Behavioral and Organizational Strategies for Minimizing the Influence of Unconscious Bias

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About WISELI

WISELI – Women in Science and Engineering Leadership Institute

- Research Institute at the University of Wisconsin-Madison
- Mission: Advancing and promoting women in academic Science, Technology, Engineering, Mathematics and Medicine (STEMM) – focus on faculty
- Broader goals – fostering a diverse faculty body
- Funding: NSF ADVANCE, NIH, Campus support

Materials in the presentation were developed in part with grant support from the National Science Foundation (NSF #012366 and #0619979). Any opinions, findings, and conclusions or recommendations expressed are those of the author and do not necessarily reflect the views of the National Science Foundation.
Today’s focus

- What is unconscious bias?

- How does/how can unconscious bias influence underrepresentation of women and members of minority groups in STEMM?
  - Influence of unconscious bias in evaluation settings
  - Influence of unconscious bias on interpersonal interactions – climate

- How can we minimize the influence of bias?
  - Personal behavior/strategies
  - Department level policies/procedures/expectations
What is unconscious bias?

- A substantial body of evidence demonstrates that most people – men and women – hold unconscious biases about groups of people.
- Depending on the discipline unconscious biases can also be referred to as:
  - Schemas
  - Stereotypes
  - Mental models
  - Cognitive shortcuts
  - Statistical discrimination
  - Implicit associations
  - Spontaneous trait inference

The tendency of our minds to judge *individuals* by the characteristics (real or assumed) of the *groups* to which they belong.
What is unconscious bias?

- Most of us routinely rely on unconscious assumptions even though we intend to be fair and believe that we are fair.

- Human brain works by categorizing people, objects and events around us -- this allows us to quickly and efficiently organize and retrieve information. It is an essential cognitive function for managing a vast amount of sensory input.

- But – when evaluating people we can be led astray by our tendency to categorize people – and we tend to do so automatically on the following dimensions:
  - Race/Ethnicity, Sex, and Age.
Unconscious bias in evaluation processes

- Applications/CVs/Résumés
- Reference Letters
- Job Interviews
- Teaching Evaluations
- Tenure and promotion
- Honors and awards
- Leadership positions
- Student admissions
Unconscious bias in evaluation settings

Evaluating Applications, CV’s, Resumes –


Women and members of minority groups rated as less competent or less likely to be hired or called back for interviews.
Gender bias and Science


- 127 Faculty from Biology, Chemistry and Physics departments participated
- Evaluated an application randomly assigned a male or female name for:
  - Competence
  - Hireability
  - Likeability
  - Starting Salary
  - Willingness to provide mentoring
Gender bias and Science


Results

- Evaluated female applicants as more likeable but less competent
- Were more likely to hire male applicants
- Were more likely to give male applicants substantially higher starting salaries
- Were more likely to offer mentoring to male applicants.
Selected forms of bias

- **Expectancy Bias**
  Expecting certain behaviors or characteristics in *individuals* based on stereotypes or assumptions about the *social category* to which they belong.

- **Presumed competence/incompetence**
  Making judgments about the competence or incompetence of individuals on the basis of stereotypes about the group to which they belong.

- **Role Congruity/Incongruity**
  The fit (or lack of fit) between group stereotypes and occupations or occupational roles.
Selected forms of bias
Role Congruity/Incongruity

Men
- Strong
- Decisive
- Intelligent
- Logical
- Unemotional
- Good at math

Women
- Nurturing
- Nice
- Supportive
- Sympathetic
- Emotional
- Verbal

"Scientist"
Selected forms of bias (Cont.)

- **In-group preferences**
  Being more comfortable interacting with people who share your group identity/identities.

- **Microaggressions**
  “… brief and commonplace daily verbal, behavioral, or environmental indignities, whether intentional or unintentional, that communicate hostile, derogatory, or negative … slights and insults toward [members of underrepresented groups].”
Influence of bias on interpersonal interactions -- Climate

What is Climate?

- Behaviors within a workplace or learning environment, ranging from subtle to cumulative to dramatic, that can influence whether an individual feels personally safe, listened to, valued, and treated fairly and with respect.

