

Identifying and Addressing Implicit Bias in Our Work

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We are all born with great potential.
Shouldn't we all have the chance to achieve it?

Disclosure

I have no conflicts of interest to disclose.



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Objectives

- Identify factors contributing to implicit bias
- Discuss examples of how implicit bias may influence our work and treatment relationships
- Define strategies to address implicit bias



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has the opportunity to "attain his or her full health achieving this potential because of social position

From race-based to race-conscious medicine: how anti-racist uprisings call us to act

Jessica P Cerdeña*, Marie V Plaisime*, Jennifer Tsai*

The brutalisation of Jacob Blake and murders of George Floyd, Breonna Taylor, Ahmaud Arbery, Tony McDade, and countless others—coupled with horrifying statistics about the disproportionate burden of COVID-19 on Black and Brown communities—have forced the USA and the world to reckon with how structural racism conditions survival. Although clinicians often imagine themselves as beneficent caregivers, it is increasingly clear that medicine is not a stand-alone institution immune to racial inequities, but rather is an institution of structural racism. A pervasive example of this participation is race-based medicine, the system by which research characterising race as an essential, biological variable, translates into clinical practice, leading to inequitable care. In this Viewpoint, we discuss examples of race-based medicine, how it is learned, and how it perpetuates health-care disparities. We introduce race-conscious medicine as an alternative approach that emphasises racism, rather than race, as a key determinant

that such approaches are harmful and unnecessary, contributing to health-care disparities among the exact populations they are intended to help.

Emerging scholarship underscores the harms of these race-adjusted practices,^{29,30} even as some continue to defend them, touting their ability to capture yet-understood differences in clinical measures between racial groups.^{31,32} However, propagation of race-based medicine promotes racial stereotyping, diminishes the need for research identifying more precise biomarkers underpinning disparities, and condones false notions about the biological inferiority of Black and Brown people. Hence, even if significant findings or clinical anecdotes support the use of racially tailored practices, they should be rigorously critiqued and mediating variables, such as structural conditions, should be analysed accordingly.

Many medical students enter their training with racial biases that are unconsciously reinforced. Race is often learned as an independent risk factor for disease, rather

Viewpoint



Lancet 2020; 396: 1125-28

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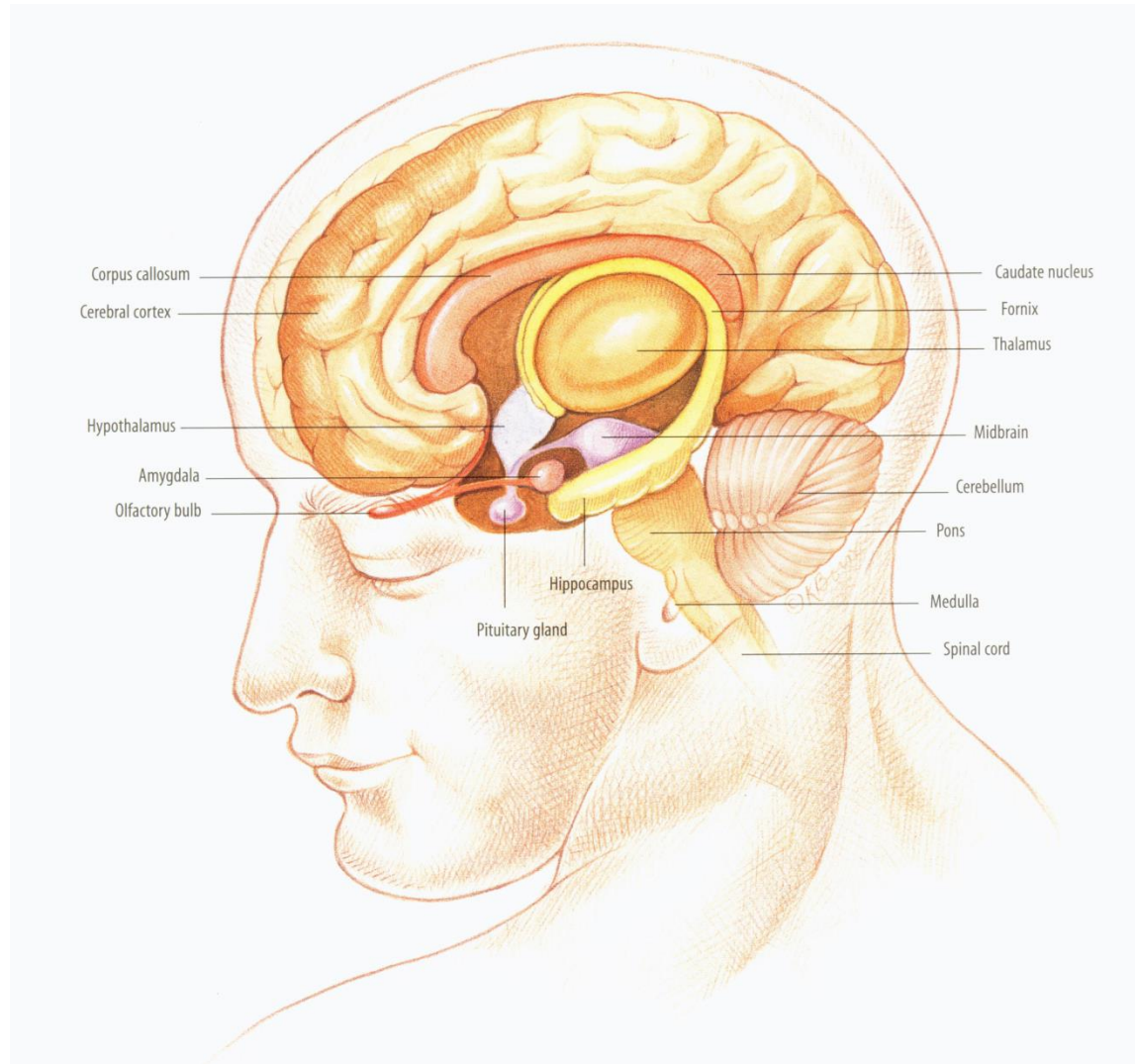
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int individuals and corr the strength of the whole society through the wa Jones, MD, PhD, MPH

- Implicit bias results from the brain's tendency to process information based on generalizations and unconscious associations and feelings, even when these are contrary to one's conscious or declared beliefs!

