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All That Glitters is Not Gold: Costs of Upward Mobility and Heterogeneity in Socioeconomic Position Across Race

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- Coronary Artery Risk Development in Young Adults (CARDIA)

Overarching Question

- Why do black-white health disparities persist after accounting for socioeconomic position (SEP)?

What's with this glitter business?

- Is there heterogeneity in SEP across race/ethnicity
 - There are substantial wealth differences across race/ethnicity in the U.S. which affect neighborhood/social context
 - Could “hidden costs of upward mobility” undermine positive effects of SEP
 - What are the effects of ignoring these factors?
 - Research
 - Practice
 - Policy

Overview

- Measurement Problems
 - Need for a life course SEP framework
 - Absence of wealth in SEP measurement
- Hidden Costs of Upward Mobility
- Empirical Examinations
- Implications

SEP & Health

- Greater levels of SEP are generally associated with better health
- While adjustment for SEP reduces black-white health disparities, differences are not eliminated
- Results from mental health studies indicate an inconsistent relationship between SEP and mental disorders for blacks

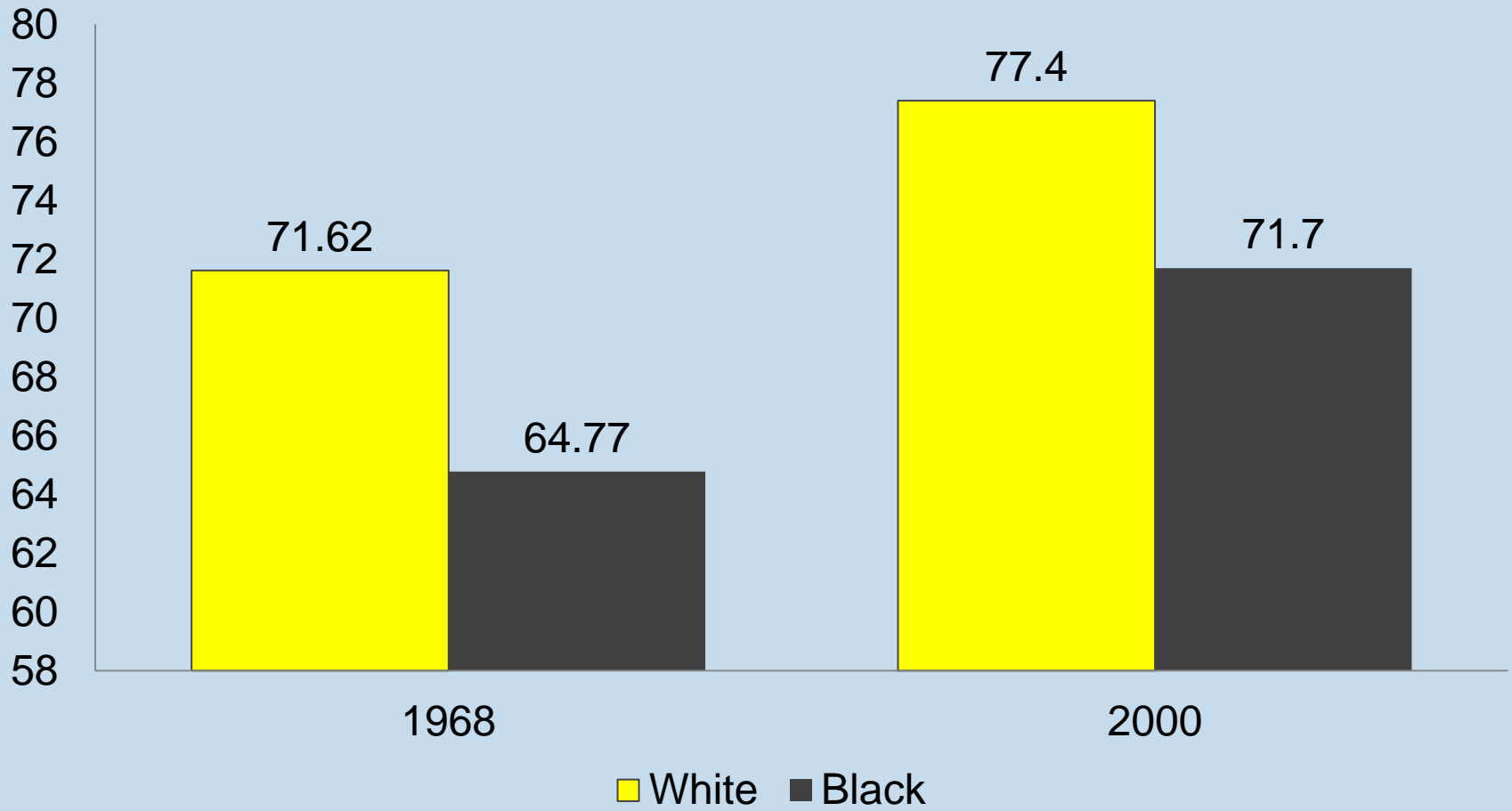
Life Course SEP & Health

- Health studies generally focus use cross-sectional data
 - Childhood/ parental SEP
 - Social mobility trajectories

Life Course and Stress

- Chronic stress exposure affects health across the life course
- African Americans experience the highest rates of low birth weight, pre-term birth, and infant mortality
- These factors have been linked to morbidities that arise during adulthood

