

The Epidemiology Section
of the
American Public Health Association

2016 Wade Hampton Frost Lecture

Presented by Sherman A. James, Ph.D.

Colorado Convention Center, Denver, CO

Monday, October 31, 2016

Wade Hampton Frost, MD



1880-1938



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THE CONTRIBUTION OF THE SOCIAL ENVIRONMENT TO HOST RESISTANCE¹

THE FOURTH WADE HAMPTON FROST LECTURE

JOHN CASSEL²

“...Of all the words Frost wrote, the ones that have made the most impression on me have been his often quoted introduction to the reprinting of John Snow’s papers... *‘Epidemiology at any given time is something more than the total of its established facts. It includes the orderly arrangement into chains of inference which extend beyond the bounds of observation... ’*” p. 107 (italics added)

Expanding Black Freedom

The Difficult Pathway to Racial Health Equity in America

Sherman A. James, PhD
Emory University

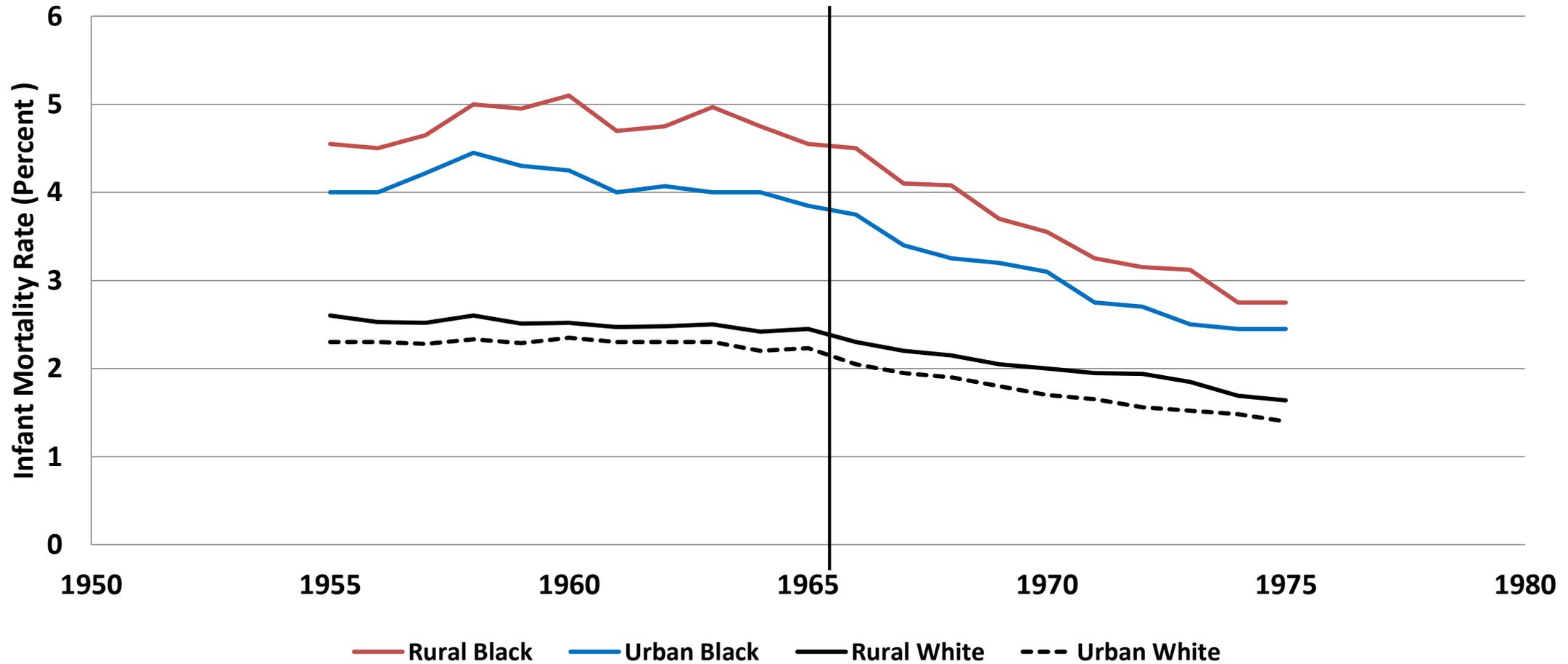
The Wade Hampton Frost Lecture

2016 APHA Annual Meeting
Denver, Colorado

Improved Birth Outcomes for Black Infants

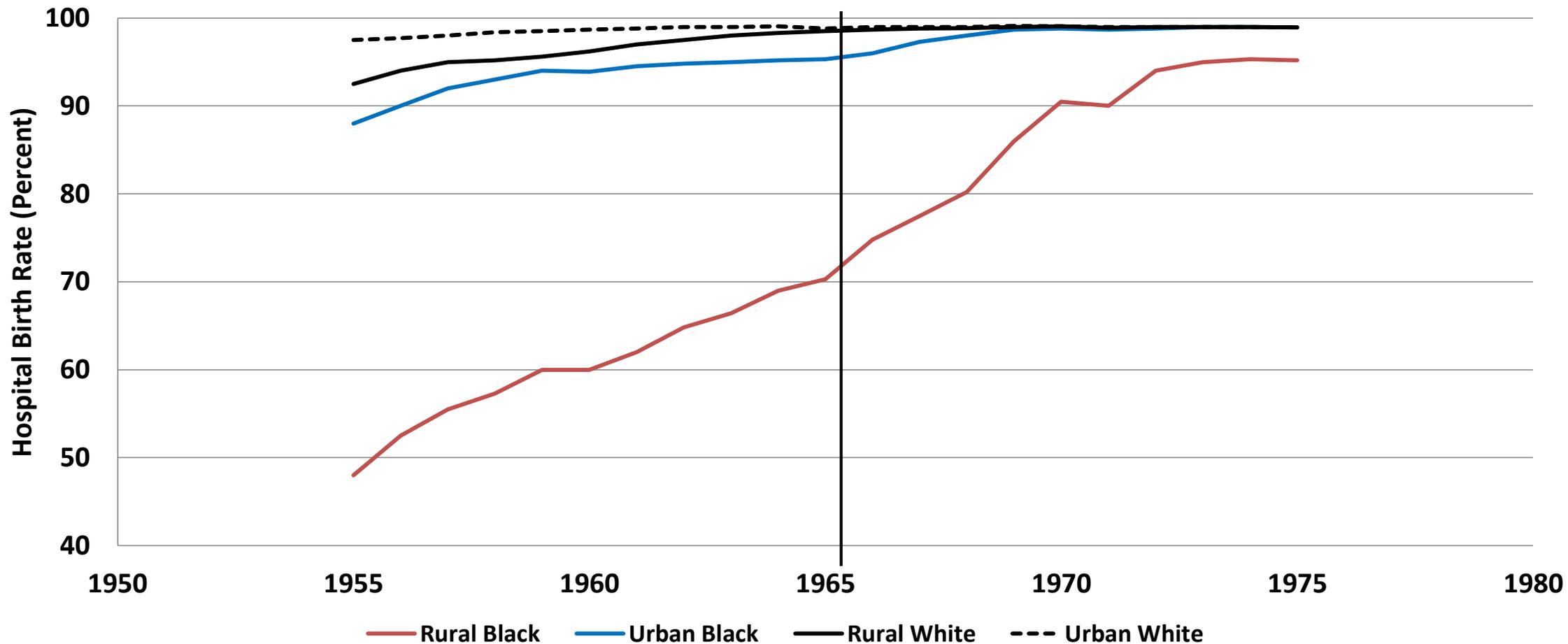
1965-1980

Black and White Infant Mortality Rates in the South, by Rural-Urban Location, 1955-1975



Chay KY, Greenstone M. The Convergence in Black-White Mortality Rates during the 1960s, *American Economic Review*, 2003