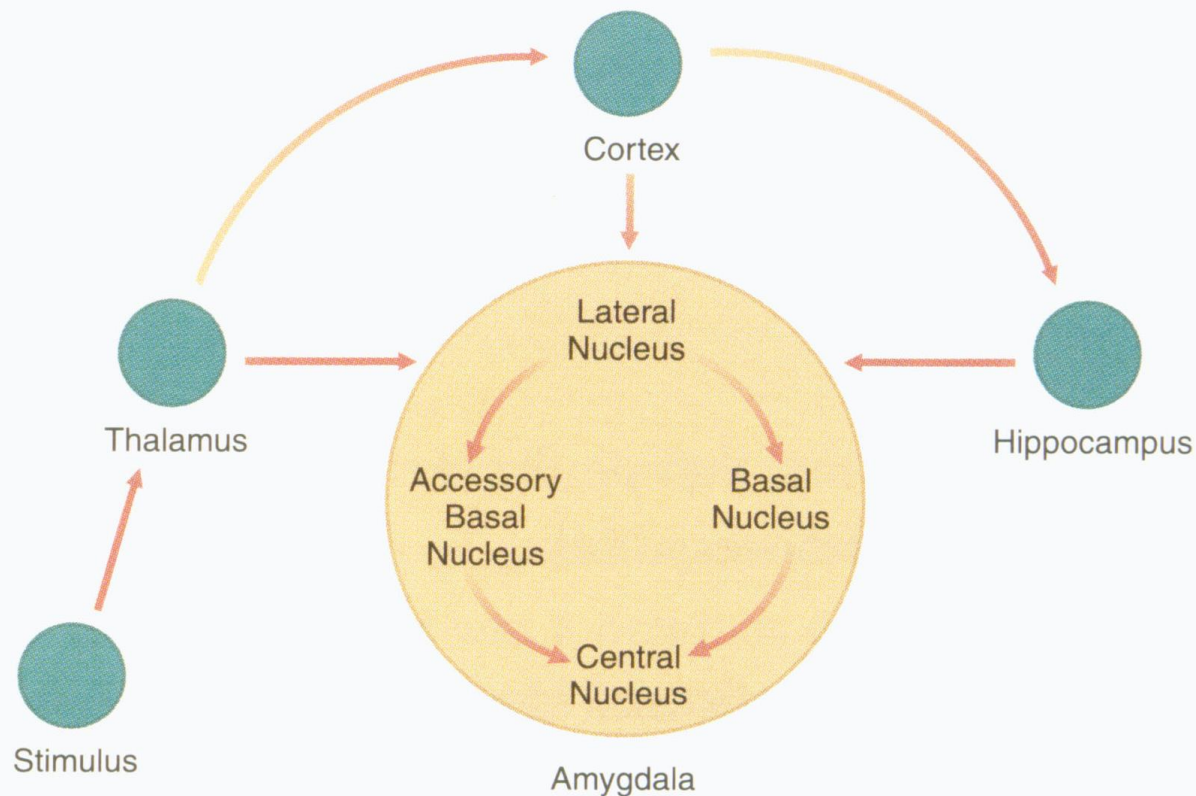


Cross-Section of the Brain



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Brain's Response to Stress



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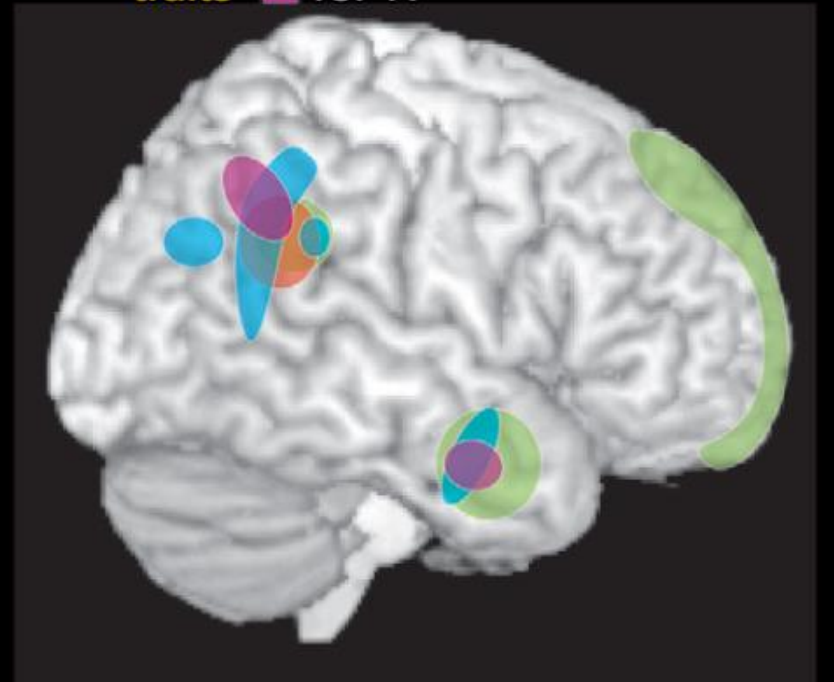
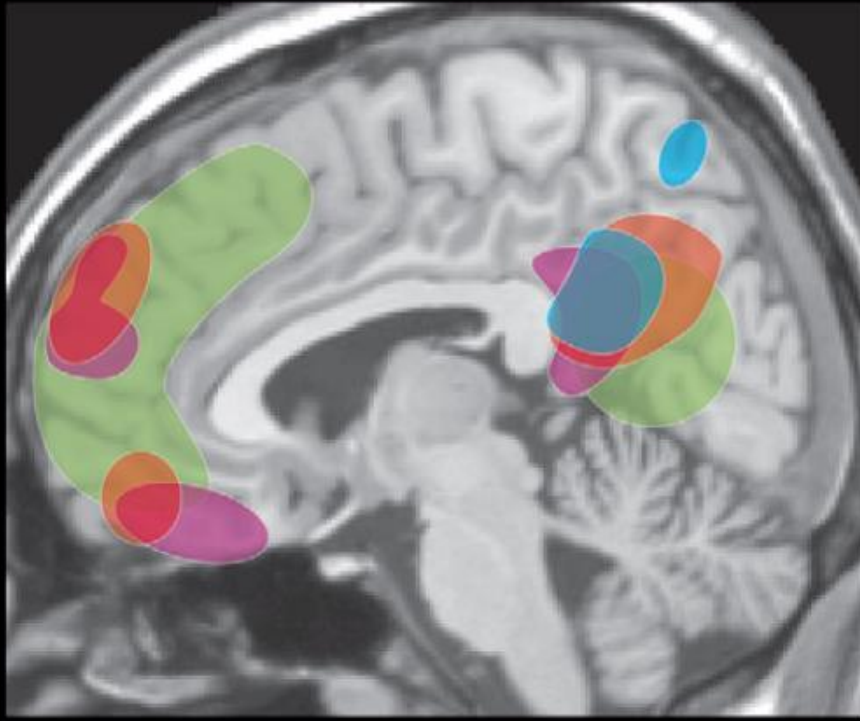
Temporal Lobe



Neural Correlates - Activation of Stereotype Knowledge





trait judgments ■ ref 10

social categories > object categories ■ ref 8
place categories ■ ref 9
traits ■ ref 11

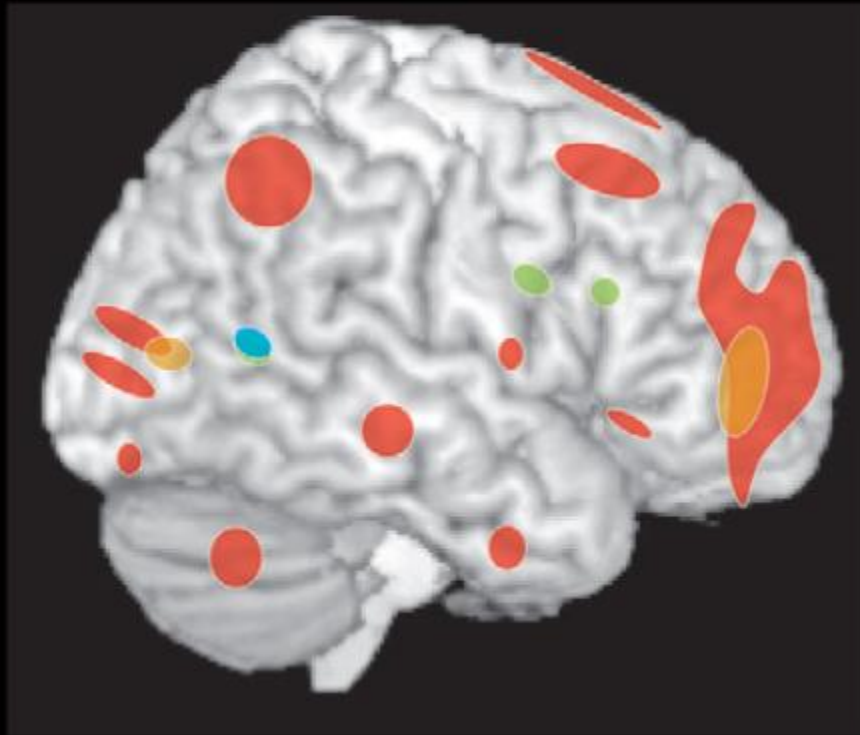


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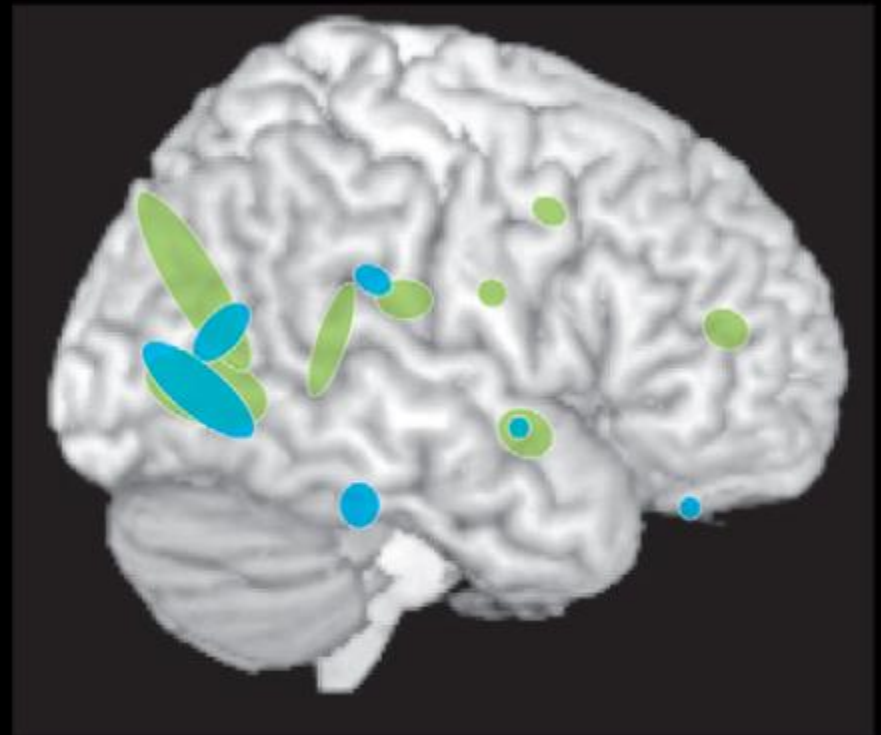
Neural Correlates - Voluntary Regulation of Negative Emotions

attend (maintain affect) stigma > non-stigma  non-stigma > stigma 
regulate (decrease) stigma > non-stigma  non-stigma > stigma 

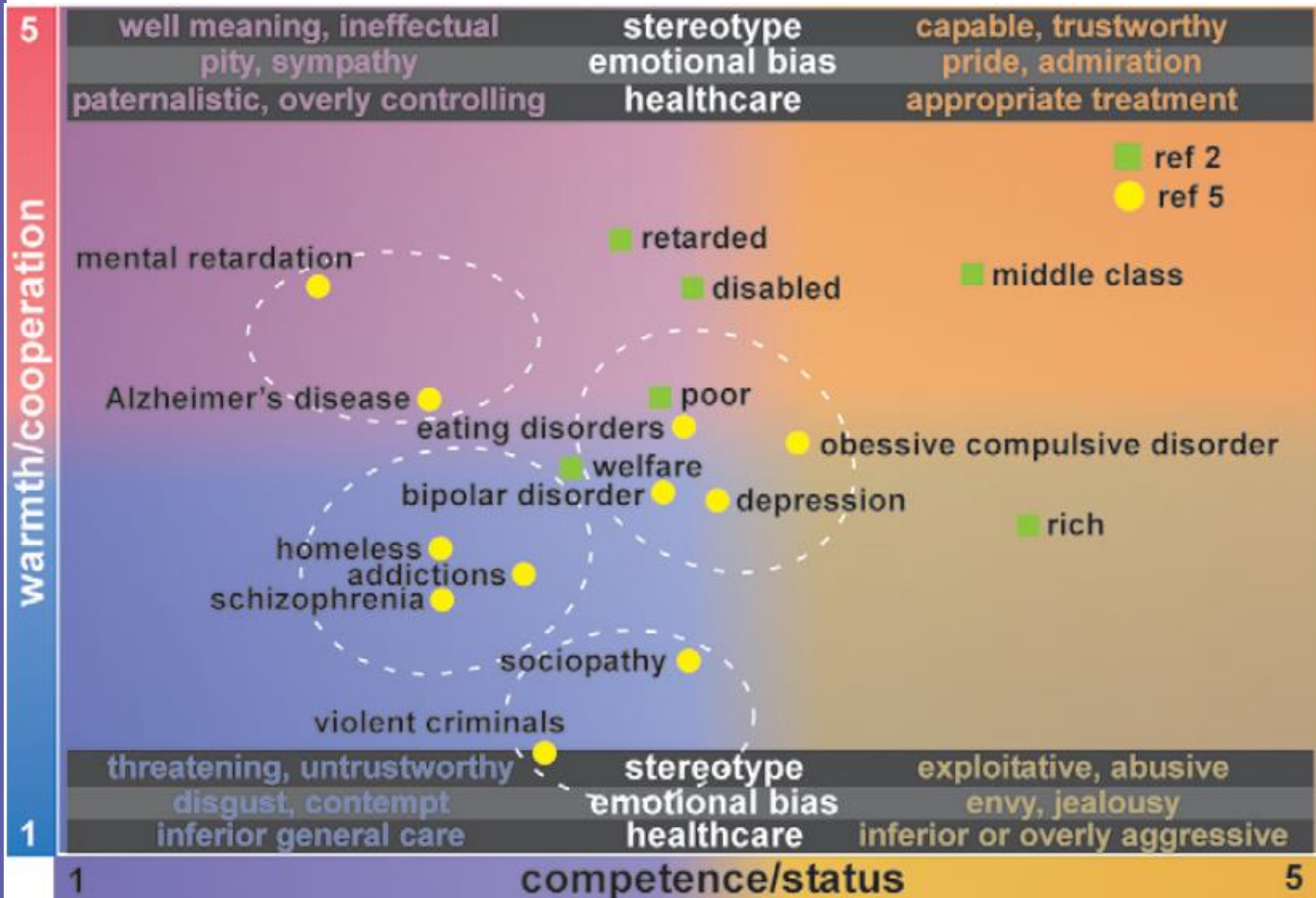
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Cultural Stereotypes



