

*Challenges and Opportunities with
Addressing Racial/Ethnic and SES
Disparities in Health*

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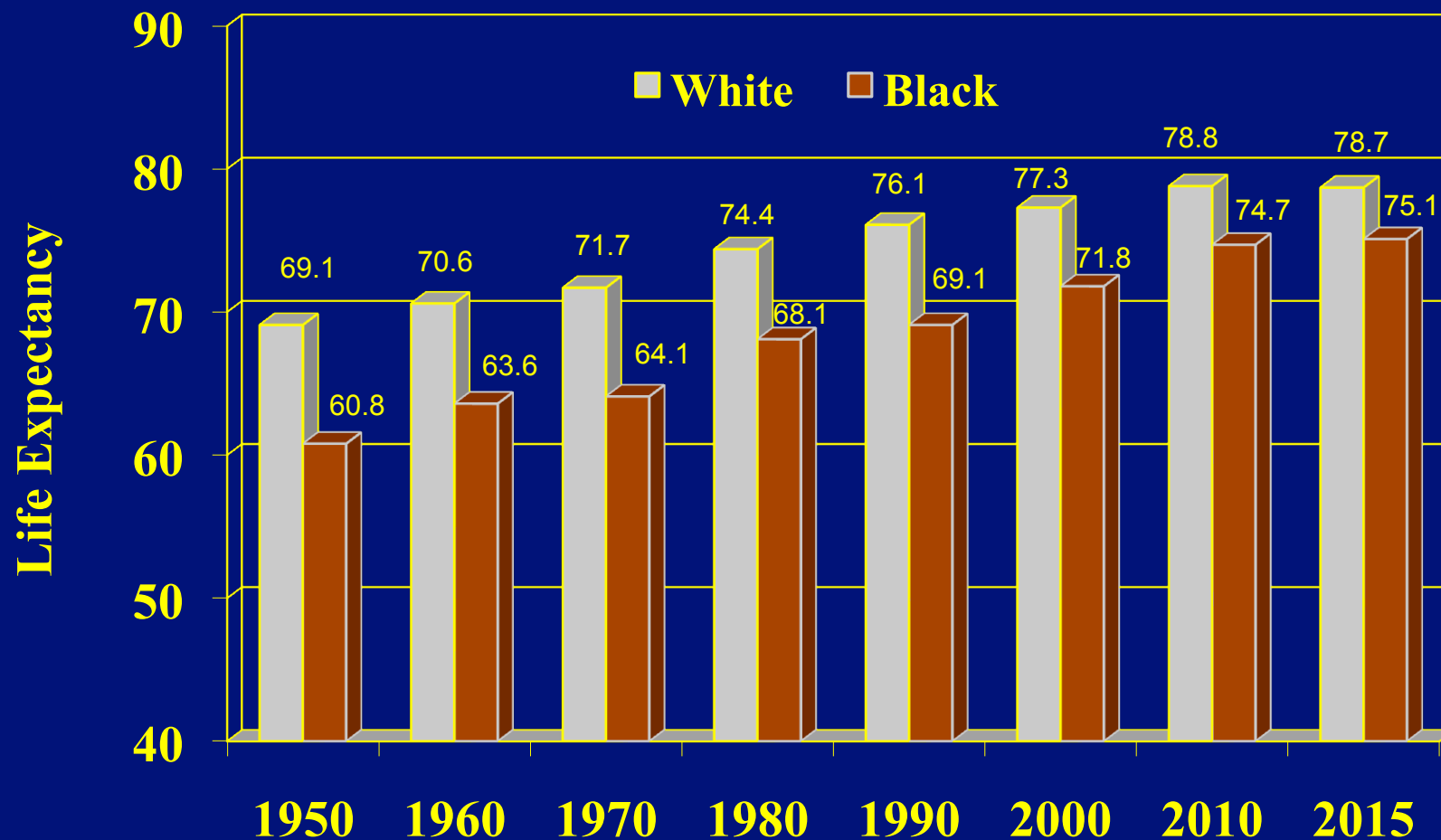
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Harvard University

Persistence of Disparities over time

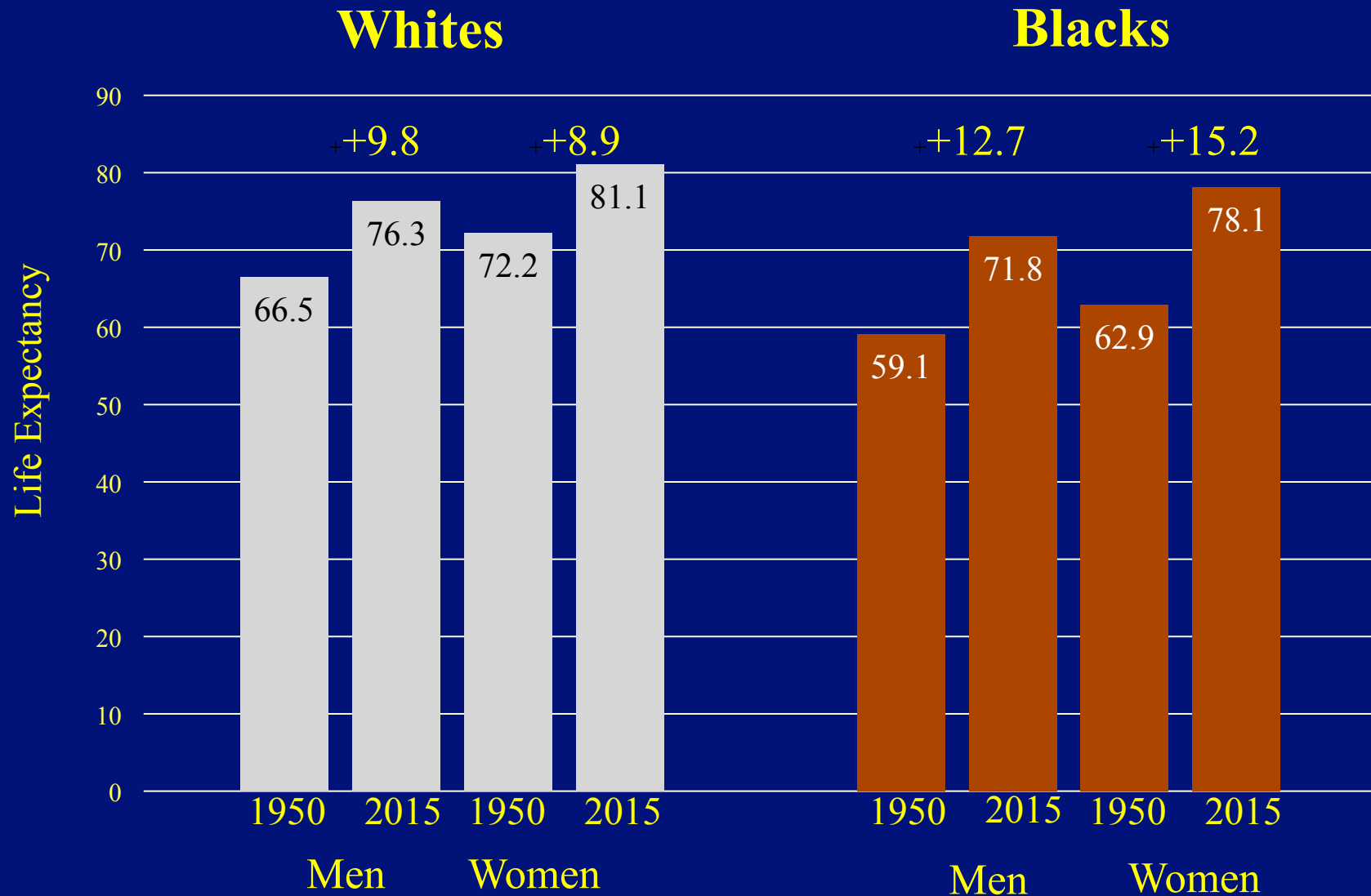
Life Expectancy, 1950-2015



NCHS, Health United States, 2016

Need to Attend to Intersectionality

Life Expectancy at Birth by Race and Gender



Value of an Intersectional Lens

- Within each race, women live longer than men and the LE advantage of females over males is greater for blacks (6.3 yrs) than whites (4.8 yrs)
 - LE advantage of black women over black men is more than twice the racial gap in LE among women and 40% larger than the racial gap among men
 - In 1950, racial gap in LE was larger for women than men, but reductions in racial gap in LE larger for women than men over time
 - Black women had largest gain in LE over time
 - Since 1970, black women have longer LE than white men
-

Priority

*Paying Attention to Migration and its
intersection with SES*

Trend Data: The Role of Black Migration?

