

Unconscious Bias

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⁺ The views presented here do not represent those of the National Science Foundation

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Unconscious Bias

“If you asked me to name the **greatest discoveries** of the past 50 years, alongside things like the **internet** and the **Higgs particle**, I would include the discovery of **unconscious biases** . . .”

-Prof. Nancy Hopkins

MIT Professor of Biology

Boston University Graduation

May 18, 2014

Unconscious Bias Affects:

- The way people interact with you
- The way *you* interact with others
- It's critical to consider both as you move along your career path!

Maintain “Constant Vigilance”

Unconscious Bias

- Expectations or stereotypes influence our judgments of others (*regardless of our own group*).
- Gender:
 - Men judging women; women judging women
 - Men and women BOTH downplay the contributions of women
- Race/ethnicity
 - Whites judging minorities; minorities judging minorities
 - Whites and minorities downplay the minorities
- Unconscious bias is
 - NOT discrimination
 - NOT prejudice



Schema

- A well-dressed businessman draws a knife on a vagrant.
- The onlookers may (and often do) "remember" the vagrant pulling the knife.
- Results of these studies are starting to question the reliability of eye witnesses.

From Wikipedia, the free encyclopedia

Schemas ...

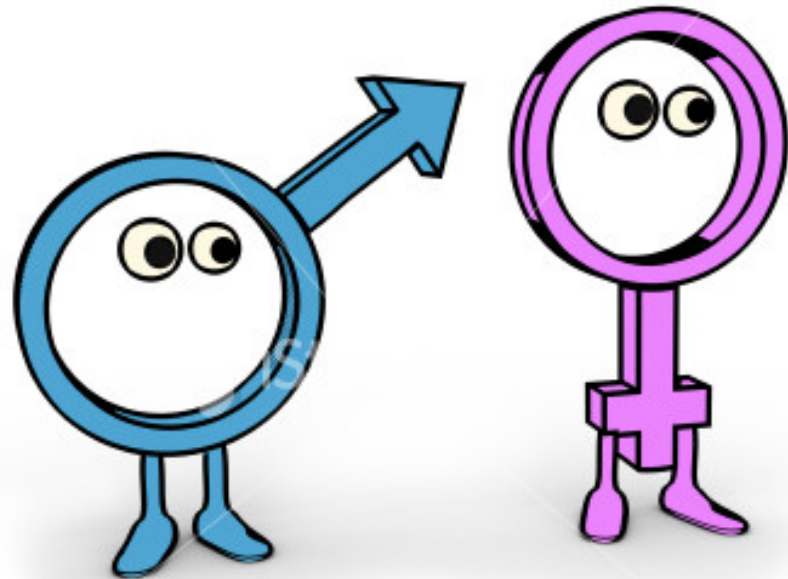
- influence group members' expectations about how they will be judged.
- allow efficient, if sometimes inaccurate, processing of information.
- often conflict with consciously held or "explicit" attitudes.
- change based on experience/exposure.



Nosek, Banaji, & Greenwald (2002). *Group Dynamics: Theory, Research and Practice*, 6, 101-115.
Fiske, Cuddy, Glick, & Xu (2002). *Journal of Personality and Social Psychology*, 82(6), 878-902.

Schemas are applied more often under circumstances of:

- Lack of critical mass
- Time pressure
- Stress from competing tasks
- Ambiguity (including lack of information)



Fiske (2002). *Current Directions in Psychological Science*, 11, 123-128.

When Do Schemas Affect Evaluation Outcomes?

- Resumes
- Job credentials
- Fellowships
- Hiring
- Awards
- Promotion
- Proposal Reviews

➤ Death by a thousand cuts.



Example: America's Symphony Orchestras

- 1970s: women were rare in the upper echelons of the classical music profession
- 1980: premiere orchestras – Boston, Cleveland, Chicago, Philadelphia & NY – only 10% women
- Despite a pool of well-qualified graduates from places like Juilliard - ~45% women.



