Gender bias in evaluations:
Complexity and subtlety in patterns of stereotyping and prejudice

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Some data on representation of women in academe
% Female BS Recipients v. Faculty
(from Nelson, 2007; data from 2000-2002)
% Female PhDs v. Asst Professors
(from Nelson, 2007; data from 1993-2002)
% Female faculty within each rank
(from Nelson, 2007; data from 2002)
Gender salary gap by academic rank
(from Ginther, 2007, data from 2001 SDR)
% Under-represented minorities
(from Nelson, 2007; data from 2005/2007)
• Reasons for gender patterns are many
  – Lack of role models/encouragement at all levels
  – Lesser access to networks
  – Childcare responsibilities
  – Dual career issues

• But at least some gender discrepancies may be due to gender stereotypes and consequent gender bias on the part of decision makers
Goals of this talk

• Review experimental research that documents gender stereotyping effects at all stages of information processing and judgment
• Note that these effects can emerge without conscious intent, awareness, or ill will
• Discuss possible solutions
A tour of gender stereotyping effects

- Automatic gender associations
- Construal/memory
- Attention
- Judgment/Evaluation
- The double-bind for women
- Attribution
- Definitions of merit
- Shifting evidentiary standards
Content of gender stereotypes

- Women = Communal (Warm)
  - helpful, friendly, kind, sympathetic, interpersonally sensitive

- Men = Agentic (Competent)
  - aggressive, ambitious, dominant, self-confident, self-reliant

(Williams & Best, 1990; Deaux & Kite, 1993)
1. We automatically associate gendered traits with gender categories.

![Graph showing the strength of gender-stereotyped associations (d) for women and men.](Rudman & Glick, 2001)
2. Stereotypes affect construal of/memory for information

- Ambiguous information is construed to be consistent with the stereotype
• Jane/Bill administered medicine to the patient.

• Elizabeth/Bob was not very surprised upon receiving her/his math SAT score.

(Dunning & Sherman, 1997)
Memory is stereotype consistent:

– Jane *the nurse*, administered medicine to the patient
– Bill, *the doctor*, administered medicine to the patient

– Elizabeth was not very surprised upon receiving her *low* math SAT score
– Bob was not very surprised upon receiving his *high* math SAT score
3. Stereotypes affect attention

• Monitoring of negative behavior – what’s noted in the “permanent record”
  – Participants review work record of male or female trainee
  – Asked to record “notable” information

(Biernat, Fuegen, & Kobrynnowicz, 2009)
More negative information recorded in “permanent record” for women
4. Stereotypes affect judgments of individuals

- We judge individual men and women consistently with group stereotypes (assimilation)
4a. Judging men and women’s suitability for jobs (Biernat & Kobrynowicz, 1997)

- Participants review resume of male or female applicant
- Job is masculine (“chief of staff”) or feminine (“executive secretary”)
- Perceived competence/hireability assessed
Gender that “fits” the job is judged most competent.

The bar chart shows the competence levels of individuals in the roles of Chief of staff and Secretary. The chart compares the competence of female (green) and male (purple) candidates for each role.

- For Chief of staff, female candidates are rated higher than male candidates.
- For Secretary, the chart does not show a significant difference in competence ratings between female and male candidates.
Evaluation of professional CVs (Steinpreis, Anders, & Ritzke, 1999)

- Academic psychologists evaluate CV of biopsychologist Karen Miller/Brian Miller
Evaluation of postdoctoral fellowship applications (Wennerås & Wold, 1997)

- Men submit 54% of applications; receive 80% of awards
4b. Failure to recognize female expertise

- Experts identified in group decision-making task based on actual individual performance
- Group members then interact to reach decision

Women “experts” are judged less expert than men, and even less expert than women non-experts!
Actual influence in groups

Experts
Women
Men

Non-experts
Women
Men
4c. Bias against “harsh” female instructors

\textit{(Sinclair & Kunda, 2000)}

![Bar chart showing evaluation of instructors based on grade and gender](chart.png)
5. Double-bind for women

- Women expected to be communal and non-agentic
- Perception of competence requires agency
- Women who display agency may be criticized
5a. Backlash against self-promoting women (Rudman, 1998)
5b. Evaluations of men and women who negotiate for higher salary/benefits

(Bowles, Babcock, & Lei, 2007)
• For *female employees*: 