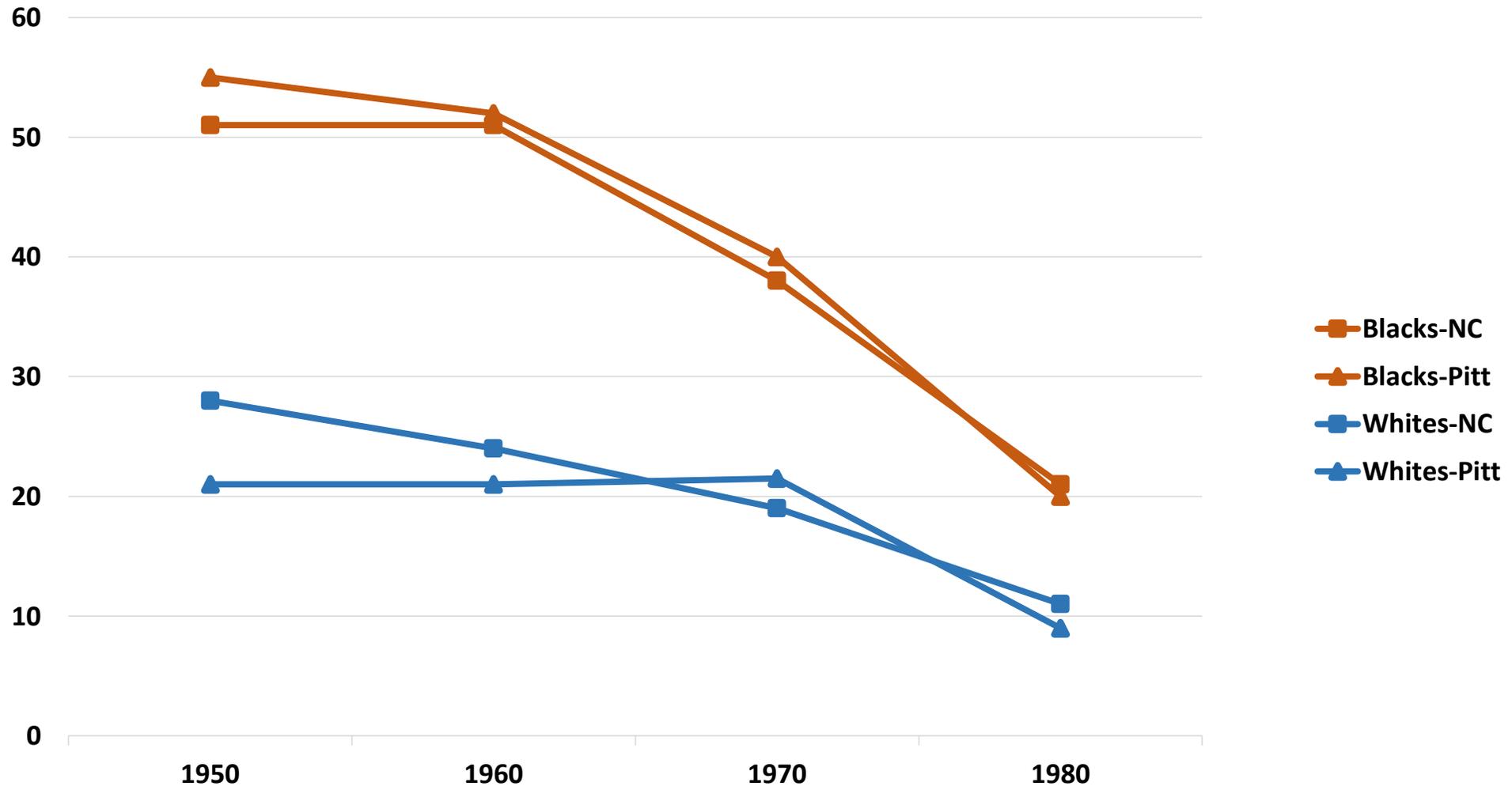
Percentage of Hospital Births in the South with a Physician Present, By Race and Location, 1955-1975



Chay KY, Greenstone M. The Convergence in Black-White Mortality Rate during the 1960s, [American Economic Review](#), 2003

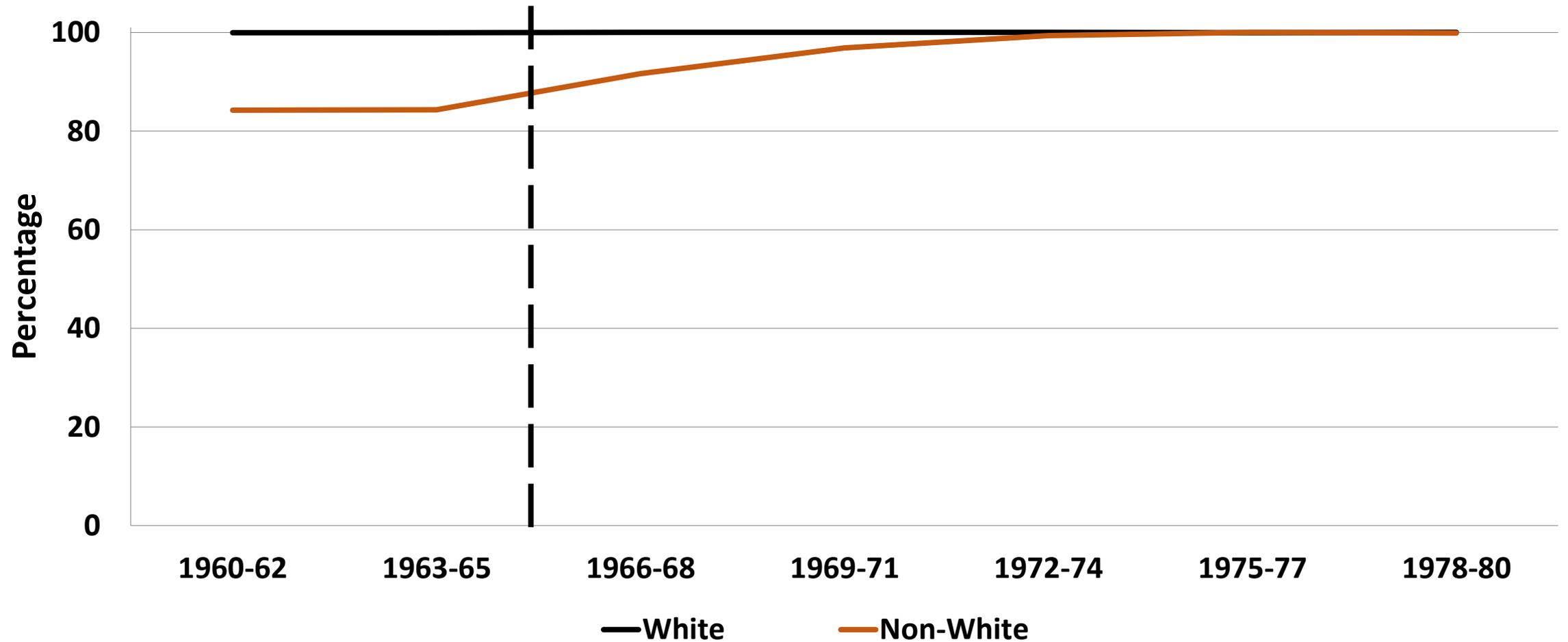
Race-Specific Trends in Infant Mortality,* 1950-1980

North Carolina and Pitt County, North Carolina



*Three year average rates for each decennial period

Percentage of Births Attended by Physician by Race, Pitt County, NC



North Carolina State Center for Health Statistics. *Annual Report of Public Health Statistics, Part 2*. Archived Reports 1960-1964. and *North Carolina Vital Statistics, Volume 1*. Archived Reports 1965-1980.

Data calculated as 3 year averages.