- Have changes in the composition of the black population contributed to the narrowing of the B-W gap?
- Black migrants are a growing part of black population in the U.S.
- Black immigrants, regardless of region of origin, have better health than their native-born peers
- Caribbean immigrants see larger decline in health with increased length of stay & generational status, than African immigrants
- Migrants from Africa are bigger share of black migration since 2000 than Caribbean migration
- Need to attend to role of migration in health trends

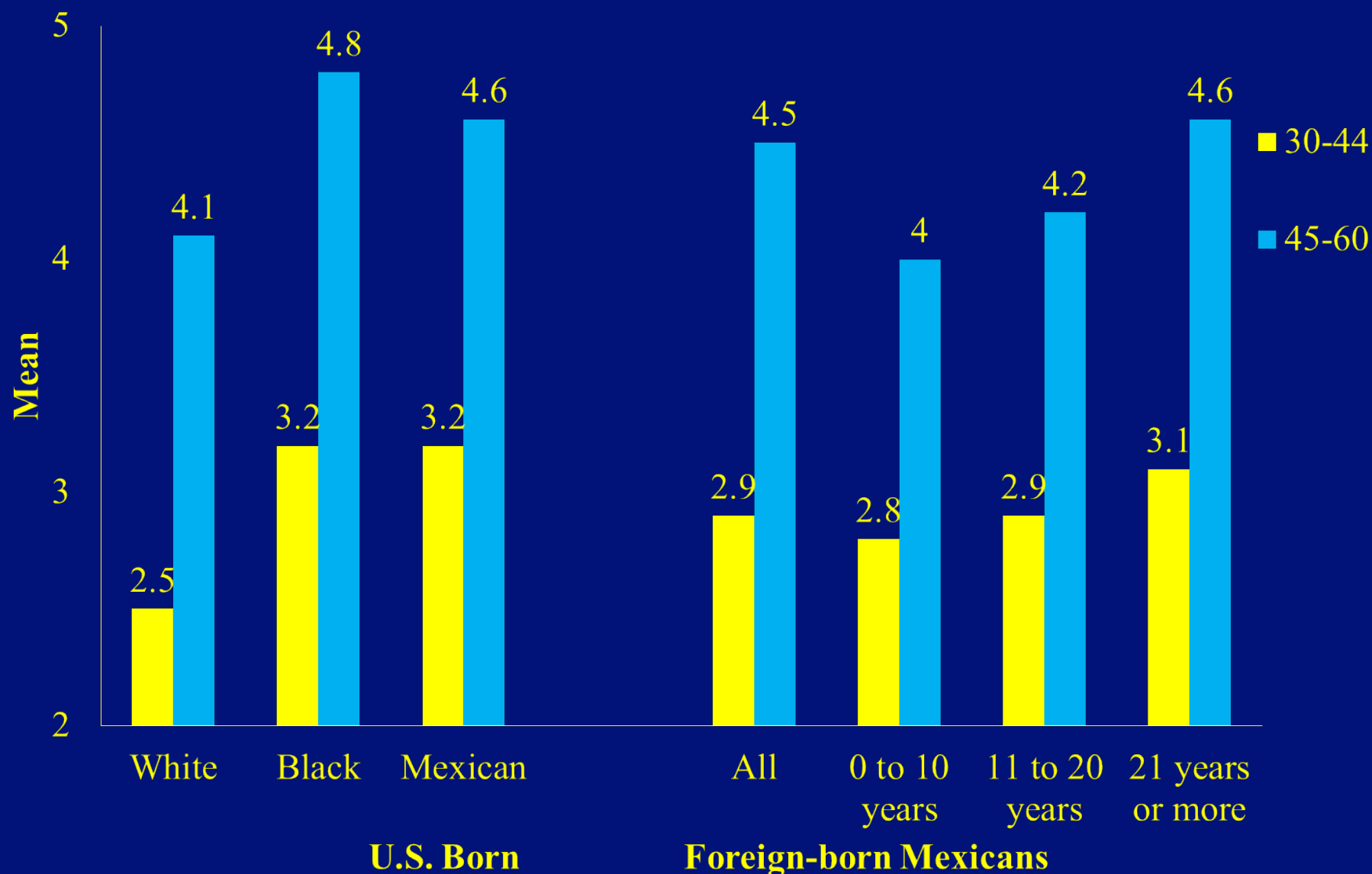
Percent College Grad, Immigrants, 2010

Black

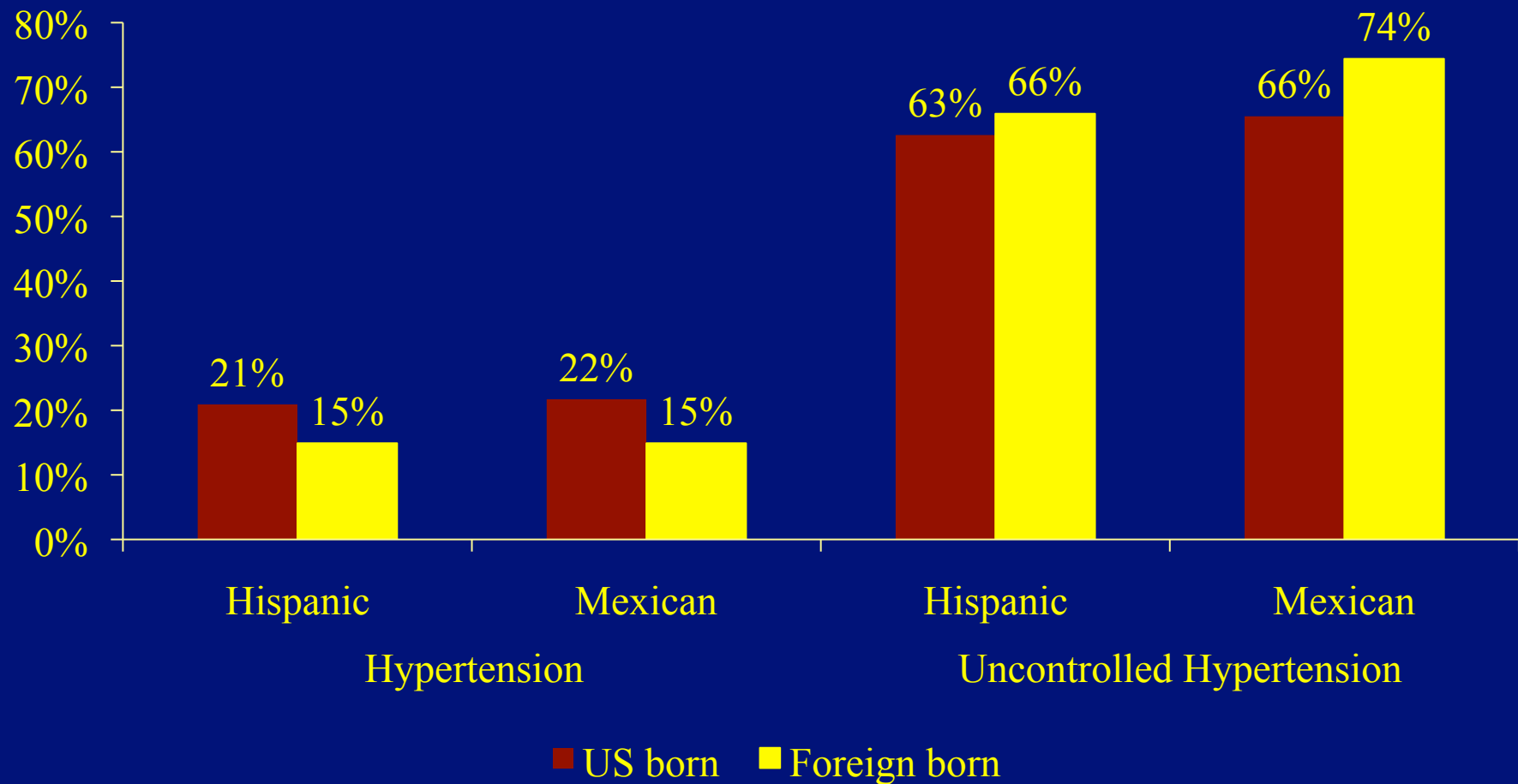
Nigeria	61.1%
Jamaica	21.7%
Haiti	16.7%

