

Structural Racism in Healthcare Implications for Implementation Science

11-6-20



David Geffen
School of Medicine



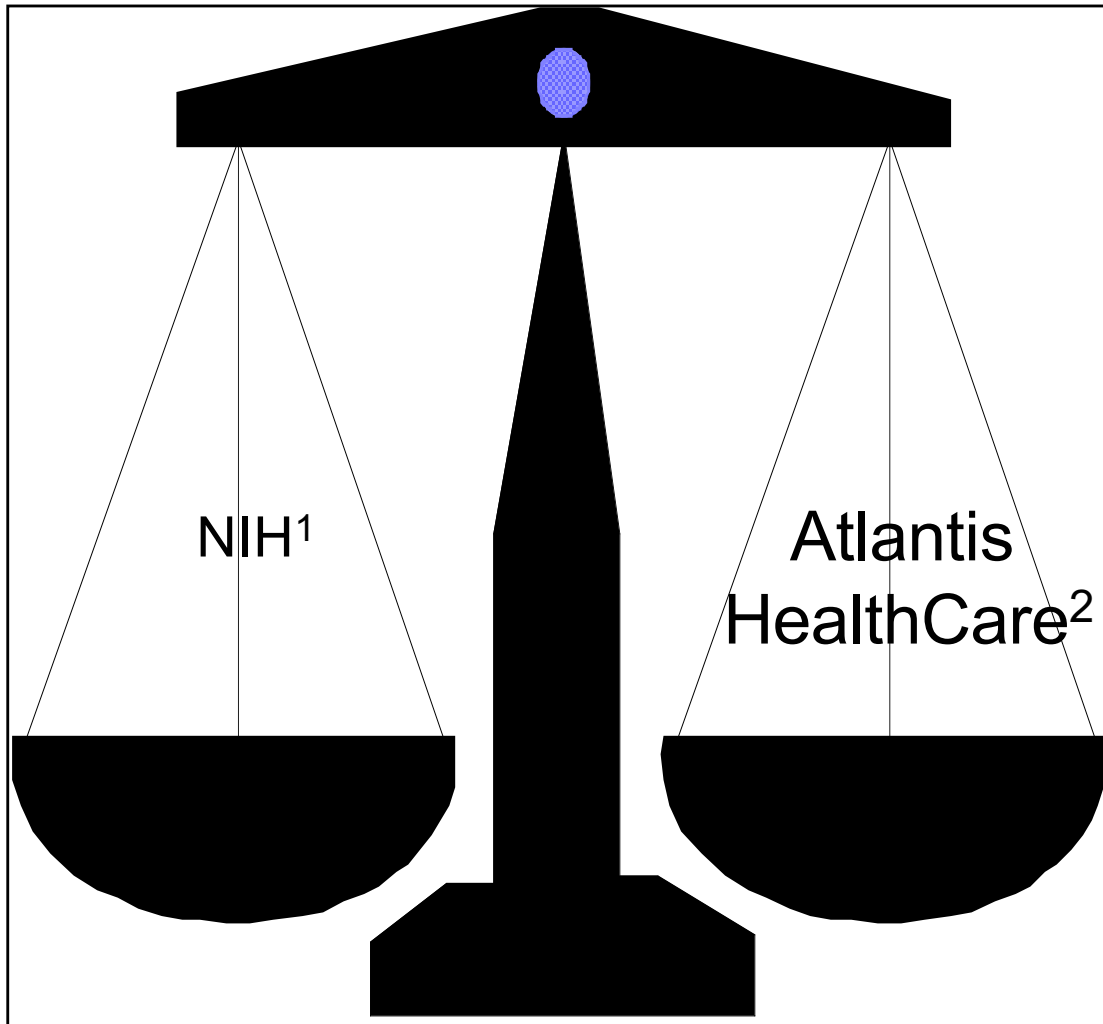
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Keith Norris, MD, PhD

Professor, David Geffen School of Medicine - UCLA

Building.Belonging.Becoming.

Potential Conflicts of Interest*#



* Activities within the last year

Grants: 1

Consulting: 2

None related to this talk

I believe in a society
grounded in Equity
& Justice

A billionaire has donated \$10 million dollars to the Columbia University for an endowed chair in Dissemination and Implementation and another \$10 million to a favorite Columbia CTSA community partner. What are your thoughts about this billionaire?

You chair the medical school admissions committee and several months later you get a call from the Dean's office. A request for a favor has been made - the billionaire has 2 kids and would love the son to get into Columbia's medical school. However, the son is struggling and MCAT is 25th percentile.

What do you do?

What are your thoughts about this billionaire now?

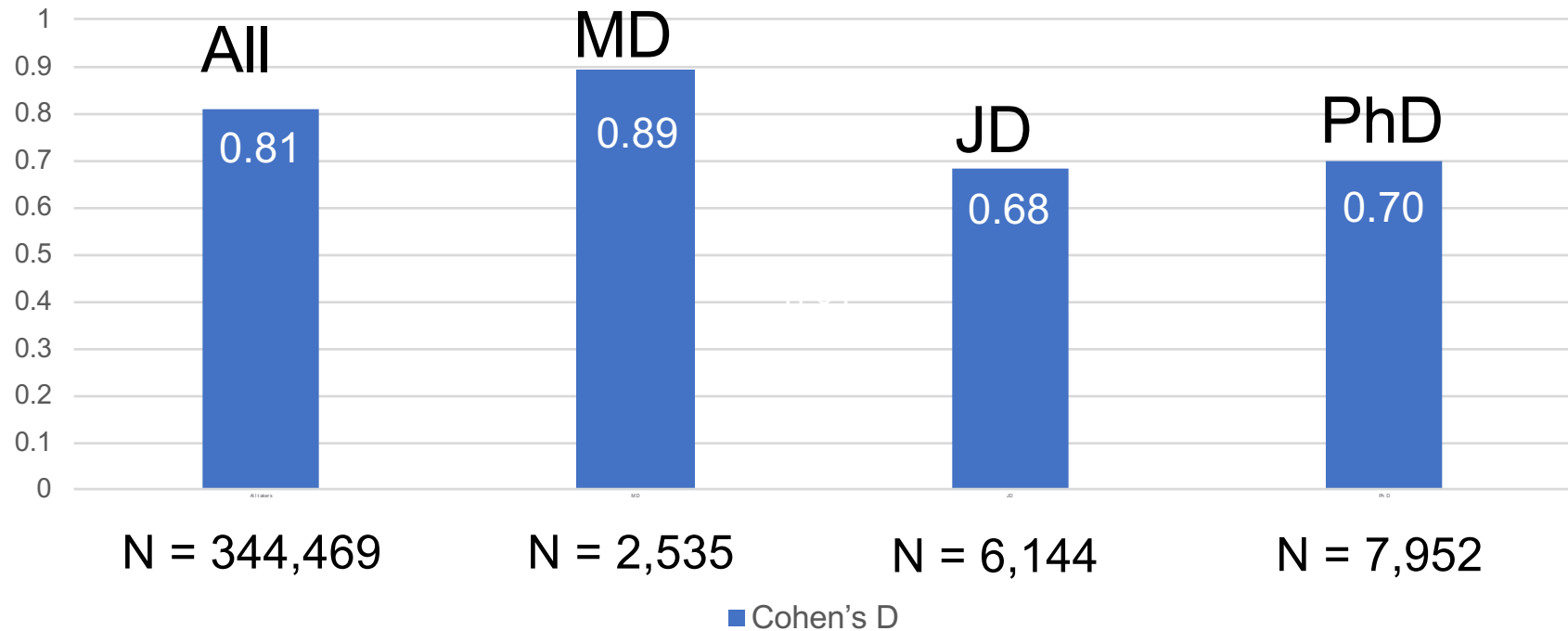


We don't see things as they are,
we see them as we are.