Improved Health of Black Women born in late 1960s vs. early 1960s

Findings

Black women born in the late 1960s were healthier as adults and gave birth to fewer infants with LBW and APGAR scores than black women born in the early 1960s. *No similar differences were found for White women.*

Potential Explanations

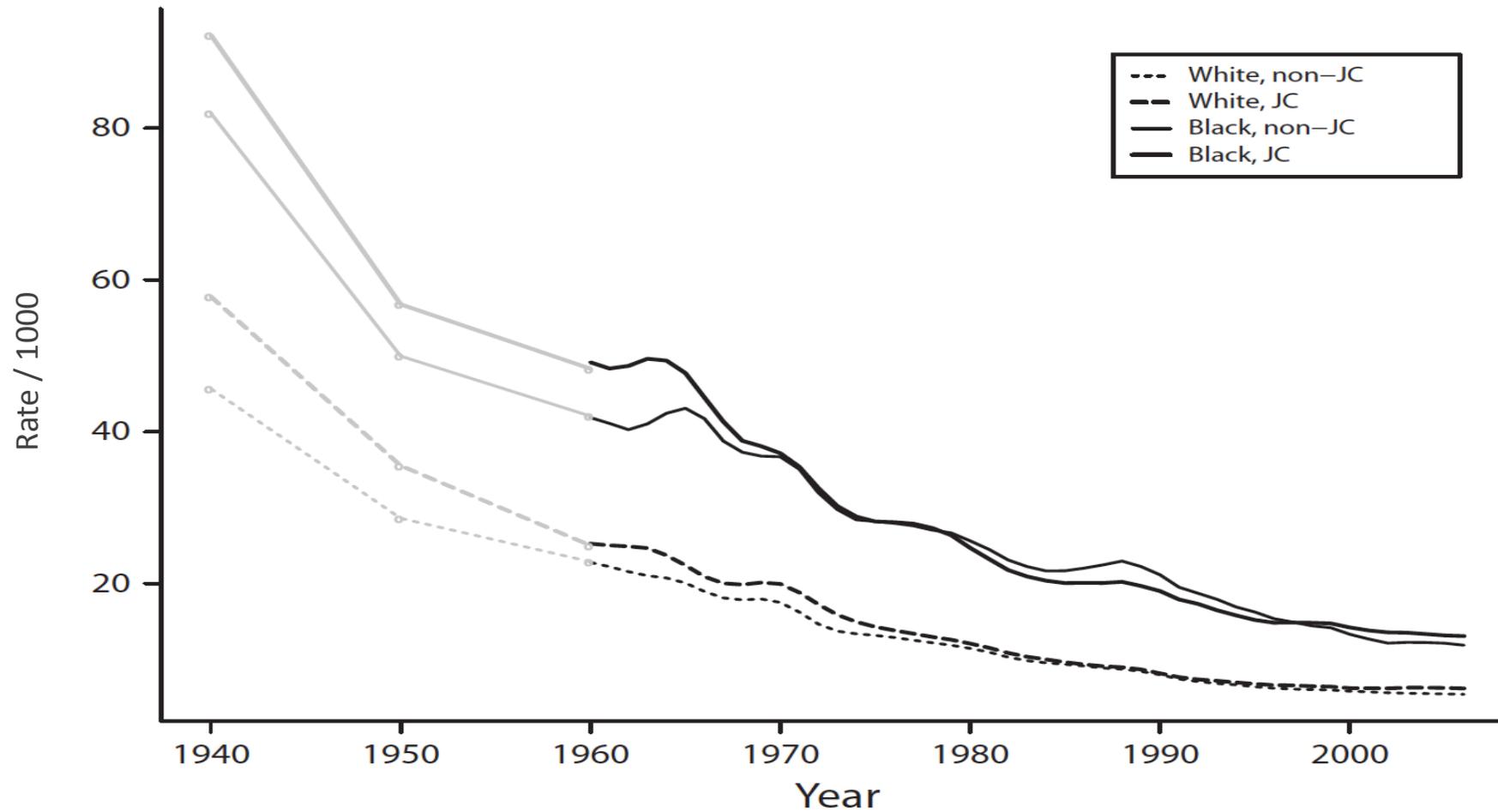
...social policies (e.g., Title VI of the 1964 CRA) that led to infant health improvements had long-run and inter-generational health benefits

“Race”

...a *political relationship* between Blacks and Whites...best understood, perhaps, as the power of Whites to *dominate* and *exclude* Blacks from participating, *as equals*, in mainstream social, economic, and political institutions

~ Based on Krieger et al, 2013

Infant Death Rates among US Black and White Infants in The Jim Crow (JC) and Non-Jim Crow Polities



Note. Gray lines are based on published state vital statistics data; black lines are based on 1960–2010 compressed mortality file.

***Reduced Cardiovascular Disease Mortality among Blacks in
the US South***

1965-1980

Large Improvements in CVD *Mortality Among US Blacks* 1968-1978

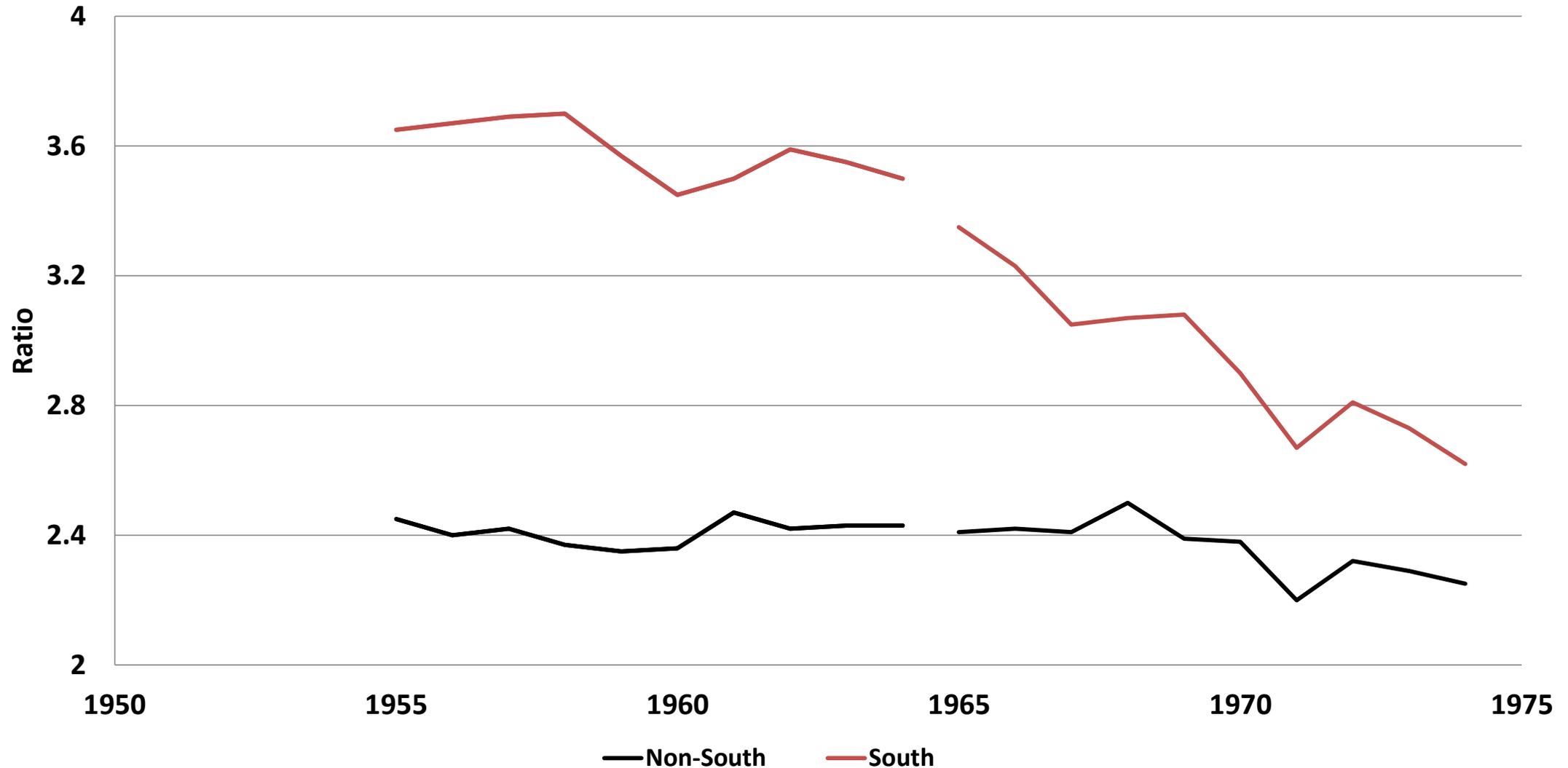
Findings

larger reductions in heart disease and stroke mortality for US Blacks (especially females) than Whites

Potential Explanations

- 1. “...stress reduction through amelioration of racist social conditions?”**
- 2. “...major advances in hypertension treatment and control in early 1970s?”**

Trends in Black-White CHD Mortality Ratios (Ages 35 to 64) for Females, By Region, 1955-1974

