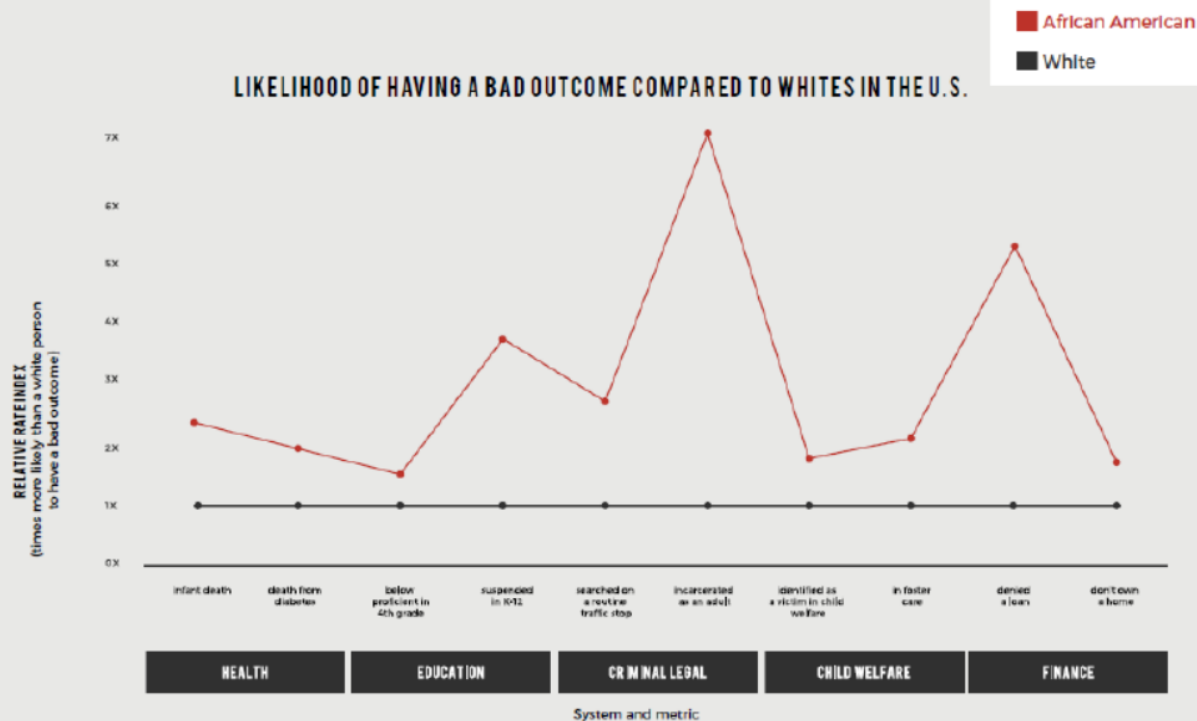


Figure 1: "African Americans are 1.5 to 7 times as likely to have a bad outcome across systems" (sources in text on page 6).

Racial disparities exist in every system in the US without exception.

RACE

White Supremacist Propaganda At 'Record-Setting' Levels, ADL Report Finds

March 6, 2019 · 7:03 AM ET

Silent Sam may be gone, but North
Carolina decided three other
Confederate monuments can stay

POLITICS

Hate Has Flourished In 2 Years Since 'Unite The Right' Rally In Charlottesville

08/12/2019 10:34 am ET | Updated Aug 12, 2019

CRIME

08/21/2019 11:19 am ET | Updated Aug 21, 2019

New Jersey Man Arrested With Stockpile Of Assault Weapons, Nazi Paraphernalia

Joseph Rubino's house contained clothing with white supremacist symbols and a
purported "instruction manual for owning a slave," federal authorities said.

Horrors in El Paso: 20 dead, 26 wounded in mass
shooting at Walmart

4 White Supremacists Face Federal Charges In California Attacks

White Supremacy Is A Worldwide Crisis – And The U.S. Can Learn From Abroad

Former East Pittsburgh officer found
not guilty in fatal shooting of unarmed
teenager

By Lauren del Valle and Ralph Ellis, CNN
Updated 6:32 AM ET, Sat March 23, 2019



Race-Based Stress

The stress reaction experienced by people of color when they encounter direct or indirect forms of racism.

