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.

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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.

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- 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 the female applicant as more likeable but less competent than the male.
- Were more likely to hire the male applicant.
- Were more likely to give the male applicant a substantially higher starting salary.
- Were more likely to offer mentoring to the male applicant.
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.

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

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

<table>
<thead>
<tr>
<th></th>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colleagues</td>
<td>4.33</td>
<td>4.56</td>
</tr>
<tr>
<td>Students</td>
<td>*4.51</td>
<td>4.65</td>
</tr>
<tr>
<td>Staff</td>
<td>*4.54</td>
<td>4.64</td>
</tr>
<tr>
<td>Dept. Chair</td>
<td>*4.35</td>
<td>4.50</td>
</tr>
</tbody>
</table>

* 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>Group</th>
<th>Faculty of Color</th>
<th>Majority Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colleagues (n=130, 912)</td>
<td>4.24</td>
<td>* 4.24</td>
</tr>
<tr>
<td>Students (n=132, 901)</td>
<td>4.55</td>
<td>4.61</td>
</tr>
<tr>
<td>Staff (n=132, 910)</td>
<td>4.59</td>
<td>4.60</td>
</tr>
<tr>
<td>Dept. Chair (n=128, 853)</td>
<td>4.23</td>
<td>* 4.23</td>
</tr>
</tbody>
</table>

* 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 ... 

* Indicates significant difference at p<0.05.

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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 do you feel isolated in your department?

* 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.
Differential experiences of bias --
Why climate matters

- 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 diversity? Examples and analogies 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?

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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
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