Schema: Virtuoso = Male

- “The more women, the poorer the sound.”
- “Women have smaller techniques than men.”
- “Women are more temperamental than men and more likely to demand special attention.”
- “I just don’t think women should be in an orchestra.” -- Zubin Mehta

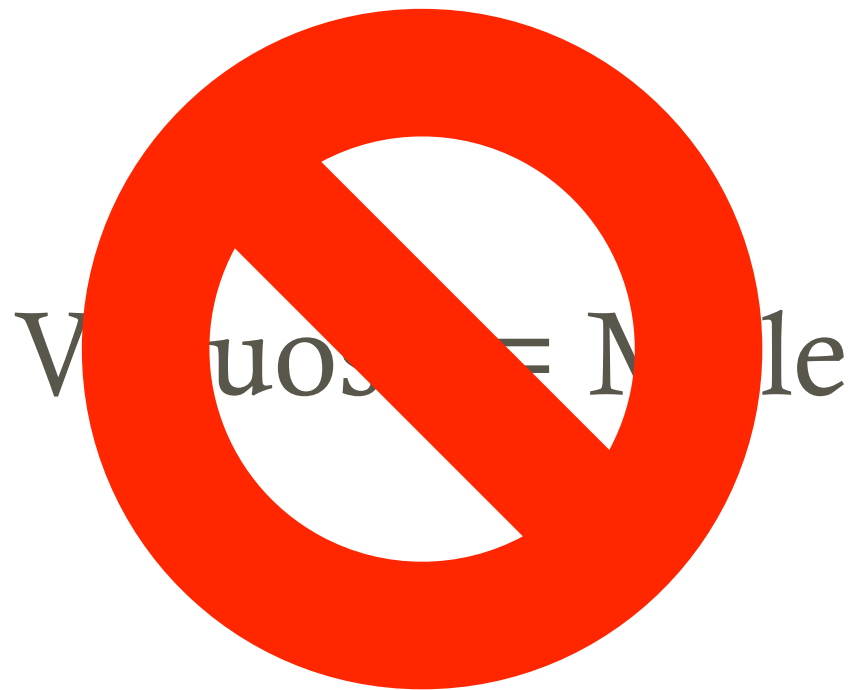


Blind Audition

- During auditions: screen inserted between musician and judge
- Results: % women in America's major symphony orchestras increases to >40%!



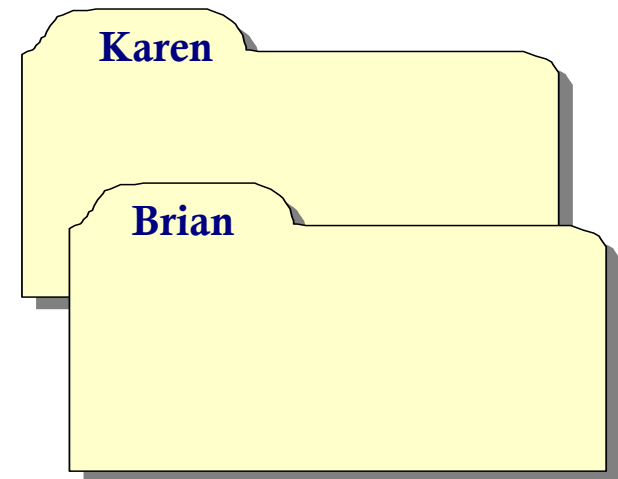
Goldin & Rouse (2000) *Amer. Econ. Rev.*, 90, 715



What is the science equivalent of the
blind audition?

Unconscious Bias: Gender

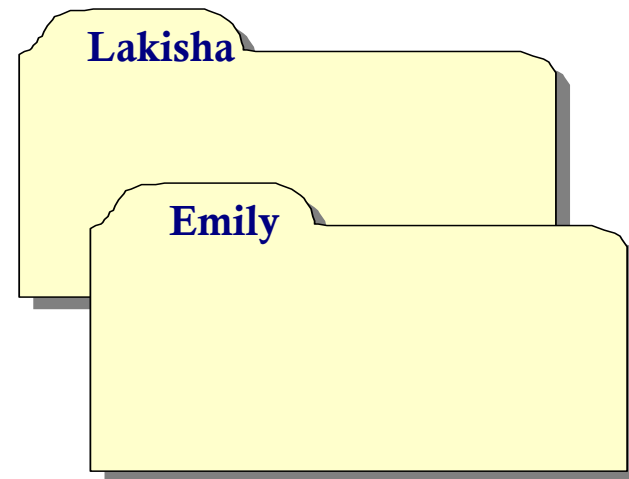
- Teams of male and female university psychology professors (search committees)
- Evaluate candidates for an open position (assistant professor of psychology)
- Application packages for **Karen** and **Brian** are identical except for name
- Search committees preferred **2:1** to hire Brian over Karen
- When evaluating a more experienced record (tenure), reservations expressed **4 times more often** for Karen than for Brian



Steinpreis, Anders, & Ritzke (1999) *Sex Roles*, 41, 509.