Linked to a number of negative outcomes:

Depression

Substance Use

Trauma-like symptoms

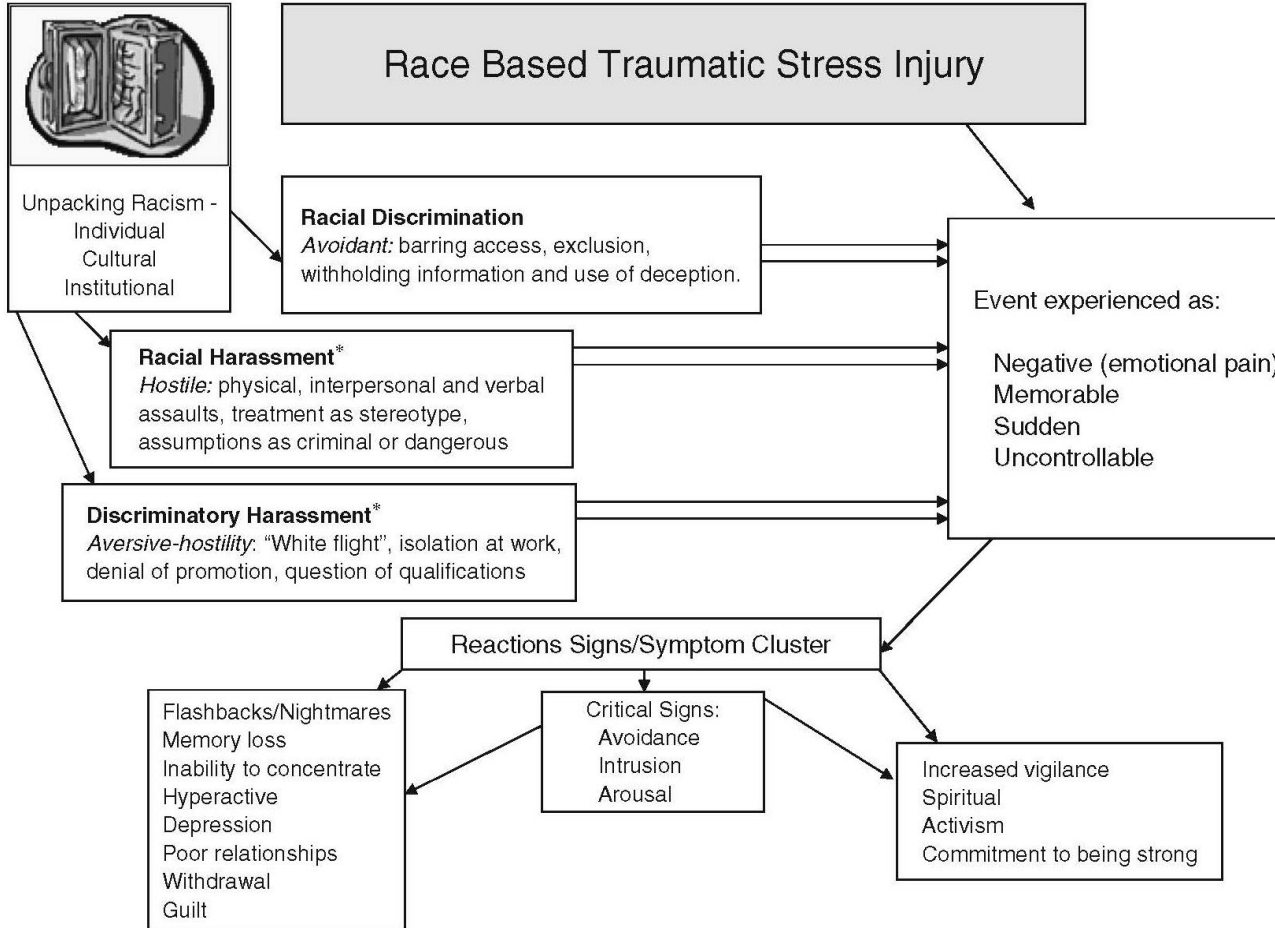
Worry

Feelings of poor health

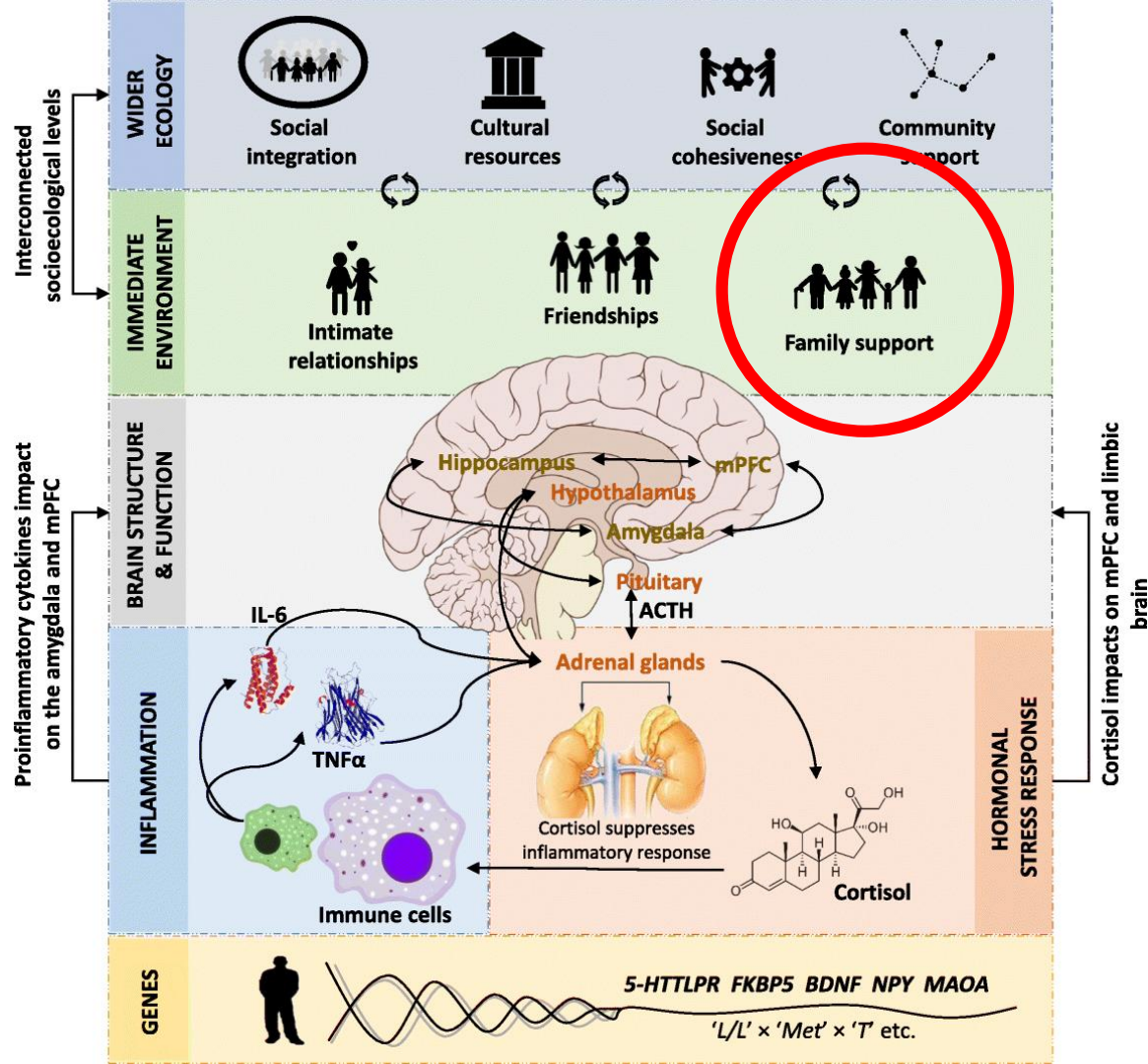


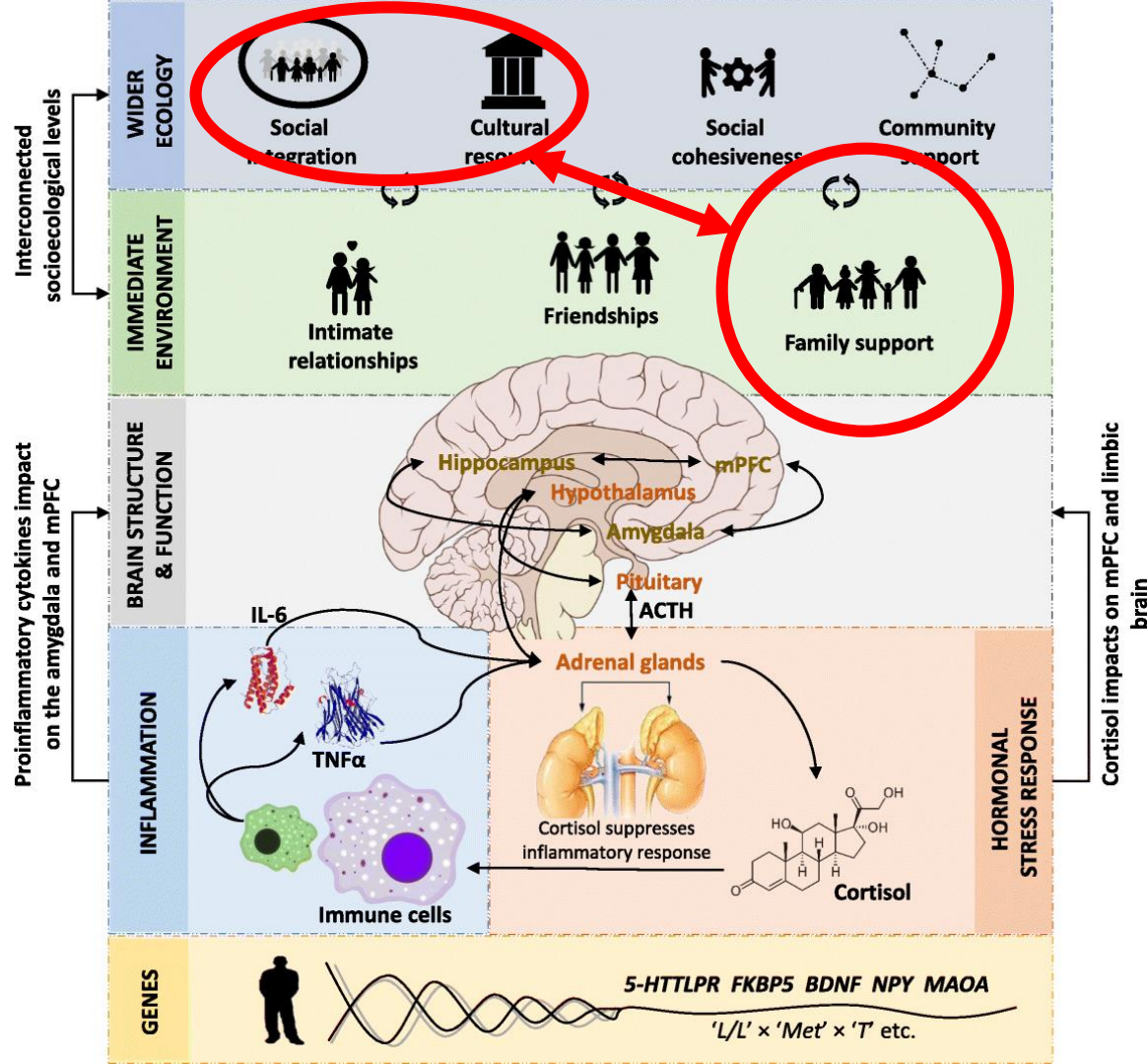
Racism = Poorer Health?

- Some researchers have theorized that there is a connection between the persistent health disparities experienced by African Americans, and their **chronic exposure to racism**



**How are stressors (like racism) received
and interpreted by families?**







Contextual Model of Family Stress (CMFS)

- Individuals and families do not live in a vacuum
- 5 dimensions of *external* context that families CAN'T control:
 - Culture, history, economy, development, and heredity.
- 3 dimensions of *internal* context that they CAN control:
 - Structural, psychological, and philosophical.