Life Expectancy at Birth



Life Course Frameworks

- Fetal origins (Barker) hypothesis: individuals who are exposed to unfavorable intrauterine environments during certain stages of fetal development are at greater risk of infant and adult mortality

Life Course Frameworks

- Weathering hypothesis: African American women experience greater rates of infant mortality due to accumulation of psychosocial stressors throughout the life course
 - Accelerated Aging

Life Course Frameworks

- Extant literature largely focuses on the examination of stress exposure in utero or during early childhood
- There is less evidence that illustrates how stress exposures during adulthood could affect health

Usual Suspects



Most studies that explore SEP-health relationship use indicators of life chances

- Income
- Education
- Occupation (sometimes)

SEP Measurement Limitations

- **Income**
 - Easy to measure but highly volatile over time
 - Regional differences
 - Household size
- **Education**
 - Years of schooling or degrees reported may not capture significant differences in educational quality

SEP Measurement Limitations

- Occupational Status

- Diverse levels of education, income, and occupational prestige are often included in the same occupational categories
- Occupation is not always predicted by education level
- Differences in compensation across gender and race/ethnicity
- Individuals outside of traditional labor force (e.g. homemakers, students, illegal or informal economy)

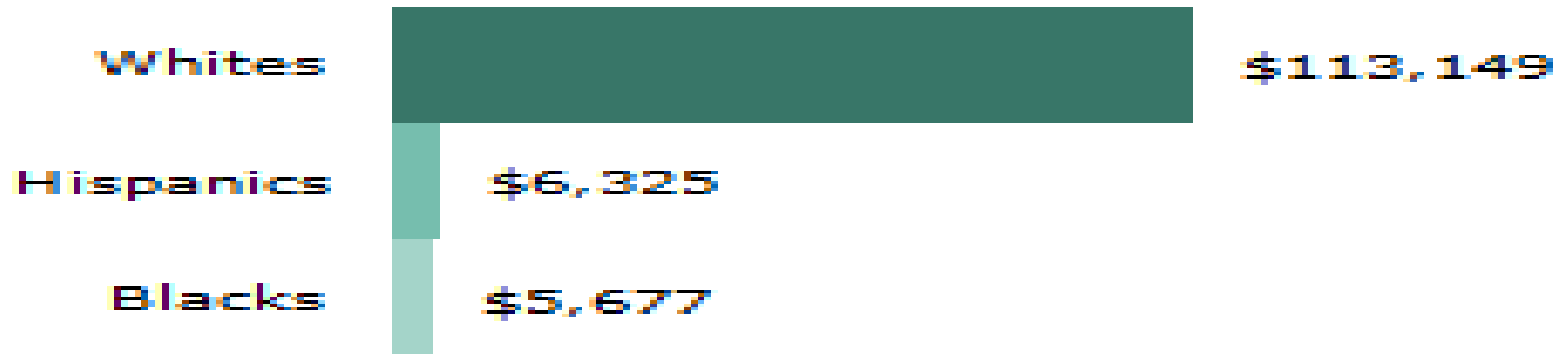
Childhood SEP

- Quality of elementary and secondary education
- Cultural capital
- Social networks
- Resources
 - Transition to adulthood