Unconscious Bias: Race

- **Lakisha** had to send **15** resumes to get a callback, compared to **10** needed by **Emily**
- **Lakisha** needed **8** more years of experience to get as many callbacks as **Emily**
- The higher the resume quality, the larger the gap between callbacks for **Emily** and **Lakisha**



Bertrand & Mullainathan (2004) *Poverty Action Lab*, 3, 1-27.

Implicit Association Test

- Think unconscious bias = conscious prejudice?
- Think you don't have unconscious biases?
- Try taking the Harvard Implicit Association Test: <https://implicit.harvard.edu/implicit/>

Letters of Recommendation for Successful Medical School Faculty

Letters for men:

- Longer
- More references to:
 - CV
 - Publications
 - Patients
 - Colleagues



*“He is an established leader” vs.
“She might make an excellent leader”*

Try writing a gender-neutral letter: He/she is a sweet young thing.

Letters for women:

- Shorter
- More references to personal life
- More “doubt raisers” (hedges, faint praise & irrelevancies)

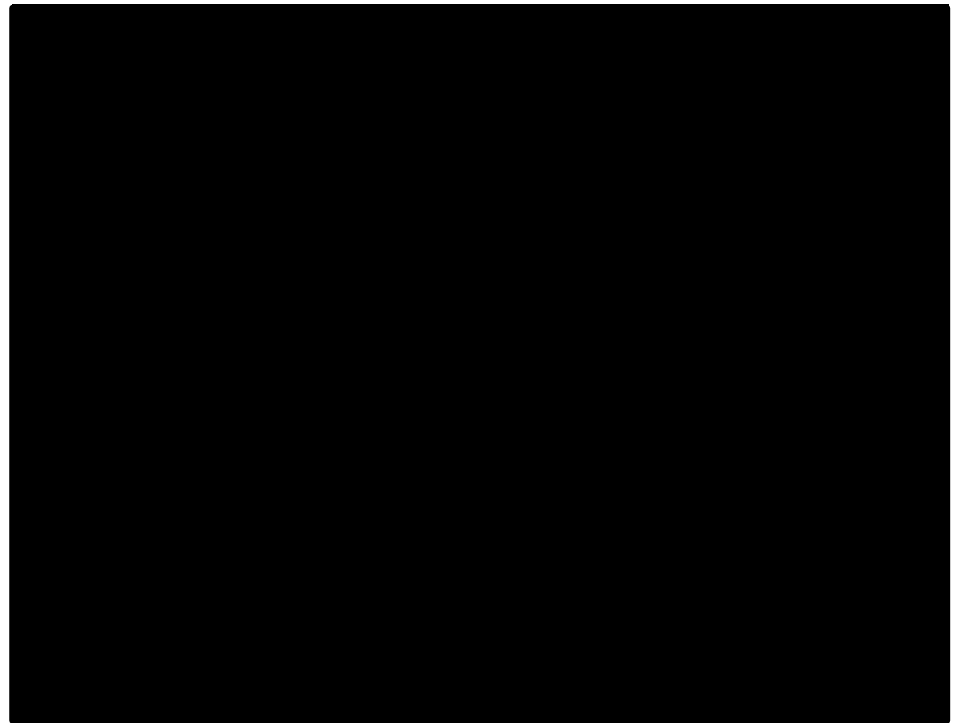
“It’s amazing how much she’s accomplished.”

“It appears her health is stable.”

“She is close to my wife.”

What Can We Do about Unconscious Bias?