- Anais Nin (1903-1977)



Race Implicit Association Test (IAT) Doctors, Researchers and Lawyers



D of 0.5 = medium effect
D of 0.8 = large effect

Cohen's D: standardized effect size, comparing the mean to M=0 (no bias),
D of 0.2 = small effect, D of 0.5 = medium effect, and D of 0.8 = large effect
Data from *Project Implicit*®, operated at Harvard University (<https://implicit.harvard.edu/>)



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Sabin J, et al. Physicians' implicit and explicit attitudes about race by MD race, ethnicity, and gender. *J Health Care Poor Underserved*. 2009;20(3):896–913.

UCLA Health

Consider a Justice Equity, Diversity
& Inclusion (JEDI) lens to conduct
Dissemination & Implementation
(D&I) Research to more effectively
address racial/ethnic (R/E) health
disparities

Dissemination & Implementation

Research approach that aims to improve the adoption, appropriate adaptation, delivery, and sustainment of effective interventions by providers, clinics, organizations, communities, and systems of care.

Brown CH, Curran G, Palinkas LA, Aarons GA, Wells KB, **Jones L**, Collins LM, Duan N, Mittman BS, Wallace A, Tabak RG, Ducharme L, Chambers DA, Neta G, Wiley T, Landsverk J, Cheung K, Cruden G. An Overview of Research and Evaluation Designs for Dissemination and Implementation. *Annu Rev Public Health*. 2017 Mar 20;38:1-22.

Why a JEDI lens is needed to conduct D&I Research to understand and reduce R/E health disparities

- Define race during the experimental design, and specify the reason for its use in the study - as we do with sex.
- Name racism
 - Identify the mechanism (interpersonal, institutional, or internalized) by which it may be operating, and other intersecting forms of oppression (e.g. sex, sexual orientation, age, nationality, religion, or income) that may compound its effects.
 - Naming racism explicitly helps authors avoid incorrectly assigning **race** as a risk factor for racially disparate outcomes, **when racism** is the risk factor for racially disparate outcomes.



Why a JEDI lens is needed to conduct HSR to understand and reduce health disparities

- If race and genetics are being expressed jointly, painstakingly delineate the intended implication.
 - *Never? offer genetic interpretations of race* because such suppositions are not grounded in science
- *Solicit patient input* to ensure the outcomes of research reflect the priorities of the populations studied.
 - **D&I often does this**
- *Identify the stakes.* Research on R/E health inequities has broad implications for public policy and clinical practice.
 - **D&I often does this**
- *Cite the experts*

The use of racial designations in health research must occur with an in depth understanding of the nuances of racism and ancestry in the context of biomedical constructs, otherwise we may reinforce the very racist concepts we claim to reject in medicine.



For D&I Science to Address R/E Health Disparities

1. Do we really understand what race meant to the investigators when the E-B studies were conducted?
 - **Was there an intersectional lens (sex, linguistic background, sexual orientation, SES, other?)**
2. Do we have the right partners ?
 - **Who is not at the table?**
3. Have we thought through the impact of structural racism in the translation to providers, health systems, etc. and how it manifests in heterogeneous populations and diverse communities?

**Every system is perfectly
designed to achieve the
results it gets**
- Dr. Don Berwick





WHO - Health Equity

- Improve conditions of daily life
- Tackle the inequitable distribution of power, money, and resources
- *Develop a workforce trained in the social determinants of health, & raise public awareness about the social determinants of health*



Structural Inequities

- The inequitable distribution of the ***social determinants of health globally*** are due to Structural Racism, Sexism, Materialism, Sectarianism, etc.
 - Which predominate depends on the country.
 - In the US racism was used to justify and support slavery (path to materialism) and is still used to support post slavery oppression.
- A key characteristic of structural racism is it persists in governmental and institutional policies in the absence of individuals who are explicitly racially prejudiced.

Every system is perfectly designed to achieve the results it gets
- Dr. Don Berwick

Housing law practices post civil rights - 2019

- 86 tests of house buying, evidence suggested that brokers subjected minority testers to disparate treatment 40% of the time (ref: white testers).
- Disparate treatment (Judged by 2 independent consultants - law professor and co-founder of the Fair Housing Justice Center)
 - 19 percent of cases for Asian testers
 - 39 percent of cases for Hispanic testers
 - 49 percent of cases for Black testers

Structural Racism

- Totality of ways in which societies foster racial discrimination through **mutually reinforcing systems** of housing, education, employment, earnings, benefits, credit, media, health care, criminal justice, etc.
 - Unequal distribution in wealth, employment, residence, toxic environmental exposures, nutrition, education, and psychosocial stress, **quality of care, healthcare access**
 - No one on this zoom owns a slave or created structural racism. Everyone on this zoom can support structural racism (by doing nothing) or help to dismantle it.

These patterns and practices reinforce discriminatory beliefs, values, and distribution of resources and strongly influence self reliance & personal responsibility



Towards Achieving Equity and Justice



1. **EQUALITY** imagines an equal world.
"I care about all students equally"

CENTER for URBAN EDUCATION

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2. But the world **ISN'T EQUAL.**

Adapted from the USC Center for Urban Education

3. And it has **BIAS AND SYSTEMIC RACISM.**

4. Within this same picture, a **DIVERSITY** lens focuses only on bringing more students into an unequal pathway.

5. In contrast, **EQUITY** redirects resources to the pathways with greatest need to fix barriers and intentionally provide support.