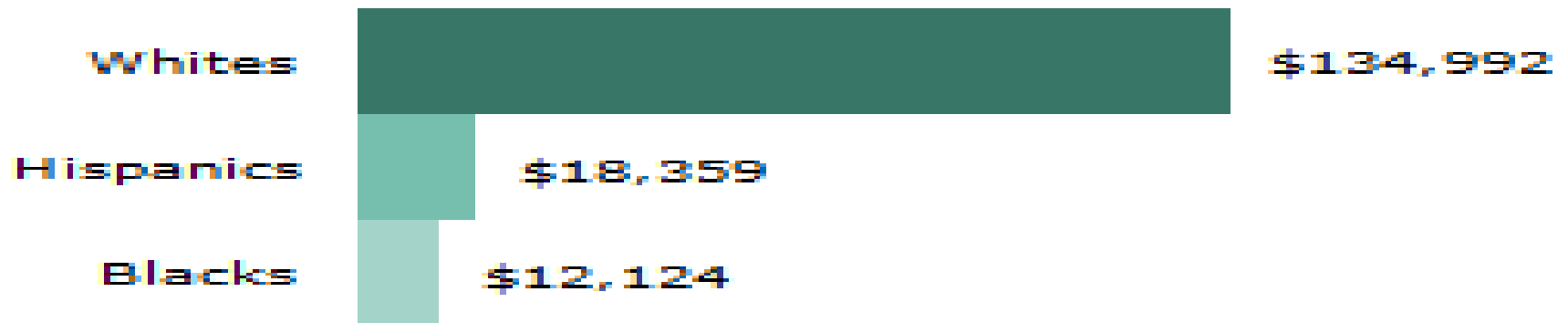
Median Net Worth of Households, 2005 and 2009

in 2009 dollars

2009



2005



Source: Pew Research Center tabulations of Survey of Income and Program Participation data

PEW RESEARCH CENTER

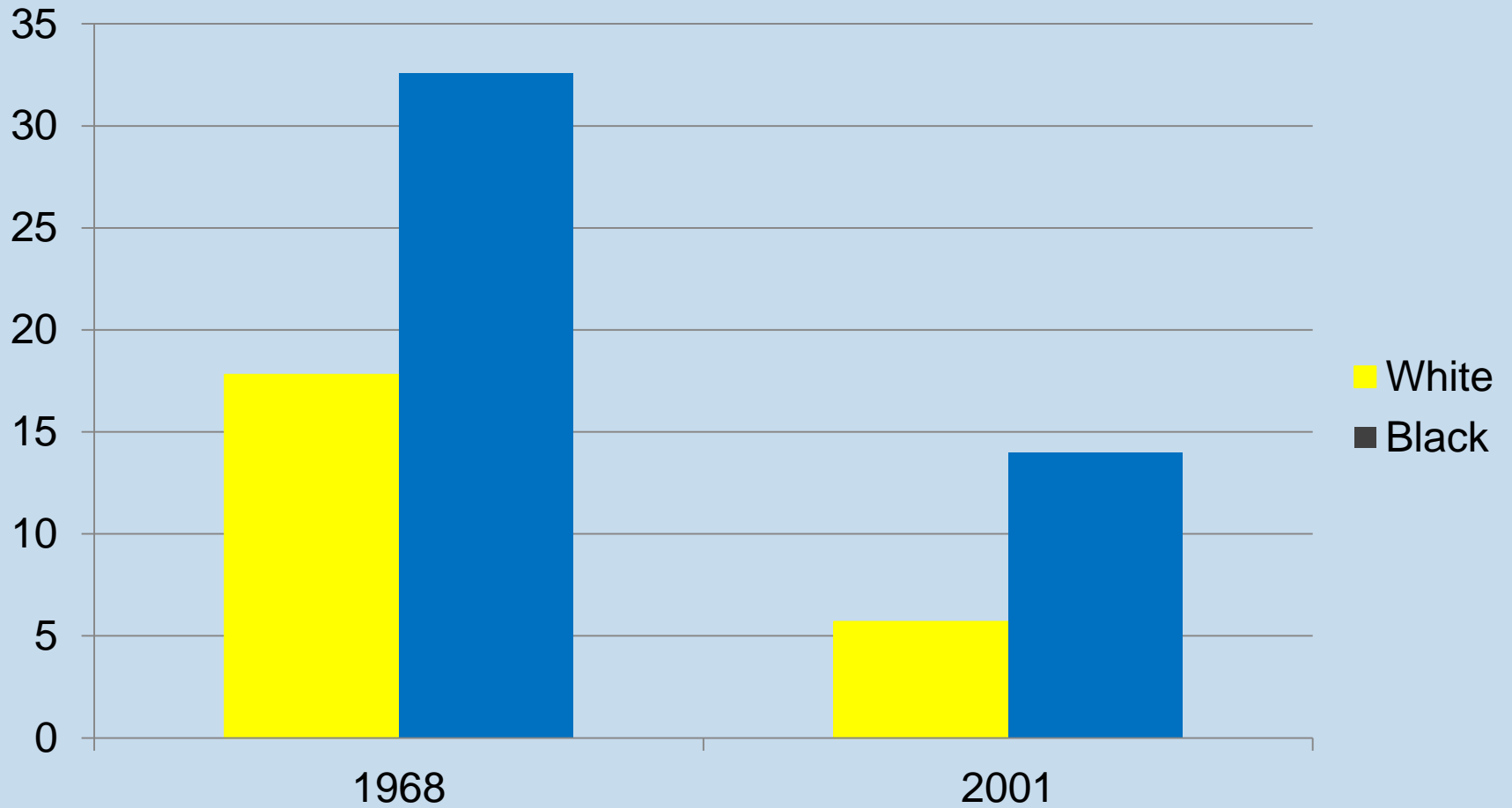
Is SEP equivalent across race/ethnicity?

