Discrimination of Race in the Labor Market: A Review and Proposal for Original Research

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Winter Semester 2024/25

Outline

Introduction and Motivation

- Brief overview of the topic: Racial discrimination in hiring practices
- The key question of Bertrand and Mullainathan (2004): *To what extent does the racial perception of a name impact callback rates for job applicants with equivalent qualifications?*
- How did they answer that key question? $\rightarrow$ by correspondence testing methodology

Literature Review

- To identify discrimination, prior research utilized regression analyses using observational data or conducting in-person field experiments (known as "audit studies")
- Many disadvantages are associated with them
- What is novel about Bertrand and Mullanaithan (2004)? $\rightarrow$ using correspondence testing methodology to identify and measure discrimination
- Now, correspondence testing has become a standard approach for subsequent studies

Literature Review - Subsequent Studies

- **United States:**
  - **Nunley et al. (2015):** Black-sounding names received **14% fewer** callbacks, especially in **customer-facing roles**
  - **Kline et al. (2022):** Revealed **systemic discrimination** within firms, embedded in company culture or hiring practices
  - **Darolia et al. (2016):** Minimal differences in responses to racially ambiguous names suggest that explicit racial bias may be declining
- **International Studies:**
  - **Oreopoulos (2011):** Significant **name-based discrimination** exists in Canada despite pro-immigration policies
  - **Banerjee et al. (2018):** Extended Oreopoulos's data, showing **larger firms in Canada exhibit less bias due to structured hiring practices**
  - **Carlsson and Rooth (2007):** Middle Eastern names in Sweden face higher discrimination, particularly in low-skilled roles
  - **Kaas and Manger (2012):** Turkish names in Germany experience significant bias, especially in smaller firms

Outline

Field Experiment

- Conducted in Boston and Chicago (2001–2002)
- Nearly 5,000 resumes were sent to real job ads
- Key design: Randomly assigned White- and African-American-sounding names (e.g., "Emily Walsh" vs. "Lakisha Washington") to identical resumes
- **Key question:** How did callback rates differ between applicants with White-sounding and African-American-sounding names?

Data

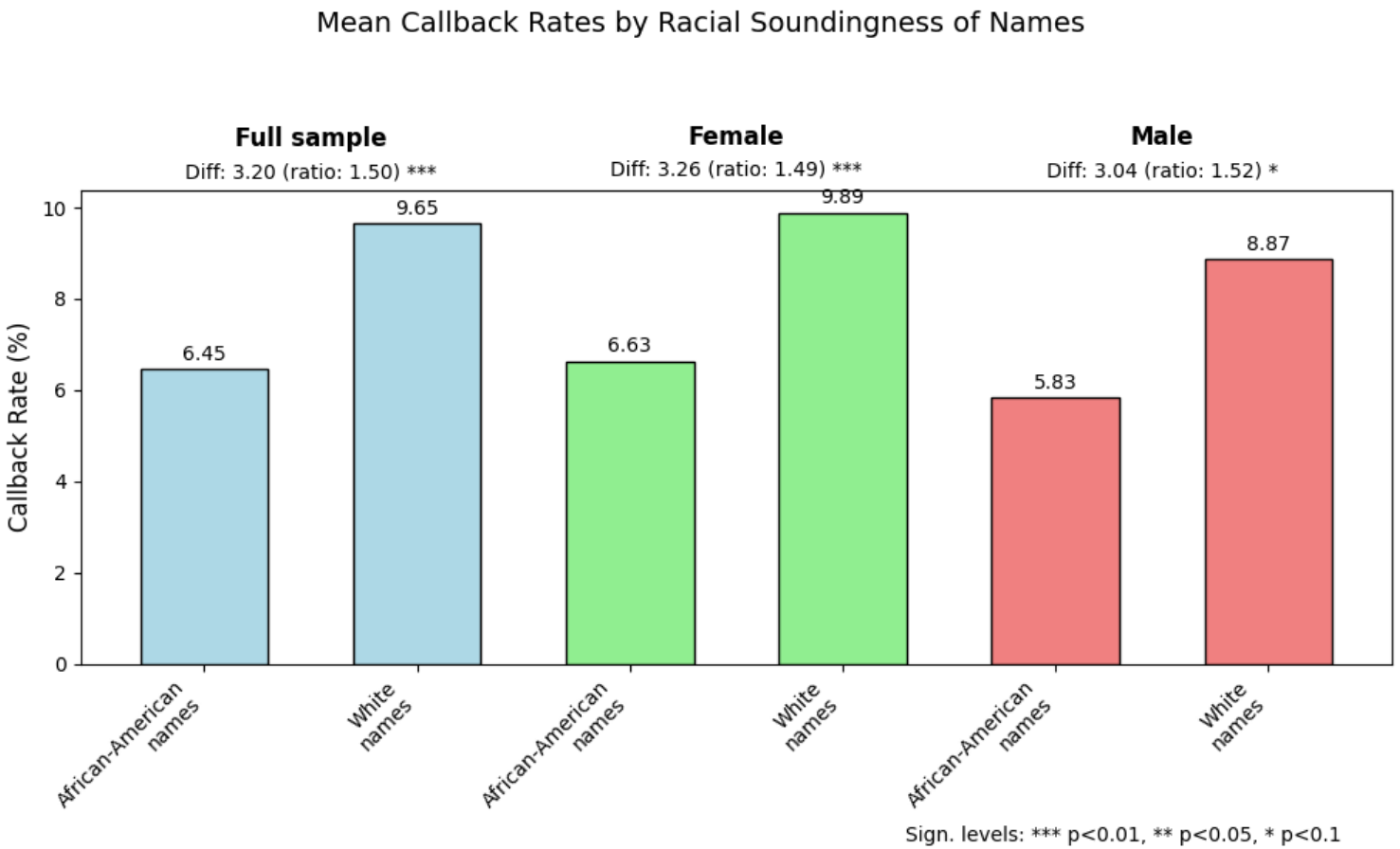
Nearly identical resumes crafted from actual job seekers' resumes, modified to anonymize content.