& **Justice** closes the hole and starts adding some boxes

The Biology of Racism



Society ◀▶ Structural Racism
Inequity in resources and opportunities
Personal Experiences with discrimination and racism
Health inequities and subsequent impact



Biological “Weathering”

Weathering

“Blacks experience early health deterioration as a consequence of the **cumulative impact of repeated experience with social and/or economic adversity and political marginalization**. On a physiological level, persistent, high-effort coping with acute and chronic stressors has a profound impact on health”

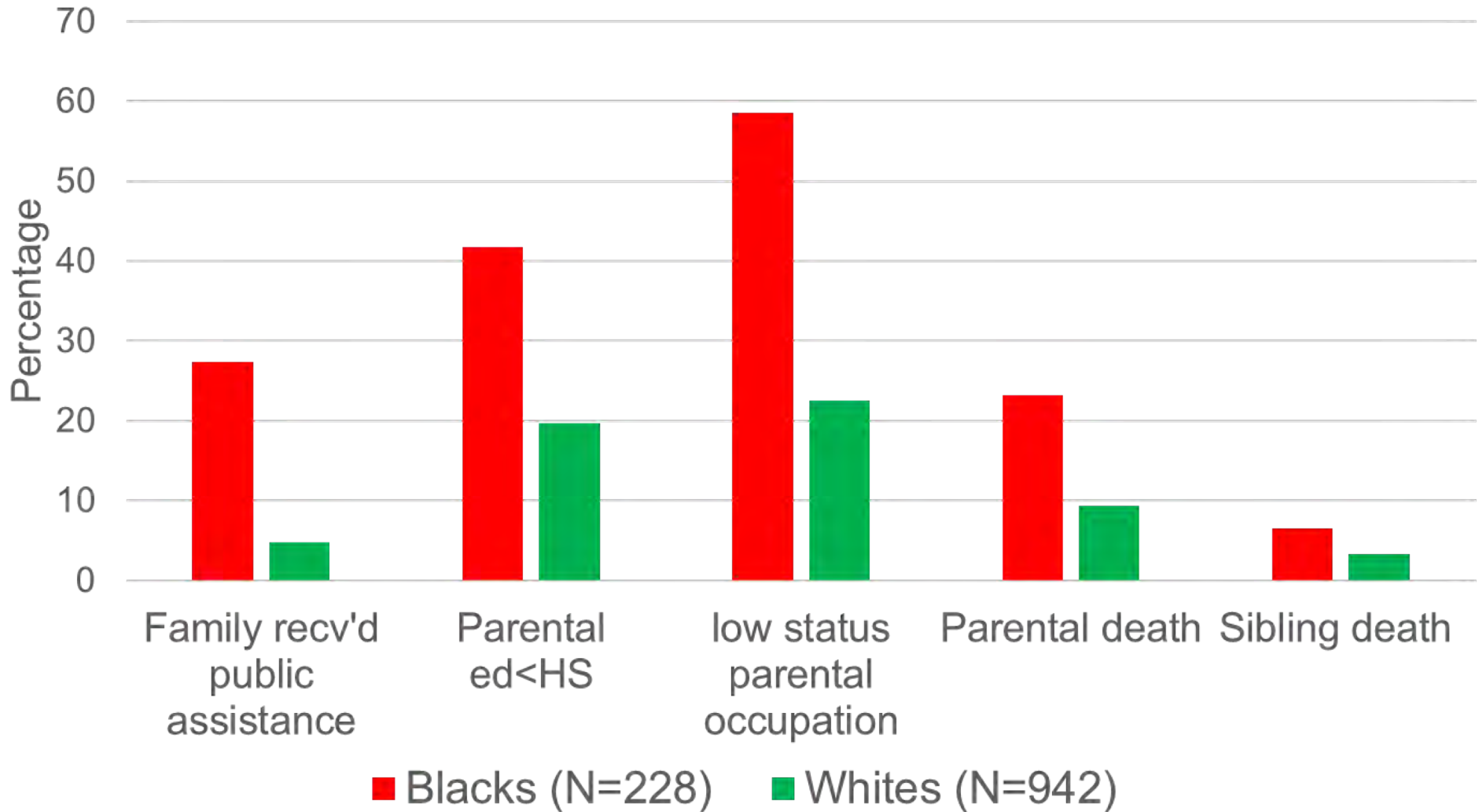
Arline Geronimus



The Aging of the President

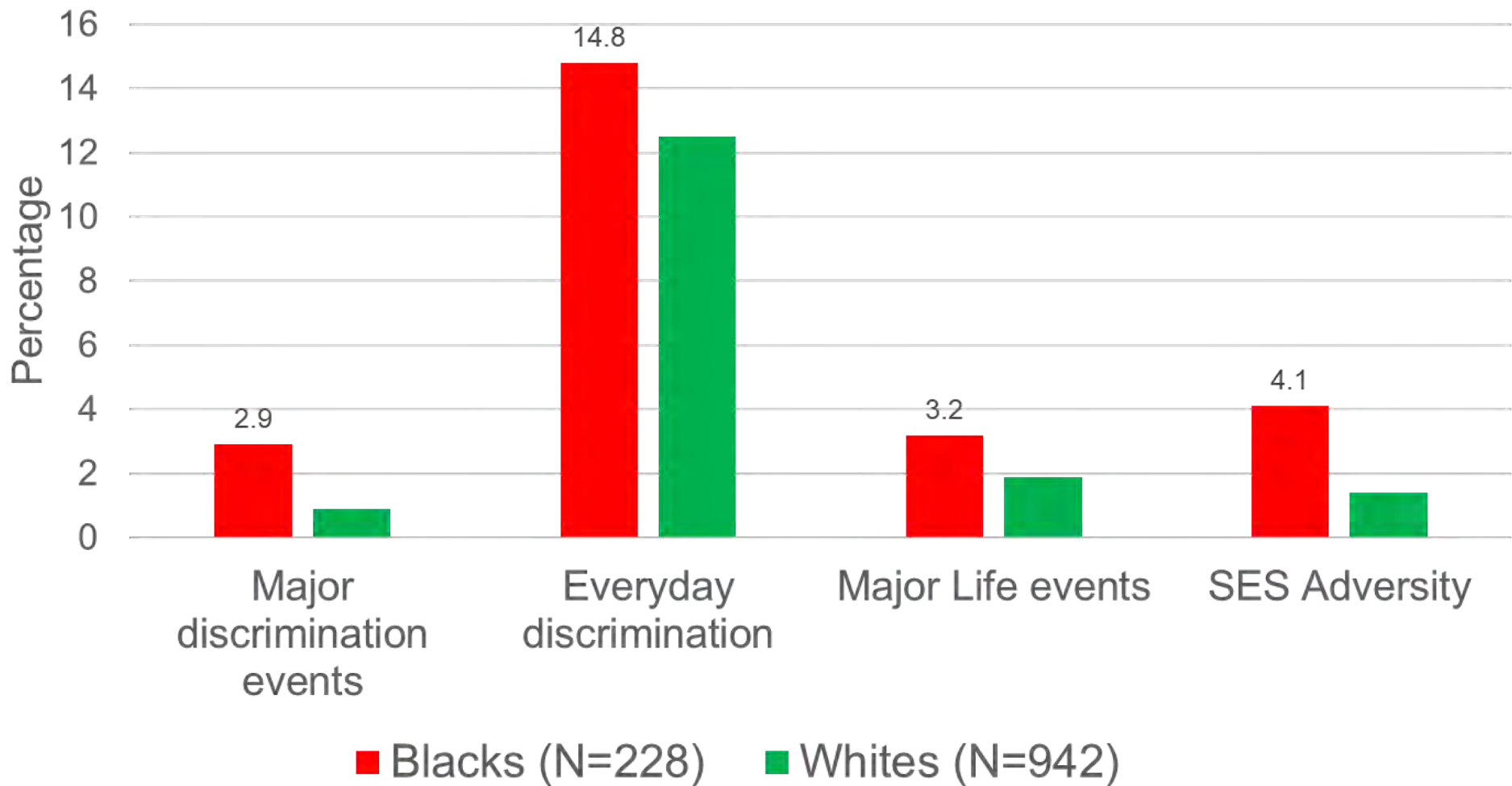
Structural Racism in Early Life

Black vs White Differences in Childhood Adversity



Structural Racism in Early Life

Black vs White Differences in Adult Adversity



Differential Weathering in the MIDUS Cohort (ages 35-85)