- Racial residential segregation
 - Quality of schools
 - Social capital
 - Neighborhood resources
 - Percentage of poverty
- Wealth disparities
 - Home value contributes to the cycle of wealth

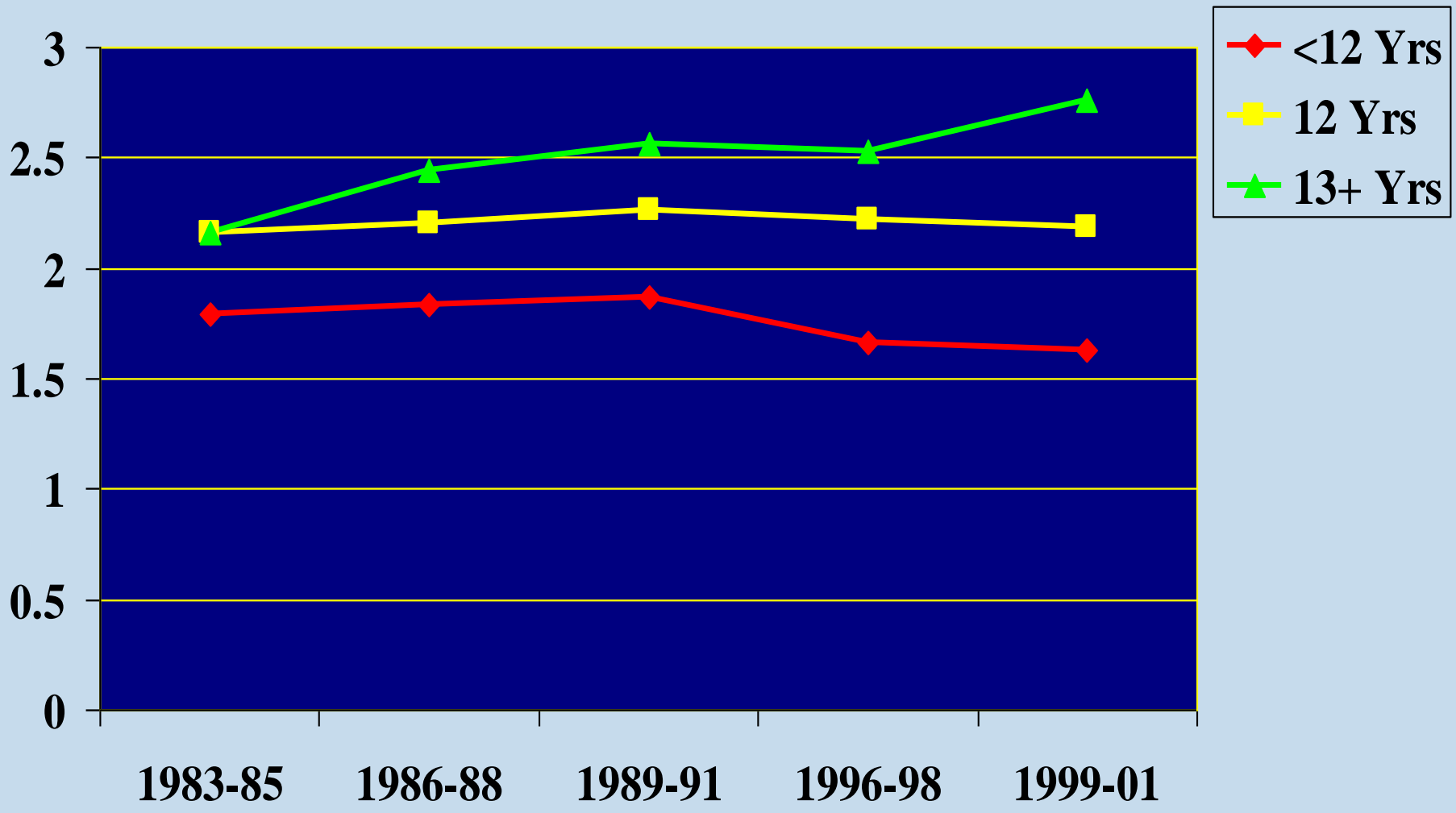
Is it simply a measurement
issue?