Bound Encoding of the Aggregate Language Environment (BEAGLE)

College Student Lifetime Exposure 10,000,000 Words

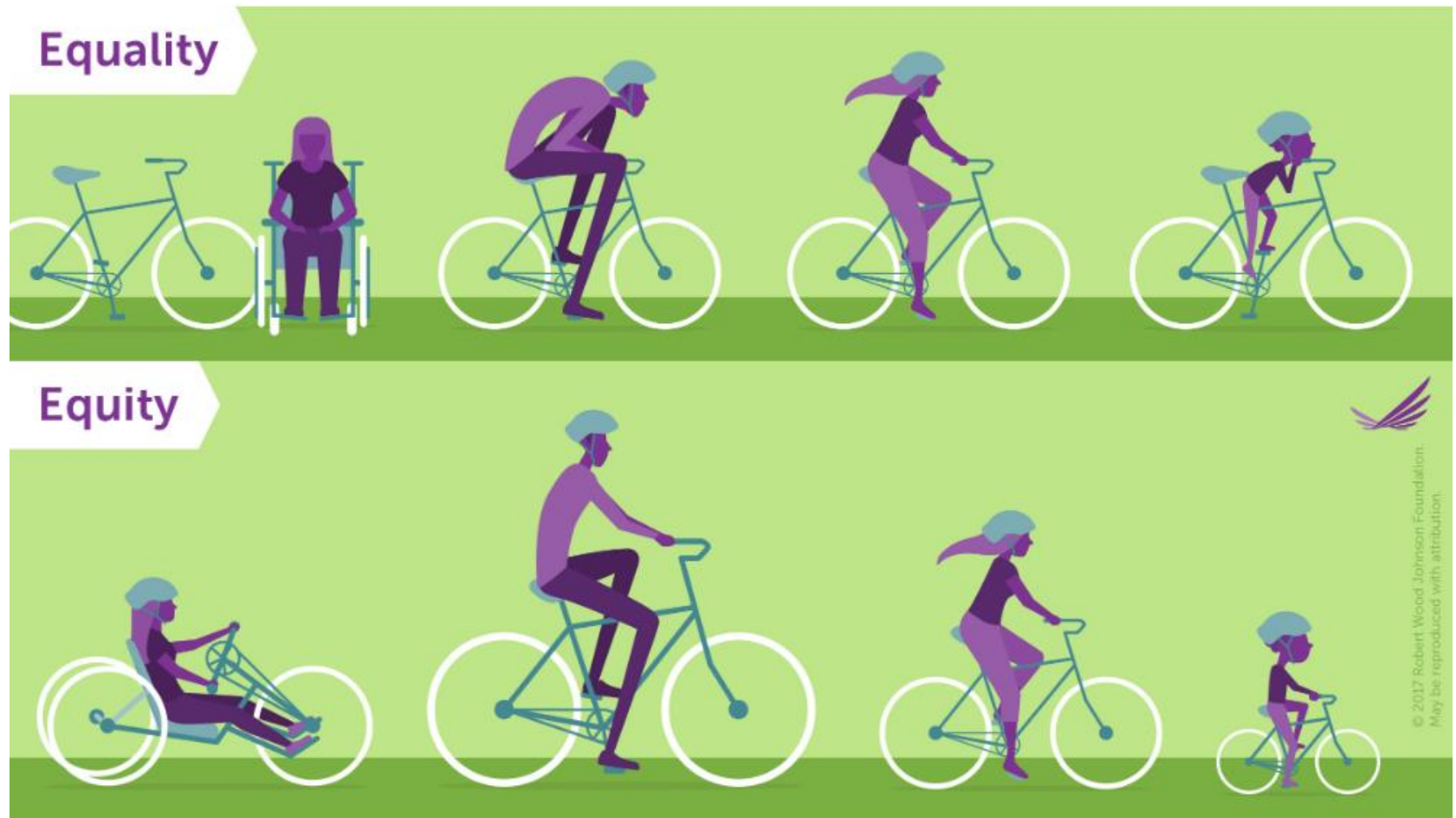
Black	White
Dangerous 0.33	Stubborn 0.32
Cheerful 0.40	Conventional 0.36
Lazy 0.40	Progressive 0.41
Religious 0.42	Wealthy 0.48
Violent 0.43	
Poor 0.64	

Verhaeghen P, Aikman SN, Van Gulick AE, Prime and Prejudice: Co-occurrence in the culture as a source of automatic stereotype priming (2011)



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Equality vs Equity



- Health Equity: Distribution of resources to allow each person to attain their full health potential

What is Health?

Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.

World Health Organization, 1946



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Where does health arise?

What are the social & environmental determinants of health?

What is the difference between equity and equality?

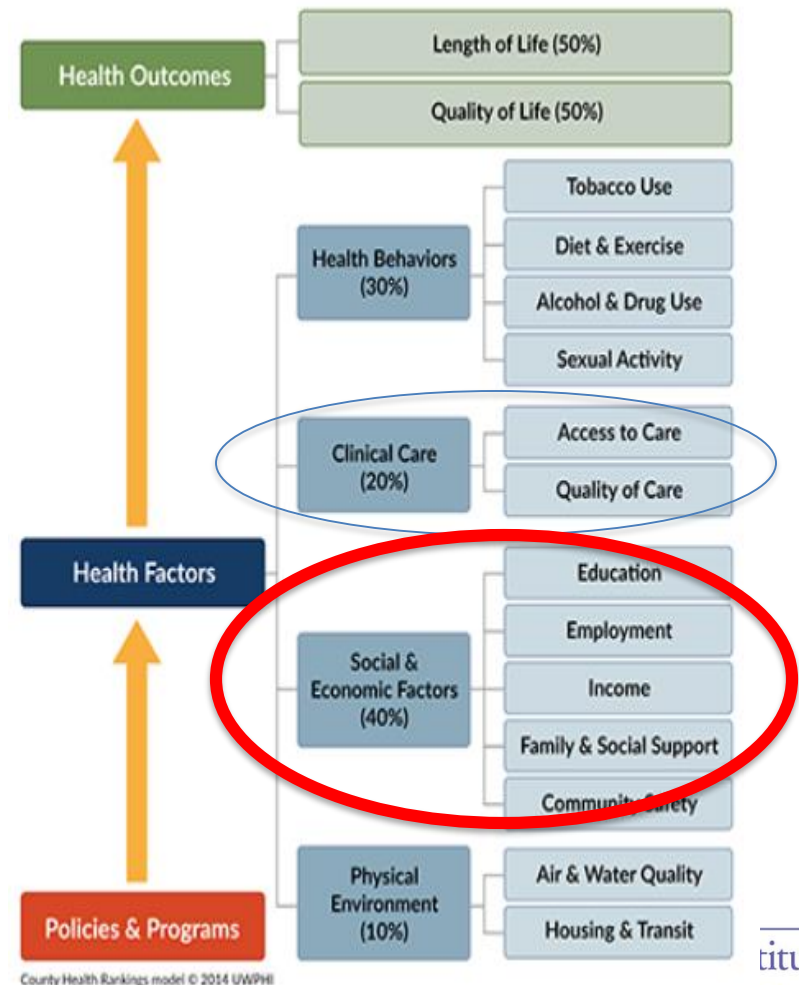
Health Equity

Health equity is achieved when every person has the opportunity to "attain his or her full health potential" and no one is "disadvantaged from achieving this potential because of social position or other socially determined circumstances."

<https://www.cdc.gov/nccdphp/dch/programs/healthycommunitiesprogram/overview/healthequity.htm>

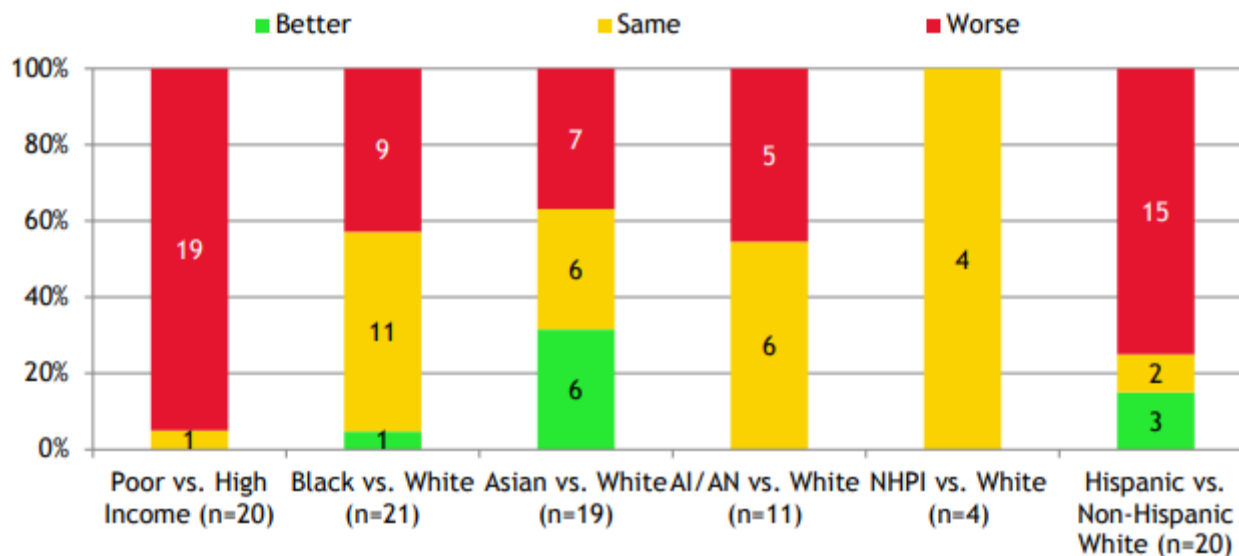
Where does health come from?