How was race signaled?

- Names commonly associated with African-Americans and Whites were selected using birth certificate data.
- Names were validated through a survey in Chicago to ensure association with the intended racial group.

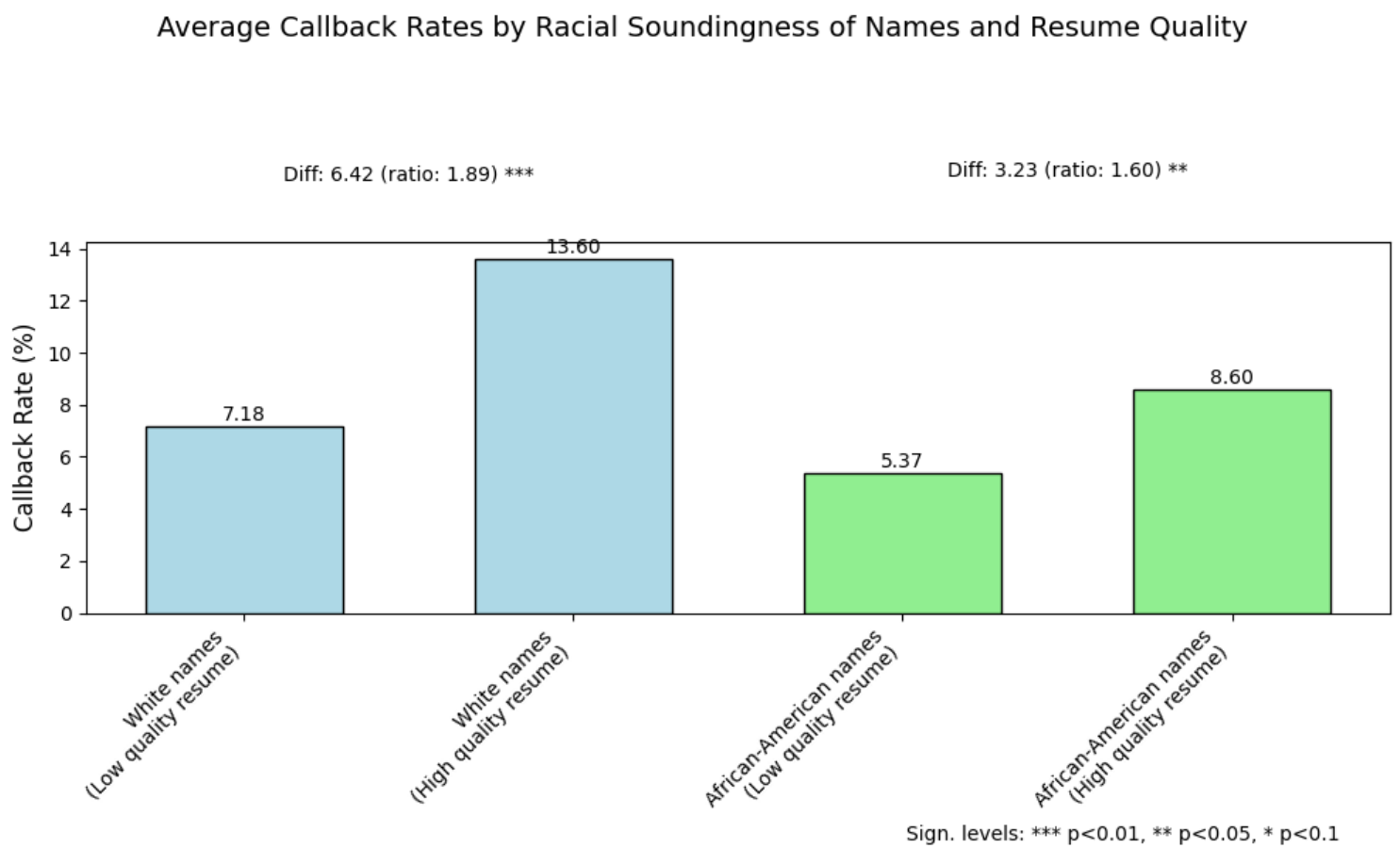
Key advantage: Random assignment of names isolates the effect of perceived race on hiring decisions.