Infant Mortality Rate

(Deaths per 1,000 live births)



Black/White Ratio for Infant Mortality by Year and Mother's Education



Costs of Upward Mobility

- Differential health returns across race/ethnicity despite similar levels of SEP
 - Emerging research suggests that there are differential health returns in relation to increases in SEP over time for blacks as opposed to whites
- Stress associated with increased SEP
 - Diminished returns on human capital investments
 - Strained social support networks

Costs of Upward mobility

- Diminished returns on human capital investments
 - Lower compensation
 - Glass ceilings/ truncated trajectories

Costs of Upward Mobility

- Exposure to interpersonal racial discrimination
 - Increased reports of racial discrimination among blacks with greater SEP levels
 - Vigilance/Cultural uniforms
 - Discrimination linked to poorer health

Costs of Upward Mobility

- Coping Resources
 - Decreased proximity to social support
 - Access to health-promoting resources (e.g. parks, recreational facilities, healthy food)

EMPIRICAL EXAMINATIONS

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Racial Discrimination, Socioeconomic Position and Depression among African Americans

D.L. Hudson, K.M. Bullard, H.W. Neighbors, A.T. Geronimus, J. Yang, & J.S. Jackson. *Journal of Men's Health* (2012).



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Study Aim

- Critically examine multiple indices of SEP and determine how they affect depression among African Americans
 - Explore the SEP-depression relationship among a nationally representative sample of African Americans
 - Broaden conceptualization of SEP (included indices of wealth and childhood SEP)

Hypothesis

- The interaction between SEP and racial discrimination would be *positively* related to increased odds of depression among African Americans