	Blacks (n=228; avg age=53)	Whites (n=942; avg age=58)	Race Difference
Fasting glucose (mg/dL)	111.1 ± 42.3	99.9 ± 23.4	<.001
HOMA-IR	1.5 ± 0.64	1.3 ± 0.55	<.001
CRP (ug/dL)	1.34 ± 0.80	1.0 ± 0.68	<.001
Il-6 (pg/mL)	1.5 ± 0.54	1.2 ± 0.51	<.001
E-selectin (ng/mL)	52.1 ± 28.9	41.3 ± 20.6	<.001
Waist	101.4 ± 18.1	96.5 ± 15.7	<.001
BMI	32.8 ± 8.6	29.0 ± 5.9	<.001

Allostatic Load

What is Allostatic Load and how it is important to Structural Racism?

Allostatic Load = a cumulative index of dysregulation across multiple of the body's regulatory systems

- Reflecting “wear and tear on the body” / biological aging
 - i.e. Weathering
- Cumulative effects on multiple biological regulatory systems of living in and adapting to ones environment.

Consequences = shorter life spans, earlier onset of chronic disease

Predictors = lives characterized by greater stress in the face of fewer resources



Early Age Differences and Allosteric Load

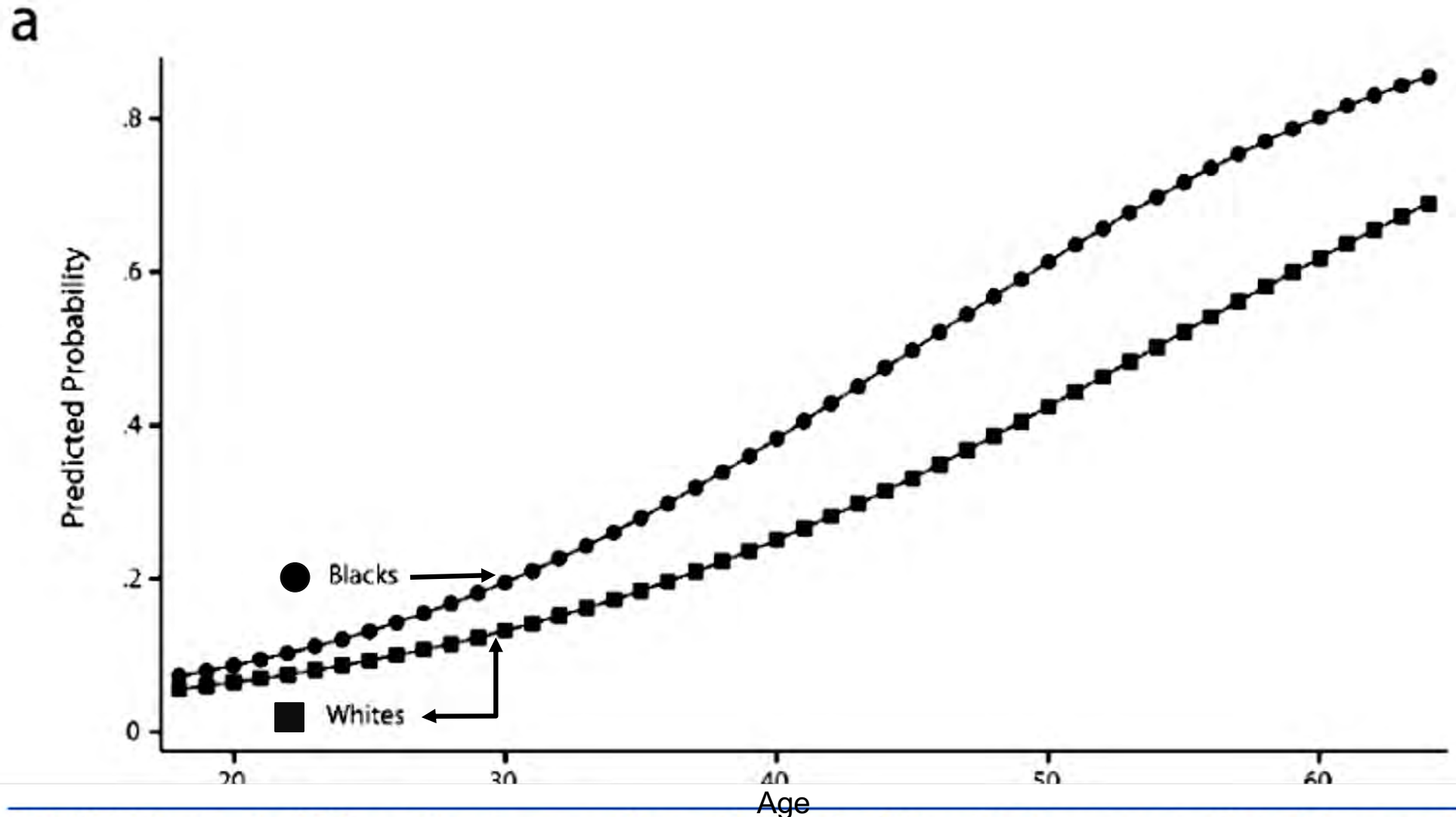
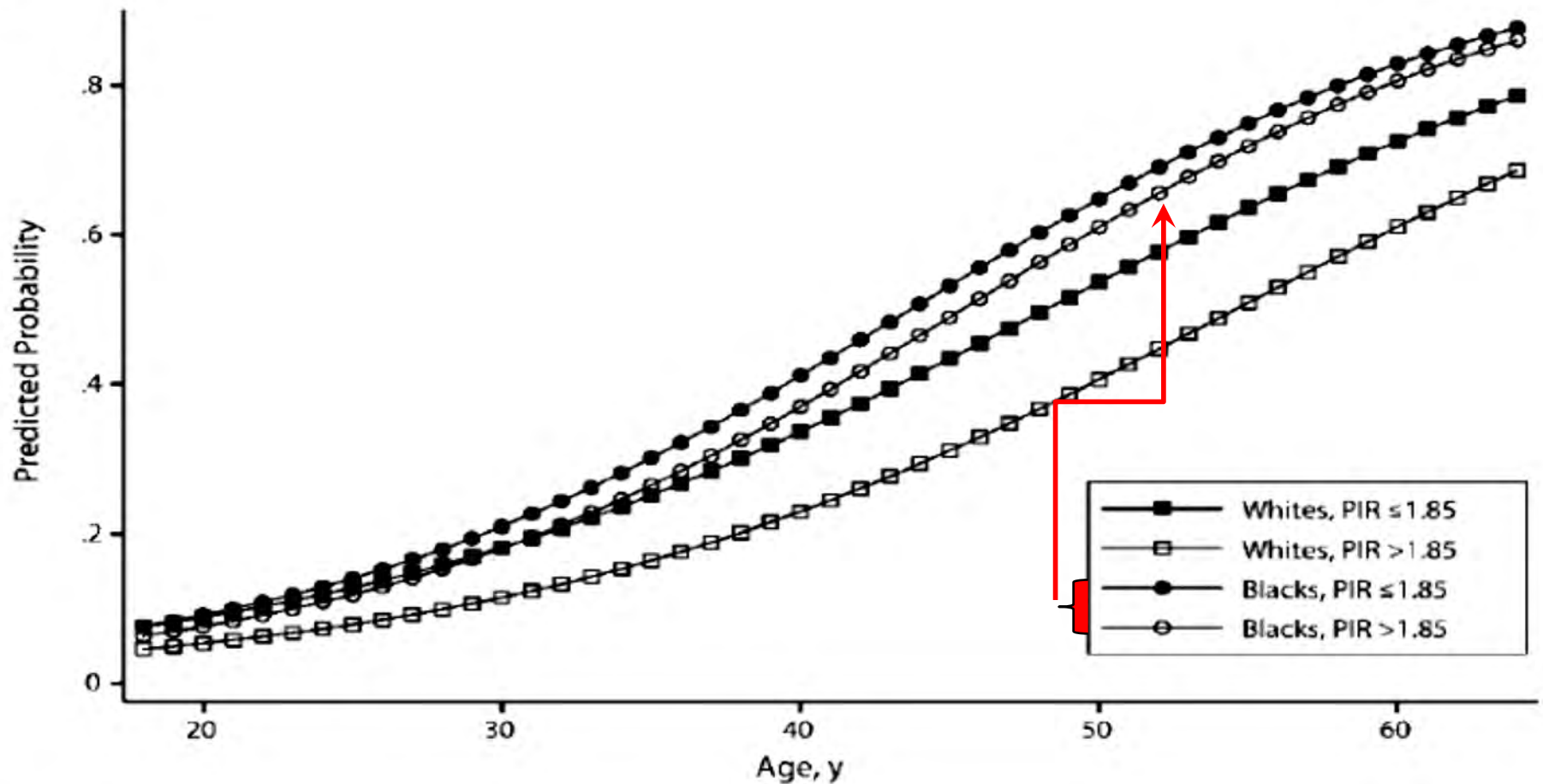