Main Results



Key Finding: Resumes with White-sounding names received 50% more callbacks than those with African-American-sounding names.

Main Results (cont'd)



High-quality resumes amplified disparities: Whites benefit more from better credentials than African-Americans.

Limitations

- **Outcome measure:** Callback rates don't reveal hiring decisions, salaries, or long-term outcomes
- **Scope of discrimination:** Study doesn't address on-the-job discrimination, such as wages or promotions
- **Racial signal through names:**
  - Not all employers recognize racial associations correctly
  - Names may also signal socioeconomic background
  - Results may not generalize to all African-Americans
- **Geographic coverage:** Limited to Boston and Chicago, reducing generalizability
- **Job-seeking methods:** Excluded networking and online platforms, key for many job seekers

Implications

- Significant barriers remain for African-Americans in the labor market
- Training programs alone may not reduce racial gaps if employers undervalue improved credentials
- Broader structural changes are needed, such as:
  - **Name-blind recruitment**
  - **Pay transparency laws** (explored in the next slides)

Outline

Effect of pay transparency laws in reducing racial discrimination in the US labor market

- Recent data from the US Department of Labor reveal that Black workers earn only **$0.76** for every dollar earned by White workers, a disparity that has widened over time with no signs of narrowing (Gudell, 2023).
- These enduring inequities underscore the systemic barriers shaping unequal labor market outcomes and emphasize the need for targeted policy interventions.
- **A promising approach:** State-level adoption of pay transparency policies
- **Key question:** *Have state-level pay transparency laws successfully narrowed the wage gap between Black and White workers?*

Original Study - Data Overview

Period: 2010–2024

Treated States: Maryland (2020), Nevada & Colorado (2021), California & Washington (2023)

- **Excluded:** States like New York and Hawaii due to insufficient post-treatment data

Source: Microdata from Economic Policy Institute (EPI, 2024), derived from the Current Population Survey (CPS)

- Comprehensive data on employment, wages and demographics

Purpose: Analyze the causal impact of pay transparency laws on racial wage gaps between Black and White workers

Original Study - Data Overview (cont'd)

Variable Name	Description
Age	Age of respondent
Female	A dummy variable for gender (0 = male, 1 = female)
Married	A dummy variable for marital status (0 = Not married, 1 = Married)
Race	Indicator for race (1 = white, 2 = black)
Education	Education level (1 = Less than high school, 2 = High school, 3 = Some college, 4 = College, 5 = Advanced)
Metropolitan	Whether or not the household resides in a metropolitan area (urban dummy)
State-FIPS	FIPS code for the state of the household
South	Whether or not the household resides in the South region of U.S.
Hours worked	Number of hours worked last week at the respondent's primary job
Person ID	A person identifier, unique within year, month and household identifier
Year	Calendar year of the interview, generated from the survey year
Wage	Hourly wage in dollars (adjusted)
Occupation category	10-category recode of the major occupation of the job of the respondent
Tenure	Number of years worked for the current employer

Table: List of variables, source: Economic Policy Institute (2024)

Original Study - Empirical Strategy

The absence of comprehensive federal pay transparency laws creates state-level variation, providing a unique opportunity to analyze their effects on racial wage gaps.