Portes and Rumbaut, Immigrant America, 2014

Mean Allostatic Load, by Race & Nativity



Hypertension, Hispanics, 2009-12



Dominguez et al., MMWR, 2015

Percent College Grad, Immigrants, 2010

Hispanic

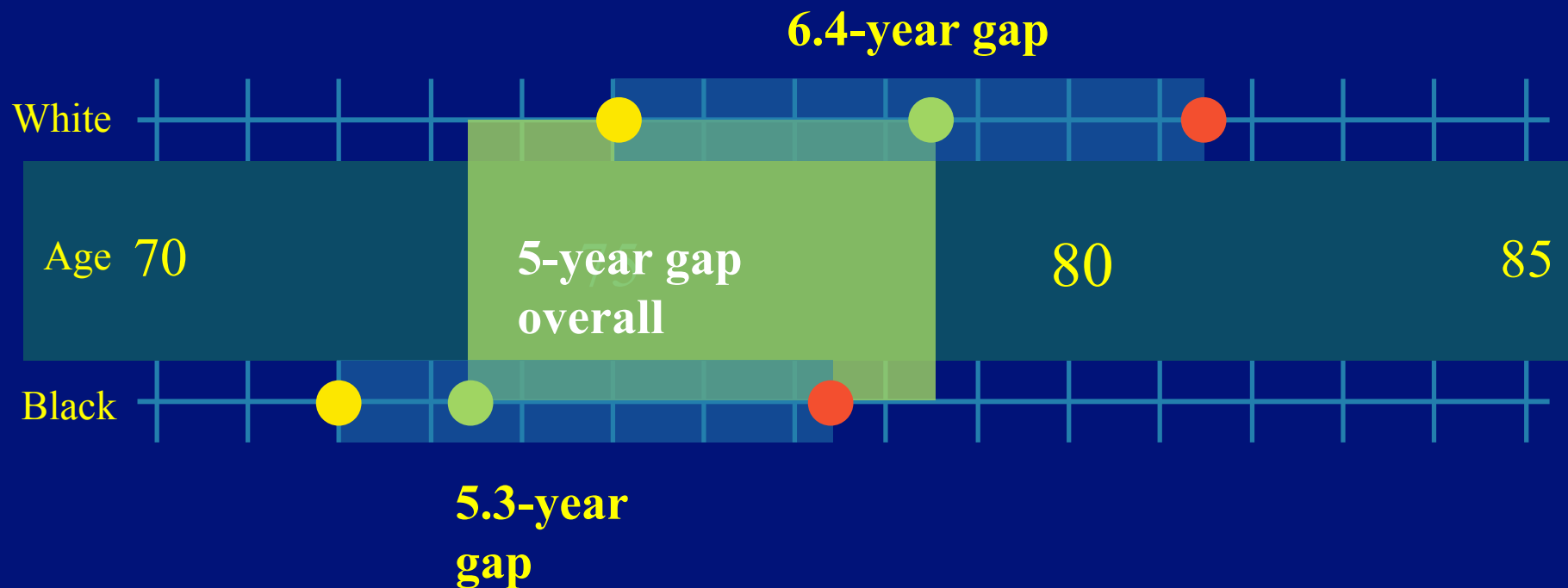
Venezuela	50.0%	Ecuador	15.5%
Argentina	37.1%	Dom. Republic	13.6%
Brazil	33.9%	Honduras	8.4%
Columbia	28.9%	Guatemala	7.3%
Peru	28.7%	El Salvador	6.7%
Cuba	21.0%	Mexico	5.3%
Nicaragua	16.8%		

Portes and Rumbaut, Immigrant America, 2014

Priority

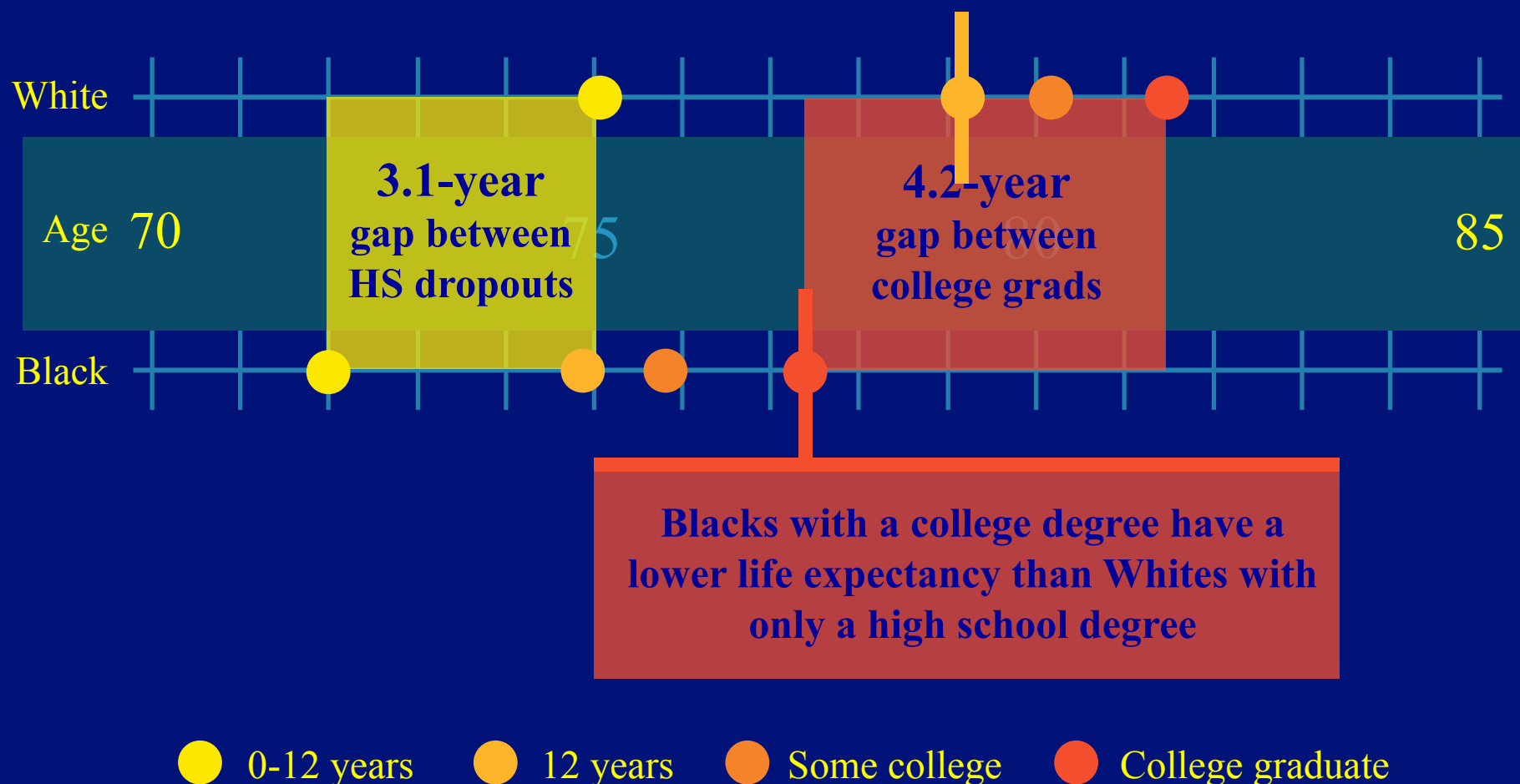
We need to better understand how race/ethnicity and SES relate to each other and combine to affect health, across multiple indicators of SES, for the broad range of racial/ethnic populations and ethnic subpopulations,

