Addressing Unconscious Bias: Steps toward an Inclusive Academic Culture

Abigail J Stewart
Imagine Ideal University

• Inclusion of students and faculty is based on past effort and evidence of accomplishment

• Rewards (grades, achievements, tenure, promotion, leadership) based on same things

• Despite consensus: disappointing when not quite true on the ground
Given Consensual Vision

• How can it not be true?
  – Unequal access to opportunity
    • Accomplishments depend on opportunities
  – Conscious discrimination
    • Decreased to low level
  – Unconscious bias
Overview

• What is unconscious bias?
• When does it matter?
• What can we do about it?
• If we do something about it, what will change?
Schemas: Non-conscious Hypotheses

• Schemas are expectations or hypotheses about the characteristics of a person based on their group membership.
• Schemas influence our judgments of others (regardless of our own group).
• Schemas influence group members’ expectations about how we will be judged.
Schemas do...

• allow efficient, if sometimes inaccurate, processing of information.
• often conflict with consciously held or “explicit” attitudes.
• change based on experience/exposure.

Schemas…

Are widely shared within a culture

- Both men and women hold them about gender.
- Both U.S. whites and people of color hold them about race/ethnicity.
- Schemas about people in different jobs or disciplines.
- People are often not aware of them.

Schemas are…

- **Applied more** under circumstances of:
  - Ambiguity (including lack of information)
  - Stress from competing tasks
  - Time pressure
  - Lack of critical mass

When do Schemas Result in Unconscious Bias?

When the schema for a type of candidate and the schema for an outcome conflict:

- Hiring
- Evaluation
- Fellowship
- Award
- Promotion
When Do Schemas Affect Evaluation Outcomes?

- Blind auditions
- Evaluation of resumes
- Evaluation of CVs
- Evaluation of job credentials
- Evaluation of fellowship applications
Evaluation of Identical CVs: Gender

For a Faculty Position:

• Male and female psychology professors more likely to hire “Brian” over “Karen” as an assistant professor (2:1).


For an undergraduate lab manager position:

• Male and female science professors rated male applicants more competent, more hireable, more suitable for mentoring, and offered higher salaries.

Moss-Racusin, Dovidio, Brescoll, Graham, & Handelsman (2012). PNAS.
Evaluation of Identical CVs: Gender

- When evaluating a more experienced record (at the point of promotion to tenure), no bias in actual vote, but reservations were expressed four times more often when the name was female.

Hiring, Assessments, and Salaries: Mothers

When evaluating identical applications:

• Evaluators rated mothers as less competent and committed to paid work than nonmothers.

• Mothers were less likely to be recommended for hire, promotion, and management, and were offered lower starting salaries than nonmothers.

• Prospective employers called mothers back about half as often as nonmothers.

When evaluating identical applications:

- Fathers were seen as more committed to paid work and offered higher starting salaries than nonfathers.
- Fathers were not disadvantaged in the hiring process.

Critical Mass Affects the Use of Schemas

• When there are many individuals, we differentiate among them and cannot rely on group-based schemas.

• In both experimental and field settings, increasing the female share of those being rated increased ratings of female applicants and employees.

Heilman (1980) Organizational Behavior and Human Performance, 26: 386-395;
Accumulation of Advantage and Disadvantage…

• Any one slight may seem minor, but since small imbalances and disadvantages accrue, they can have major consequences in salary, promotion, and prestige, including advancement to leadership positions.