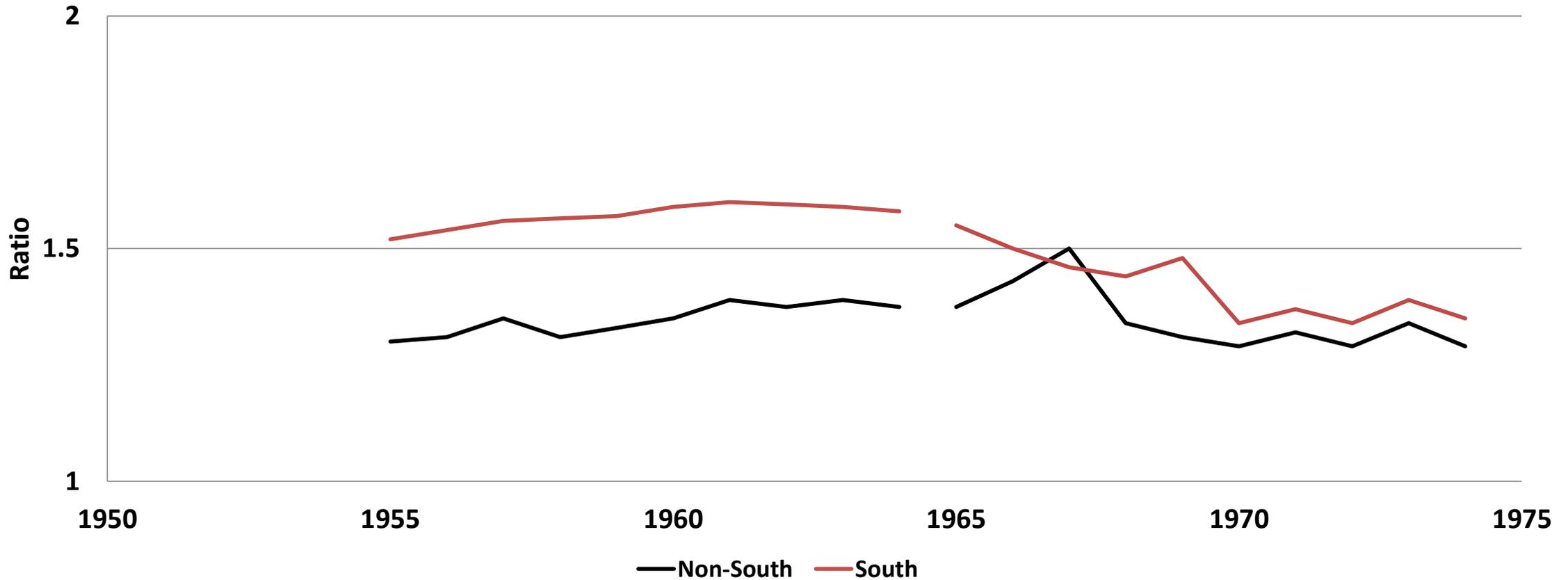


Trends in Black-White Stroke Mortality Ratios (Ages 35 to 64) for Females, By Region, 1955-1974

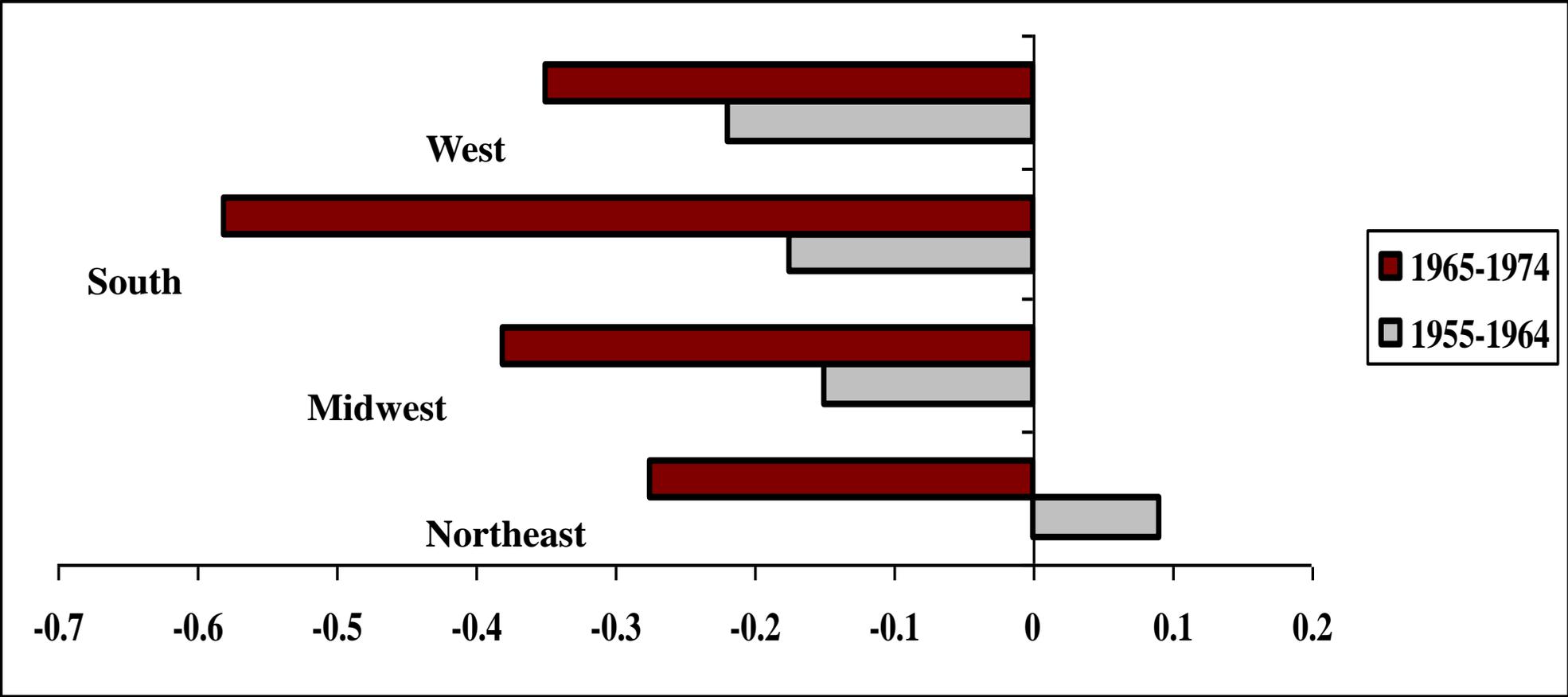


Kaplan et al, Lifting Gates, Lengthening Lives...in Schoeni et al (eds.), Making Americans Healthier 2008

Trends in Black-White Cancer Mortality Ratios (Ages 35 to 64) for Females, By Region, 1955-1974

