# Discrimination

Carnegie Mellon University

1

## Social Psychology Concepts

- **Stereotype**: belief about group differences
- **Prejudice**: (negative) attitudes about a group
- **Discrimination**: differential actions toward a group
  - *Belief based* – based on stereotype beliefs
    - E.g., I believe (possibly accurately) that women have weaker math training than men, so I don't hire women
  - *Taste based* – based on attitudes
    - E.g., I just don't like hiring women, regardless of their math training.

2

## Role of Decision Science

in the study of discrimination and racism:

Research Methods:

- Implicit bias measures
- Correlational studies of large datasets
- Geographical variation in attitudes & behavior
- Audit studies
  - Experimental manipulation with concealment design

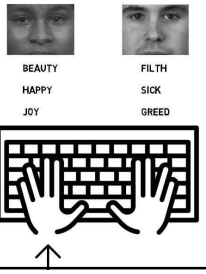
3

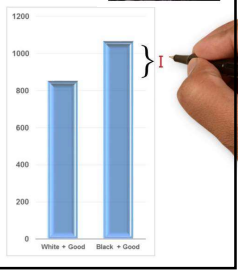

4

## Implicit Attitude Test

Mahzarin Banaji (Harvard)

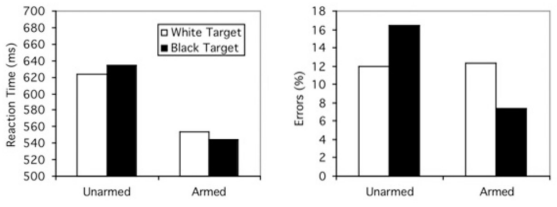
The Black - White Race Attitude Test




5

## Josh Correll (University of Colorado) Police Officer's Dilemma




6

## Disproportionate Use of Lethal Force in Policing Is Associated With Regional Racial Biases of Residents

Social Psychological and Personality Science
2018, Vol. 9(4) 393-401

DOI: 10.1177/1948550617711229
journals.sagepub.com/home/spp
SAGE

Eric Hehman[1], Jessica K. Flake[2], and Jimmy Calanchini[3]

**Abstract**

Due to a lack of data, the demographic and psychological factors associated with lethal force by police officers have remained insufficiently explored. We develop the first predictive models of lethal force by integrating crowd-sourced and fact-checked lethal force databases with regional demographics and measures of geolocated implicit and explicit racial biases collected from 2,156,053 residents across the United States. Results indicate that only the implicit racial prejudices and stereotypes of White residents, beyond major demographic covariates, are associated with disproportionally more use of lethal force with Blacks relative to regional base rates of Blacks in the population. Thus, the current work provides the first macropsychological statistical models of lethal force, indicating that the context in which police officers work is significantly associated with disproportionate use of lethal force.

Eric Hehman (McGill University)

7

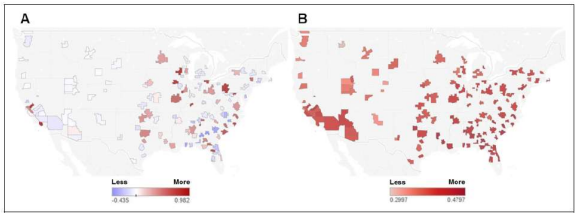



Figure 1. Disproportionate lethal force (A) and implicit racial prejudice of Whites (B) by core-based statistical area (CBSA). Tick marks on scale represent zero points in which no disproportion is present. CBSAs are included in analyses if at least one individual had been killed by police.

8

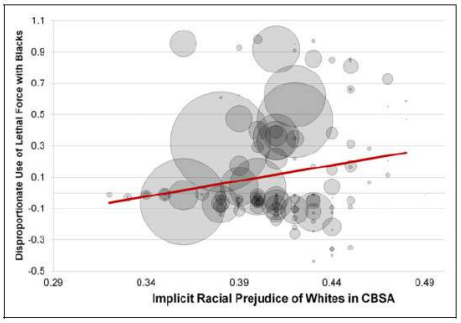



**Figure 2.** The correlation between the core-based statistical area (CBSA)-level implicit racial prejudice and disproportionate use of lethal force with Blacks. Circle size represents the number of respondents in each CBSA.