- The atmosphere or ambience of an organization as perceived by its members. An organization's climate is reflected in its structures, policies, and practices; the demographics of its membership; the attitudes and values of its members and leaders; and the quality of personal interactions.
Assessing Climate

Campus Climate Surveys
- Harvard University’s COACHE surveys
- Individual Institutional Survey’s
  - UW-Madison Faculty Worklife Survey

General Findings
Campus surveys show that women and faculty members from underrepresented groups experience a less positive climate than do male and majority faculty.
UW-Madison Faculty Worklife Survey, 2012

- Response Rates
  - 2,099 TT Faculty received survey
  - 1,044 responded (50% response rate)
  - Women more likely than men to respond (57% women responded, 46% men responded)

http://wiseli.engr.wisc.edu/facworklife.php
In my department, the overall climate is ...

* Indicates significant difference at p<0.05.
Response choices: 1 – Very negative, 2 – Negative, 3 – Mediocre, 4 – Positive, 5 – Very positive

Results from the 2012 Study of Faculty Worklife at UW-Madison: Tenure and tenure-track faculty. © 2013.
How often are you treated with respect by...

* Indicates significant difference at p<0.05.

Response choices: 1 – Never, 2 – Rarely, 3 – Sometimes, 4 – Often, 5 – Very often

Results from the 2012 Study of Faculty Worklife at UW-Madison: Tenure and tenure-track faculty. © 2013.
How often are you treated with respect by ... 

* * * 4.24 4.51 * 4.23 4.48 4.55 4.61 4.59 4.60 4.51 4.61 4.59 4.60 4.55 4.61 4.59 4.60

Colleagues (n=130, 912) Students (n=132, 901) Staff (n=132, 910) Dept. Chair (n=128, 853)

* Indicates significant difference at p<0.05.
Response choices: 1 – Never, 2 – Rarely, 3 – Sometimes, 4 – Often, 5 – Very often

Results from the 2012 Study of Faculty Worklife at UW-Madison: Tenure and tenure-track faculty. © 2013.
How often are you treated with respect by...

<table>
<thead>
<tr>
<th></th>
<th>Gay/Lesbian</th>
<th>Hetero/Bisexual</th>
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<tbody>
<tr>
<td>Colleagues (n=30, 978)</td>
<td>4.40</td>
<td>4.49</td>
</tr>
<tr>
<td>Students (n=30, 970)</td>
<td>4.63</td>
<td>4.60</td>
</tr>
<tr>
<td>Staff (n=30, 978)</td>
<td>4.57</td>
<td>4.61</td>
</tr>
<tr>
<td>Dept. Chair (n=29, 919)</td>
<td>4.52</td>
<td>4.46</td>
</tr>
</tbody>
</table>

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Results from the 2012 Study of Faculty Worklife at UW-Madison: Tenure and tenure-track faculty. © 2013.
How often do you feel isolated in your department?

- **Women/Men**: n=377/661
- **FOC/Majority**: n=131/907
- **With/without Disability**: n=82/947
- **Gay or Lesbian/Hetero or Bisexual**: n=30/975
- **Not Chair/Dept.Chair**: n=973/65

* Indicates significant difference at p<0.05.

Response choices: 1 – Never, 2 – Rarely, 3 – Sometimes, 4 – Often, 5 – Very often

Results from the 2012 Study of Faculty Worklife at UW-Madison: Tenure and tenure-track faculty. © 2013.
How reluctant are you to voice concerns ...

* Indicates significant difference at p<0.05.
Response choices: 1 – Never, 2 – Rarely, 3 – Sometimes, 4 – Often, 5 – Very often

Results from the 2012 Study of Faculty Worklife at UW-Madison: Tenure and tenure-track faculty. © 2013.
How much harder do you have to work to be perceived as a legitimate scholar?

* Indicates significant difference at p<0.05.

Response choices: 1—Not at all, 2—A little, 3—Somewhat, 4—Very, 5—Extremely

Results from the 2012 Study of Faculty Worklife at UW-Madison: Tenure and tenure-track faculty. © 2013.
Perceptions about department climate are key determinants for faculty satisfaction and retention.