- Individual choice and behavior
- Doctor's office
- Where we live
- Where we work
- Where we learn
- Where we play
- Where we pray



Snapshot of Disparities in Access

Figure 22. Number and percentage of access measures for which members of selected groups experienced better, same, or worse access to care compared with reference group, 2016 or 2017



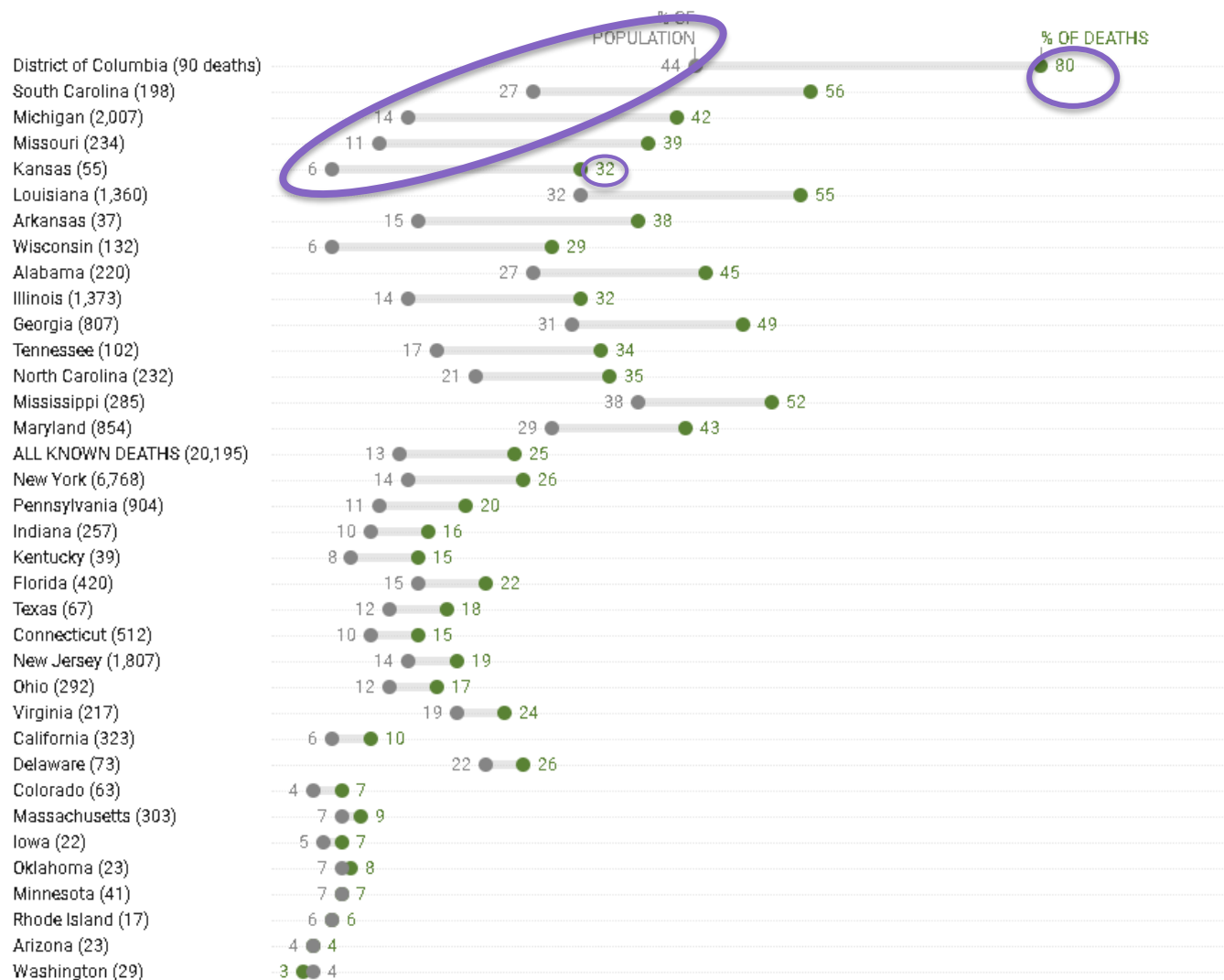
Key: n = number of measures; AI/AN = American Indian or Alaska Native; NHPI = Native Hawaiian/Pacific Islander.

Note: The measures represented in this chart are available in Appendix A. The number of measures is based on the measures that have data for each population group.

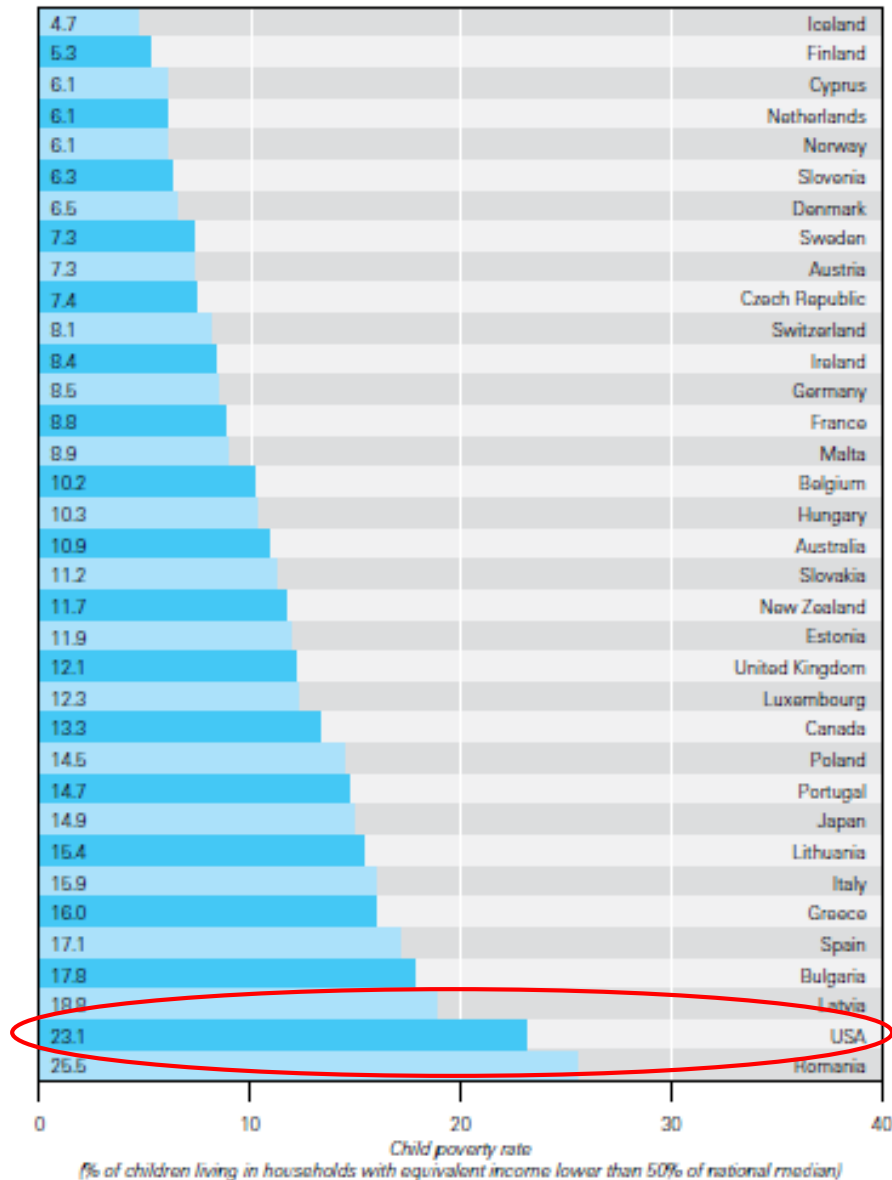
AHRQ Publication No. 19-0070-EF September 2019 www.ahrq.gov/research/findings/nhqrdr/index.html

Black Americans: Percent of COVID-19 deaths and population, through May 19, 2020

For all U.S. states with available data and Washington, D.C., in cases where 10 or more known deaths have occurred. Sorted from most over-represented to most under-represented.



U.S. Ranks Second in Child Poverty



Report 10 UNICEF, 2012

On Health and Well-Being Measures

[irc.org/publications/pdf/RC14_eng.pdf](https://www.unicef-irc.org/publications/pdf/RC14_eng.pdf)

https://www.unicef-irc.org/publications/pdf/RC14_eng.pdf

League Table – Country performance across nine child-relevant goals

Country	No poverty	Zero hunger	Good health and well-being	Quality education	Decent work and economic growth	Reduced inequalities	Sustainable cities and communities	Responsible consumption and production	Peace, justice and strong institutions
Norway	1	4	5	9	5	2	2	13	30
Germany	8	8	4	7	6	9	24		15
Denmark	4	2	21	5	10	3	20	19	10
Sweden	6	9	13	16	7	11	6	21	5
Finland	2	15	16	1	15	4	5	11	29
Iceland	3	17	2	27	18	1	8	27	1
Switzerland	5	3	12	11	2	7	27	31	7
Republic of Korea		5	10	3	12	16		22	23
Slovenia	11	27	11	23	9	10		2	13
Netherlands	7	6	6	17	8	12	34	33	14
Ireland	9	31	22	13	37	8	1	8	9
Japan	23	1	8	10	1	32	33	36	8
United Kingdom	16	34	15	20	31	6	14	9	16
Luxembourg	19	12	14	25	3	15	31	28	19
Austria	10	10	9	26	24	13	18	30	28
Spain	28	26	3	12	36	28	16	16	4
Estonia	18	20	26	21	14	29	4	4	35
Portugal	30	32	1	24	26	27	7	1	27
France	15	7	17	14	20	34	23	25	21
Czech Republic	17	16	25	22	13	31	26	24	6
Australia	12	29	23	39	23	17	3	18	18
Croatia	20	14	24	36	36	18	11	14	11
Poland	22	24	32	31	4	23	17	10	20
Italy	31	23	18	19	30	20	30	15	2
Canada	32	37	29	8	11	14	19	6	37
Belgium	14	11	19	6	28	19	36	32	32
Cyprus	13	30		34	21	5	22		36
Latvia	27	21	27	18	16	25		12	38
Malta	24	39	28	2	29	21	32		12
Slovakia	21	19	34	35	19	24	10	29	26
Greece	29	35	20	33	32	36	28	17	3
Hungary	26	22	31	30	33	30	21	23	17
Lithuania	25	25	33	29	27	33		5	31
New Zealand		18	38	15	34	26	9	35	33
Israel	36	13	7	28	22	39	37	34	25
Turkey		46	33	43		22	39	3	22
United States	33	36	36	32	17	35	13	20	40
Mexico	34	41	33	4	40	41	15		
Romania	37	33	35	40	25	38	12	37	24
Bulgaria	35	38	39	38	39	40	25	7	34
Chile		29	40	37	38	37	35	26	39

Higher Average Lower insufficient data

Did you know?