FIGURE 1—Probability of having an allostatic load of 4 or higher, as predicted by race (a)



Poverty and Allostatic Load

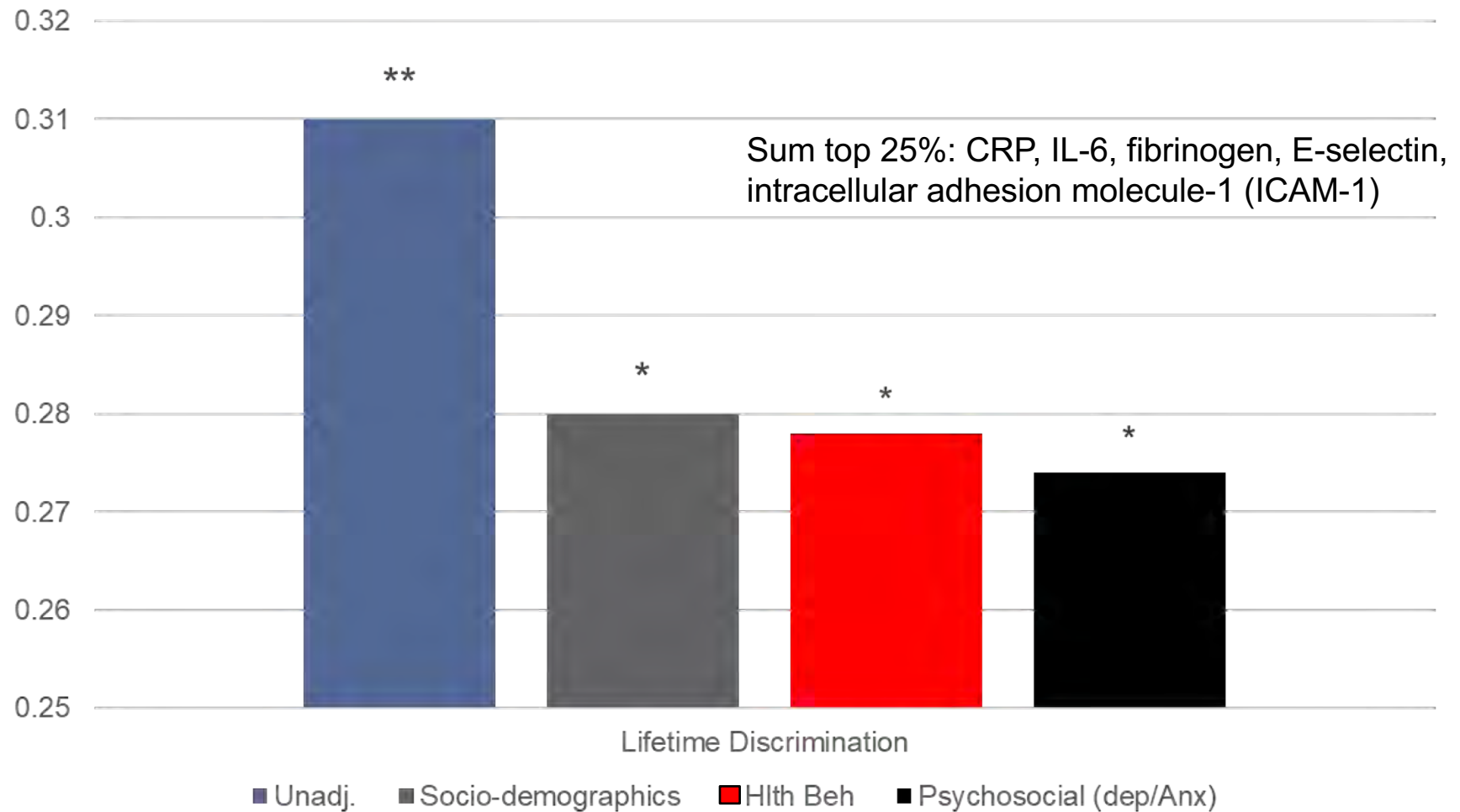


Note. PIR = poverty income ratio.