Stacked Difference-in-Differences (DiD) approach:

- Accounts for staggered policy adoption across states
- Divides the analysis into sub-experiments: each compares a treated state to "clean control" states during the same period
- Combines sub-experiments into a stacked dataset for regression analysis

Goal:

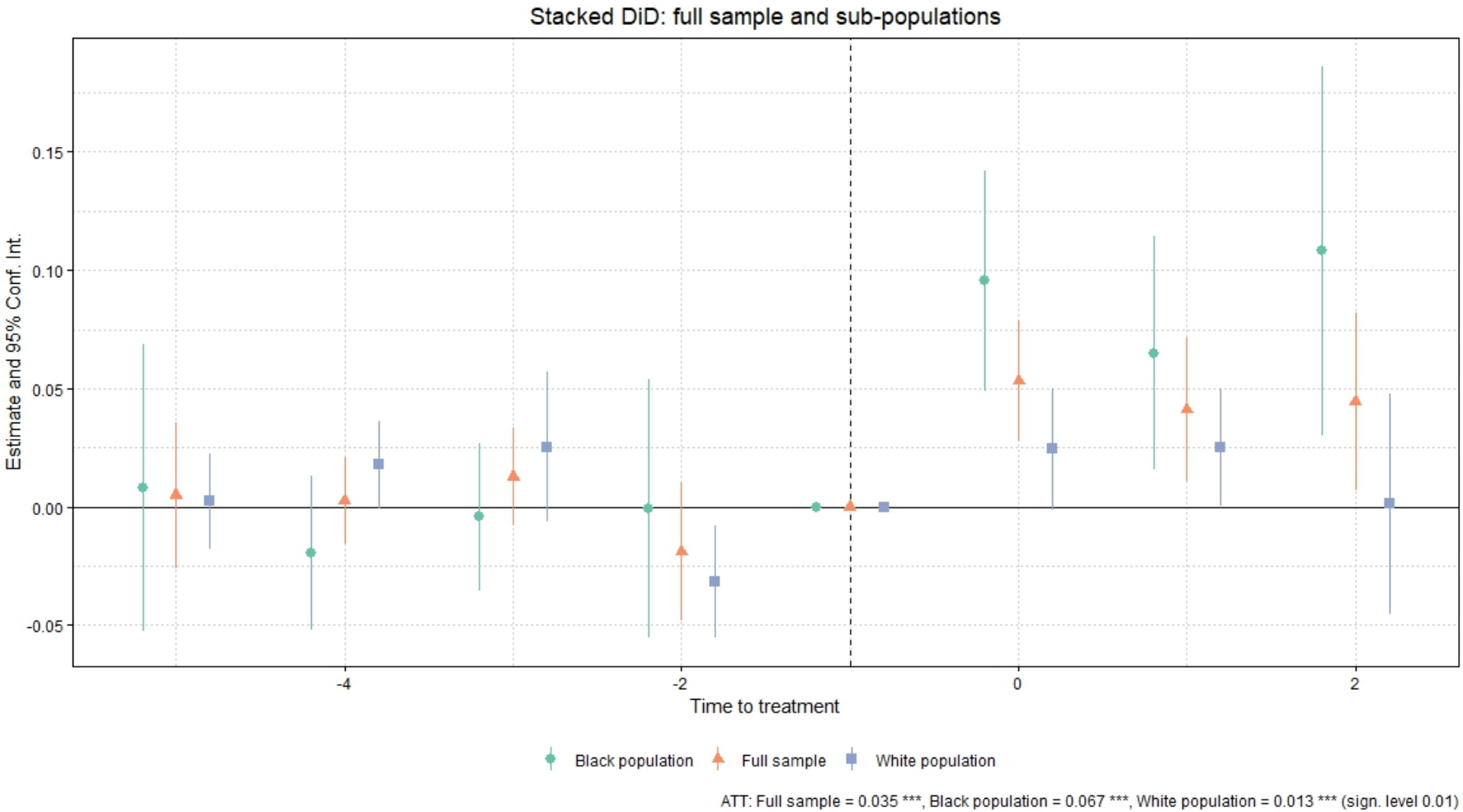
- Evaluate whether state-level pay transparency laws effectively narrow the wage gap between Black and White workers