[← Back To Map](#)HEALTH OUTCOMES
OVERALL RANK

Rank ▼ County

- 1 Montgomery (MO)
- 2 Howard (HO)
- 3 Frederick (FR)
- 4 Carroll (CO)
- 5 St. Mary's (SM)
- 6 Calvert (CA)
- 7 Queen Anne's (QA)
- 8 Anne Arundel (AN)
- 9 Talbot (TA)
- 10 Harford (HA)
- 11 Prince George's (PG)
- 12 Charles (CH)
- 13 Baltimore (BL)
- 14 Kent (KE)
- 15 Garrett (GA)
- 16 Worcester (WO)
- 17 Washington (WA)
- 18 Cecil (CE)
- 19 Wicomico (WI)
- 20 Allegany (AL)
- 21 Caroline (CR)
- 22 Dorchester (DO)
- 23 Somerset (SQ)
- 24 **Baltimore City (BA)**

[Español](#)

Baltimore City (BA)

☐ Show areas to explore ☐ Show areas of strength

County Demographics +

	Baltimore City County	Trend ⓘ	Error Margin	Top U.S. Performers	Maryland	Rank (of 24) ⓘ
Health Outcomes						24
Length of Life						24

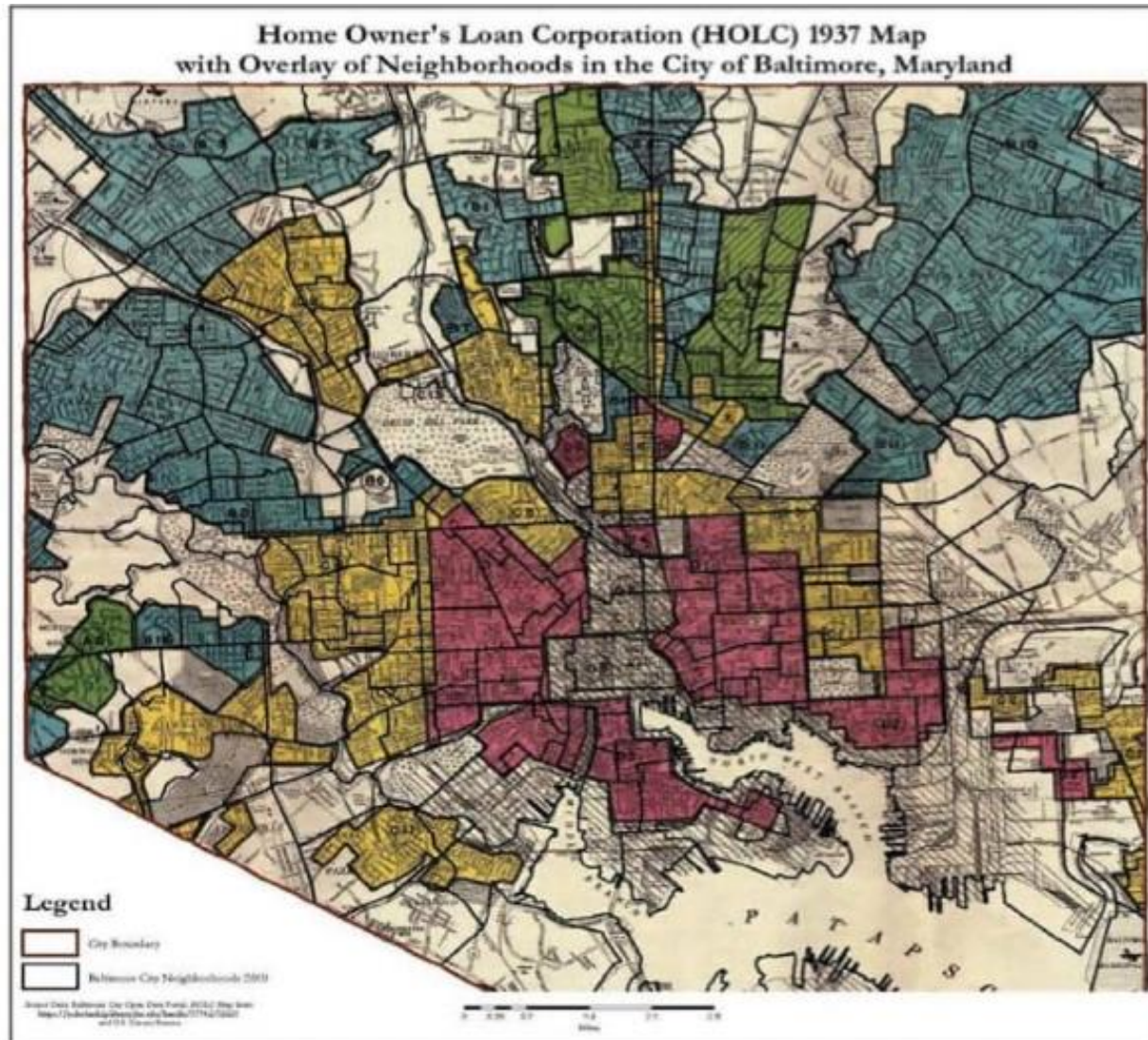
Premature death	13,200		12,900-13,600	5,400	7,100	
Quality of Life						24
Poor or fair health	19%		19-19%	12%	14%	
Poor physical health days	3.7		3.6-3.8	3.0	3.1	
Poor mental health days	4.1		4.0-4.3	3.1	3.5	
Low birthweight	12%		12-12%	6%	9%	

Additional Health Outcomes (not included in overall ranking) +

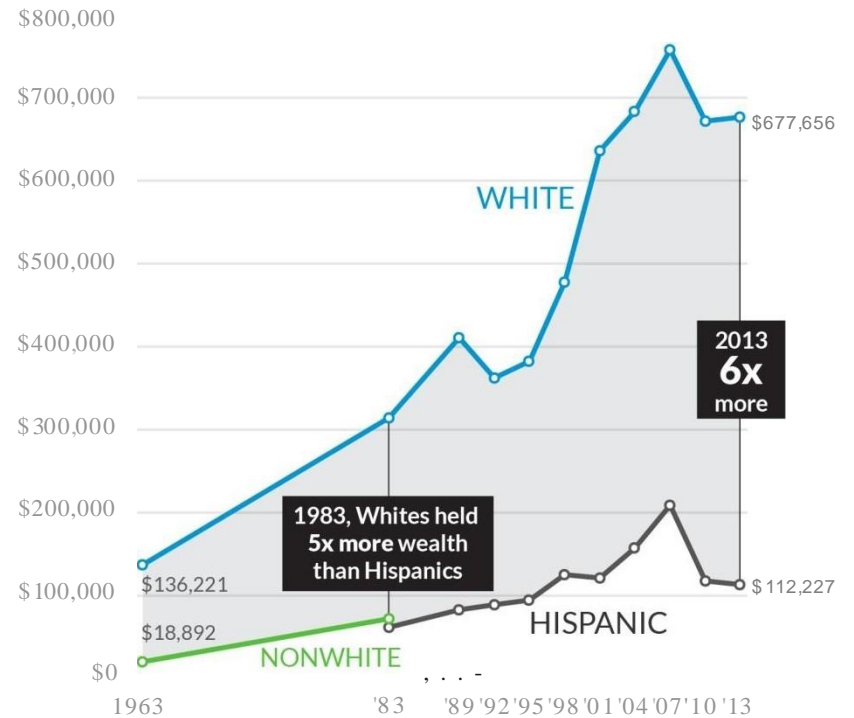
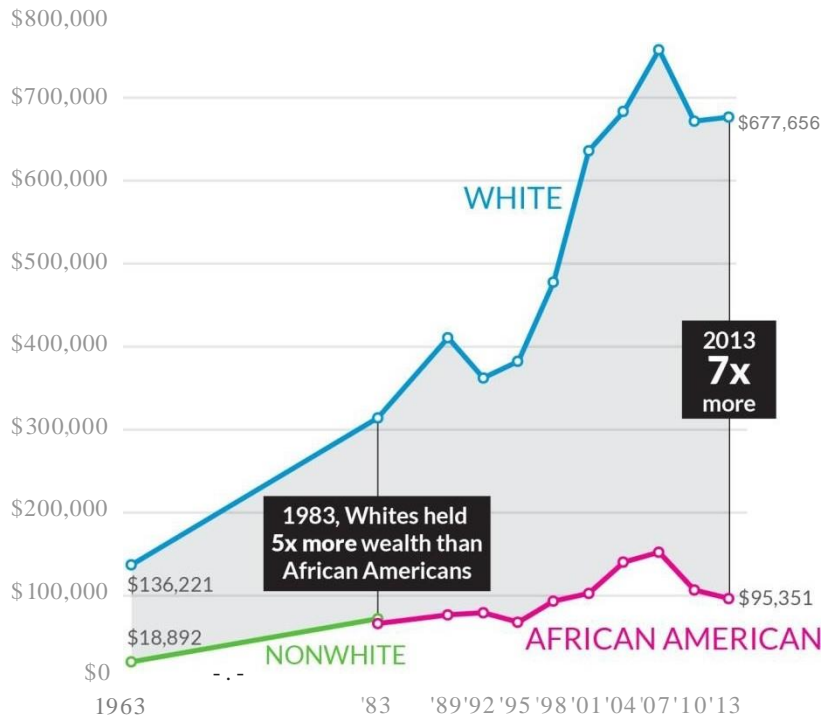
Health Factors						23
Health Behaviors						23
Adult smoking	20%		20-21%	14%	14%	
Adult obesity	33%		31-36%	26%	30%	
Food environment index	6.6			8.7	9.1	
Physical inactivity	25%		23-26%	19%	21%	
Access to exercise opportunities	99%			91%	92%	
Excessive drinking	18%		17-18%	13%	17%	
Alcohol-impaired driving deaths	19%		15-22%	13%	30%	
Sexually transmitted infections	1,189.0			152.8	510.4	

r Institute
CENTIAL

Redlining...



