

Unconscious Bias

What it is and what to do about it

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What is unconscious bias (UB)?

- Form of rapid cognition that finds patterns based on small bits of information
 - ▣ Adaptive: Danger detector
 - ▣ Ancient reflexive system that links concepts that co-vary
- UB refers to social stereotypes about certain groups of people that are formed outside one's own consciousness (*Fiske & Taylor, 1991; Valian, 1998; 1999*)

Unconscious bias

- ❑ Pervasive: Everybody's got it!
- ❑ Implicit Association Test (IAT)
 - ❑ <http://implicit.harvard.edu/>
- ❑ Errors are systematic: Map to existing social hierarchies & stereotypes (*Nosek, PNAS 2009*)
 - ❑ Men > women, whites > blacks
 - ❑ Males = Science & Females = Liberal Arts
- ❑ Sometimes involve true observations that are then generalized to individuals

One example: Perceived height



- 147 students shown photos of women & men; asked to estimate their heights
 - Both men & women judged men to be taller and women to be shorter than they actually were, even when actual heights comparable
 - Shows that perceptions based on:
 - Sex, not frame of reference
 - Generalize from group to individual
- *Nelson, Biernat, & Manis, 1990*

2nd example: Gendered links

- Different distribution of men and women in certain careers creates implicit associations
- Of domains with gender
 - ▣ Work = male, family = female
 - ▣ Science = male, arts = female
- That are generalized to traits . . .
 - ▣ Male = independent, competent
 - ▣ Female = cooperative, warm

Often incompatible with conscious values

Rev. Jesse Jackson

"There is nothing more painful to me at this stage in my life, than to walk down the street and hear footsteps and start thinking about robbery—then look around and see somebody white and feel relieved."

Quoted in Chicago Sun Times, Nov 29, 1993

Ways UB affects institutional diversity

- Environmental factors can influence candidate evaluation
- Data we receive from others are biased.
- Our judgments are influenced by our own unconscious biases with regard to multiple factors.
 - ▣ Affects everyone, regardless of gender, ethnicity
- Research shows impact on evaluation, hiring, selection of leaders

1. Proportion in the candidate pool

Proportion of women in candidate pool influences how female candidates are rated and whether they are recommended for hire.

Table: Mean search committee rating on 10 point scale (10 is best) for women in relation to their representation in pool

	12.5%	25%	37.5%	50%	100%
n/N	[1/8]	[2/8]	[3/8]	[4/8]	[8/8]
Qualified	4.3	4.7	6.8	7.1	6.5
Recommended for Hire	3.7	3.6	6.2	6.1	5.7

Heilman, 1980

2. Letters of recommendation

300 letters for faculty hired by major U.S. medical school reviewed

Letters for female candidates:

- ▣ Significantly shorter, less record focused
- ▣ Showed less professional respect (first name vs. “Dr” for men)
- ▣ Contained doubt raisers (24% vs. 12%)
- ▣ Discussed how well they get along with others (16% vs. 4%)
- ▣ Referred to personal life (6% vs. 1%)

Letters for male candidates:

- ▣ Referred to research (62% vs. 35%), publications (13%/3%)
- ▣ Contained more “standout adjectives” (2.0/letter vs. 1.5/letter)

Trix and Psenka, 2003

3a. Evaluation of achievement

- ❑ CV of psychologist sent to 238 psychologists randomly selected from the 1997 APA directory
- ❑ Name on CV either “Brian Miller” or “Karen Miller”
- ❑ “Brian” more likely to be hired at entry & tenure level; evaluated more positively on research, teaching & service

	“Karen” entry level	“Brian” entry level	“Karen” tenure level	“Brian” tenure level
N considered	66	66	53	53
% selected	44%	56%	77%	87%

- ❑ Gender of evaluator unrelated to evaluation of candidate

Steinpreis et al, 1999

3b. Hiring “Emily” or “Lakisha”

Fictitious resumes (n=4890) sent in response to 1300 help wanted ads in Boston & Chicago for sales/clerical positions

- 2 high quality, 2 low quality resumes
 - African American/White American-sounding names randomly assigned
- Callback rate: “White” names “African American” names
- | | |
|-------------|-------------|
| 9.7% | 6.5% |
|-------------|-------------|
- 50% difference solely attributable to name manipulation
- White sounding name = 8 years of experience on resume

Bertrand and Mullainathan, 2004

4. The “Mommy Tax”

- Parenthood looks different on women and men
- 192 undergrads evaluated applications, equally qualified, same gender, parents/not parents¹
 - Mothers 42% less likely to be hired
- Fictitious candidates evaluated on perceived warmth/competence²
 - Mothers gain warmth but lose competence
 - Fathers gain warmth, maintain competence
 - Competence ratings predict interest in hiring

¹ Correll et al, 2007; ²Cuddy et al, 2004

Leadership and height



Percent >6 feet tall:

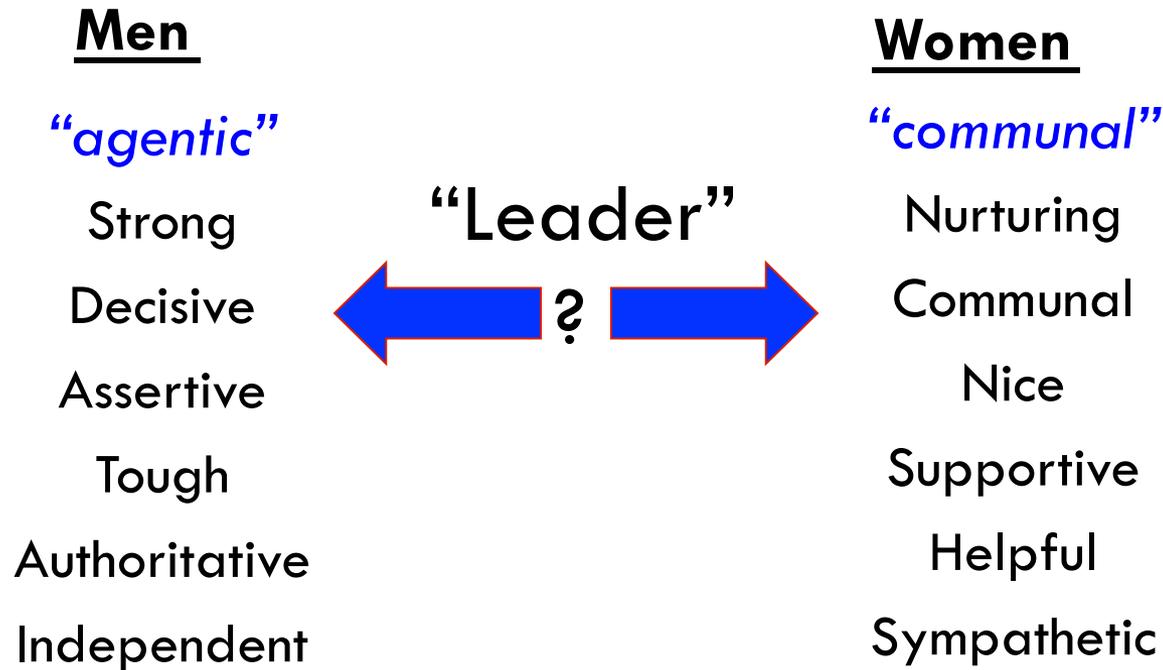
- US men: 15%
- Fortune 500 CEOs: 58%

Stereotypes about men and women

- Men are *agentic*: Decisive, competitive, ambitious, independent, willing to take risks
- Women are *communal*: nurturing, gentle, supportive, sympathetic, dependent
- Stereotypes lead to:
 - *Assumptions* of appropriate occupations and positions
 - *Social penalties* for violating prescriptive gender norms

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

Implications: Perceptions of leadership



“Think-manager-think-male phenomenon”

Schein VE, J Social Issues. 2001;57(4):675-688.

5. The Leadership Paradox:

Aspirations \neq opportunities

- 198 medical school faculty surveyed about goals, attitudes, & experiences
- No gender differences in:
 - Aspirations to be a leader
 - Self-assessment of leadership qualities
 - Willingness to take on time consuming tasks
- However, women significantly less likely to:
 - Be asked to serve as committee chair, section head or department head
 - Be involved in decisions over promotion or space allocation
 - Feel they have influence in the department

Wright et al, Academic Med 2003

Summary: Unconscious bias

Occurs in the context of:

1. Low representation of minorities in candidate pool
2. Subtle differences in references that favor men
3. Committee members' UB devalue accomplishments of women, minorities
4. Parenting: positive for men, negative for women
5. Leadership opportunities reduced for women

Unconscious bias influences evaluation in multiple ways

Reduce Bias: Individual level

- Acknowledge that you have biases.
- Some strategies to reduce your own biases:
 - ▣ Take perspective of members of a different group
(*Galinsky & Moskowitz, 2000*)
 - ▣ Visualize positive images that counter negative gender schemas (*Blair et al, 2001*)
- Know the relevant research (*Moskowitz et al, 1999*)

Reduce Bias: Institutional level

- Commit to specific credentials & review candidates on these credentials before making judgments.
- Expect diverse applicant pool
- Use structured interviews, standardized process
- Allow raters sufficient time to review applicants
- Don't ask about parenthood
- Create accountability for decision makers

Isaac et al. Acad Med 84: 1440-6, 2009

Summary

- Unconscious bias is well documented, pervasive.
- Unconscious bias replicates the social hierarchy.
- Unconscious bias influences our behavior.
- Unconscious bias affects diversity of faculty and leaders in academic medicine.
- Unconscious bias can be effectively reduced.