Life Expectancy at Age 25 Based on Level of Education



● Overall ● 0-12 years ● College graduate

Life Expectancy at Age 25 Based on Level of Education

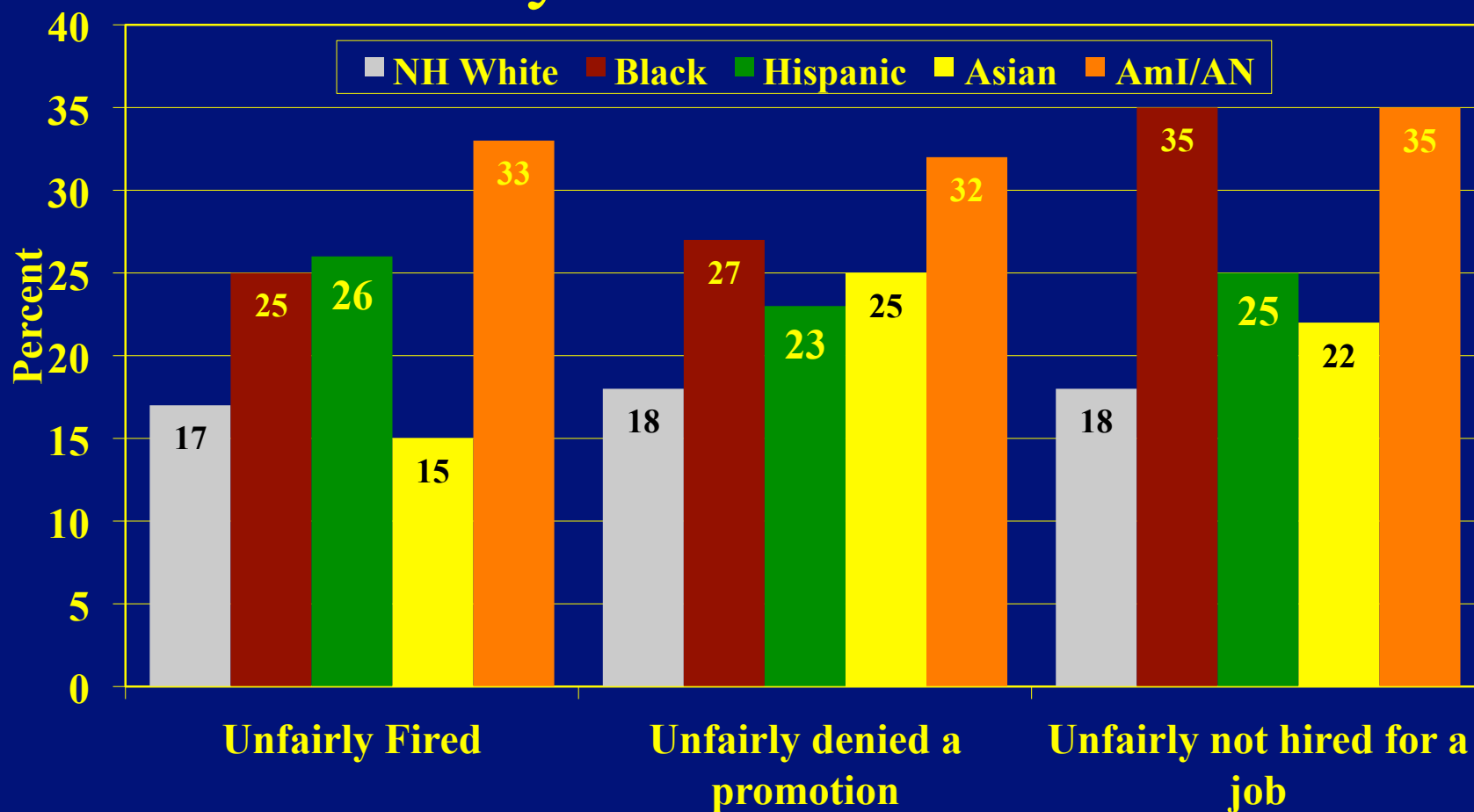


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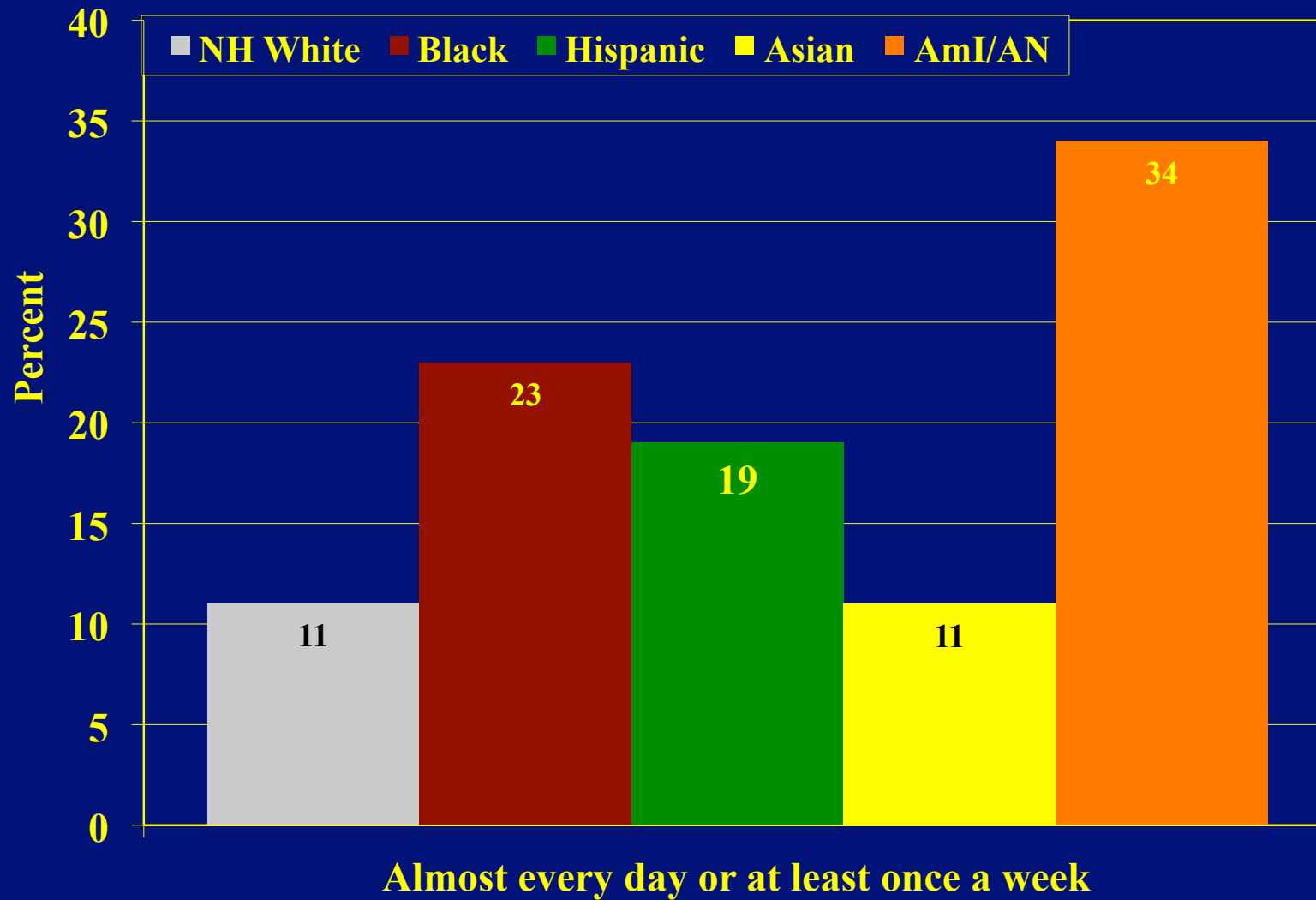
*Need for coverage of all populations,
including very small populations*

Work Discrimination, 2015

Have you ever been...?



Everyday Discrimination, 2015



American Psychological Association, Stress in America, 2016

Priority

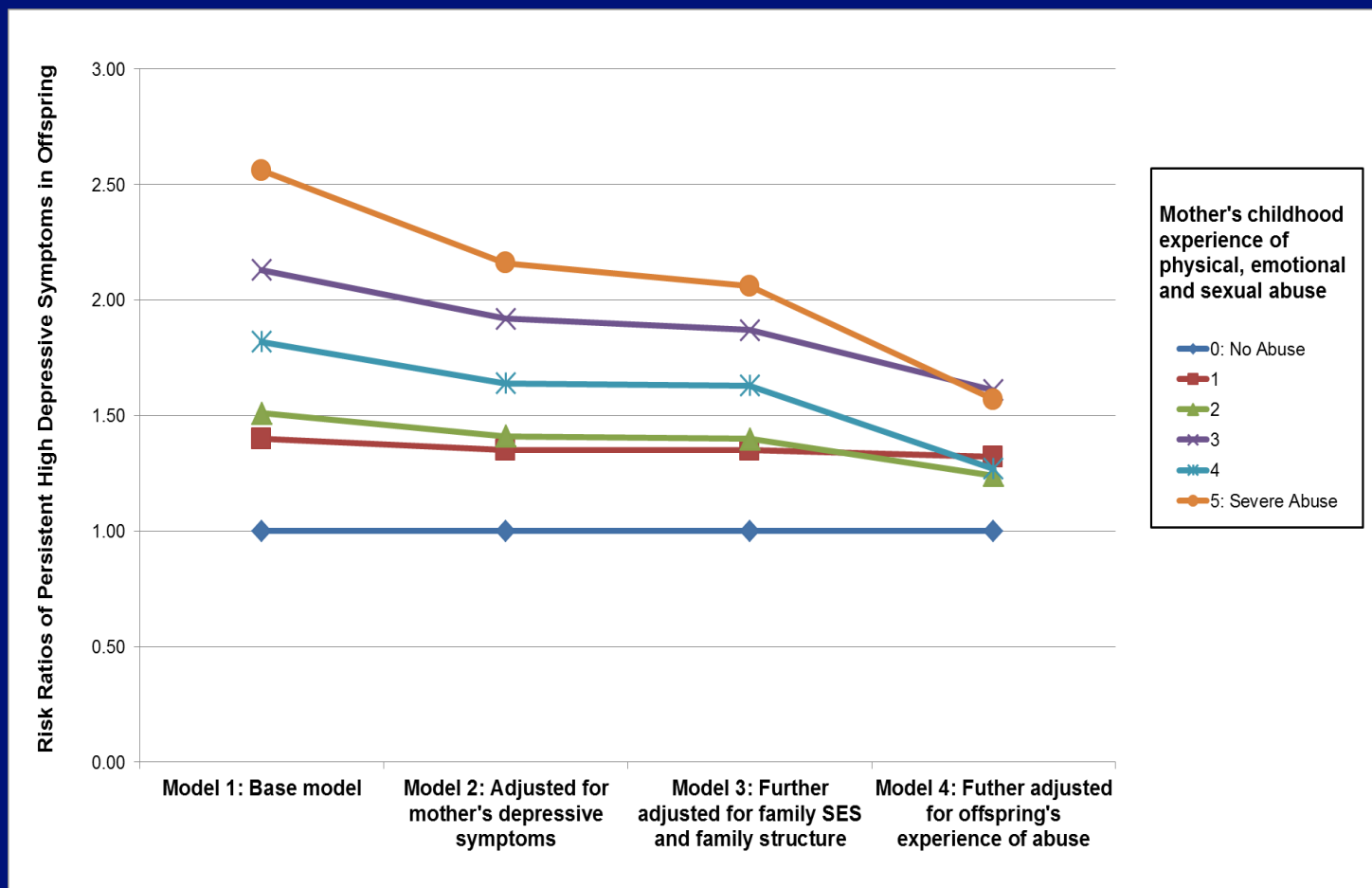
*We need to accelerate research that will
help us to better understand the life
course and transgenerational sources of
inequities*