• “Mountains are molehills piled one on top of the other.” (Valian, 1998, p. 4)

Impact of Schemas on Careers: Processes for Different Groups Are Similar

Similarities for different groups

- Importance and impact of schemas
- Lack of critical mass leads to reliance on schemas
- Evaluation bias operates
- Accumulation of disadvantages operates
Impact of Schemas on Careers: Processes for Different Groups Are Different

Differences between groups

- Content of schemas
- Likelihood of solo status greater for racial/ethnic minorities than white women; unknown for sexual minorities and people with disabilities
- Less full pipeline for racial/ethnic minorities than white women; unknown for sexual minorities and people with disabilities
- Added complexity for women of color and others with intersecting identities (e.g., gay African American men, lesbians)
If We Do Not Actively Intervene, The Cycle Reproduces Itself

- Lowered success rate
- Accumulation of disadvantage
- Performance is underestimated
- Schemas
- Solo status/Lack of critical mass

Inertia
What Can We Do about Unconscious Bias?

• Awareness
• Practices
• Policies
• Accountability
Strategies for Mitigating Unconscious Bias

- Increase conscious awareness of bias and how bias leads to overlooking talent
  - Implicit Association Test: [https://implicit.harvard.edu/implicit/](https://implicit.harvard.edu/implicit/)
  - Broaden awareness in community
  - Increase sense of responsibility
  - Decrease probability of guilt and blame
The STRIDE Committee promotes excellence among faculty in all fields by engaging the campus community in efforts to improve the university environment.

STRIDE provides information and advice about practices that will maximize the likelihood that diverse, well-qualified candidates for faculty positions will be identified, and, if selected for offers, recruited, retained, and promoted at the University of Michigan.

*We're STRIDE, not STRID!*
Developed Peer Pedagogy to Broaden Awareness and Influence Practices

- Confidence to articulate both presentations and handbook came with sense of causal model that:
  - Relied on empirical evidence
  - Accounted for findings about key elements
  - Accounted for persistence of outcome
  - Systemic; no “bad actors”
  - Led to practical solutions
### Does STRIDE work?

<table>
<thead>
<tr>
<th>College</th>
<th>Pre-STRIDE AY2001-2002</th>
<th>STRIDE AY2003-2012</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Men</td>
<td>Women</td>
</tr>
<tr>
<td>Medical School (Basic Sciences)</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>College of Engineering</td>
<td>32</td>
<td>2</td>
</tr>
<tr>
<td>College of LSA (Natural Sciences)</td>
<td>28</td>
<td>5</td>
</tr>
<tr>
<td>Total % Women</td>
<td>13%</td>
<td></td>
</tr>
</tbody>
</table>

This table shows the proportion of men and women hired in each of the three colleges that employ the largest number of scientists and engineers at the University of Michigan.

Note the marked, and statistically significant, increase in the proportion of women hired, comparing the two pre-STRIDE years with the ten STRIDE years (chi square=8.62, p=.003).
Increase Accurate Understanding of the Pipeline

Table 1 - % Doctoral Degrees Conferred to Women and Underrepresented Minorities in [Department] at the University of Michigan, 16 Peer Institutions, and all R1 Institutions with [Department] Programs: 2000 - 2008

<table>
<thead>
<tr>
<th></th>
<th>University of Michigan</th>
<th>16 Peer Institutions</th>
<th>R1 Institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of doctoral degrees conferred</td>
<td>13</td>
<td>224</td>
<td>501</td>
</tr>
<tr>
<td>% doctoral degrees conferred to women</td>
<td>13%</td>
<td>18%</td>
<td>19%</td>
</tr>
<tr>
<td>% doctoral degrees conferred to underrepresented minorities</td>
<td>11%</td>
<td>10%</td>
<td>6%</td>
</tr>
</tbody>
</table>

Table 2 - Faculty Search: Applicant Pool and Candidate Pool - Fall 2010/Winter 2011 Recruitment Season

<table>
<thead>
<tr>
<th></th>
<th>Applicant Pool</th>
<th>Intermediate Pool</th>
<th>Intend to Invite</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>134</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>% Women</td>
<td>9%</td>
<td>9%</td>
<td>9%</td>
</tr>
<tr>
<td>% Underrepresented minorities</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>N. Unknown Sex</td>
<td>114</td>
<td>114</td>
<td>2</td>
</tr>
<tr>
<td>N. Unknown Race/Ethnicity</td>
<td>82</td>
<td>82</td>
<td>8</td>
</tr>
</tbody>
</table>