9

**Table 1.** Full Model of Disproportionate Lethal Force From the Racial Prejudice Implicit Association Test.

| Effect | *B* | *SE* | β | *p* Value |
|---|---|---|---|---|
| White implicit bias | 4.129 | 1.90 | .354 | .031 |
| White explicit bias | −0.519 | 0.29 | −.306 | .079 |
| Black median income | −0.001 | 0.01 | −.074 | .699 |
| White median income | 0.001 | 0.01 | .223 | .261 |
| % HS degree Blacks | −0.362 | 1.34 | −.270 | .788 |
| % HS degree Whites | 0.681 | 1.01 | .095 | .503 |
| % BA degree Blacks | −2.613 | 2.24 | −.162 | .246 |
| % BA degree Whites | 1.659 | 1.49 | .153 | .268 |
| Segregation | 0.040 | 0.36 | .015 | .912 |
| Black implicit bias | −1.130 | 0.84 | −.146 | .182 |
| Black explicit bias | 0.117 | 0.14 | .089 | .392 |
| Violent crime | −0.001 | 0.01 | −.082 | .489 |
| Unemployment | 0.013 | 0.02 | .089 | .476 |
| Population density | −0.001 | 0.01 | −.182 | .123 |
| Total lethal force rate | 0.031 | 0.02 | .181 | .077 |

*Note.* HS = high school. BA = bachelor of arts. $R^2 = .14$.

N=135 CBSAs (Core-based statistical areas)

10

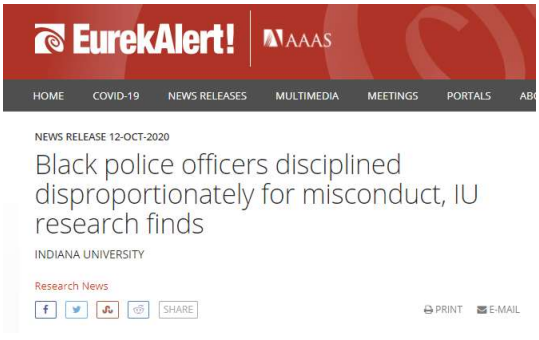
**Table 2.** Full Model of Disproportionate Lethal Force From the Weapons Stereotype Implicit Association Test.

| Effect | *B* | *SE* | β | *p* Value |
|---|---|---|---|---|
| Black–weapon association | 5.497 | 1.63 | .390 | .001 |
| White implicit bias | 1.915 | 2.57 | .166 | .459 |
| White explicit bias | 0.100 | 0.45 | .056 | .824 |
| Black implicit bias | 1.372 | 0.123 | .145 | .267 |
| Black explicit bias | 0.105 | 0.23 | .057 | .646 |
| Black median income | 0.001 | .01 | .047 | .844 |
| White median income | 0.001 | .01 | .163 | .451 |
| % HS degree Blacks | −0.433 | 1.71 | −.042 | .800 |
| % HS degree Whites | −2.698 | 1.47 | −.339 | .072 |
| % BA degree Blacks | −2.434 | 2.77 | −.158 | .383 |
| % BA degree Whites | 1.674 | 1.89 | .137 | .380 |
| Segregation | 0.570 | 0.389 | .250 | .148 |
| Violent crime | −0.001 | 0.01 | −.086 | .547 |
| Unemployment | −0.031 | 0.03 | −.186 | .196 |
| Population density | −0.001 | 0.01 | −.189 | .196 |
| Total lethal force rate | 0.014 | 0.02 | .100 | .408 |

*Note.* HS = high school. BA = bachelor of arts. $R^2 = .34$.

N=81 CBSAs (Core-based statistical areas)

11




12

Organizational Behavior and Human Decision Processes xxx (xxxx) xxx–xxx

Contents lists available at ScienceDirect

Organizational Behavior and Human Decision Processes

journal homepage: www.elsevier.com/locate/obhdp

The race discipline gap: A cautionary note on archival measures of behavioral misconduct

Sheryl L. Walter*, Erik Gonzalez-Mulé, Cristiano L. Guarana, Ernest H. O'Boyle Jr., Christopher M. Berry, Timothy T. Baldwin