Preconception Stress and Infant Mortality

- Study of all births in Sweden, 1973 to 2009
- Stress: mother lost a child, spouse or parent from 6 months prior to conception, through birth of child
- Preconception stress predicted infant mortality (OR=1.53) adjusted for covariates



Mother's Childhood abuse Predicts Offspring's Persistent High Depressive Symptoms Across Adolescence & Young Adulthood



N mothers=6,692. All models adjusted for SES & demographic factors. All $p < 0.05$ (except for mother's childhood abuse level 1 and 2 in model 4).

Roberts, A. L., Chen, Y., Slopen, N., et al., 2015, *Depression and Anxiety*, 32(10), 709-719.

Intergenerational Epigenetic Mechanisms

- People who experienced the Holocaust have different stress profiles than their peers
- Holocaust exposure was associated with epigenetic alterations that were evident both in the exposed parent and offspring (compared to demographically comparable controls)
- This intergenerational epigenetic priming of the physiological response to stress may contribute to the increased risk of psychopathology in the next generation
- The findings also suggested site specificity for environmental influences – parental trauma versus the offspring's own childhood trauma

Discrimination and Allostatic Load

- 331 Blacks (20 year olds), 9 rural counties in Georgia
- Discrimination assessed at age 16, 17, and 18
- Allostatic load assessed at age 20; overnight cortisol, epinephrine, norepinephrine, SBP, DBP, CRP, BMI
- 79% of sample had low and increasing levels of discrimination; 22% had stably high levels
- Stably high levels of discrimination as a teen linked to higher allostatic load at age 20
- Association increased when adjusted for CES-D, life stress, socioeconomic risk and unhealthy behavior.

Priority

We need to better understand the health costs of adapting well in difficult environments and how we can minimize them

The Costs of Resilience?

- Studies of black adolescents followed over time
- Low SES with high self-control and self-regulation at age 11 succeed academically and emotionally in young adulthood
- At age 20, they have lower drug and alcohol use
- But they have greater obesity, higher blood pressure, stress hormone levels and epigenetic aging (DNA methylation profiles) than low SES peers low on self-control, and than higher SES peers



Priority

Need to better understand the ways in which the current political environment affects the health of children and adolescents

Hostility in Schools

- Survey of 2,000 K-12 teachers (not a probability sample)
- Since the 2016 presidential campaign began:
 - 67% of teachers report that students (esp., immigrants, children of immigrants and Muslims) express concerns or fears about what might happen to their family after the election
 - More than a third seen increase in anti-Muslim or anti-immigrant sentiment



<http://www.newkidscenter.com/Bullying-in-Preschool.html>

<http://www.sfgate.com/news/article/Jerry-Brown-Trump-election-build-California-wall-6892193.php>

Costello, *The Trump Effect*, Southern Poverty Law Center, 2016

Hostility in Schools -2

- More than half report an increase in uncivil political discourse
- More than half say students “emboldened” to use slurs and name-calling, and say bigoted and hostile things about minorities, immigrants, and Muslims



<http://www.booktrust.org/wheres-hope-hispanic-students> www.mormonchurch.com/4933/sad-reality-youth-bullied-church www.islamiclife.com/family/?page=all http://www.huffingtonpost.com/erin-johnson/the-phrase-self-critical-children-need-to-hear_b_9851740.html

Costello, *The Trump Effect*, Southern Poverty Law Center, 2016

Impact of Presidential Election

- Across the US, spike in hate crimes & harassment
- 1,094 bias incidents in the 1st 34 days
- Highest count on day one
- K-12 Schools, the number one site of hostility and hate crime incidents in the U.S.
- US hate groups grew in 2016 from 2015
- Anti-Muslim groups increase 197%



Hostility and Adolescent Health

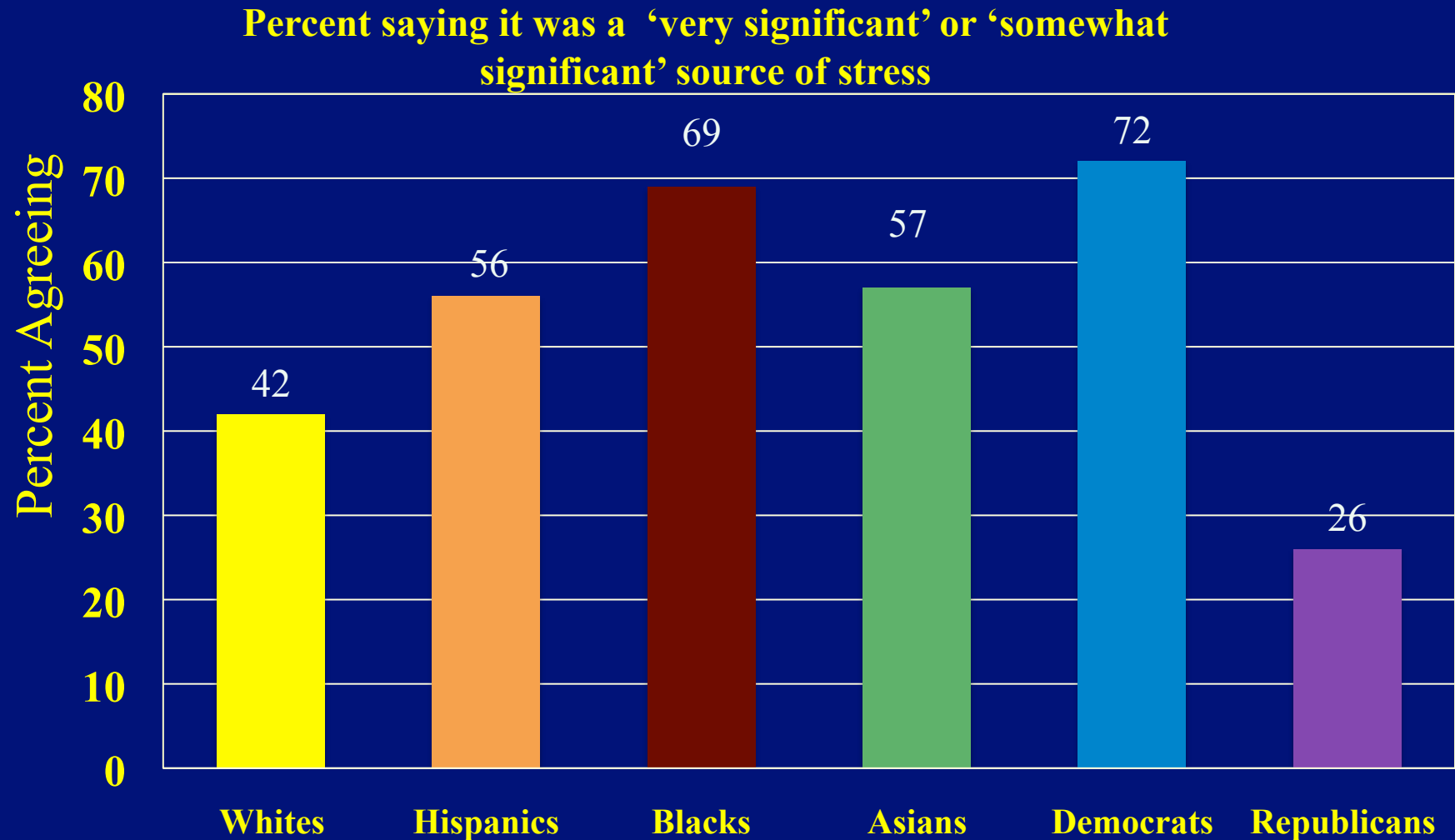
- Study of 2,572 11th graders in 10 urban and suburban schools in LA County
- Interviewed: Spring 2016 and in Spring 2017
- Students indicate their level of concern and worry about the increasing hostility and discrimination of people because of status in society (race, ethnicity, sexual orientation, immigrant status, religion or disability status)
- Increasing concern about discrimination in 2016 was positively associated with use of cigarettes, alcohol, marijuana, number of substances, and depression and ADHD symptoms