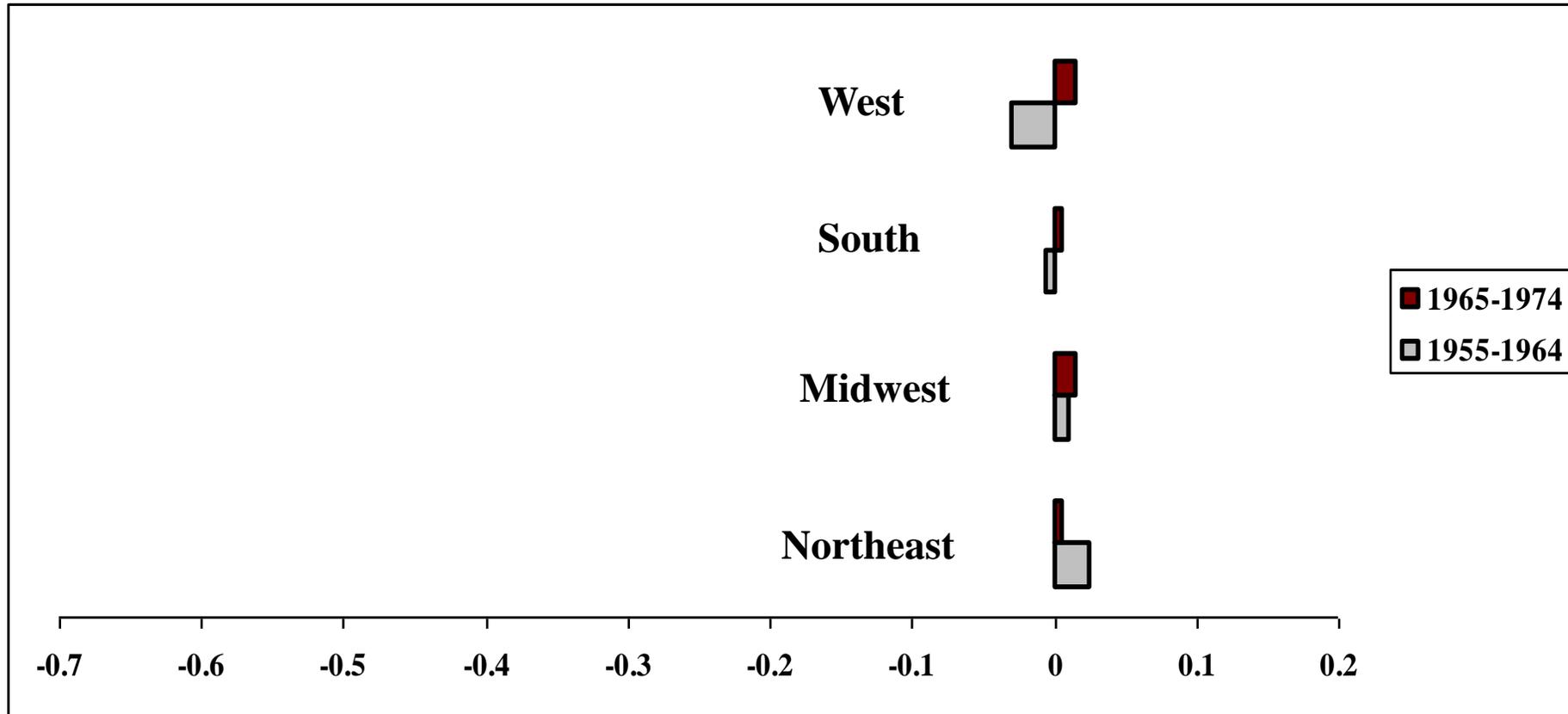


Change in Black-White Ratio of Female Mortality (Ages 35-64): 1955 to 1964 and 1965 to 1974



Kaplan G. et al, *Lifting Gates, Lengthening Lives...Making Americans Healthier* 2008; Figure 6.8, p. 157

Change in Black-White Ratio of Male Mortality (Ages 35-64): 1955 to 1964 and 1965 to 1974



Source: Kaplan et al, *Lifting Gates, Lengthening Lives...* in Schoeni et al (eds.), *Making Americans Healthier* 2008

Race-Gender-Regional Differences in Black/White CVD Mortality Ratios, 1955-64 vs. 1965-74

Findings

Larger reductions in Black/White CVD mortality ratios, for females – *but not males* - in the South than non-South, 1955-1964 vs. 1965-74

Potential Explanations

1965-1980: Black females (especially in the South) achieved major social status gains (e.g., jobs, higher income) relative to White females...*not so for Black males...* evidence for improved psychosocial and material life conditions stronger than for improved BP control

Fundamental Social Causes of Health Inequalities

Socioeconomic and racial disparities in health persist despite changes in the leading causes of death because socioeconomic and racial elites flexibly use:

*money, knowledge, prestige, power
and beneficial social connections*

to protect their health and wellbeing...

“Race”

...a *political relationship* between Blacks and Whites...best understood, perhaps, as the power of Whites to *dominate* and *exclude* Blacks from participating, *as equals*, in mainstream social, economic, and political institutions

~ Based on Krieger et al, 2013

“Caste”

“... A caste system occurs where a society is made up of **birth ascribed groups** which are hierarchically ordered and culturally distinct. The hierarchy entails *differential evaluation, rewards, and association...*”

Merriman, G. Stratification, pluralism, and interaction: A comparative analysis of caste; in de Reuck A, Knight J (eds.) Caste and Race: Comparative Approaches, Boston: Little Brown and Company, 1967; p. 48

Features of Caste Systems

Differential Evaluation

- ascribed differences in intrinsic worth: “purity” (as in India) or genetically determined capabilities (as in the US)...

Differential Rewards

- differential access to goods and services and differential power to influence the behavior of others...

Differential Association

- social rank expressed by who may be one’s friends, wife, neighbor... only *within* the caste is status equality found

Stressors and Social Rank in Primates

“...In most social species, dominance rank influences the extent to which an individual sustains physical and psychological stressors...When the hierarchy is stable in species where dominant animals actively subjugate subordinates, it is the latter who are most socially stressed. This reflects the high rates of physical and psychological harassment of subordinates, their relative lack of social control and predictability, and their need to work harder to obtain food, and their lack of social outlets such as grooming or displacing aggression onto someone more subordinate ...

...During major hierarchical reorganization...dominant individuals...typically experience the greatest amounts of physical and psychological stress...”

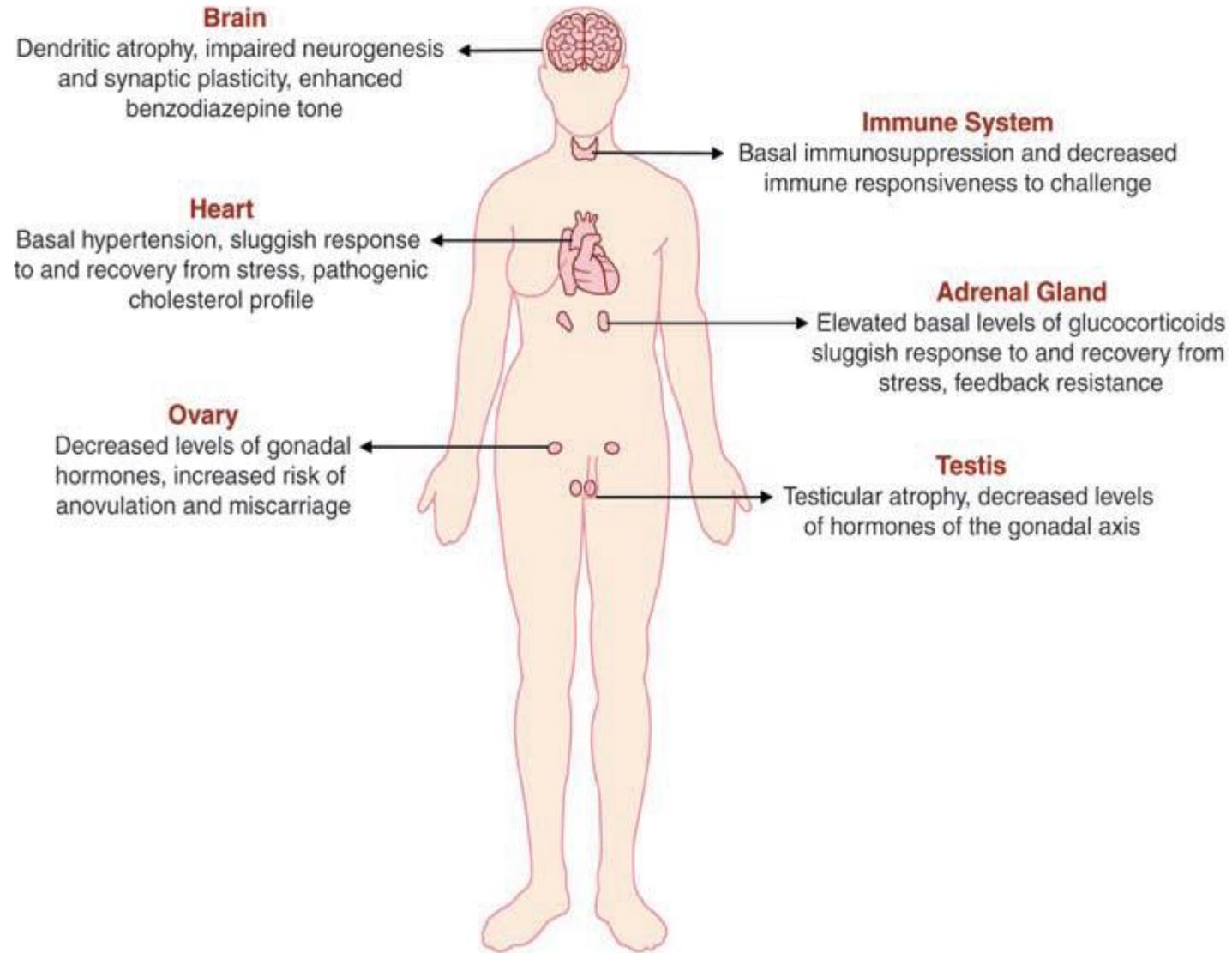


Fig.2. *Physiological correlates of the more stressful social rank*; Sapolsky R. The Influence of Social Hierarchy on Primate Health, *Science*, 29 April 2005, vol. 308: 50