FIGURE 2—Probability of having an allostatic load of 4 or higher, as predicted by poverty income ratio (a) and poverty income ratio and race (b).



Lifetime Discrimination & Inflammation Burden*in Adults: Mid-Life in the US (MIDUS)



Adverse Childhood Experience Questionnaire for Adults

1. Did you feel that you didn't have enough to eat, had to wear dirty clothes, or had no one to protect or take care of you?
2. Did you lose a parent through divorce, abandonment, death, or other reason?
3. Did you live with anyone who was depressed, mentally ill, or attempted suicide?
4. Did you live with anyone who had a problem with drinking or using drugs, including prescription drugs?
5. Did your parents or adults in your home ever hit, punch, beat, or threaten to harm each other?
6. Did you live with anyone who went to jail or prison?
7. Did a parent or adult in your home ever swear at you, insult you, or put you down?
8. Did a parent or adult in your home ever hit, beat, kick, or physically hurt you in any way?
9. Did you feel that no one in your family loved you or thought you were special?
10. Did you experience unwanted sexual contact (such as fondling or oral/anal/vaginal intercourse/penetration)?

Adverse Childhood Experience Questionnaire for Adults

- 61% of adults had at least one ACE & 16% ≥ 4
 - Females and several racial/ethnic minority groups were at greater risk for experiencing ≥ 4 ACEs.
- Persons who had experienced ≥ 4 ACE compared to those who experienced none had:
 - 2-5 fold increase in obesity, cancer, diabetes, heart disease, drug abuse, depression, and suicide attempt independent of race/ethnicity, sex, and age

**It's not what's wrong with you or them
it's what happened to you or to them**

Summary

Structural Racism can affect biology as well as health beliefs, behaviors and practices

This is critical for understanding the potential role of “race” as a variable in multi-level modeling, individual SES vs community SES and more.

Understanding how D&I may address social determinants to advance health equity in the United States

Addressing structural inequities and social injustice

- Address income and wealth inequality (policy)
- Support targeted provisions (policy)
- Support models of care that consider social risk (policy/practice)
- Enhance multilevel research & interventions (research/ practice)
- Implement focused training for health care providers (practice)

Recommendations to address institutional environments

- Improve access to high-quality care (policy)
- Enhance standards relevant to patients' social circumstances (practice/research)
- Enhance navigation and service integration (practice/research)



Understanding how D&I may address social determinants to advance health equity in the United States

Recommendations to address living environments

- Enhance surveillance data and data integration (research/policy)
- Increase cross-sectoral collaboration (practice/research)

Cross-cutting recommendations (research/policy/practice)

- At the leadership level, commit to eliminating disparities
- Proactively partner with marginalized/under-resourced communities/patients
- Consistently monitor progress and provide feedback



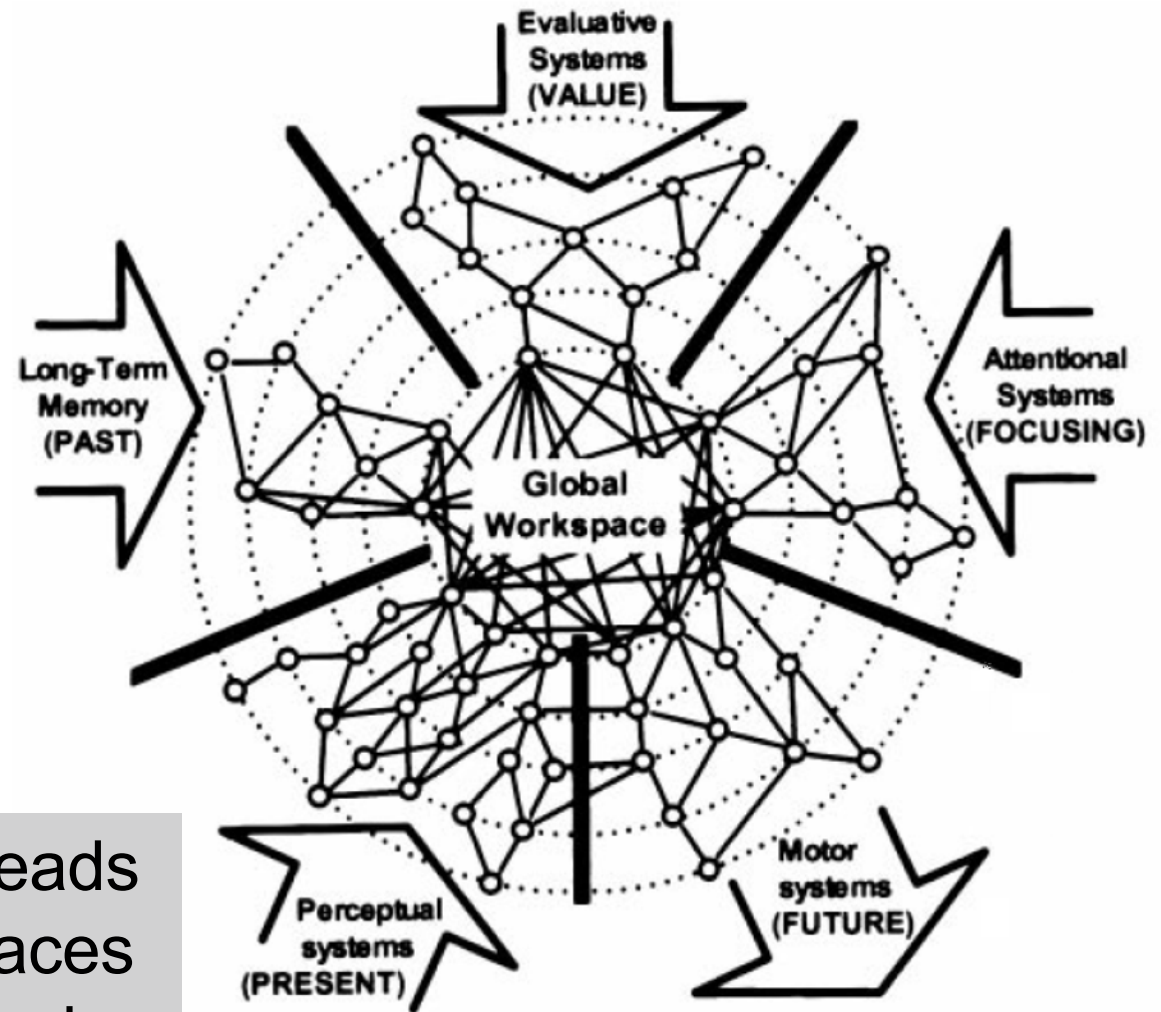
In conducting D&I research and multilevel interventions, remember many low SES and minority research participants have increased stress due to structural racism which may impact their ability to optimally participate and their outcomes

(the same for your patients and even your colleagues on your research team from marginalized groups)

