



**Understanding and Minimizing the
Influence of Unconscious Bias**

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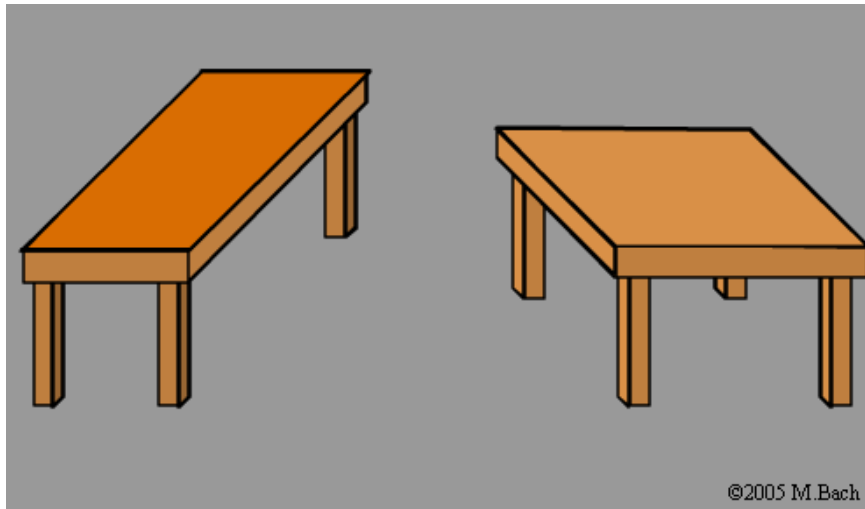
Kansas State University
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Outline

- Understanding the origins of implicit/unconscious bias
- Identifying implicit bias in a faculty hiring context
- Mitigating unconscious bias

Bias as a *habit of mind*

Ordinary mental operations that serve us quite well in most circumstances are subject to error and can fail our intentions




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“Stroop Effect” and the color naming task


Compatible Trial	Incompatible/ Interference Trial
<p>RED</p> <p>BLACK</p> <p>BROWN</p> <p>GREEN</p> <p>YELLOW</p> <p>BLUE</p>	<p>RED</p> <p>BLACK</p> <p>BROWN</p> <p>GREEN</p> <p>YELLOW</p> <p>BLUE</p>