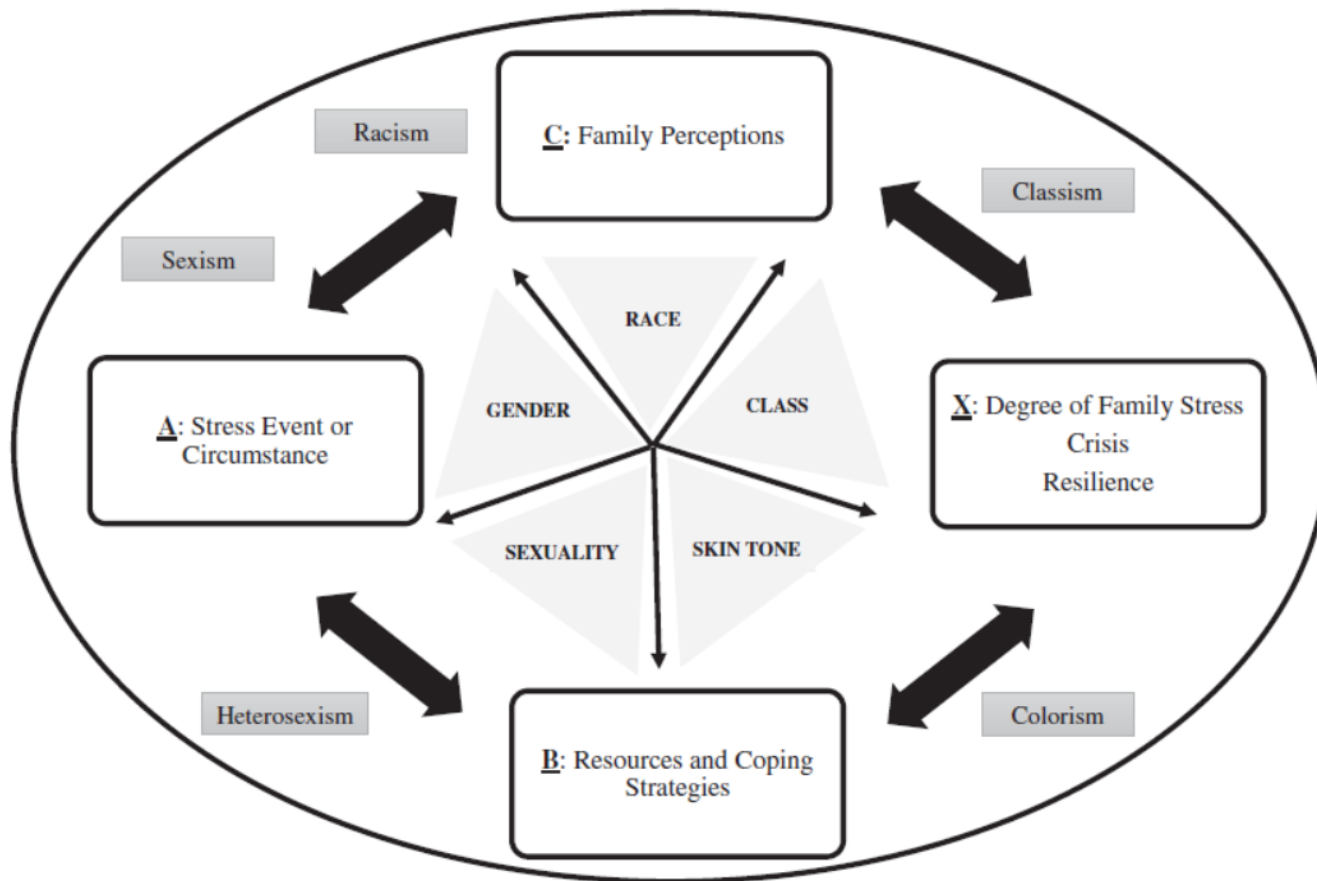


Sociocultural Family Stress Model

- Applies CMFS specifically to African American families
- Incorporates MEES (mundane extreme environmental stress)
 - “...the multiple forms of continuous, chronic, subtle and overt...oppressions (e.g., racism, classism, sexism, heterosexism, colorism) in the lives of African Americans and their families.”
 - The stress that African Americans experience as a result of the constant, daily exposure to racism, and their relegation to a racially stratified social system.
 - MEES can make individuals and families physically sick

FIGURE 1. SOCIOCULTURAL FAMILY STRESS MODEL.