Average Family Wealth by Race/Ethnicity, 1963-2013



Sources: Urban Institute calculations from Survey of Financial Characteristics of Consumers 1962 (December 31). Survey of Changes in Family Finances 1963, and Survey of Consumer Finances 1983-2013.

Notes: 2013 dollars. No comparable data are available between 1963 and 1983. African American/ Hispanic distinction within nonwhite population available only in 1983 and later.



The Disease of Poverty

Helping parents to help their children can close the rich-poor health gap

By Michael Marmot

In Baltimore, men in one of the most down-at-the-heels, blighted parts of the city live 20 years less, on average, than men in the leafiest, most well-to-do neighborhoods. Numbers such as these are why poverty and lack of access to medical care are often blamed for poor health in the U.S.

But it is not a simple money = health equation. Other numbers make that clear. By global standards, the poor of the U.S. are fantastically rich, yet they die sooner than the poor of other

Costa Rica, Chile and Cuba. In fact, the U.S. survival figure is lower than that in 51 other countries—although the U.S. spends more on health care than any other land.

To improve health, we have to stop blaming the sufferers and look not only at lack of money but lack of other resources. My research, and that of other scientists, points the finger at social and psychological disempowerment, a personal sense of marginalization in society, as a factor with greater effect than lack of money alone. When people feel deprived relative to those around them, stress rises, and then health suffers. Fortunately, the research also indicates that interventions with parents—improving parenting skills, for example—profoundly empowers their children. This, in turn, appears tied to a lifetime of better health.

A SOCIAL SLOPE

AS A PUBLIC HEALTH SPECIALIST and epidemiologist, I have been investigating reasons for health inequalities for more than 35 years. I first described the connection between a person's social status and his or her health in

studies of British civil servants, called the Whitehall Studies. No civil servant is poor or unemployed, and none is as rich as a banker or hedge fund manager. Yet among these white-collar men and women the higher their civil service grade, the longer their life expectancy and the better their health. This has become known as the social gradient, and it is not just about money but about a whole cluster of socioeconomic factors, and the way they give you a sense of control over your life and how you perceive your position in society relative to others. In my book *The Health Gap*, I follow this connection to the U.S. Someone in the middle of the U.S. income distribution curve has worse health than people with higher incomes but better health than poorer people. If we use education as our measure, we find the same thing: more years of education mean longer life expectancy and better health.

Skeptics will counter that the most common causes of death, such as diabetes, cardiovascular disease and cancer, are linked to lifestyle problems such as smoking and obesity, not disempowerment. But look harder. Smoking follows the social gradient: the lower the social position, the greater the smoking. Obe-

Black women are facing some sickening statistics

■ From heart disease to neonatal care, women of color are high on the risk list.

Heat disease is the No. 1 killer of American women. Yet black women tend to develop heart ailments and die from those ailments 10 years before white women do.

■ Black women are twice as likely to deliver premature infants as white women.

■ About 61 percent of pregnant black women seek health care during the first trimester of pregnancy compared to 79 percent of white women.

These were among the black women's health issues discussed last week during Women's Awareness Week '91 at the University of South Florida (USF) in Tampa. The panelists invited to discuss the problems were Dr. Harolyn Belcher, an assistant professor in the pediatrics department of the USF College of Medicine; Gwen Ritter, USF's student affairs coordinator for Student Health Services; Marsha Lewis-Brown, executive director of Northside Centers Inc., a psychiatric hospital and comprehensive community mental health organization in Tampa; and Alveeta Maulsby, a registered nurse who works for the Hillsborough County Health Department.

While medical professionals raised the



PEGGY
PETERMAN

alarm, they remained hopeful that educational programs can reduce the incidence of health problems.

Dr. Belcher said it is not uncommon for some black women to seek medical assistance as late as six months into their pregnancy, which can lead to premature births.

"We find that once black premature babies are cared for and receive medical attention in the new-born nursery, they progress even faster than their white counterparts," Dr. Belcher said. "But once they leave, they are twice as likely to die during this post-natal period. We believe it is because there is less follow-up, a lack of understanding about following directions and not having the finances for medical help."

She said that on average, black women at all economic levels have low birth-weight babies. Research indicates that this may be caused by the cumulative effect of stress in their lives.

"Racism might be a stress," Dr. Belcher said. "Chronic stress can result from just everyday encounters, such as not be-

ing waited on in department stores or at other agencies. Poor nutrition is also a contributing factor."

More statistics:

■ African-Americans nationwide use emergency rooms for their primary health care — 73 percent more often than white people.

■ AIDS is the major cause of death among black women ages 15 to 44 in New York and New Jersey.

"The majority of these women are abusing drugs and resorting to prostitution to pay for their habit," Dr. Belcher said. "This is the way they get AIDS."

Lifestyles have a large impact on health, Gwen Ritter said. She used a chart to show how lifestyle can affect illness. For all nationalities, lifestyle is a factor in heart disease (54 percent), stroke (50 percent), cancer (37 percent), and cirrhosis of the liver (70 percent).

She urged the audience to monitor the way they live, practice prevention and stay fit.

"Learn what is good for you, and what is not," Ms. Ritter said. "Practicing good health habits such as breast self-examination, getting six to eight hours of sleep and staying away from fatty foods is essential. The body gives great early warning signals; we've just got to be in tune with our bodies."



"**C**hronic stress can result from just everyday encounters, such as not being waited on in department stores or at other agencies."

— Harolyn Belcher, assistant professor, pediatrics, USF College of Medicine



"**L**earn what is good for you, and what is not. The body gives great early warning signals; we've just got to be in tune with our bodies."

— Gwen Ritter, USF's student affairs coordinator for Student Health Services



"**O**ne must be aware of the impact that culture, racism, religion and spirituality play in the behavior of a person."

— Marsha Lewis-Brown, executive director, Northside Centers Inc. psychiatric hospital and mental health organization, Tampa

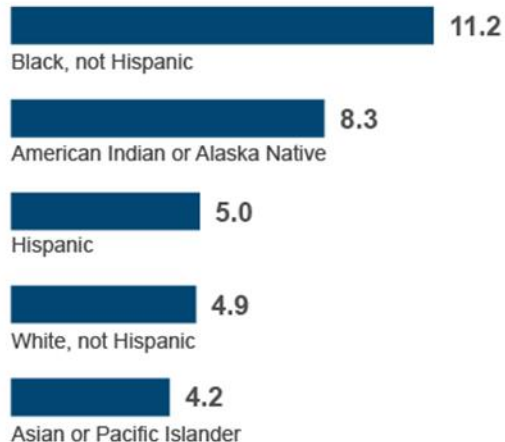
Please see **RISK 3D**

Infant Mortality Rate by Race and Ethnicity of Mother, 2015

The infant mortality rate experienced by infants born to non-Hispanic black mothers was **more than 2.5 times** the rate experienced by infants born to Asian or Pacific Islander mothers (11.2 and 4.2 deaths under 1 year of age per 1,000 live births, respectively).



Infant deaths per 1,000 live births



Data source: Linked Birth/Infant Death Data Set, CDC/NCHS.

Healthy People 2020 Targets

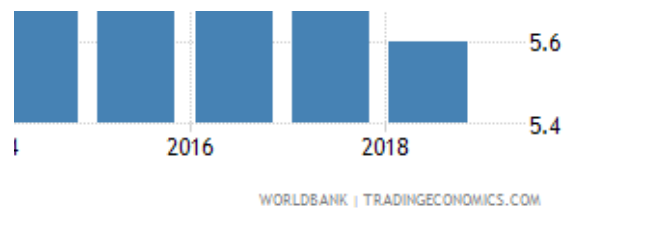
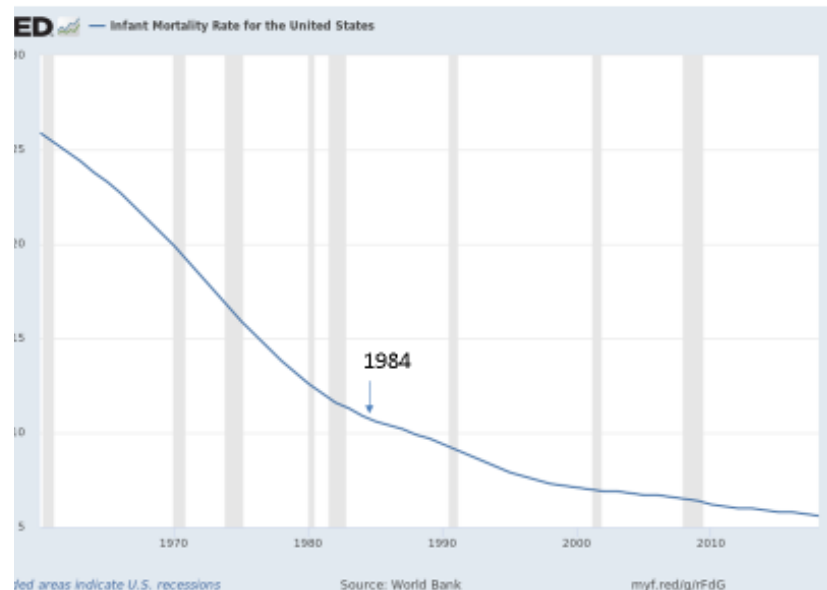
Infant Deaths

5.9 infant deaths per 1,000 live births occurred within the first year of life in 2015.

Data source: Linked Birth/Infant Death Data Set, CDC/NCHS.