Stroop, *Journal of Experimental Psychology* 1935

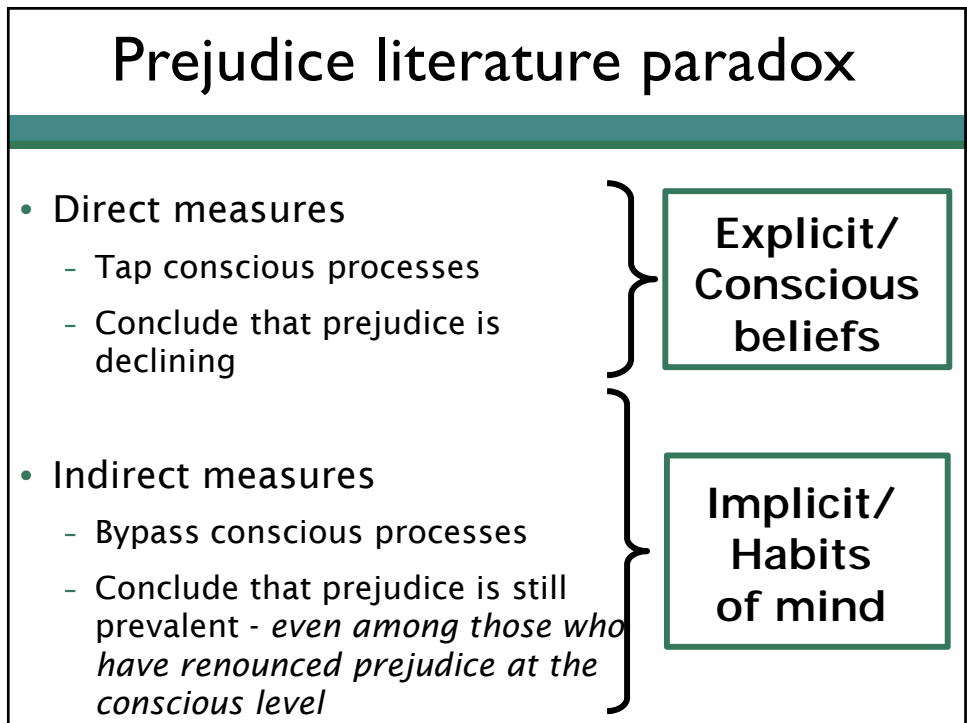
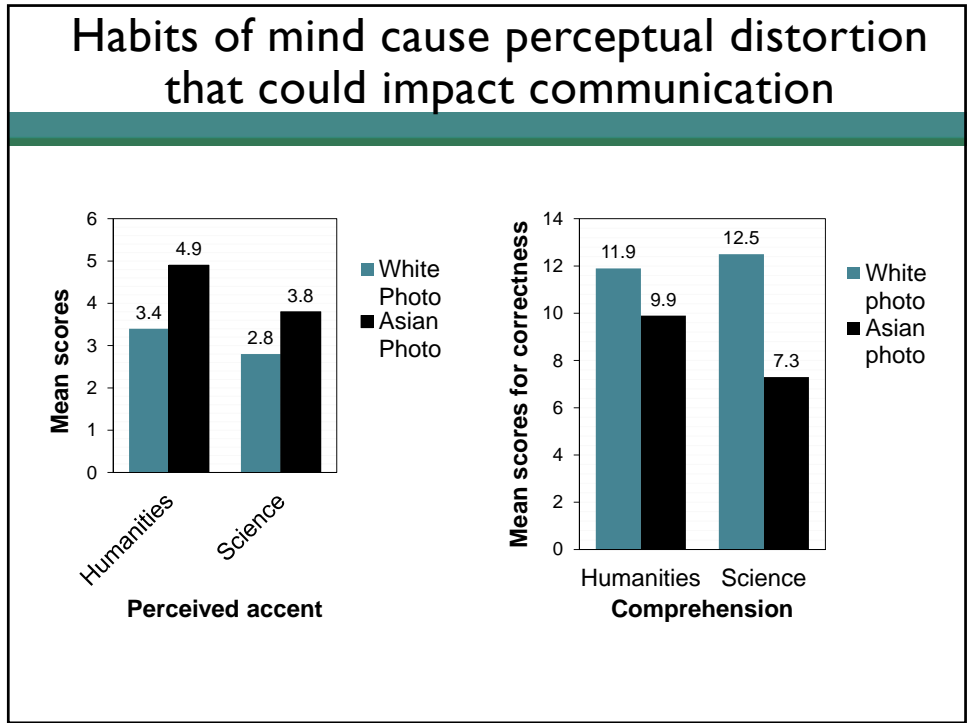
Habits of mind affect social perceptions as well as object perception



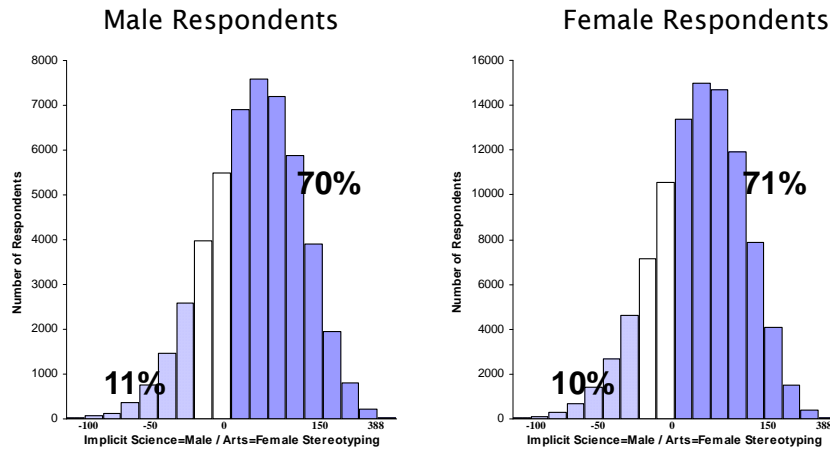
- Students listened to a 450-word recorded passage read by Standard American English speaker
- Random assignment to topic (science or humanities) and viewing static image of Asian or White face