*Indiana University, United States*

13

| | Chicago | |
|---|---|---|
| | White | Black |
| Variable | Mean (SD) | Mean (SD) |
| N | 3373 | 1670 |
| Sex (0 = female; 1 = male) | 0.82 (0.38) | 0.69 (0.46)*** |
| Age | 47.48 (9.36) | 50.27 (8.47)*** |
| Tenure | 18.91 (7.71) | 19.96 (7.33)*** |
| Disciplinary Action[a] | 0.10 (0.40) | 0.21 (0.58)*** |
| Disciplinary Action[b] | 0.08 (0.27) | 0.15 (0.36)*** |
| Allegations[a] | 4.02 (4.85) | 3.67 (4.06)** |

14

| | Discipline[a] controlling for number of allegations Chicago | | |
|---|---|---|---|
| | B1 | SE | IRR |
| Race (Black) | 0.84*** | 0.10 | 2.32 |
| Race (Hispanic) | 0.14 | 0.12 | 1.15 |
| Race (Asian) | 0.11 | 0.28 | 1.12 |
| Number of Allegations | 0.15*** | 0.01 | 1.16 |
| Lack of Service Allegation | | | |
| Verbal Assault Allegation | | | |
| Physical Assault Allegation | | | |
| Sex | 0.09 | 0.10 | 1.09 |
| Age | 0.01 | 0.01 | 1.01 |
| Tenure | 0.01 | 0.01 | 1.01 |
| Intercept | −4.42*** | 0.39 | |
| N | 6695 | | |
| ◊$R^2$ | 0.206 | | |
| Full log likelihood | −2160.99 | | |
| Model chi-square (df) | 779.99(111)*** | | |

15

Research Report

PSYCHOLOGICAL SCIENCE

Psychological Science
23(7) 710–717
© The Author(s) 2012
Reprints and permission:
sagepub.com/journalsPermissions.nav
DOI: 10.1177/0956797611434539
http://pss.sagepub.com

SAGE

**Temporal Distance and Discrimination: An Audit Study in Academia**

**Katherine L. Milkman[1], Modupe Akinola[2], and Dolly Chugh[3]**

[1]The Wharton School, University of Pennsylvania; [2]Columbia Business School, Columbia University; and [3]Stern School of Business, New York University

**Abstract**

Through a field experiment set in academia (with a sample of 6,548 professors), we found that decisions about distant-future events were more likely to generate discrimination against women and minorities (relative to Caucasian males) than were decisions about near-future events. In our study, faculty members received e-mails from fictional prospective doctoral students seeking to schedule a meeting either that day or in 1 week; students' names signaled their race (Caucasian, African American, Hispanic, Indian, or Chinese) and gender. When the requests were to meet in 1 week, Caucasian males were granted access to faculty members 26% more often than were women and minorities; also, compared with women and minorities, Caucasian males received more and faster responses. However, these patterns were essentially eliminated when prospective students requested a meeting that same day. Our identification of a *temporal discrimination effect* is consistent with the predictions of construal-level theory and implies that subtle contextual shifts can alter patterns of race- and gender-based discrimination.

16

## Construal level

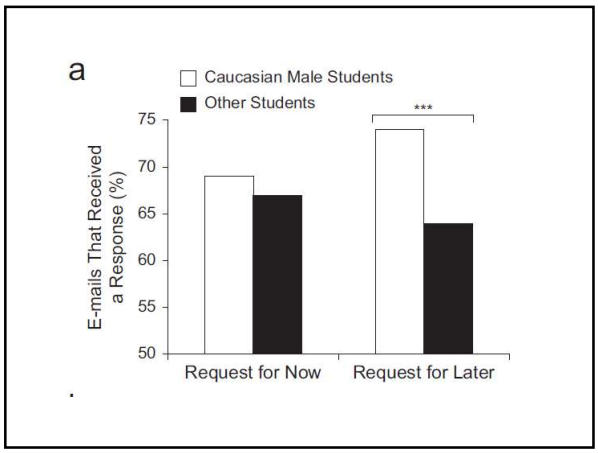
- Immediate events → concrete construal
  - Details
  - Logistics
  - How & when
- Distant events → abstract construal
  - Course generlizations
  - Why & whether
  - Increased reliance on stereotypes