Original Study - Empirical Strategy (cont'd)

$$\log(\text{Wage diff}_{ijt}) = \sum_{\tau=-\kappa_{\text{pre}}}^{\kappa_{\text{post}}} \beta_\tau \cdot I_{\tau,ijt} + \mu_{ij} + \rho_{jt} + X_{ijt}\gamma + \epsilon_{ijt}$$

Component	Description
Dependent variable	Logarithm of wage differential between year t and year $t-1$ for individual i in state j, capturing changes in wage growth due to pay transparency policies.
$I_{\tau,ijt}$	Indicator variable for event time τ relative to policy adoption, where $\tau = 0$ is the treatment year, $\tau < 0$ are pre-treatment years and $\tau > 0$ are post-treatment years.
μ_{ij}	Individual-by-state fixed effects, controlling for unobservable time-invariant characteristics of individuals and states. For example, if some states historically have higher wages regardless of the treatment, these fixed effects absorb that variation.
ρ_{jt}	State-by-year fixed effects, capturing state-specific trends over time.
X_{ijt}	Vector of covariates that control for gender, marital status, tenure, education level, job category, whether individual i is located in the South region, and hours worked per week.
ϵ_{ijt}	Error term.

Original Study - Hypothetical Results



Key identifying assumption: **parallel trends**

Original Study - Hypothetical Results (cont'd)

Dependent Variable:	Wage difference (log)		
	Full sample (1)	Black population (2)	White population (3)
A. Average Treatment Effect on Treated (ATT)			
Treated (=1) × Post (=1)	0.035***	0.067***	0.013***
	(0.005)	(0.012)	(0.007)
B. Event-studies			
Treated (=1) × Event-time, -5 (=1)	0.0050	0.0081	0.0025
	(0.0138)	(0.0270)	(0.0091)
Treated (=1) × Event-time, -4 (=1)	0.0027	-0.0191	0.0178*
	(0.0080)	(0.0147)	(0.0082)
Treated (=1) × Event-time, -3 (=1)	0.0129	-0.0040	0.0254
	(0.0094)	(0.0141)	(0.0143)
Treated (=1) × Event-time, -2 (=1)	-0.0190	-0.0005	-0.0317**
	(0.0131)	(0.0243)	(0.0107)
Treated (=1) × Event-time, 0 (=1)	0.0531***	0.0958***	0.0244*
	(0.0114)	(0.0208)	(0.0115)
Treated (=1) × Event-time, 1 (=1)	0.0412**	0.0647**	0.0253**
	(0.0137)	(0.0221)	(0.0112)
Treated (=1) × Event-time, 2 (=1)	0.0445**	0.1082**	0.0013
	(0.0168)	(0.0350)	(0.0209)
Age	0.0054**	0.0035**	0.0075**
	(0.0039)	(0.0068)	(0.0073)
Metropolitan	-0.0011	0.0085	-0.0075
	(0.0039)	(0.0068)	(0.0073)
Tenure	0.004**	0.003*	0.005**
	(0.0004)	(0.0003)	(0.0006)
Education	0.005**	0.002**	0.006**
	(0.0029)	(0.0055)	(0.0034)
Married	0.0150	0.0209	0.0115
	(0.0048)	(0.0074)	(0.0044)
Female	0.079**	0.084**	0.077**
	(0.019)	(0.018)	(0.011)
South	-0.003	-0.008	-0.001
	(0.0019)	(0.0018)	(0.0011)
Occupation category	-0.0003	0.0009	-0.0012
	(0.0018)	(0.0021)	(0.0020)
Fixed-effects			
State-by-year FE	Yes	Yes	Yes
Individual-by-state FE	Yes	Yes	Yes
Fit statistics			
Observations	228,726	92,228	136,498
R^2	0.00046	0.00117	0.00061
Within R^2	0.00037	0.00087	0.00049

Standard errors are clustered at the state level and reported in parentheses.
*Sign. levels: ***: 0.01, **: 0.05, *: 0.1*

Outline

Discussion

- Pay transparency policies effectively reduce the racial wage gap, particularly benefiting historically underpaid groups like Black workers.
- These findings support the expansion of pay transparency measures, possibly at the federal level, to create consistent outcomes across states.
- However, pay transparency is not a complete solution. Additional measures are needed to address systemic issues such as occupational segregation and other barriers.
- This study builds on Bertrand and Mullainathan (2004) by focusing on wage disparities after hiring, showing how policy interventions reshape compensation structures.
- While immediate effects are promising, further research is needed to evaluate long-term impacts and performance across different labor markets.

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Thank you!

Thank you for your attention! Any questions?