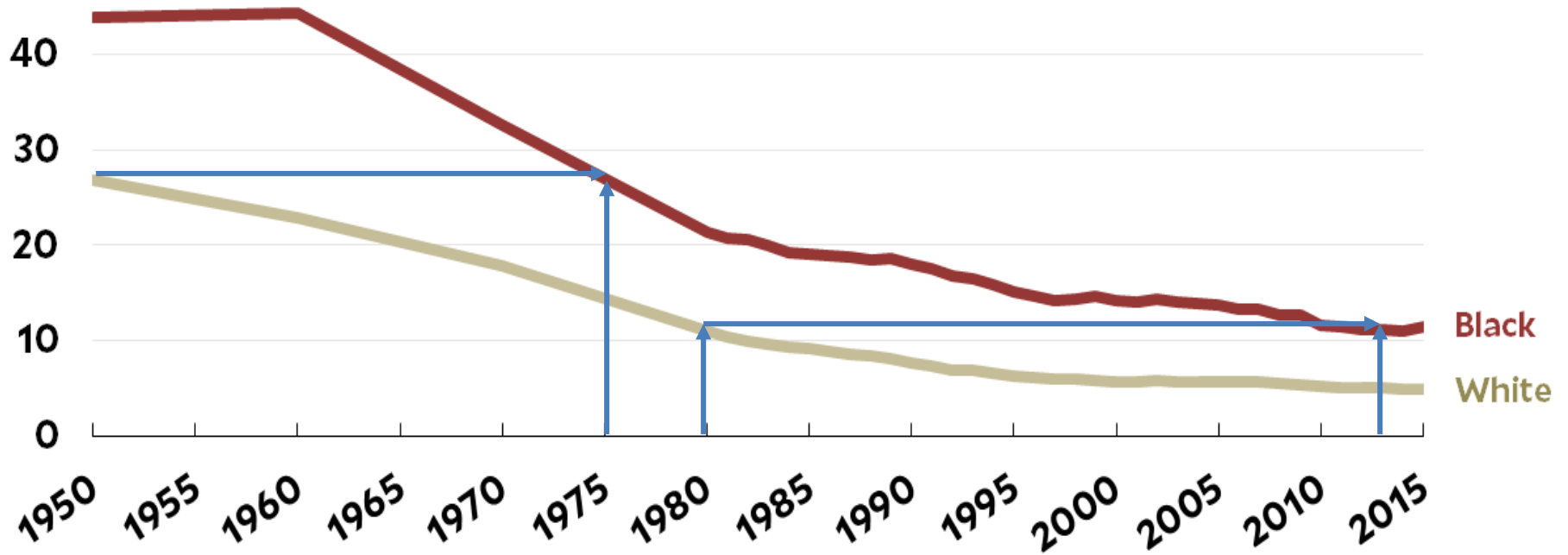
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ing one year of age, per 1,000 live births in a given

Infant Mortality Rate

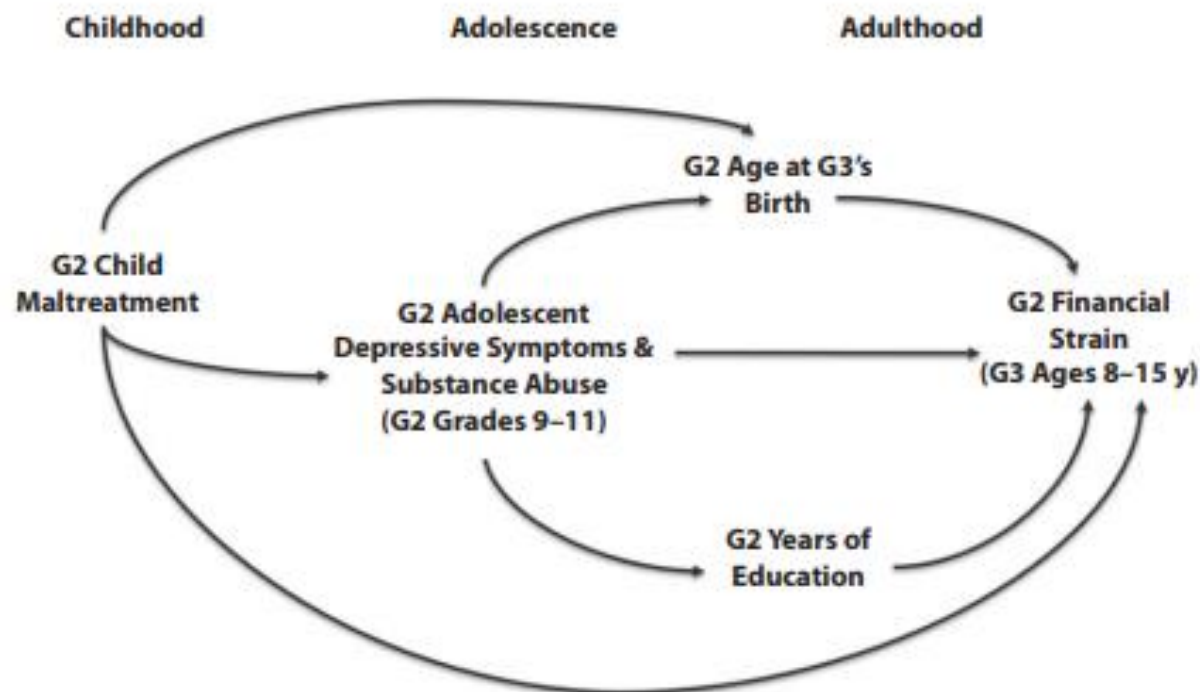
Deaths Per 1,000 Live Births



Source: Centers for Disease Control

Mother Jones

The Harmful Effect of Child Maltreatment on Economic Outcomes in Adulthood



Note. G2 = generation 2; G3 = generation 3.

FIGURE 1—A Developmental Cascade of the Consequences of Child Maltreatment on Adult Socioeconomic Outcomes: Rochester Youth Development Study and Rochester Intergenerational Study, Rochester, NY, 1988–2016

Henry, Fulco, Merrick, 2018 doi:10.2105/ AJP.2018.304635)



USF Health Sciences NEWS

MEDICINE • NURSING • PUBLIC HEALTH • AFFILIATED HOSPITALS

September 26, 1991

\$1.45 million grant to help cocaine moms, babies

By Anne DeLotto

Breaking the cycle of substance abuse for pregnant women and their newborns is the aim of a \$1.45 million federal grant awarded to three professors in the University of South Florida College of Medicine.

"This will be an all-encompassing program," said Jeffrey Angel, M.D., associate professor of obstetrics and gynecology and principal investigator for the project.

"We're prepared to offer a comprehensive approach to pregnant women who abuse cocaine and other drugs as well as provide treatment and appropriate follow-up for the babies born to addicted



Photo by John Bard

Left to right: Dr. Pamela Wallace, Dr. Harolyn Belcher and Dr. Jeffrey Angel discuss Project STRIVE.

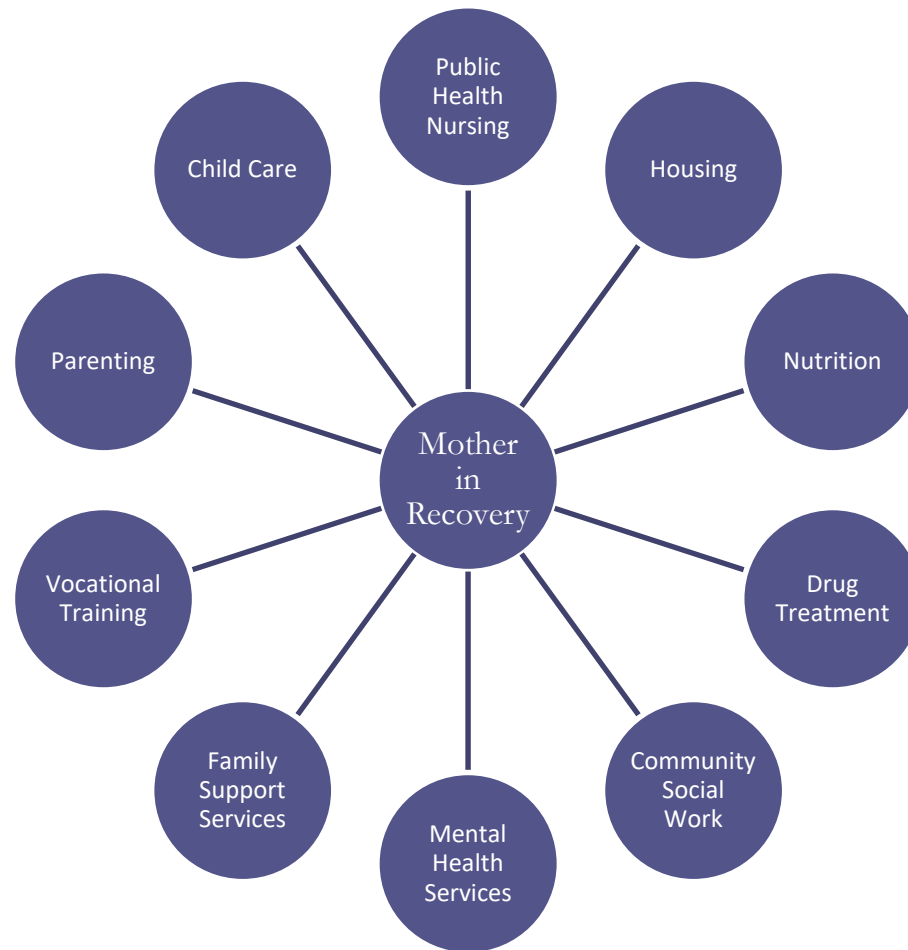
the newborns."

Project STRIVE will be funded between \$253,900 and \$324,400 annually for five years by the Department of Health and Human Services, Office of Substance Abuse Prevention. Dr. Angel's co-investigators for the project are Harolyn Belcher, M.D., and Pamela Wallace, Ph.D., both assistant professors of pediatrics.

Plans call for 50 women a year to enroll in the program, which begins January 1. Project

STRIVE is an acronym for the program's goals, that is, support, trust, rehabilitation, initiative, values, and education.