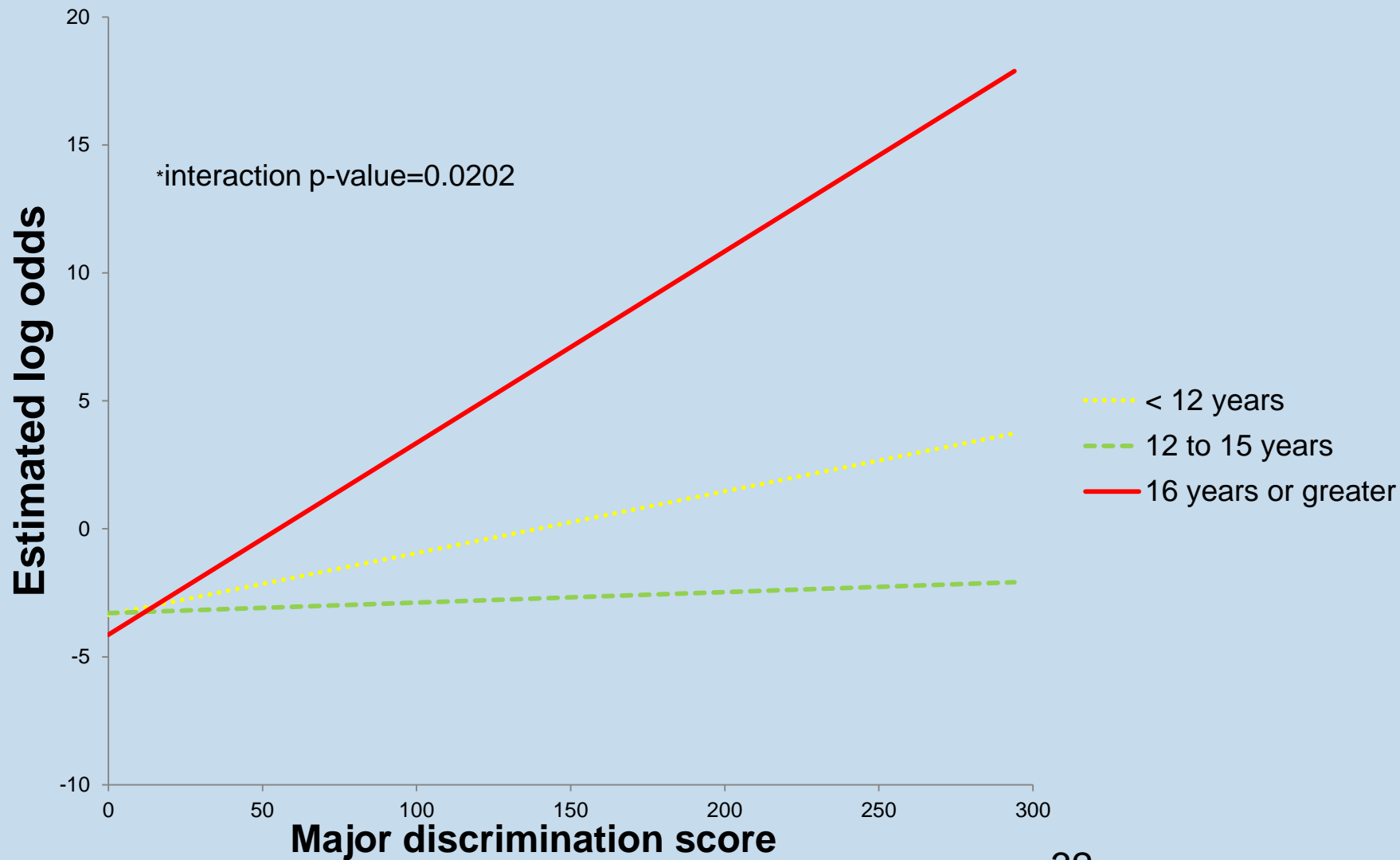
Data

- National Survey of American Life
 - National population-based sample drawn from the coterminous United States
 - In home, face-to-face interviews
- N=3,570 African Americans aged 18 and over