Leventhal, Cho, et al JAMA Pediatrics, 2018

Increased Hostility & Changes in Health

- 42% at baseline and 45% at follow-up were “very” or “extremely” concerned about increasing discrimination
- Increased discrimination among Hispanics & blacks
- Change in concern about discrimination associated with increased
 - cigarette use
 - marijuana use
 - number of substances used
- No effect on alcohol use, depression & ADHD symptoms
- Increased cigarette use greater for blacks & Hispanics

Election Outcome as a Source of Stress



American Psychological Association, Stress in America, 2017

Priority

More generally, we need to understand how hostility in the larger environment can adversely affect health

Racial Prejudice and CHD Mortality

- Explicit prejudice (greater warmth for whites vs blacks) and implicit prejudice (IAT) aggregated in 1,836 counties
- In counties where whites had more explicit prejudice, the death rate for heart disease was higher for blacks and whites, with the effect stronger for blacks
- Racial disparities in CHD larger in counties with more white prejudice
- On average, 11 more blacks died yearly in high bias counties
- No association with implicit bias
- A similar pattern not evident for cancer deaths
- Results adjusted for covariates (pop, b/w ratio, income, education, unemployment, poverty, segregation, geog. mobility, housing density, age bias)

J Leitner et al, Psychological Science, 2016

Priority

Need to better understand the ways in which the current political environment affects the health of immigrants

Arizona SB 1070 Immigration Law

- 2010 Arizona law empowered police to stop anyone suspected of being undocumented and detain any without proof of citizenship
- A study of 204 dyads of Mexican-origin adolescent mothers and their mother figures, interviewed before and after the law
- Utilization of public assistance and preventive routine care by Mexican-origin adolescent mothers, for their children declined after SB 1070 enacted
- Among mother figures, the U.S. born reported a steeper decline in use of public assistance than the foreign-born.
- Heightened perceptions of fear, discrimination and lack of community safety, even among Mexican-origin women who were U.S. citizens, affected the use of health care and social services.

Postville, Iowa Immigration Raid

- In 2008, largest immigration raid in US history
- 900 immigration agents at meat-processing plant
- Employees suspected of being undocumented immigrants (perceived to be Latino) handcuffed until their immigration status was established
- 389 employees (98% Latino) arrested and detained: cuffed and chained together
- Many families separated
- Males detained 80 miles away, women in county jails
- Mothers of small children released with ankle monitors but, barred from working, survive on charity



Novak, Geronimus, Martinez-Cardoso, Int Journal Epi, 2017

Immigration Enforcement and Health

- Detainees chained together in groups of 10 and arraigned on felony charges (aggravated identity theft: working under a false SSN)
- ~300 deported after 5-months in prison
- Latino community in high levels of fear
- Some sleeping in churches instead of their homes
- Infants born to Latina mothers in year after raid, show increase in low birth weight compared with infants born in year before the raid
- A similar increase in LBW infants was not evident among non-Hispanic white mothers
- *Immigration enforcement policies can have negative health effects on the local community*

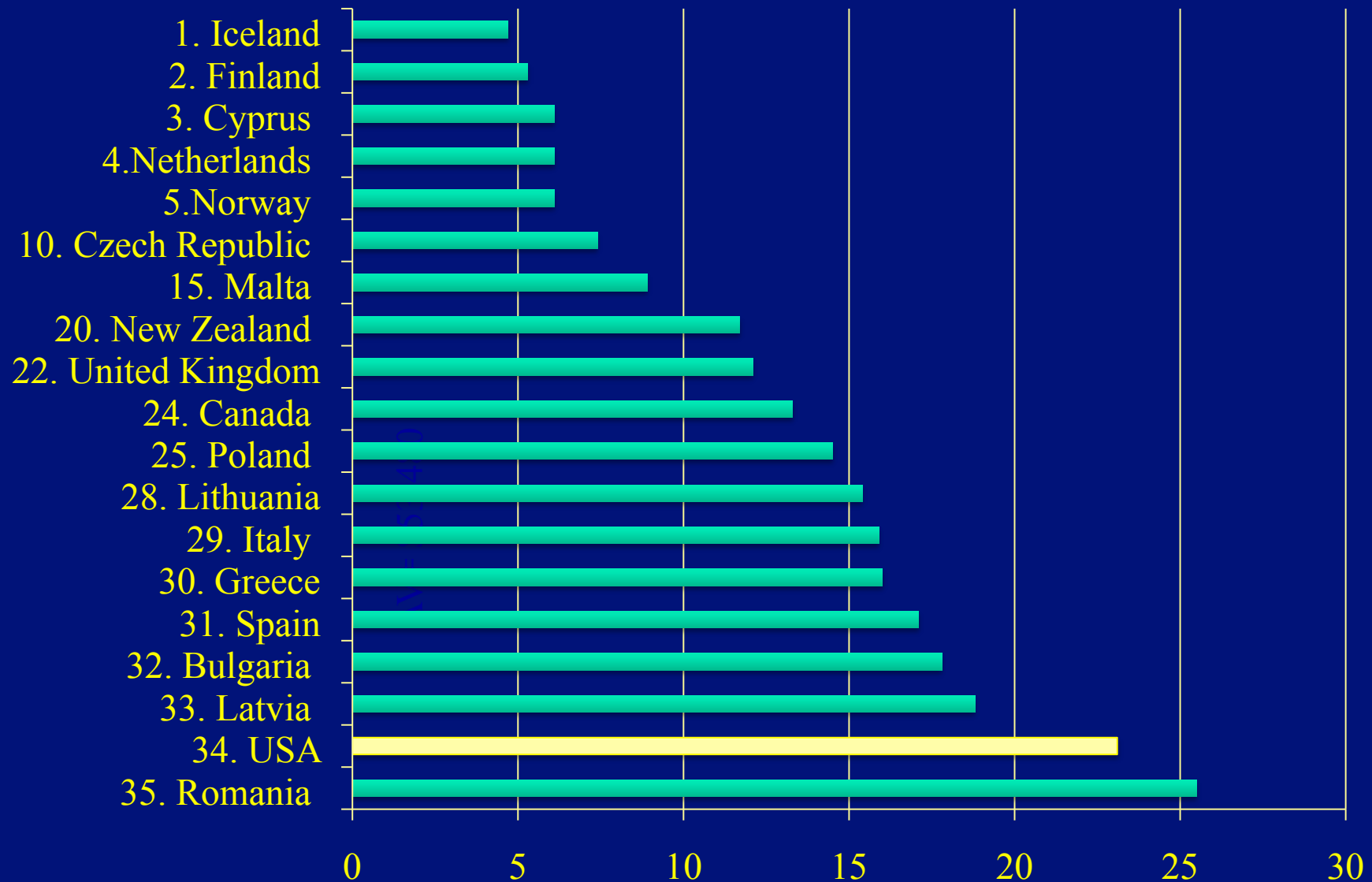


Priority

*We need to identify how to create
environments that are more resilient
(Resilience exists *not just at the
individual level*)*