Systems Approach to Care



STRIVE: One Stop Shopping

Genesis Maternal and Child Health Center

- Obstetric and Pediatric Care
- Child Care
- Center and Community-based Social Work
- Drug Counseling
- Parent Education
- Mental Health Services
- Developmental Follow-up & Intervention

STRIVE

Goals

- Promote coordinated multi-organization services for pregnant drug dependent women & their infants
- Increase the availability of prevention, early intervention, & treatment services
- Decrease AOD use among pregnant participants
- Improve birth & child developmental outcome

Maternal Demographics

- Age (mean): 28.1 years (20-39)
- Never married: 59.5%
- Mean years of education: 10.7 (7-15)
- 66.2% did not complete HS
- 79.7% unemployed
- 79 % previous arrest history
- Race/Ethnicity
 - African American: 63.3%
 - White: 30.4%
 - Hispanic: 3.8%

Drug Use Pattern

- 77% Cocaine/crack
- 55% Alcohol
- 20% Marijuana
- 15% Tobacco
- 55% Polydrug use

Age at First Use

- Alcohol: 15.8 years (5-26 yrs)
- Marijuana: 16.2 years (6-25 yrs)
- Cocaine/Heroin: 20.5 years (12-33 yrs)

Maternal Psycho-Social History

- 52% had co-morbid psychiatric illnesses
- 83% had experienced physical violence
- 64.3% had experienced sexual abuse/rape
- 23% had experienced sexual abuse as a child

HUGS Study: Parent Child Interaction

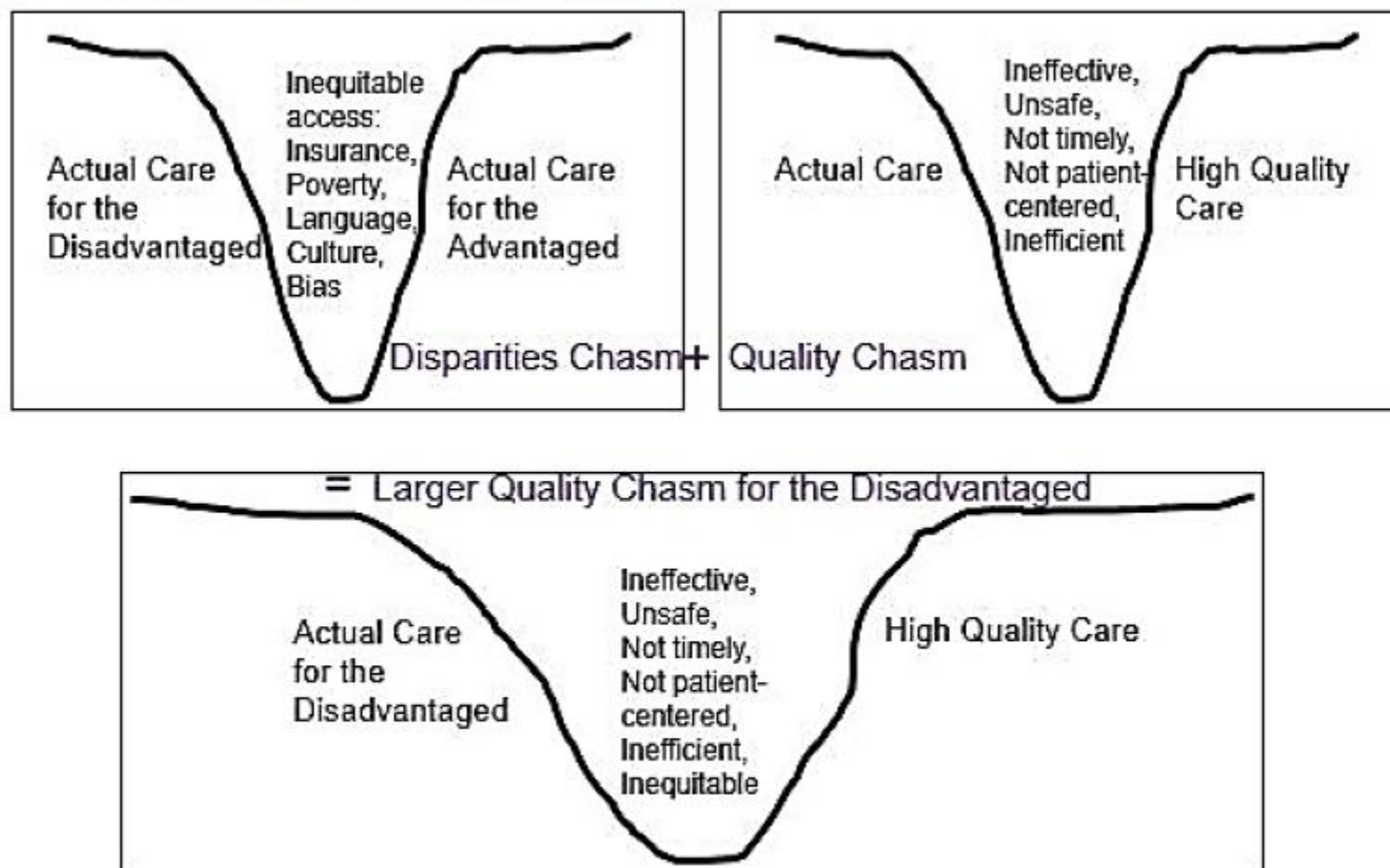
- 56% were not at-risk!

Who completes PT treatment?

Risk Variable	Completed CPP (n=16)	All other CPP parents (n=63)	P-value	Completed PCIT (n=15)	All other PCIT parents (n=65)	P-value
M psychosocial risk variables (0-11)	3.7 (1.62)	4.1 (1.54)	0.166	2.7 (1.18)	3.8 (1.87)	0.011
CESDR score	18.9 (18.46)	16.8 (15.48)	0.320	9.0 (9.82)	17.6 (14.84)	0.017
CBCL externalizing	27.2 (11.31)	28.7 (9.71)	0.296	24.1 (8.30)	26.2 (10.07)	0.188
CBCL internalizing	20.3 (9.95)	18.4 (9.14)	0.233	14.3 (8.34)	17.7 (8.44)	0.082

Health Access Disparities

Exhibit. Linking the Disparities and Quality Chasms



Source: Based on Institute of Medicine. Crossing the Quality Chasm: A New Health System for the 21st Century. Washington, DC: The National Academies Press; 2001. <https://doi.org/10.17226/10027>.

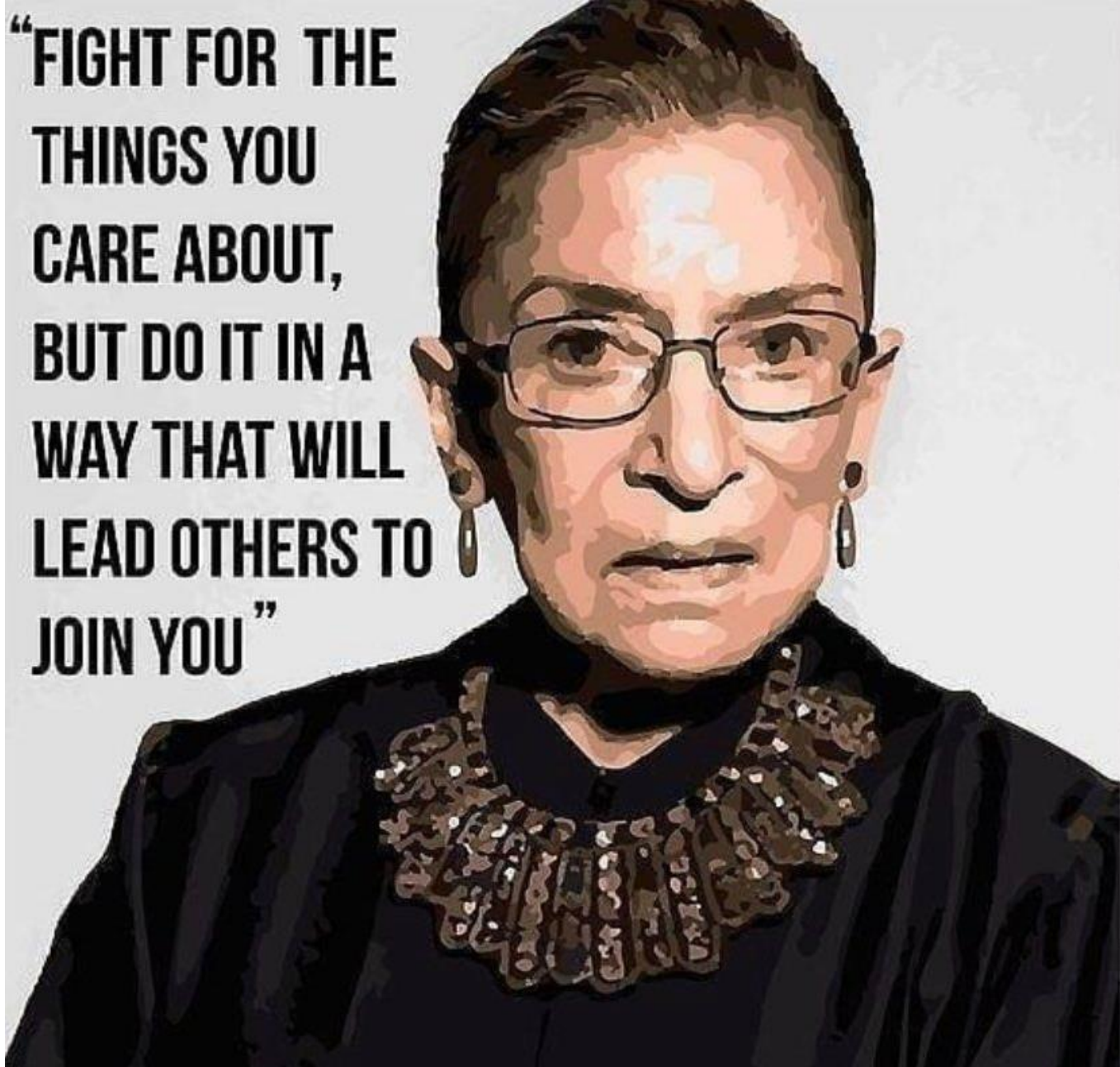
Dr. Will T. L. Cox Collection

- Detect, Reflect, Reject Devine, 1989; Devine & Monteith, 1993
- Modify your environment Cheryan, Plaut, Davies, & Steele, 2009
- Seek individuating information Brewer, 1988; Fisk & Neuberg, 1989
- Perspective taking Galinsky & Moskowitz, 2000
- Consider other explanations Kawakami et al., 2000
- Commit to credentials *a priori* Uhlmann & Cohen, 2005
- Increasing exposure Allport, 1954; Pettigrew & Tropp, 2006; Shelton & Richeson, 2005



Kennedy Krieger Institute
UNLOCKING POTENTIAL

**“FIGHT FOR THE
THINGS YOU
CARE ABOUT,
BUT DO IT IN A
WAY THAT WILL
LEAD OTHERS TO
JOIN YOU”**



Justice Ruth Bader Ginsburg

March 15, 1933 – September 18, 2020