- Self-promotion

  - Competence: -.22
  - Likeability: -.43

• For *male employees*: 

- Self-promotion

  - Competence: .34
  - Likeability: .16
6. Stereotypes affect attributions for performance

- We may attribute stereotype-inconsistent information to temporary and/or situational causes
“What is skill for the male is luck for the female” *(Deaux & Emswiller, 1974)*

- Participants asked to explain the successful performance of man or woman on “mechanical” perceptual task
Attribution to ability (versus luck)

The bar chart shows the attribution to ability (versus luck) for females and males. The chart indicates that males tend to attribute more success to ability compared to females.
More recent attribution research

*Heilman & Haynes* (2005)

- Ps read about a successful work team (one male, one female)
- Judgments of influence/competence of group members
Male given more credit for team success
“There is an insidious gender schema that associates effort with women, and ability with men in professional areas”
7. Stereotypes may affect definitions of merit

- Emphasizing the importance of attributes a favored target possesses
• Evaluation of male or female applicant for police chief
  – Qualifications
    • “Street smart” but not formally educated
    • Formally educated, but not “street smart”

_Uhlmann & Cohen (2005)_
How important is formal education to being a police chief?

Qualification is more important if the male has that qualification.
8. Stereotypes activate shifting evidentiary standards

- Stereotypes serve as standards (expectations) against which we judge individual group members
- Standards *shift* for different groups
- Both leniency and stringency depending on judgment at hand
  - Low expectations = low *minimum* standards but greater burden to *confirm* ability
Gender and short-listing/hiring

*(Biernat & Fuegen, 2001)*
Gender and behavioral rewards

• Men given consequential rewards; women given “praise”
Co-ed softball and standards

(Biernat & Vescio, 2002)

• Role-playing managers favor men in assigning positions
  – Team selections: 52% men
  – Benching decisions: 59% women
  – Infield positions: 58% men
  – Top of batting order: 63% men

• But cheer more in response to a woman’s getting on base
Praise but no raise in a work setting

(Vescio et al., 2005)
Summarizing effects of stereotypes

- Quick gendered associations
- Construal/memory for ambiguous information
- Attention to negative information
- Judgmental assimilation to stereotypes
- The double bind
- Attribution
- Shifting definitions of merit
- Shifting evidentiary standards
Micro-Macro links

• Daily discriminatory events may seem trivial
• But disadvantages accumulate
“Unless employers implement structures to check the biasing effects of these microlevel processes, their long-term consequences create or exacerbate macrolevel disparities across race and sex groups in their economic and social fates”

(Reskin, 2007)
What can we do about gender bias?
Stereotyping is not inevitable

- Imagery of the category matters
  - Imagining “strong woman” reduces gender stereotyping \((Blair \textit{et al.}, 2001)\)
  - Viewing positive photos reduces racial bias \((Wittenbrink \textit{et al.}, 2001)\)

- Motivation matters
  - Internal motivation to restrain prejudice
  - Accuracy motives
  - Accountability

- Context matters
  - Intensifiers of bias
    - Hyper-masculinity
    - Solo status
    - Power differentials
    - Little information
Avoiding common mistakes in evaluating merit
(from Thorngate, Dawes, & Foddy, 2008)

• Avoid memory-based judgments
  – On-line is better

• Avoid holistic (global) judgments
  – Dis-aggregate evaluations; judge components (reduces halo effect)

• Avoid inconsistency in weighting of components
Practical Steps

• Awareness and conscious self-correction can help
  – Monitoring
  – Training
    • Acknowledgement of subtle bias
    • Changing associations to gender and to job categories
    • Suppressing/controlling/correcting
    • Changing norms
  – Structuring
    • Curb decision-makers’ discretion by requiring specific procedures
University of Wisconsin search committee training
(Sheridan, Fine, Winchell, Pribbenow, Carnes, & Handelsman, 2007)

- Workshops on good search practices + effects of nonconscious gender/race bias

![](chart.png)

**% women asst prof hires**

- **Participating depts**
  - Yellow: 2003-2005
  - Purple: 2006

- **Non-participating depts**
  - Yellow: 2003-2005
  - Purple: 2006
Other approaches

• Increased accountability for decisions
  – Search processes
  – Tenure decisions

• Gender-blind review process
  – Journal articles, grant proposals

• Family-friendly policies
  – In definition of tenure clock and career trajectory
Thank you!