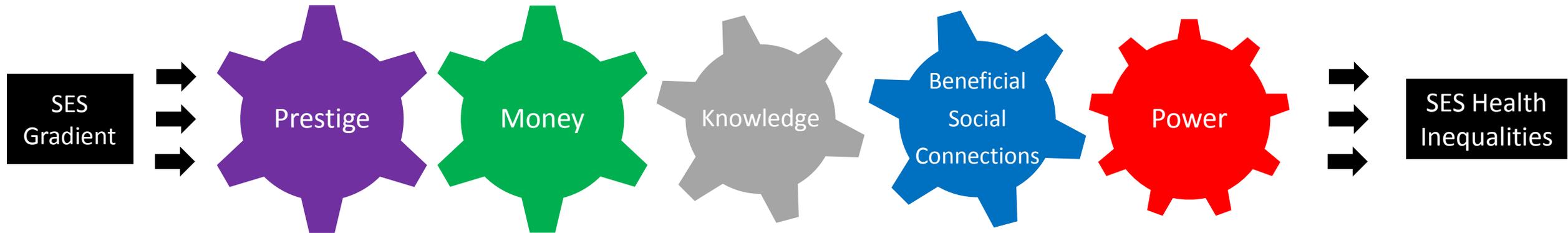
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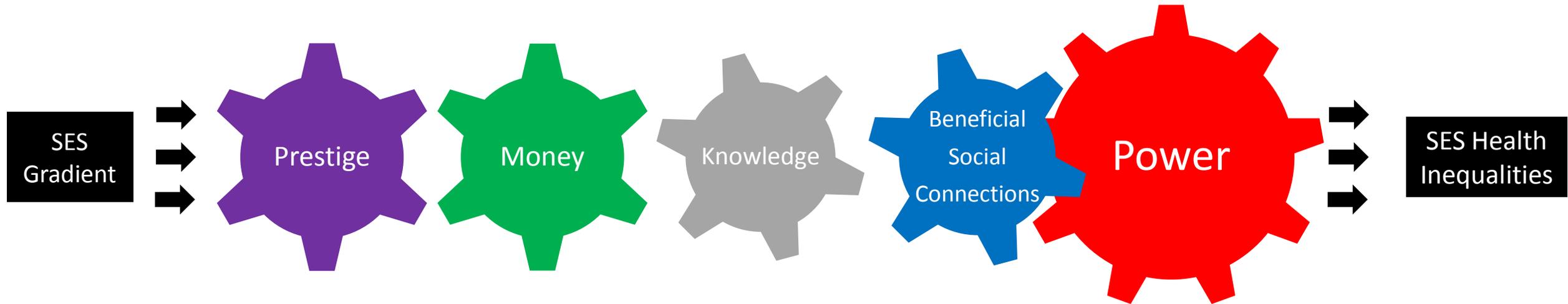
to protect their health and wellbeing...

Conceptual Model: SES as Fundamental Causes of Health Inequalities



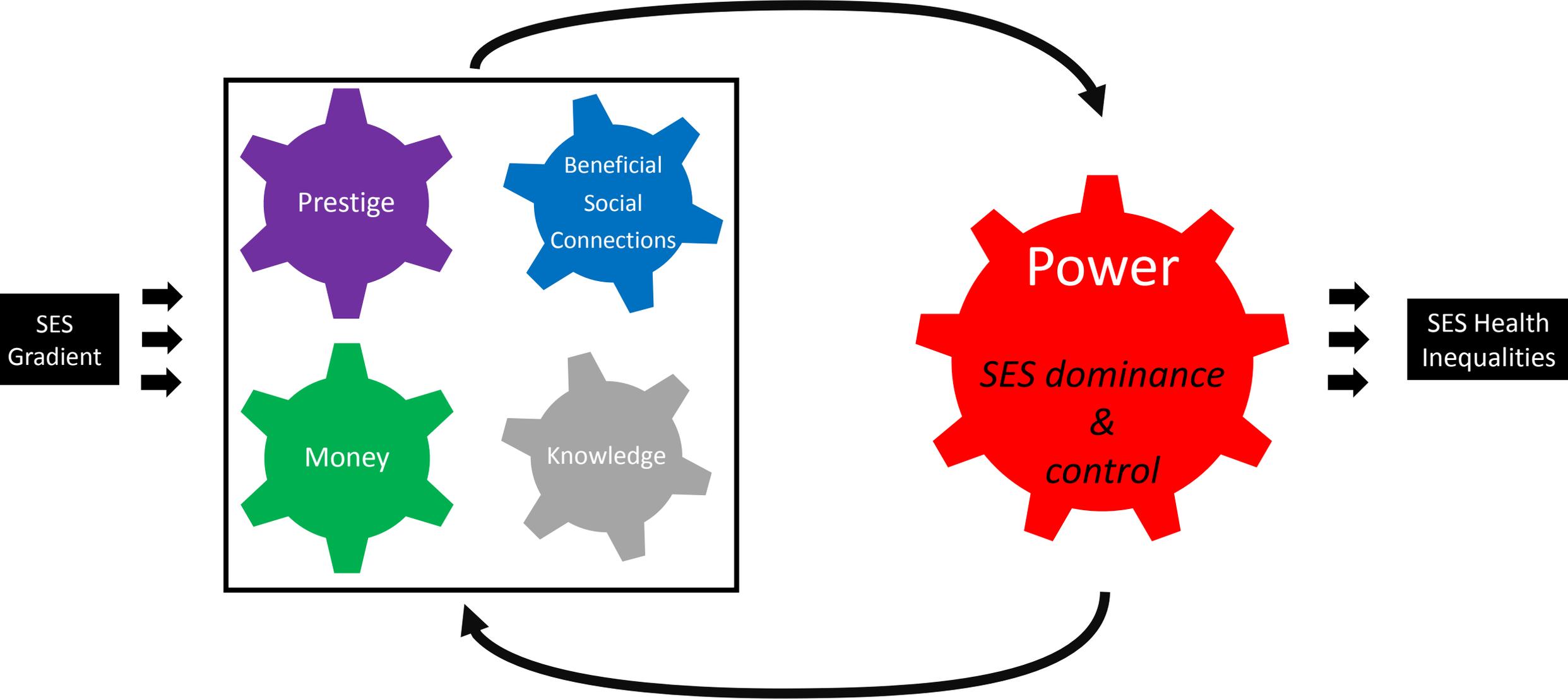
Based on Link and Phelan: Social Conditions as Fundamental Causes of Disease; Journal of Health and Social Behavior, 1995: 80-94.

Modified Conceptual Model: SES as Fundamental Causes of SES Health Inequalities



Based on Link and Phelan: Social Conditions as Fundamental Causes of Disease; Journal of Health and Social Behavior, 1995: 80-94.

Modified Conceptual Model: SES as Fundamental Causes of SES Health Inequalities



Based on Link and Phelan: *Social Conditions as Fundamental Causes of Disease*; *Journal of Health and Social Behavior*, 1995: 80-94.

Is Racism a Fundamental Cause of Inequalities in Health?