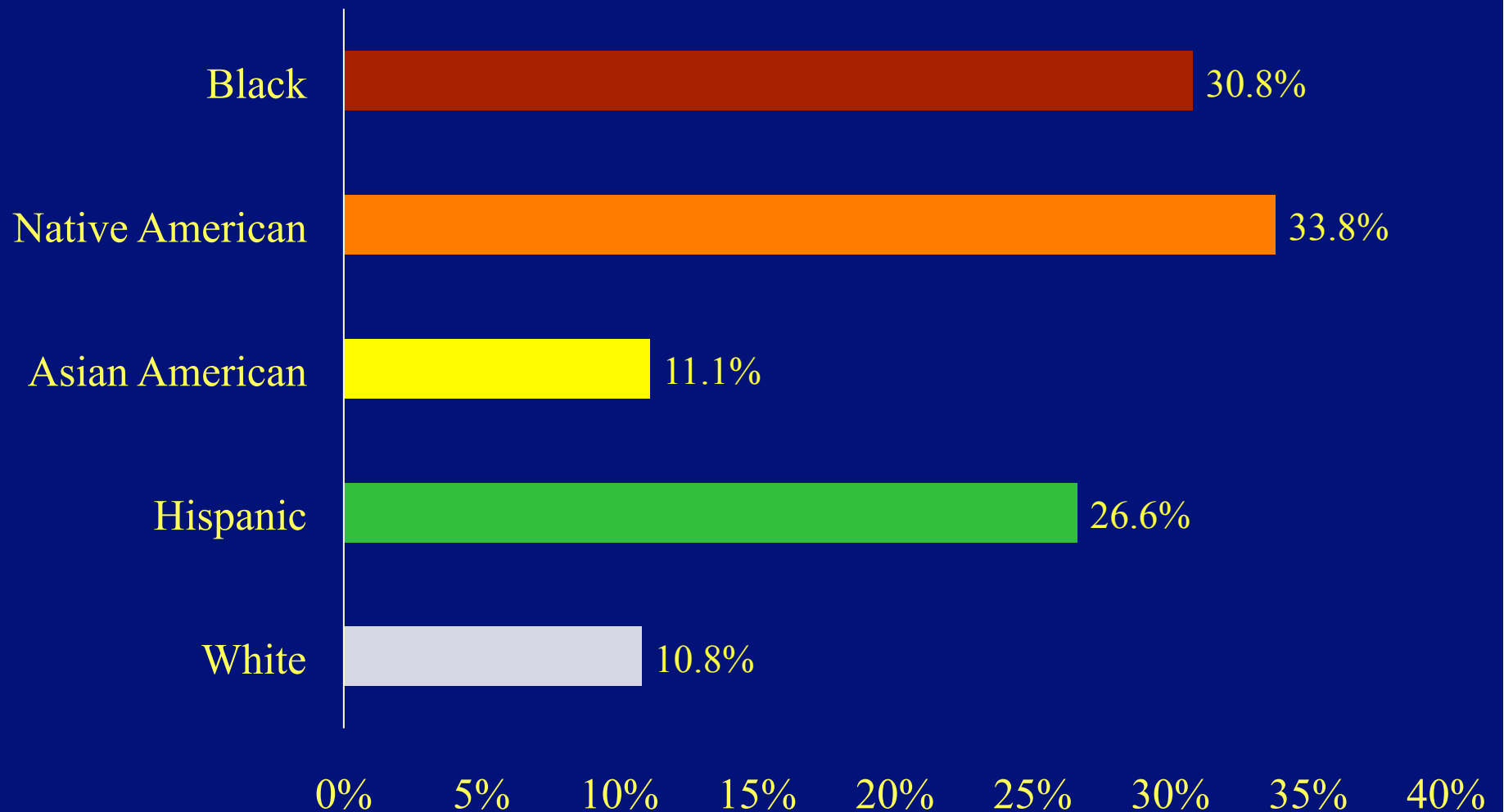
Policy interventions can create
resilience to buffer the negative
effects of childhood poverty

Child Poverty Rate



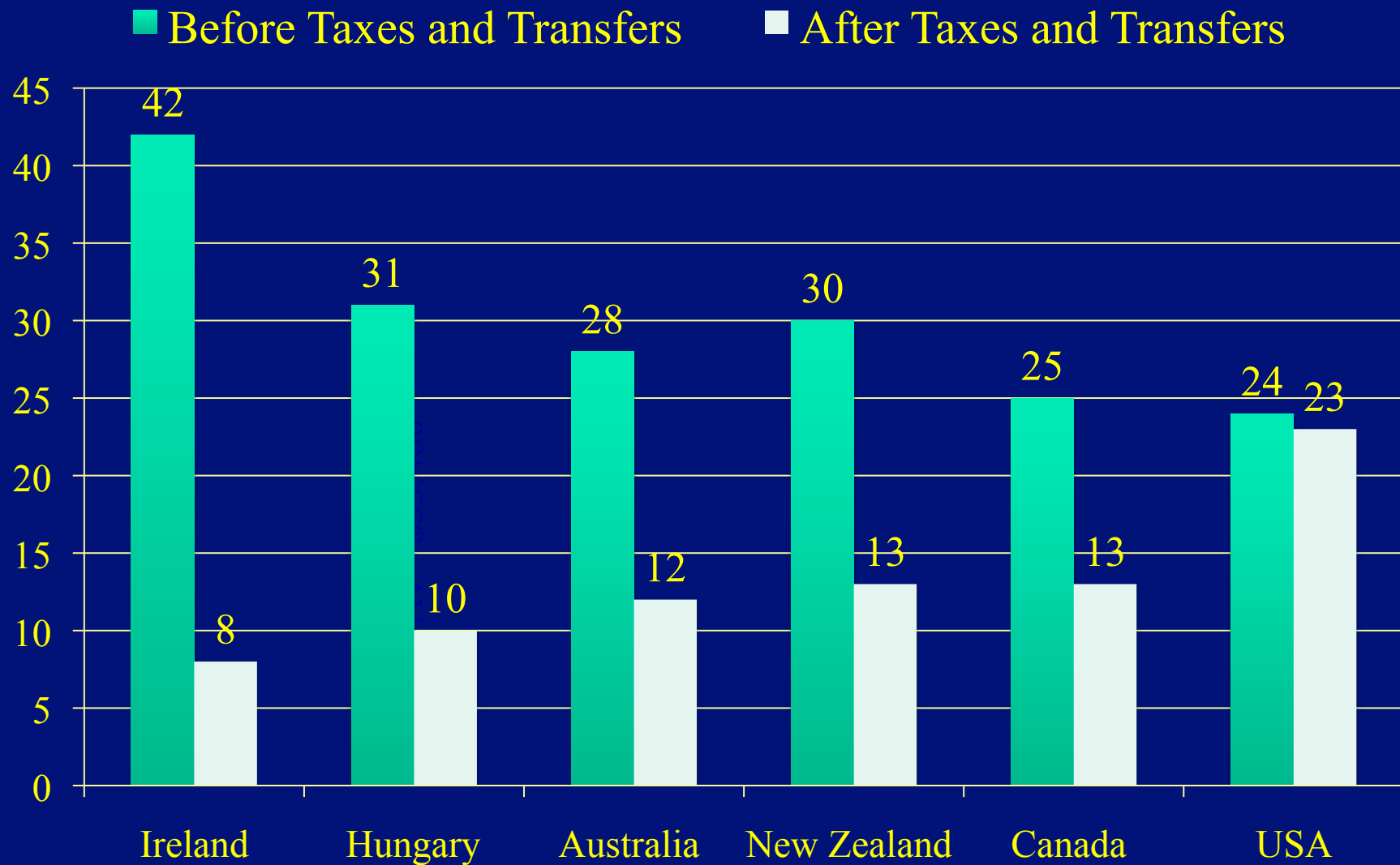
UNICEF, Measuring Child Poverty, 2012

Childhood Poverty and Race, 2016



American Community Survey, 2015-2016; Economic Policy Institute, 2017

Child Poverty Rate



UNICEF, Measuring Child Poverty, 2012

The Safety Net as a Resilience Resource

Keeping it in Place a resilience strategy

A walk down memory lane

1981 Cuts in Health & Social Services

- 500,000 persons lost eligibility for Aid to Families with Dependent Children (AFDC)
- 1 million persons dropped from Food-stamps
- 600,000 net loss of Medicaid beneficiaries between 1981 and 1983
- Medicaid covered 52 of the poor in 1985 compared with 65% in 1976
- In some states, less than 20% of poor were covered
- Some cities had a 21% decrease in Medicaid eligibility



Source: Wikipedia

Source: Mary Mundinger, NEJM, 1985

Health Impacts

- Elderly experienced reduced access to care
- Av. Medicare deductible for a hospital stay doubled from 1981 to 1985
- Nationwide increase in women who did not receive prenatal care
- A 143% increase in anemia in pregnant women
- Increase in the incidence of Low birth weight
- Increase in infant mortality, poor areas, 20 states, 1981-82
- Preventable childhood diseases rise in poor populations
- Increase in children with elevated blood lead levels, and lead poisoning
- Increase in chronic disease in adults