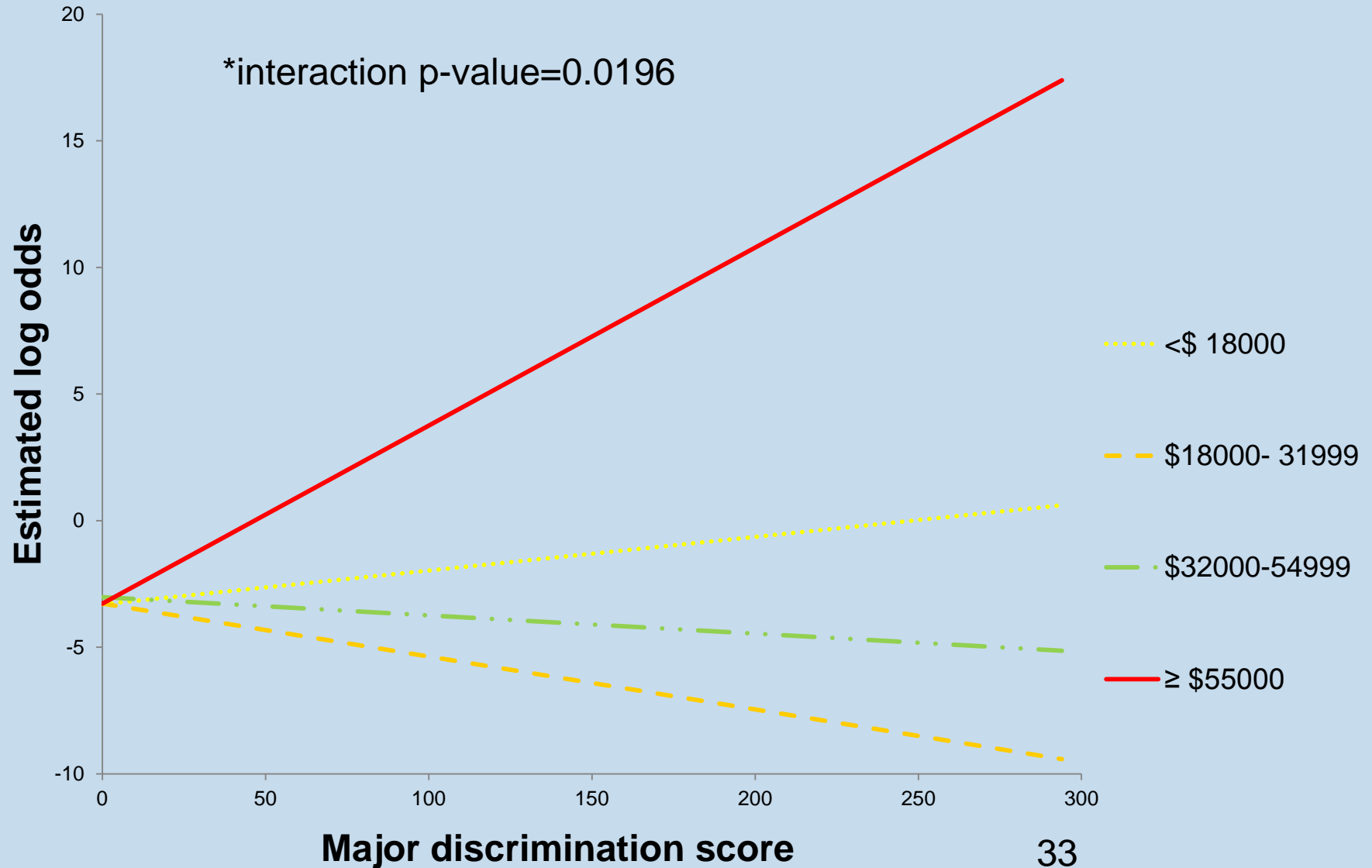
SEP Measurement

- Education
 - < 12 years of education (referent)
 - 12 to 15 years
 - \geq 16 or greater years
- Household income
 - < \$18,000 (referent)
 - \$18,000-\$31,999
 - \$32,000-\$54,999
 - \geq \$55,000

Men: Education x Major racial discrimination



Men: Income x Major racial discrimination



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Examining the Effects of Race, Life Course Socioeconomic Position, and Racial Discrimination on Health

Hudson, D.L., Puterman, E., Adler, N.E, Bibbins-Domingo, K., & Matthews, K. (Under Review).



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Sample

- Coronary Artery Risk Development in Young Adults (CARDIA) Study
- Prospective study (1986)
- 5,115 Blacks and Whites aged 18-30 years at year 1
- 4 sites: Birmingham, AL; Chicago, IL; Minneapolis, MN; and Oakland, CA.

Cumulative SEP

- Cumulative SEP score (0-6) based on:
 - Father's education (<high school=0; high school=1; > high school= 2)
 - Respondent education (≤ 12 years=0; 13-16 years=1; ≥ 17 years=2)
 - Respondent occupation (laborer=0; clerical/sales/housewife=1; executive/professional/supervisory/ technical=2)

Social Mobility

- Father's education
 - Lower: < high school
 - Higher: > high school
- Own occupation
 - Lower: laborer
 - Higher:
housewife/clerical/sales/supervisory/
technical/ professional/executive

Social Mobility Designations

- Stable High: high childhood & high adulthood SEP
- Decreasing: high childhood & low adulthood SEP
- Increasing: low childhood & high adulthood SEP
- Stable Low: low childhood & low adulthood SEP

Dependent Variable

- Depressive Symptoms: 20-item Center for Epidemiological Studies Depression Scale (CES-D)

FINDINGS

Table 1. Sociodemographics.