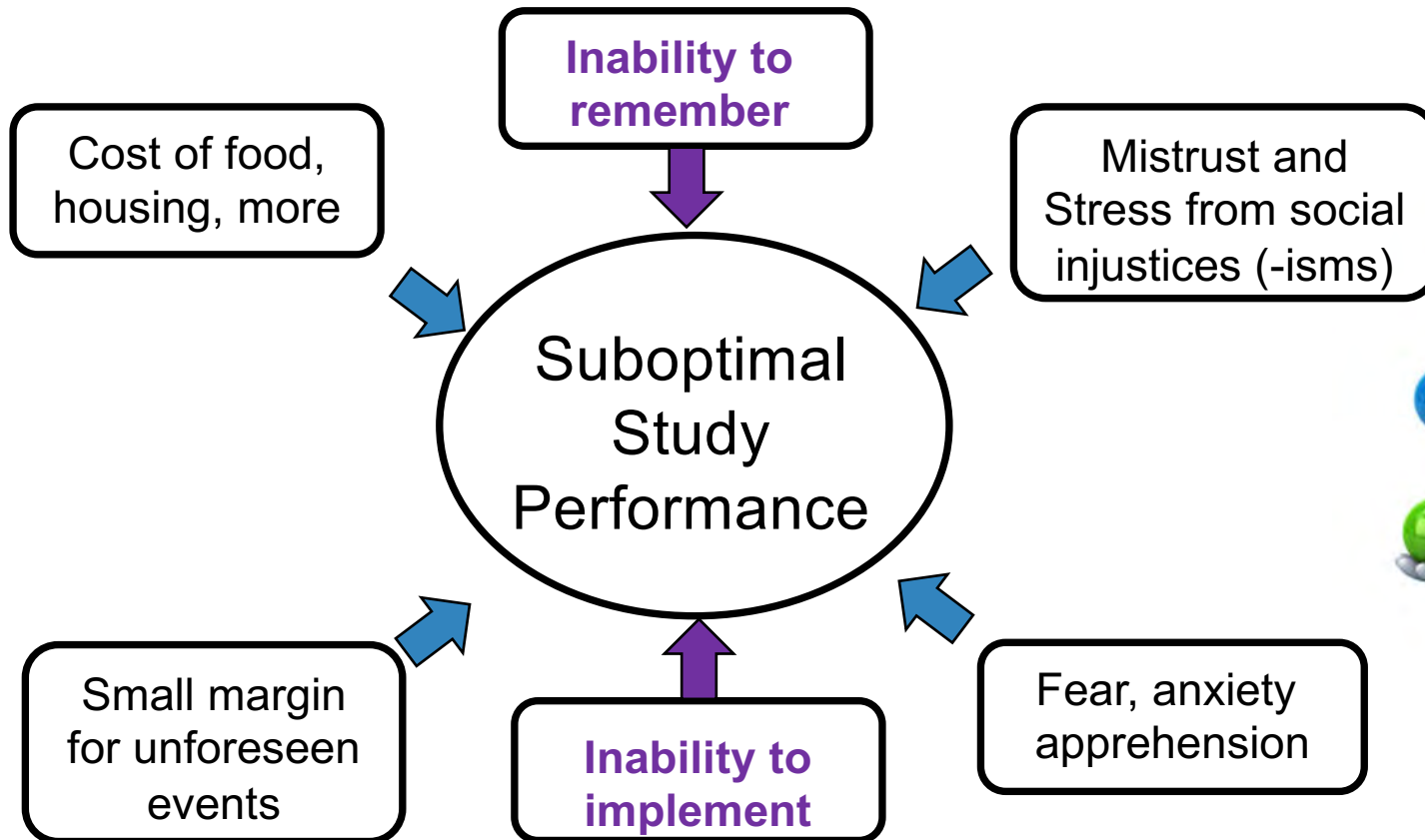
Psychosocial Stress (Poverty/Discrimination/More) & Cognitive Processing



Stress (to survive/cope) leads to realignment of workspaces that limits cognitive processing

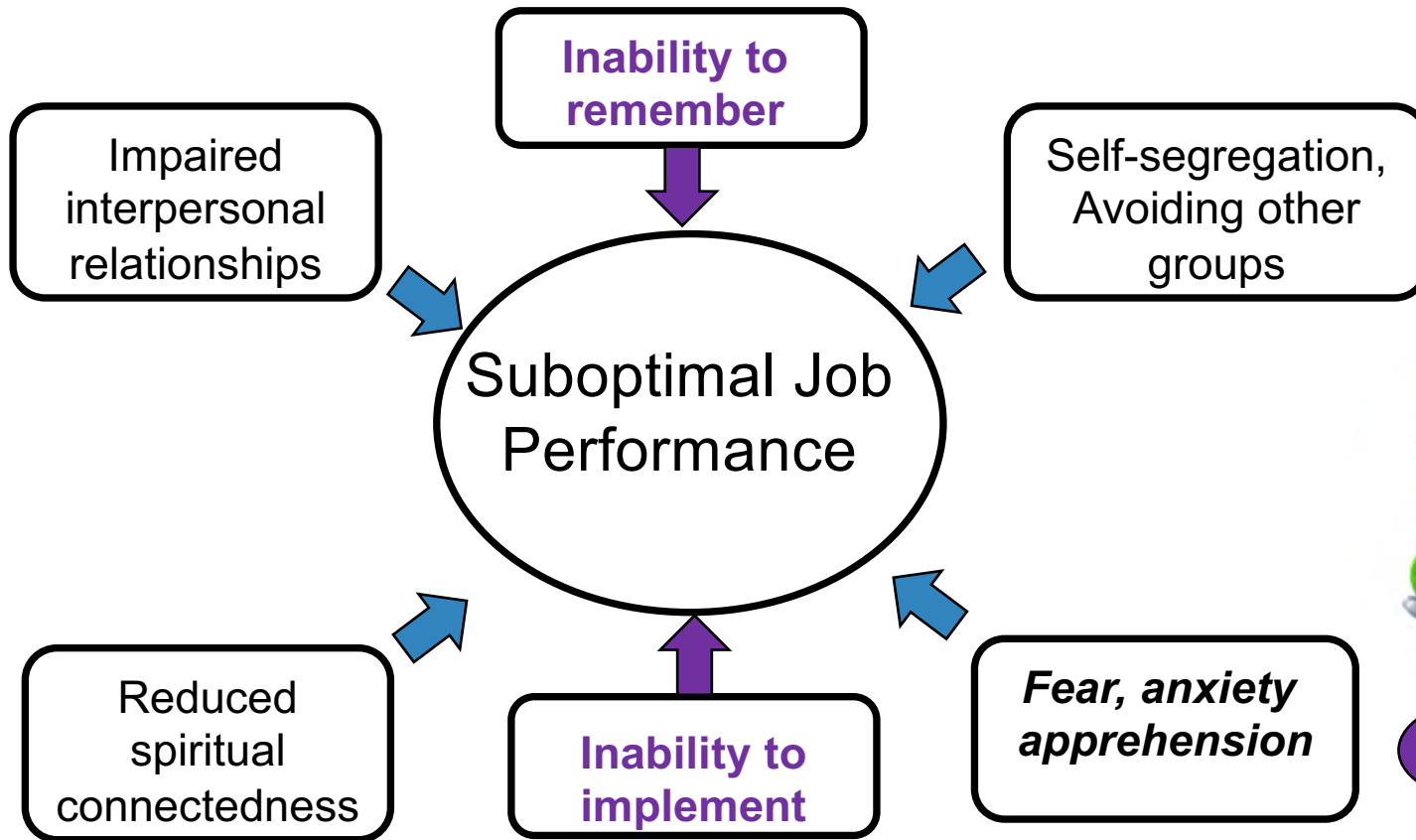


What might happen if/when an “under-resourced/marginalized” research participant makes their visit & then goes home?