Source: Late Adulthood

Source: Mary Munder, NEJM, 1985

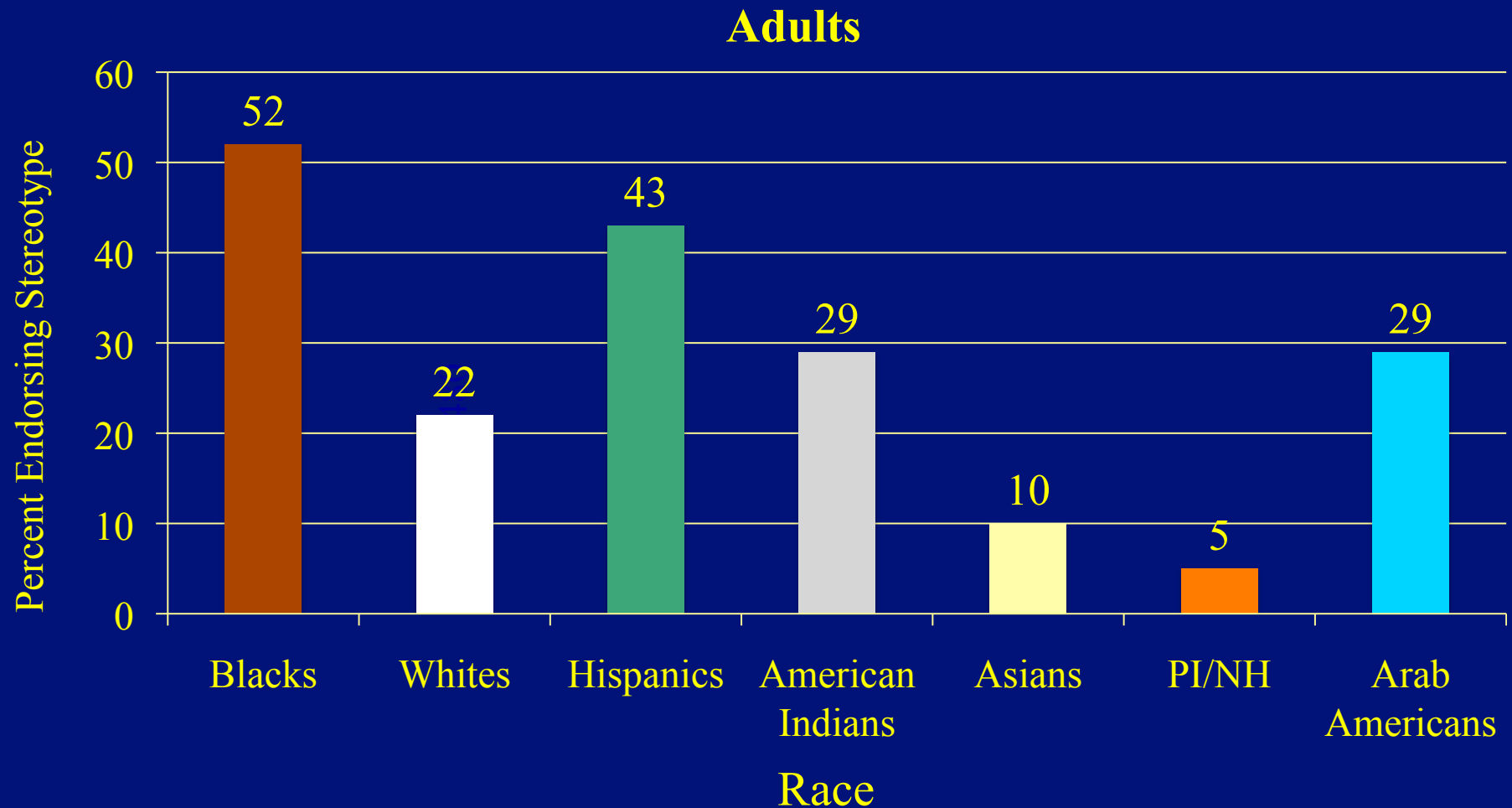
Securing the Safety Net

- We need to monitor policy changes and document their impact on health and inequities in health
- We need generate the data to inform advocacy for keeping and strengthening a very fragile safety set that is likely to become even more strained

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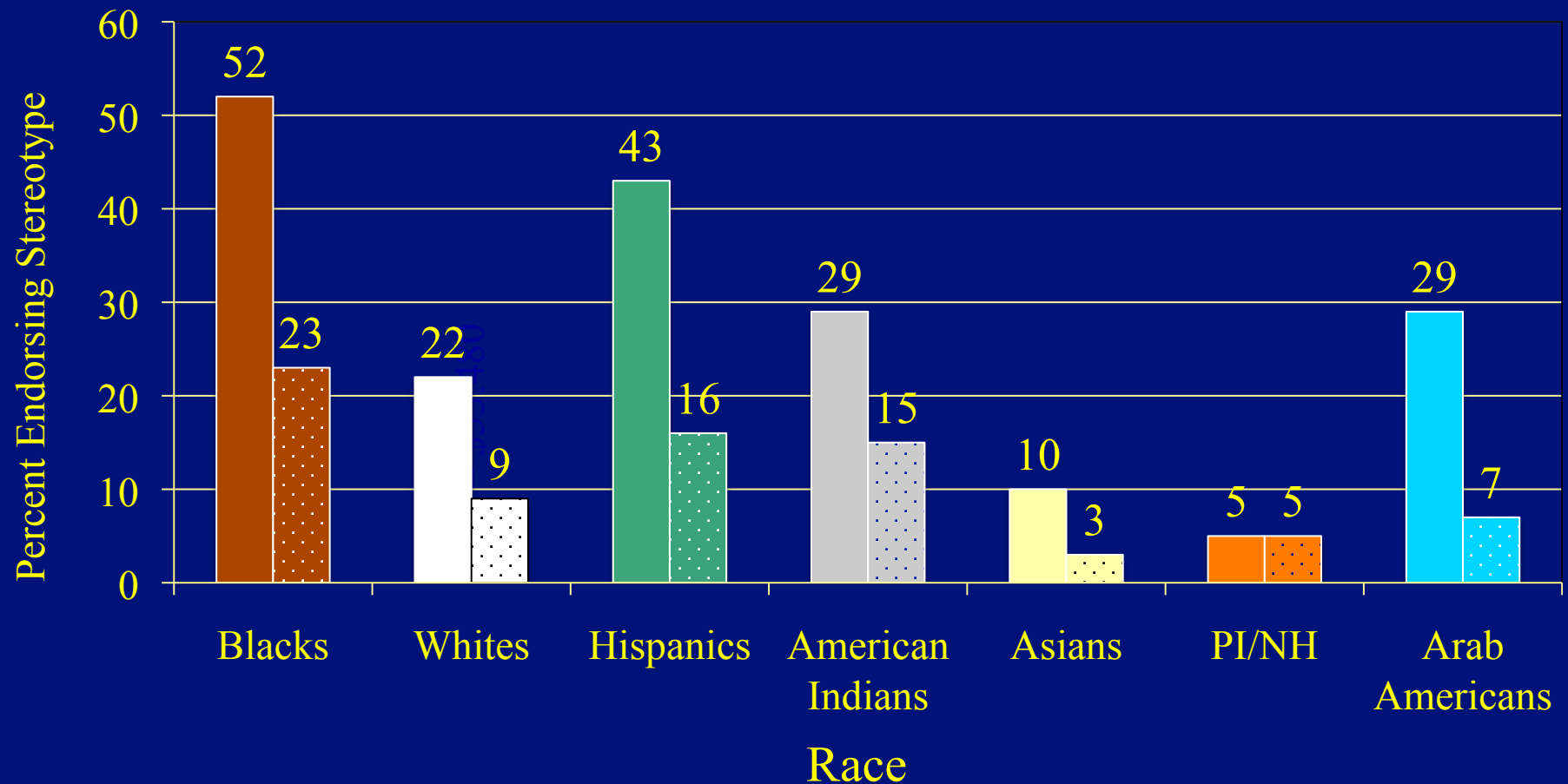
We need to better understand, and effectively address, the deeply embedded racism in our culture (as manifested in high levels of negative stereotyping) and its implications for political support to address social inequities in health

Percent of Whites* Viewing Adults as Violence Prone, 2013



Priest, Slopen,Williams, PLoS ONE, 2018 *who work or volunteer with Children

Percent of Whites* Viewing Adults and Young Children as Violence Prone, 2013



Priest, Slopen, Williams... et al., PLoS ONE, 2018 *who work or volunteer with Children

3 Communication Challenges

- We need to raise awareness levels of the problem of inequities in society and in health
- We need to build the science base that will guide us in developing the political will to address racial and SES inequities in health
- We need to build empathy, that is, identify how to tell the story of the challenges of the disadvantaged in ways that resonates with the public

The Real Challenge

An Empathy Gap?



<https://www.phila.gov/personnel/Jobs/NonCivilServiceJobOpps.html>

“The most difficult social problem in the matter of Negro health is the peculiar attitude of the nation toward the well-being of the race. There have... been few other cases in the history of civilized peoples where human suffering has been viewed with such peculiar indifference” W.E. B. Du Bois, 1899 [1967] p.163

Lack of Empathy, Evident Early in Life

- Mainly white 5-, 7- and 10-year olds rate pain of black and white children
- No racial bias at age 5
- Children show weak bias (blacks feel less pain) at age 7
- At age 10 children rate pain of black child less than white one (strong, reliable racial bias)
- Unrelated to social preference (would like to be friends with)
- We may need to start empathy training very young



http://www.huffingtonpost.com/2013/10/17/racial-empathy-gap_n_4118252.html

Research Agenda Needed

We need to build the science base that will guide us to identify:

1. How to effectively tell the story of the challenges of the disadvantaged in ways that resonate with the public and communicate the consequences of health inequities for all of us
2. How to reduce the perception of inequities as politically contentious and polarizing
3. How to build political will to develop a commitment and meaningful agenda to reduce inequities in health