Rubin, 1992; Kang & Rubin, 2009

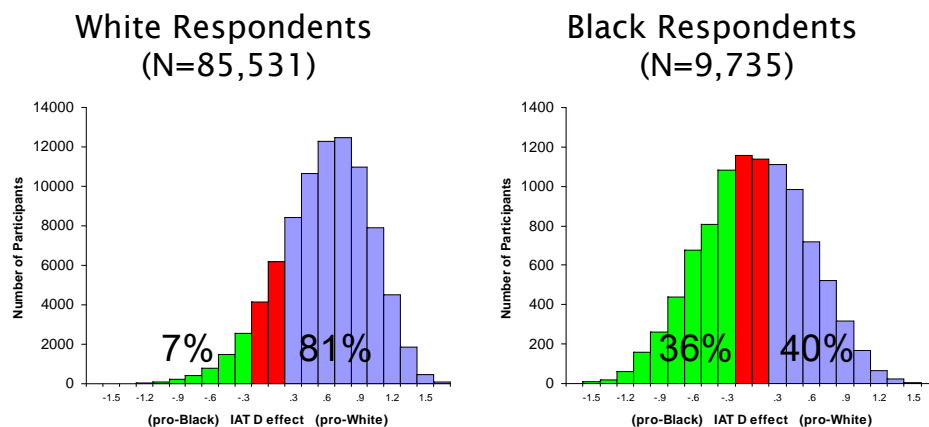


Implicit gender-science stereotypes



SOURCE: Used with permission of Project Implicit: <https://implicit.harvard.edu>

Implicit preference for Whites compared to Blacks



SOURCE: Used with permission of Project Implicit: <https://implicit.harvard.edu>

Implicit bias characteristics

■ Ordinary

- Stem from our natural tendency to form associations to help organize our social worlds

■ Learned from culture

- Reflect the “thumbprint of culture” on our minds

■ Pervasive

- Prevalent among men and women, Blacks and Whites, young and old, etc.

■ Often conflict with consciously endorsed beliefs

- Dissociation between implicit and explicit responses

Implicit bias characteristics

■ Consequential

- Can predict behavior better than (and often at odds with) explicit measures
- Constrains the opportunities of targets of implicit bias

Shift in conceptualization of prejudice

OLD FRAMEWORK = Prejudice is bad so if I think or act with bias, I am a bad person

NEW FRAMEWORK = Prejudiced thoughts and actions are habits that we all have and breaking these habits requires more than good intentions

In other words....

“The fact that automatic and frequently unconscious processes are in play reduces blame but not responsibility.”

van Ryn et al., 2011.

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Group stereotypes lead to unconscious bias

- Just knowing any group stereotype can distort cognitive processing of information
- Individuals from groups not currently represented on K-State faculty are disadvantaged
- Trivial amounts of information trigger the whole stereotype
- Stereotyped assumptions resist disconfirming data

Gender Stereotypes: Common assumptions about how men and women behave

What are some common stereotypes about men?

Decisive, competitive, ambitious, independent, logical, good at technical tasks, strong, tall

agentic

Works of multiple authors over 30 years:
e.g., Eagly, Heilman, Bem, Broverman

Gender Stereotypes: Common assumptions about how men and women behave

What are some common stereotypes about women?

Nurturing, gentle, supportive, sympathetic, good at relationships, dependent, weak, delicate

communal

Works of multiple authors over 30 years:
e.g., Eagly, Heilman, Bem, Broverman

Gender Stereotypes: Common assumptions about how men and women behave

- How could this affect evaluation of applicants?
 - Most positions assumed to require agentic traits (occupational role congruity for men)
 - Social penalties for violating prescriptive gender norms (women cannot be seen as *too* agentic and men cannot be seen as *too* communal)

Works of multiple authors over 30 years:
e.g., Eagly, Heilman, Bem, Broverman

Height and leadership



Percent >6 feet tall:

- US men: 15%
- Fortune 500 CEOs: 58%

Group assumptions can distort objective data

Average estimated height of women: 5'4"



Average estimated height of men: 5'9"

Nelson, Biernat, & Manis, 1990

Evaluation of curriculum vitae

- Curriculum vitae randomly assigned male or female name evaluated by 238 academic psychologists (118 male, 120 female)
 - One CV - at time of job application (jr-level)
 - One CV - at time of early tenure (sr-level)

Steinpreis et al. (1999).

Evaluation of curriculum vitae

- For entry-level CV: more likely to hire male applicants and gave men higher ratings for:
 - Teaching
 - Research
 - Service
- For tenure-level CV:
 - Tenure recommendation the same
 - Four times more likely to include cautionary comments on CVs with a female name

Steinpreis et al. (1999).