	All	Blacks	Whites
	(N =3620)	(N = 1697)	(N = 1923)
Age at entry, mean (SD)	25.08 (3.61)	24.49 (3.79)	25.59 (3.37)
Male sex, No. (%)	1602 (44.3)	702 (41.4)	900 (46.8)
Body Mass Index, mean (SD)	28.74 (6.84)	30.46 (7.35)	27.22 (5.95)
Parental Education (years), mean (SD)	13.97 (3.18)	12.86 (2.92)	14.88 (3.09)
Own Education (years), mean (SD)	15.28 (3.18)	14.38 (2.16)	16.07 (2.55)
Own Occupation			
Laborer, N (%)	531 (14.7)	328 (19.6)	203 (10.6)
clerical/sales/housewife, N (%)	1398 (38.6)	803 (47.9)	595 (31.2)
executive/professional/ supervisory/technical, N (%)	1656 (45.7)	544 (32.5)	1112 (58.2)
Cumulative Socio-Economic Position, mean (SD)	3.87 (1.49)	3.31 (1.41)	4.36 (1.39)
Discrimination Frequency, Sum (SD)	1.29 (1.76)	2.33 (1.95)	0.38 (0.82)
CES-D, mean (SD)	9.16 (7.85)	10.52 (8.36)	7.96 (7.16)
Self-rated health, mean (SD)	3.65 (0.89)	3.47 (0.90)	3.82 (0.86)

Table 2. Cumulative SEP and Frequency of Experienced Racial Discrimination on Depressive Symptoms

	All [†]			Blacks [†]			Whites [†]		
	b	SE	p	b	SE	p	b	SE	p
Model A									
Cumulative SEP	-0.66	0.09	<.001	-1.09	0.16	<.001	-0.4	0.11	<.001
Model B									
Discrimination	2.31	0.33	<.001	1.89	0.4	<.001	4.82	0.81	<.001
Model C									
Cumulative SEP	-0.69	0.09	<.001	-1.19	0.16	<.001	-0.39	0.11	<.001
Discrimination	2.44	0.33	<.001	2.19	0.39	<.001	4.77	0.81	<.001
Model D									
Cumulative SEP X Discrimination	0.03	0.19	0.88	0.38	0.28	0.18	0.75	0.52	0.15

Notes. [†] For analyses with all participants, gender, age, and race were included as covariates. For those within each racial group, gender, age and BMI were included as covariates.

Table 3. Cumulative SEP and Racial Discrimination on Self-Rated Health

	All [†]			Blacks [†]			Whites [†]		
	b	SE	p	b	SE	p	b	SE	p
Model A									
Cumulative SEP	0.11	0.01	<.001	0.08	0.02	<.001	0.13	0.01	<.001
Model B									
Discrimination	-0.15	0.04	<.001	-0.11	0.04	0.008	-0.35	0.1	<.001
Model C									
Cumulative SEP	0.11	0.01	<.001	0.09	0.02	<.001	0.13	0.01	<.001
Discrimination	-0.17	0.04	<.001	-0.14	0.04	0.001	-0.33	0.1	0.001
Model D									
Cumulative SEP X Discrimination	-0.04	0.02	0.048	0.01	0.03	0.675	-0.15	0.06	0.016

Notes. [†] For analyses with all participants, gender, age, and race were included as covariates. For those within each racial group, gender and age were included as covariates.

Summary of Results

- Inverse association between greater levels of SEP with depressive symptoms
- Positive relationship between racial discrimination and depressive symptoms, but only among blacks and whites with greater levels of SEP

Summary of Results

- Upward social mobility (moving from low to high) was associated with fewer reports of depressive symptoms
- Unable to make any meaningful comparisons between race, social mobility and health because of low sample sizes in some social mobility categories across race

Overall Implications

- Experiences of racial discrimination could diminish the protective effects of increased levels of SEP

Future Research

- Firmly establish SEP-health relationship across race/ethnicity
 - Account for wealth
 - Examine the life course (cumulative and at “critical periods”)
- Examine potential costs of upward mobility
 - Racial discrimination
 - Social support

THANK YOU