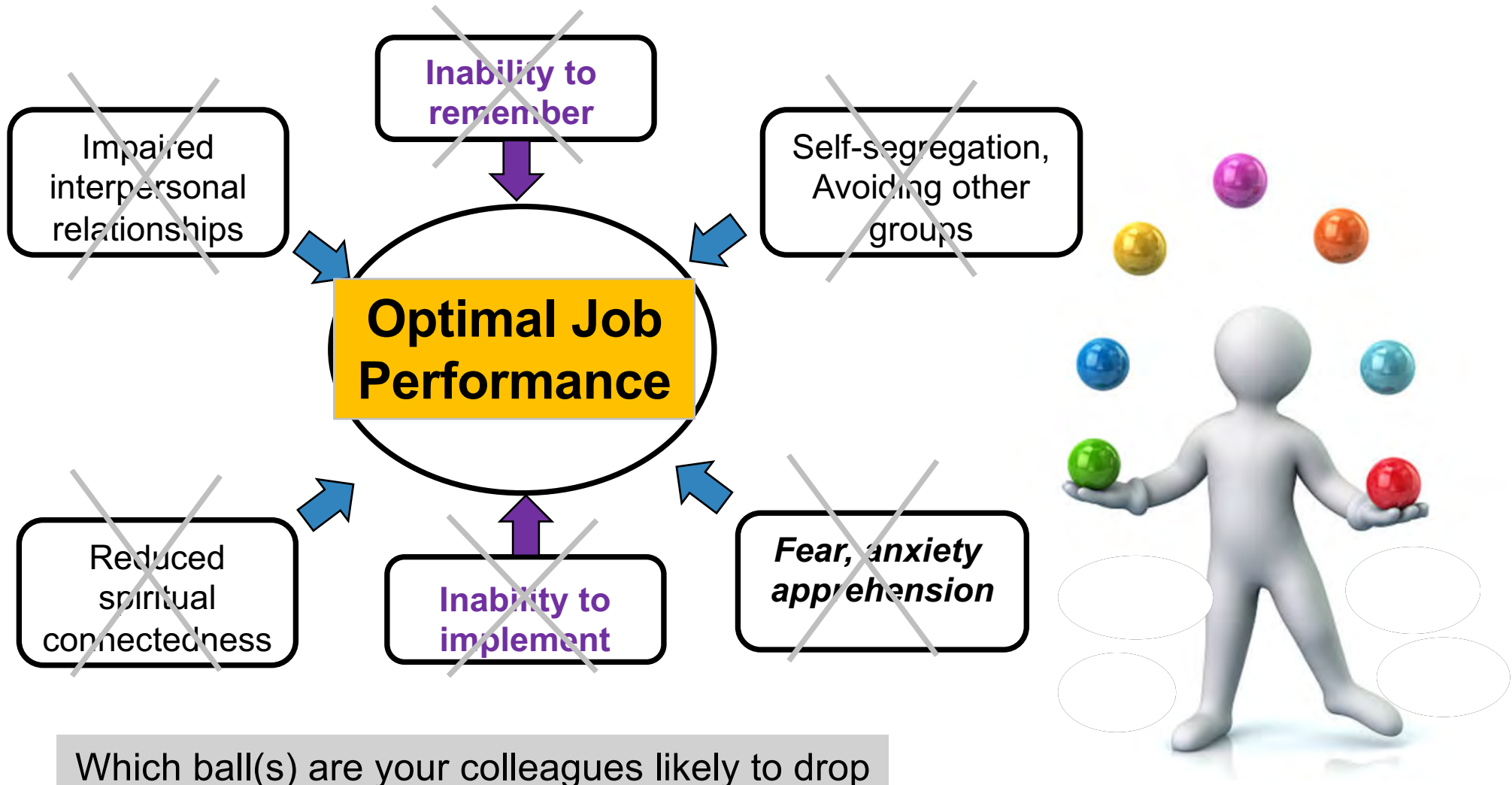
Which ball(s) are your under-resourced/marginalized and disproportionately minority study participants likely to drop
-Rent, food, electricity, new tire, childcare, elder care or
-Study recommendations, f/u visit, meds/other?

What might happen if a colleague has the usual work/life stress & the additive stress of work/life discrimination/isolation/navigation?



Which ball(s) are your colleagues likely to drop if your division is not a safe space?

What might happen if a colleagues has the usual work/life stress & the additive stress of work/life discrimination/isolation/navigation?



Which ball(s) are your colleagues likely to drop if your CTSA is not a safe space?

The Way Forward: Society

- Don't be afraid of bias
- Everyone can work to minimize bias
- Don't be afraid of the name Structural Racism. No one on this zoom owned an enslaved Black person or created structural racism
 - Structural racism - **mutually reinforcing systems** of housing, education, employment, earnings/benefits, credit, media, health care, criminal justice, etc.
- However, everyone can either continue to support structural racism (actively or by doing nothing) or **to help to dismantle it.**



The Way Forward: CTSA Leadership

- Use your platform to highlight the importance to address EDI issues
- Examine how racism/sexism/LGTBQ+ bias can influence hiring criteria/retention and how that may affect your group.
- Review CTSA **policies** to ensure BIPOC, Women, LGTBQ+ and others are not disadvantaged.
 - Make sure you are being inclusive and equity-minded in your communications to your group.
- Adapt **processes** to measure the impact of diverse and inclusive behaviors that are often not explicitly valued but critical to organizational success

“How can I help my institution focus on diversity and inclusion when we have so many other issues that demand our attention every day?”

- Diversity and Inclusion should be more than objects upon which you fix your focus. They should be embedded in the lens through which you focus on your key priorities.
- Don't try to balance your professional development, morale, or compensation with your diversity and inclusion priorities. Instead try to work on all institutional priorities in the most diverse and inclusive way.

Diversity and inclusion should be more than goals that leaders can set; they should be the values that guide how leaders set the goals.

The truth is that there is nothing noble in being superior to somebody else. The only real nobility is in being superior to your former self.



- Whitney Young, Jr.