JC Phelan, BG Link

Annual Review of Sociology

December, 2015, 41: 311-330

Fundamental Social Causes of Health Inequalities

Mechanisms of Systemic Racism

Institutional Resources

White domination of political, legal, commercial, entertainment, education, health care, mass media, and other institutions

Individual Resources

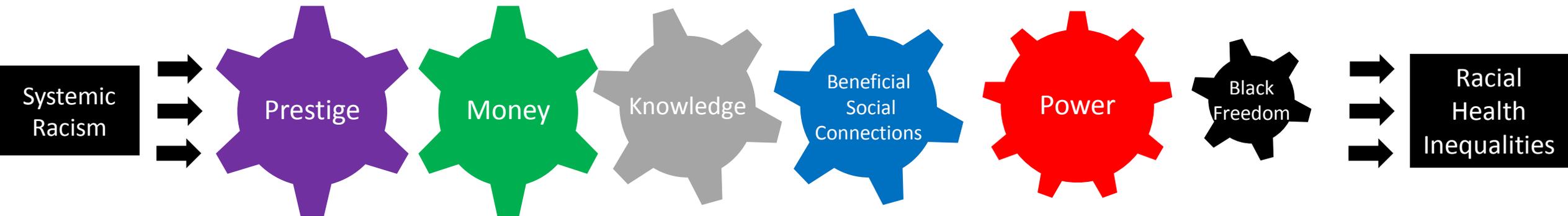
Whites' greater access to money, knowledge, power, prestige, and beneficial social connections

Social Psychological

Whites' negative stereotypes of Blacks

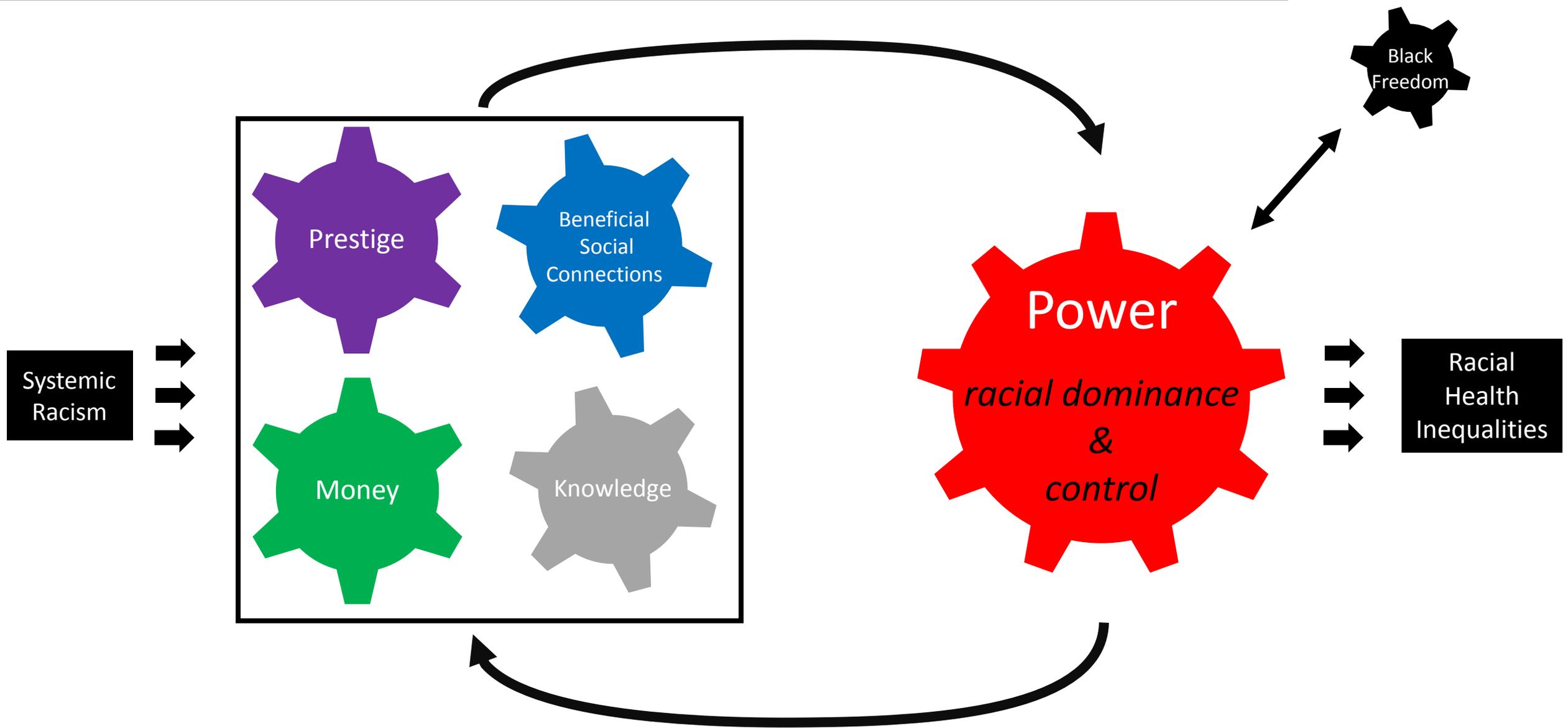
Feagin JR, The White Racial Frame, 2013; Phelan JC and Link BG, *Is Racism a Fundamental Cause of Inequalities in Health?* (August 2015), Annual Review of Sociology, 41: 315

Conceptual Model: Systemic Racism as Fundamental Cause of Racial Health Inequalities



Based on Phelan JC and Link BG., *Is Racism a Fundamental Cause of Inequalities in Health?* (August 2015), *Annual Review of Sociology*, 41: 311-330

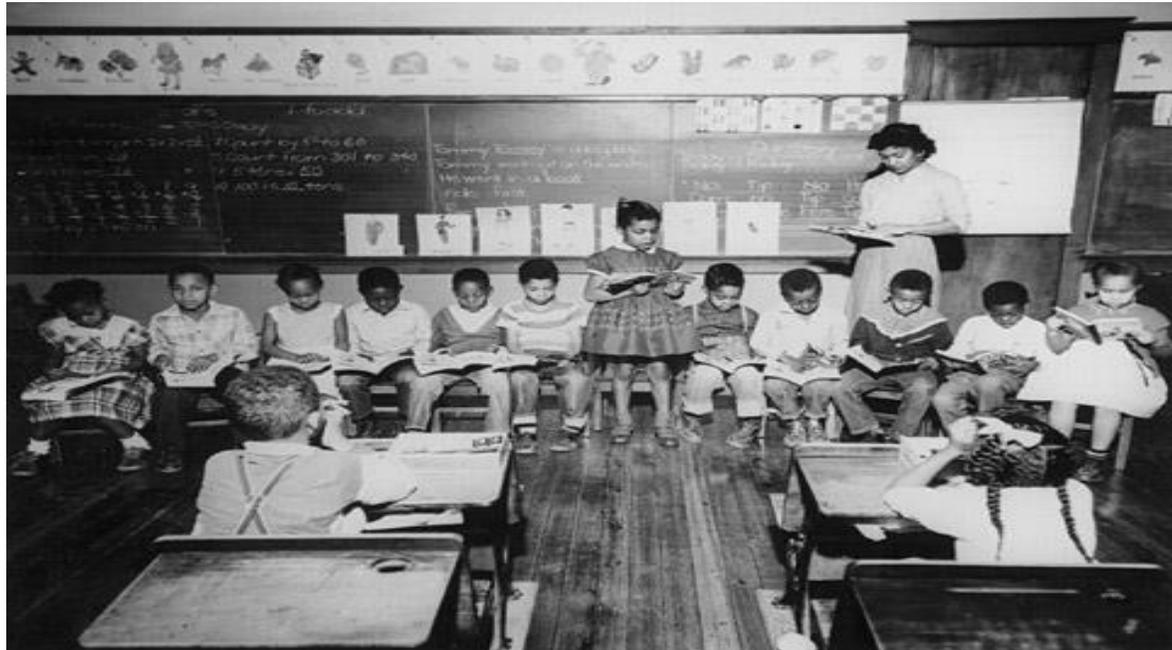
Modified Conceptual Model: Systemic Racism as Fundamental Causes of Racial Health Inequalities



Based on Phelan JC and Link BG, *Is Racism a Fundamental Cause of Inequalities in Health?* (August 2015), *Annual Review of Sociology*, 41: 315



**Public Schools
1950s-1960s**



**Public Accommodations
Sit-ins
1960-62**



**Public Transportation
Freedom Rides
1961-63**



Voting Rights Mississippi Freedom Summer 1964

MISSING CALL FBI

THE FBI IS SEEKING INFORMATION CONCERNING THE DISAPPEARANCE AT PHILADELPHIA, MISSISSIPPI OF THESE THREE INDIVIDUALS ON JUNE 20, 1964. EXTENSIVE INVESTIGATION IS BEING CONDUCTED TO LOCATE GOODMAN, CHANEY, AND SCHWERNER, WHO ARE DESCRIBED AS FOLLOWS:

ANDREW GOODMAN	JAMES EARL RAY	MICHAEL WENDY SCHWERNER
		

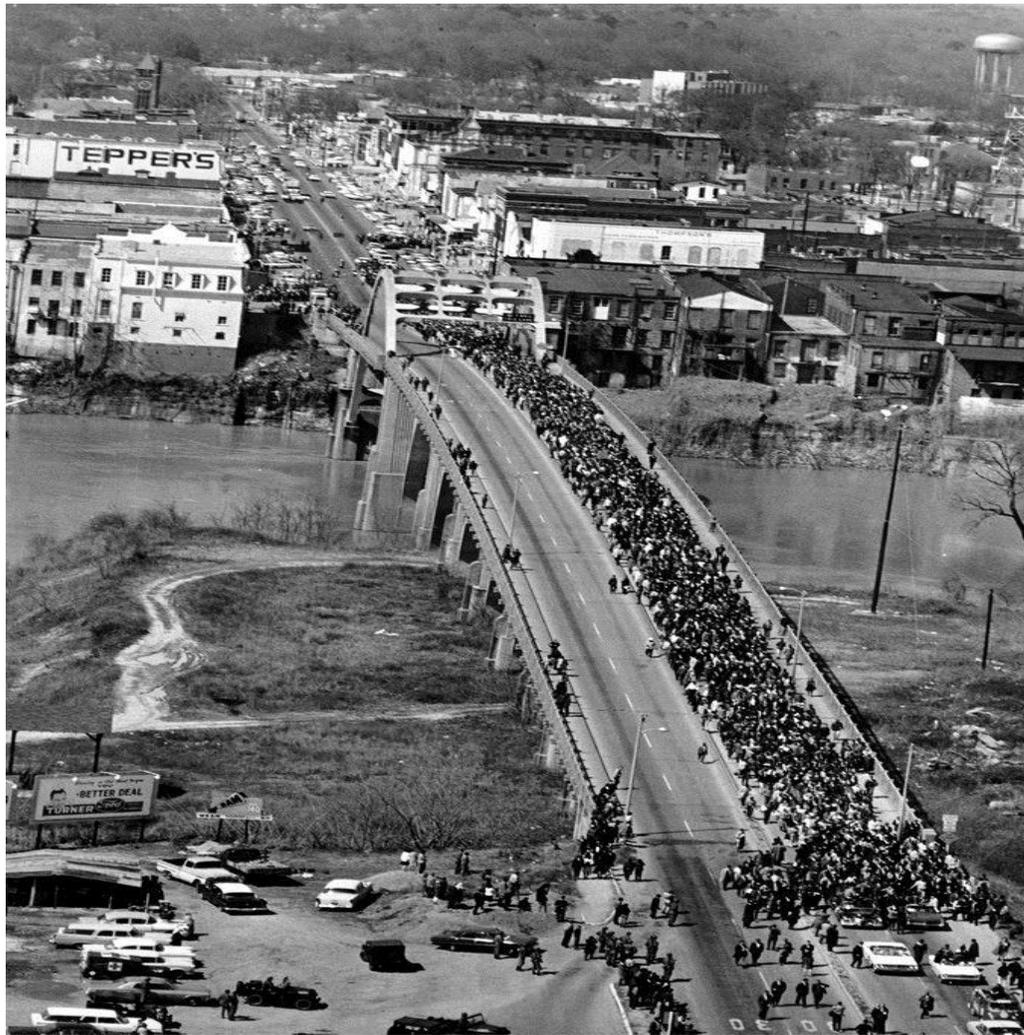
White
Male
Born June 4, 1928
New York City
24 years
5'7" to 5'8"
175 to 180 pounds
Brown
Light hair

Provide name of school, high school or college of each, approximate age, address, etc.

RECEIVE ANY INFORMATION ON THESE INDIVIDUALS, YOU ARE REQUESTED TO CONTACT THE OFFICE OF THE FBI.

FEDERAL BUREAU OF INVESTIGATION
U.S. DEPARTMENT OF JUSTICE
400 W. G. B. BLDG.
WASHINGTON, D. C. 20535
TELEPHONE: (202) 452-4000





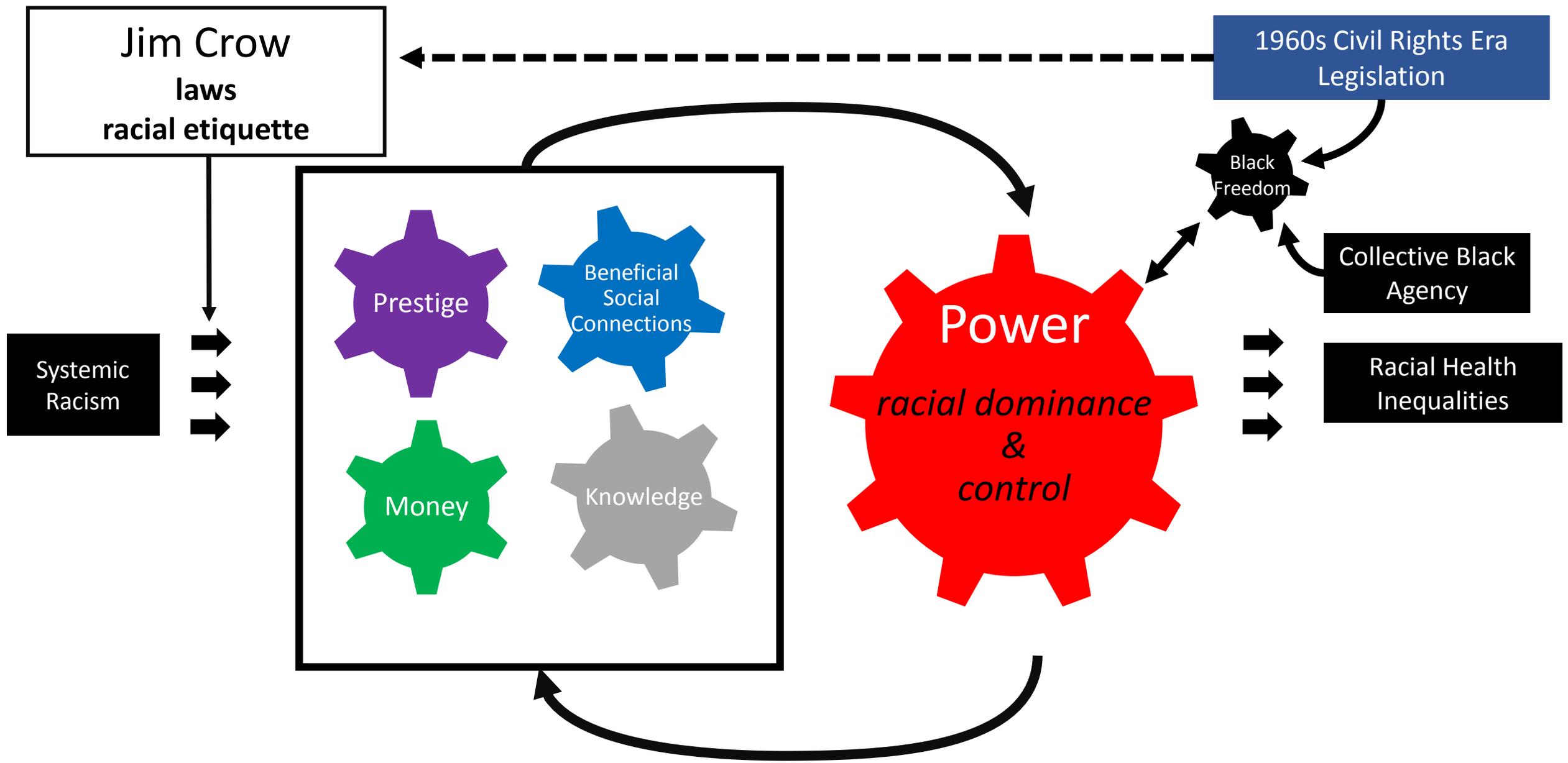
**Voting Rights
Selma to Montgomery March
May, 1965**



**Jobs and Wages
Sanitation Workers
Memphis, 1968**



Modified Conceptual Model: Expanding Black Freedom and Reducing Racial Inequalities



Based on Phelan JC and Link BG, *Is Racism a Fundamental Cause of Inequalities in Health?* (August 2015), *Annual Review of Sociology*, 41: 315

Acknowledgements

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