- Awareness
- Policies
- Practices
- Accountability



Addressing Bias

- I. The Interview Process – for the Committee
- II. The Interview Process – for the Candidate
- III. Looking Beyond Hiring – Bias Every Day

- Used <http://sitemaker.umich.edu/advance/toolkits> for reference

How do we start a job search?

Recruitment of the Applicant Pool

1. Form a search committee
2. Write an ad targeting a specific sub-discipline
3. Advertise the position
4. Wait for the applications to pour in

If you follow this standard practice, odds are that the racial and gender diversity of your applicant pool will look a lot like your current department. If you want the pool to be more diverse, you have to work a bit harder.

Recruitment of the Applicant Pool

- Recruit proactively year-round
- Recruit specifically for underrepresented groups
- Use of “open searches” (broad vs. narrow job definitions)
- If possible, advertize for multiple positions at once (cluster hiring).



How do we continue a job search?

1. Search committee picks 'best' candidates
2. Applications sit in a server
3. Faculty invited to browse through the files
4. 'Best' candidates are invited to campus

This is the easiest, least painful way to go through this process. Efforts may be made to avoid *conscious* bias and prejudice, but opportunities abound for *unconscious* bias dominate the selection.

The Interview Process – Preparation

- Set criteria before looking at applications
- Review Equal Employment Opportunity (EEO) laws with the search committee.
- Review what questions can and cannot be asked legally.
- Remind everyone that the goal is to get the *best* candidates possible – and that means drawing from a broad group, not just people who “look and talk like you.”
- Look over the interview candidate list – is there diversity? If not, re-evaluate.

Interview Process – Actual Interviews

- Have a formal set of interview questions that are asked of every candidate, and assign specific questions to specific members of the committee
- Organize the entire interview process so that it is as uniform as possible.
- Have a evaluation form with criteria that all committee members have reviewed and approved and *use it*.
- All candidates that meet the criteria become part of the “long short list”
- All long short list candidates get phone interviews
- Meet as a committee after each candidate interview to discuss and take notes.

Interview Process – Evaluation and Recommendation

- Based on evaluation forms and responses in phone interviews, select candidates to become part of the “short short list”
- Review “short short list” for diversity. If it’s lacking, revisit selection.
- Ensure all in-person candidates get the same interview experience (repeat process from previous slide).
- Do not allow committee members to evaluate candidates that they did not interact with.
- Maintain “constant vigilance” for evidence of bias in evaluation, including:
 - Descriptive language
 - Appearance
 - “Not like us” (including accents, etc.)

Interview Process – Candidate Viewpoint

- Do your homework
 - Read about the place and people
 - Prepare to discuss how you will “fit in”
 - Prepare list of questions
- Dress professionally
- Behave professionally
- Think about both the unconscious biases *you* might have going in, and that *they* might have

Example

- Candidate was well qualified
- Candidate was known to some committee members
- During the face-to-face interview some people only saw candidate's presentation, others also interviewed candidate
 - Those who only saw presentation had doubts about candidates ability to "fit in"
 - Those who interviewed the candidate and saw the presentation thought the candidate would be an excellent choice.

Looking Beyond Hiring – Bias Every Day

- Remember - we face unconscious bias every day, not just in interviews
- We must be proactive to combat this bias, both within ourselves and others
- You can help control your destiny!

Example

- Thought I was an administrative assistant because:
 - I was the only woman present
 - I was diligently taking notes
 - I sat in the middle of a large, rectangular table
- I am still often the only woman present, and I take diligent notes, BUT
 - I will introduce myself and my role, and lead the meeting (if appropriate)
 - I will sit at the head of the table (if appropriate)

Example

- Young man is assumed to be in junior position
 - He is named Project Scientist for a major instrument, his first such position.
 - The Project Manager is a much more senior man.
 - The team always goes to PM for decisions.
- Young man is Project Scientist
 - Speak up.
 - Be proactive when decisions are science-based.
 - Do your homework and make informed decisions.

Ways to Mitigate Bias

- Increase awareness of how implicit biases might affect evaluations
- Decrease time pressure and distractions in evaluation process
- Rate on explicit criteria rather than global judgments
- Point to specific evidence supporting judgments



Bauer and Baltes, 2002, *Sex Roles* 9/10, 465.

The Astronomy Workforce of the Future



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Excellence has no gender or race or sexual orientation