Evaluating applications: Gender bias in science?

- 127 faculty from Biology, Chemistry, and Physics:
 - John more competent, hireable, deserving of mentorship, and worth a higher salary
 - Jennifer more likeable

Moss-Racusin et al. (2012).

Evaluation of recommendation letters

- 312 letters of recommendation for medical faculty successfully hired at a large U.S. medical school
- Letters written for women vs. men:
 - Shorter; more gendered terms
 - Minimal assurance
 - More “*doubt-raisers*”
 - 4x more mention of personal life
 - Fewer *standout adjectives* (“outstanding”, “excellent”) and more *grindstone adjectives*

Trix & Psenka (2003).

Evaluation of resumés: Prescriptive gender norms and discontinuous employment

- 143 members of a professional HR organization assessed applicants with:
 - No employment gap
 - Discontinuous employment (9 mos or 12 wks x 3)
- Only men were disadvantaged by gaps

Smith et al. (2005).

Systematic review of interventions affecting gender bias in hiring

- 9639 articles from 9 electronic databases
- 1920 abstracts screened
- 130 articles reviewed in full
- 27 met criteria:
 - After 1972
 - Randomized, controlled design
 - Participants blinded to intent
 - Both genders in applicant pool and raters
- 23/24 studies for high-status positions found male applicants evaluated more positively for employment than identical female applicants

Isaac, Lee, & Carnes (2009).

Common racial/ethnic stereotypes

African American¹

Athletic
Rhythmic
Low in intelligence
Lazy
Poor
Loud
Criminal
Hostile
Ignorant

Chinese²

Disciplined
Competitive
Loyal to family ties
Scientifically minded
Business oriented
Strong values
Clever
Serious
Determined
Logical
Wise

Latinos³

Poor
Have many children
Illegal immigrants
Dark-skinned
Uneducated
Family-oriented
Lazy
Day laborers
Unintelligent
Loud
Gangsters

1. Devine and Elliot. (1995) Are Racial Stereotypes Really Fading? The Princeton Trilogy Revisited. *Personality and Social Psychology Bulletin* 21 (11): 1139–50.
2. Madon et al. (2001) Ethnic and National Stereotypes: The Princeton Trilogy Revisited and Revised. *Personality and Social Psychology Bulletin* 27(8) 996–1010.
3. Ghavami and Peplau. (2015) An Intersectional Analysis of Gender and Ethnic Stereotypes: Testing Three Hypotheses. *Psychology of Women Quarterly* 37(1): 113-127.

Occupational role congruity and race/ethnicity

- Two résumés (one of higher- and one of lower-quality) assigned a male name signaling a racial/ethnic identity
 - White, Asian, Hispanic, and Black
- 155 white male participants
 - Answered 16 questions about applicant
 - Rated suitability for 12 occupations (7 higher-status and 5 lower-status occupations)

King et al. (2006).

Occupational role congruity and race/ethnicity

Higher status occupations

Architect
 Chemist
 Computer programmer
 Engineer
 Physician
 Judge
 Pilot

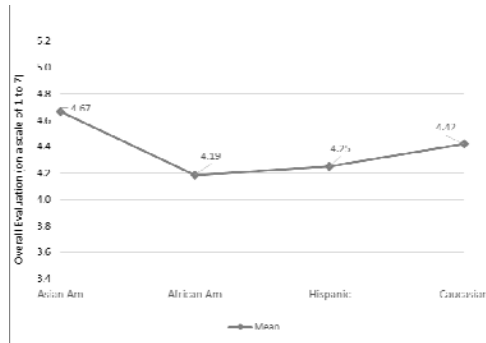
Lower status occupations

Construction worker
 Custodian
 Kitchen staff worker
 Public transit employee
 Repairman

King et al. (2006).

Occupational role congruity and race/ethnicity

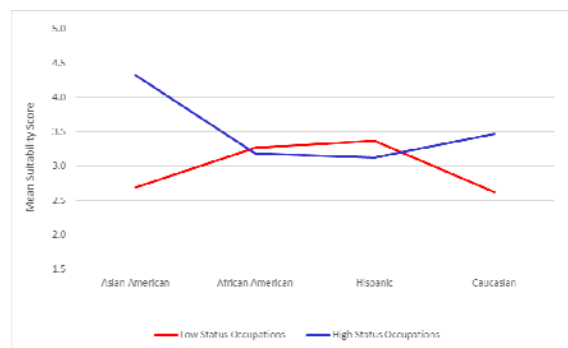
- Evaluation influenced by applicant's race/ethnicity.
 - Asian American applicants rated most positively
 - African American applicants rated least positively



King et al. (2006).