Improving department climate is critical for the retention and advancement of women faculty and faculty of color.
Minimizing Bias and Assumptions

Know what factors increase vulnerability to unconscious bias

- Believing oneself to be objective and unbiased
- Believing oneself to be colorblind or gender blind
- Having insufficient or ambiguous information
- Being busy and under time pressure
- Multi-tasking
- Being stressed, tired, and/or hungry
Minimizing Bias and Assumptions

What Not to Do:

- Suppress bias and assumptions from one’s mind (or try to)
  - Studies demonstrating Stereotype Rebound effect
Minimizing Bias and Assumptions: Behaviors

- **Question your objectivity**
  - Replace your self-image as an objective person with recognition and acceptance that you are subject to the influence of bias and assumptions
    

- **Stereotype Replacement**
  - Reflect on your own judgments and interactions and assess whether bias/assumptions played a role
  - Recognize stereotypical portrayals in society or your environment
  - Challenge the fairness of the judgment or portrayal and replace it with a non-stereotypical response
Minimizing Bias and Assumptions

Counter-Stereotype Imaging

- Regulate your responses/judgments by imagining counter-stereotype examples
- Recognize or increase the visibility of counter-stereotype examples in your domain.
  - Eg: Photographs on walls in classrooms and hallways – do they reflect the diversity; Examples used in text books and classrooms – do they reflect the diverse interests of students.
  - Departmental seminars/conferences – are invited speakers from diverse groups within the field.
  - Leadership positions within the department
  - Awards & recognition
Minimizing Bias and Assumptions

- Individuating (instead of generalizing)
  - Obtain more information on specific qualifications, record of performance, personality, and other attributes of an individual before making assumptions/judgments.
  - Practice making situational attributions rather than dispositional attributions
    - He’s late because the bus broke down vs. he’s late because he’s disorganized/lazy/unmotivated.
    - She can’t make the meeting because she’s out of town presenting at a conference vs. assuming she is absent because she has to take care of her kids.
Minimizing Bias and Assumptions

- Perspective Taking
  - Adopt the perspective (in the first-person) of a member of a stigmatized group

  *For example, imagine what it would be like to...*

  - Have your abilities repeatedly called into question
  - Not be offered opportunities because of assumptions about what fields you will like – or because you have family responsibilities
  - Not receive the same rewards and recognitions as similarly deserving peers

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Minimizing Bias and Assumptions

- Increase opportunities for contact with members of underrepresented groups
  - Greet and engage professionally with members of underrepresented groups presenting at or attending academic conferences
  - Pursue opportunities for collaboration
  - Engage in outreach work with minority communities
  - Mentor and advocate for students and colleagues from underrepresented groups.
Minimizing Bias and Assumptions: Organizational Strategies

- Examine your strategic plan – are diversity outcomes and goals incorporated into the department’s vision?

- Build an inclusive community
  - Departmental committees and leadership team
  - Teaching Assignments
  - Departmental events -- seminars, conferences
  - Promote inclusive language
  - Promote a culture of respect, consideration, politeness
  - Recognize and value the work of departmental members
  - Encourage Balance between work and family/personal responsibilities
Creating a Welcoming & Inclusive Department Climate

- Encourage or expect departmental members to take advantage of learning opportunities that aim to improve diversity and climate:
  - Information on the role of unconscious bias in evaluation
  - Information about sexual harassment
  - Information and advice on mentoring students from underrepresented groups

- Respond appropriately to illegal behaviors and complaints about demeaning, sexualizing or condescending language and behavior.

See: Enhancing Department Climate: A Guide for Department Chairs

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Behavioral & Organizational Change is Possible!!

- Not necessarily easy
- Requires awareness, motivation, a sustained commitment, effective strategies, and persistent effort
  - Can expect that you may slip up
  - Stay committed
- Strategies we provided are powerful tools to combat unconscious/implicit biases
  - Implicit responses can be brought into line with explicit beliefs