Mundane Extreme Environmental Stress



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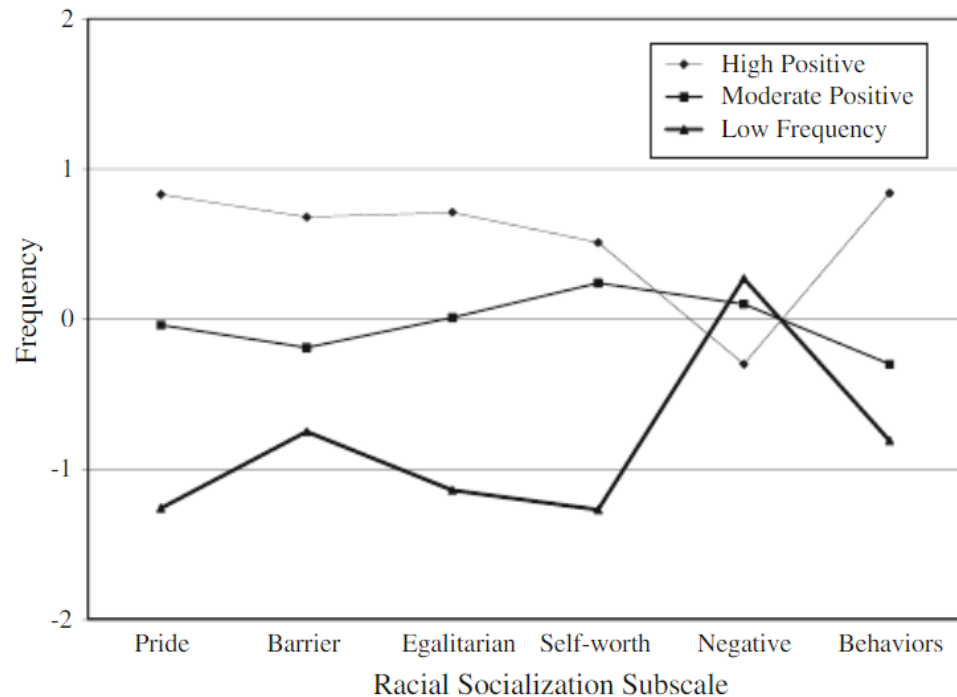
Racial socialization

- Process through which direct and indirect messages regarding the attitudes, beliefs, values, expectations, behaviors, meanings, and importance related to race and racial group membership are transmitted to youth.
- Prominent feature in many Black families, and frequently a central component of parenting for African Americans.



Racial socialization - benefits

- Improved sense of self and ability to cope with racialized environments.
- Preparation for bias and discrimination
- Reduced likelihood of depression
- Lower levels of depression
- Weakened relationship between race-based stress and trauma-related symptomology



J Youth Adolescence (2009) 38:189–203
DOI 10.1007/s10964-008-9359-7

EMPIRICAL RESEARCH

Racial Socialization and Racial Identity: African American Parents' Messages About Race as Precursors to Identity

Enrique W. Neblett Jr. · Ciara P. Smalls ·
Kahlil R. Ford · Hòa X. Nguyễn · Robert M. Sellers



Cultural Humility in Practice

- Our systems of care, including assessment, treatment, and intervention delivery are monocultural.
 - Who decides what is “normal” vs. “abnormal”?
- Cultural Humility
 - Be aware of your biases and how that may impact people you serve
 - Recognize the limits of your knowledge
 - Don’t be “color blind”
 - Recognize cultural wealth

Discussion:

How will screening differentially impact families or color given what we know about disparities?

What else do we need to know/do to screen and deliver services with cultural competence?

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THE UNIVERSITY
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