Occupational role congruity and race/ethnicity

- Asian and White American rated most suitable for high-status jobs
- Hispanic and African Americans rated most suitable for low-status jobs
- Whites also benefited most from high quality resumes



King et al. (2006).

Evaluation of CVs and résumés

“I sent my resume for something and when I showed up someone said to me, ‘Your resume didn’t look black.’ Can you imagine someone saying that?”

- Black female, senior faculty member

Pololi et al. (2010).

Case study

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Strategies for Minimizing Bias and Assumptions

- Replace your self-image as an objective person with recognition and acceptance that you are subject to the influence of bias and assumptions.
Uhlman & Cohen (2007)
- Diversify your committee (while avoiding undue service burden).
 - Social tuning/increased motivation to respond w/o bias
Lowery et al. (2001)
 - Counterstereotype imaging
Blair et al. (2001)
- Emphasize institution's commitment to multicultural vs. colorblind mindset.
Wilton et al. (2015)
- State at the beginning of meeting "the vast majority of people try to overcome stereotypic preconceptions."
Duguid & Thomas-Hunt (2015)

What can institutions do to mitigate bias against women in hiring settings?

- Infuse environment with statements that research evidence shows equivalent gender competence in relevant roles
- Encourage raters to take adequate time and agree on criteria in advance of reviewing applications
- Allow applicants to provide individuating evidence of job-relevant competency
- Work for applicant pool to have at least 25% women
- Do not ask about parenthood status
- Use structured vs. unstructured interview questions
- Avoid man-suffix job titles (e.g. use chair rather than chairman)
- Use inclusion vs. exclusion strategy for selection from final list
- Implement training workshops for personnel decision-makers

Isaac, Lee & Carnes (2009).

Case study, reconsidered

Case study, reconsidered

- What role did the committee chair play in allowing those dysfunctions to occur?
- What, if anything, could a department chair or dean have done BEFORE the search to minimize this kind of dysfunction?
- What, if anything, could a department chair or dean do DURING the search process (including during on-campus interviews) to minimize this kind of dysfunction?
- What, if anything, could a department chair or dean do AFTER the selection of a final candidate for hire to minimize the influence of bias in the process?

Ten tips for academic leaders to promote diversity & inclusion

- Learn about outstanding diverse scholars in your unit
- Learn from the local experts about diversity issues
- Review data on equity
- Study work/life issues
- Make diversity and inclusion issues visible
- Increase the visibility of outstanding diverse scholars
- Support committees and task forces
- Ask hard questions and take tough stands
- Incorporate diversity and equity in strategic planning
- Be receptive when presented with diversity-related issues

Relevant publications

- Sheridan, Jennifer; Eve Fine; Christine Maidl Pribbenow; Jo Handelsman; Molly Carnes. 2010. "[Searching for Excellence & Diversity: Increasing the Hiring of Women Faculty at One Academic Medical Center.](#)" *Academic Medicine*. 85(6):999-1007.
- Isaac, Carol; Barbara Lee; and Molly Carnes. 2009. "[Interventions that Affect Gender Bias in Hiring: A Systematic Review.](#)" *Academic Medicine*. 84(10):1440-1446.
- Sheridan, Jennifer; Eve Fine; Jessica Winchell; Christine Maidl Pribbenow; Molly Carnes; and Jo Handelsman. 2007. "[Searching for Excellence & Diversity: Does Training Faculty Search Committees Improve Hiring of Women?](#)" *American Society for Engineering Education (ASEE) 2007 Conference Proceedings*. June 2007.
- Sheridan, Jennifer; Christine Maidl Pribbenow; Eve Fine; Jo Handelsman; and Molly Carnes. 2007. "[Climate Change at the University of Wisconsin-Madison: What Changed, and Did ADVANCE Have an Impact?](#)" *Women in Engineering Programs & Advocates Network (WEPAN) 2007 Conference Proceedings*. June 2007.
- Eve Fine and Jo Handelsman. 2005. [Searching for Excellence and Diversity: A Guide for Search Committee Chairs](#). University of Wisconsin-Madison

Thank you!