17

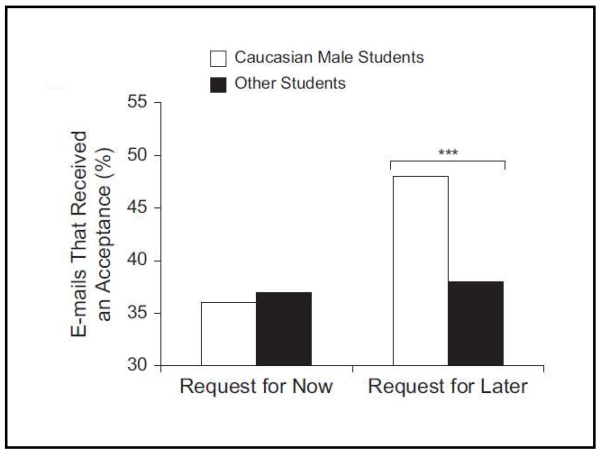
## Study design

- Large sample (6,548 professors)
- Audit study
  - Ss don't know this is a research study
- Real behavioral measure
  - Responding to the email
- Independent variable:
  - Name of student (gender and race)
  - Request for today or next week
- Dependent variables:
  - Answer email
  - Agree to meet
  - Time to respond

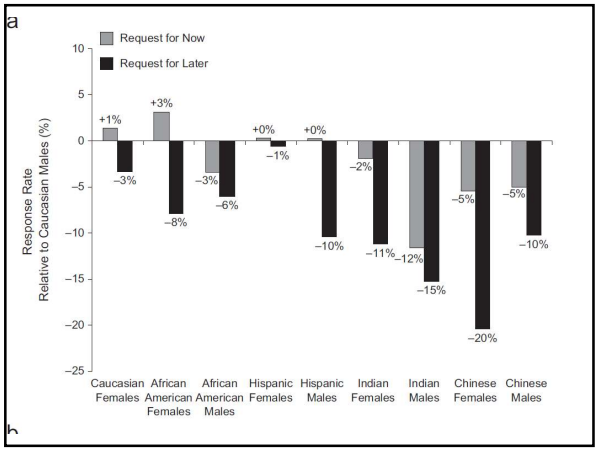
18


a
Caucasian Male Students
Other Students
E-mails That Received a Response (%)
75
70
65
60
55
50
***
Request for Now
Request for Later

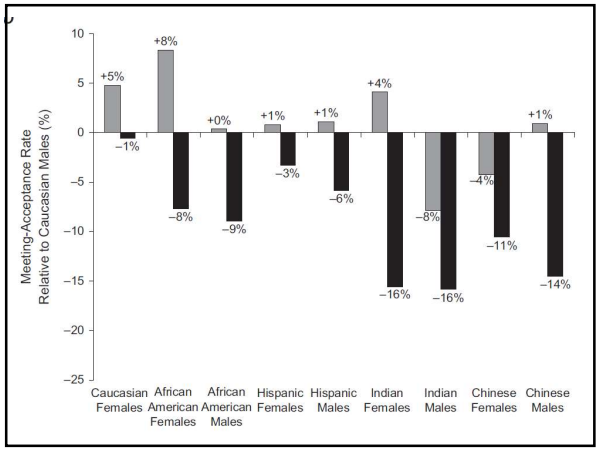
19


Caucasian Male Students
Other Students
E-mails That Received an Acceptance (%)
55
50
45
40
35
30
***
Request for Now
Request for Later

20


a
Request for Now
Request for Later
Response Rate Relative to Caucasian Males (%)
10
5
0
−5
−10
−15
−20
−25
+1%
−3%
+3%
−8%
−3%
−6%
+0%
−1%
+0%
−10%
−2%
−11%
−12%
−15%
−5%
−20%
−5%
−10%
Caucasian Females
African American Females
African American Males
Hispanic Females
Hispanic Males
Indian Females
Indian Males
Chinese Females
Chinese Males

21


Meeting-Acceptance Rate Relative to Caucasian Males (%)
10
5
0
−5
−10
−15
−20
−25
+5%
−1%
+8%
−8%
+0%
−9%
+1%
−3%
+1%
−6%
+4%
−16%
−8%
−16%
−4%
−11%
+1%
−14%
Caucasian Females
African American Females
African American Males
Hispanic Females
Hispanic Males
Indian Females
Indian Males
Chinese Females
Chinese Males

22