Table 3 - % Women and Underrepresented Minorities on the Tenure Track (Funded) in [Department]: 2001 and 2010

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2010</th>
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<tbody>
<tr>
<td>Total faculty</td>
<td>28</td>
<td>27</td>
</tr>
<tr>
<td>% Women</td>
<td>15%</td>
<td>15%</td>
</tr>
<tr>
<td>% Underrepresented minorities</td>
<td>12%</td>
<td>12%</td>
</tr>
</tbody>
</table>

Notes:
- Table 1: WebCASPAR / IPEDS Completion Survey
  - African Americans, Hispanic Americans, and Native Americans (including Alaska Natives).
  - Temporary residents were excluded when calculating percent doctoral degrees conferred to underrepresented minorities, as these individuals were not assigned a race-ethnicity code in the WebCASPAR / IPEDS Completion Survey database.
  - The Office of the Associate Dean for Academic Affairs in the College of Engineering provided a list of peer institutions for each department. The peer institutions for this discipline include: Carnegie Mellon University, Cornell University, All Campuses; Georgia Institute of Technology, Main Campus; Massachusetts Institute of Technology; Michigan State University; Northwestern Univ; Ohio State University; Main Campus; Pennsylvania State U, Main Campus; Purdue University, Main Campus; Stanford University; University of California-Berkeley; University of Illinois at Urbana-Champaign; University of Iowa; University of Minnesota - Twin Cities; University of Texas at Austin; University of Wisconsin-Madison. Data for these comparison institutions was mapped to University of Michigan departments based on Classification of Instructional Programs (CIP) code assignments (2008). Because of differences in organizational structures across institutions and how individual institutions assign CIP codes to their respective departments, the mappings were made in a way to be more inclusive rather than exclusive.
  - Includes R1 institutions that conferred doctoral degrees in [Department].
- Table 2: Departmental Pool Composition Report
  - When calculating percent female, individuals without an assigned sex code (male or female) were included in the denominator.
  - When calculating percent underrepresented minority (African Americans, Hispanic Americans, and Native Americans), individuals without an assigned race-ethnicity code were included in the denominator; therefore, the proportion of minorities reported in this table may underestimate the actual proportion of minorities comprising the applicant pool and/or candidate pool.
- Table 3: M-Pathways Human Resources Data Warehouse (HR61); effective dates: 03/31/2001 and 03/31/2010.
  - Excludes dry appointments; faculty with appointments in more than one department in the College of Engineering (i.e., greater than 0% time equivalence) were counted in each department.
What Practices Matter?

• Recruitment of applicant pool
  o Increase representation of low base-rate groups in pool

• How deliberations are completed
  o Decrease ambiguity in criteria
  o Increase/document knowledge of candidates
  o Rely on evidence
  o Avoid use of global judgments
Recruitment of the Applicant Pool

- Recruit proactively year-round
- Recruit from wider range of “feeder” sources
- Recruit specifically for low base-rate groups
- Use “open searches” (broad vs. narrow job definitions)
Active Recruiting

• Widen the range of institutions from which you recruit.
• Consider candidates, including women and minorities, who may currently be thriving at less well-ranked institutions. They may be there because of:
  o Early career decisions based on factors other than ranking of institution
  o Past discrimination by top tier institutions
  o Candidate’s own internalization of schemas
Job Description: Open Searching

- Consider implications of the job description: search as broadly as possible.
- Work with a single search committee for all positions, to allow opportunities for people with unusual backgrounds to emerge.
Consider Representation in Final Pool of Interviewees

• Bringing in more than one female and/or minority candidate can disproportionately increase the likelihood that a woman and/or minority will be hired.

How Deliberations Are Conducted

- Composition of the search committee
- Clarity of the criteria for the job
- Consistent use of evidence
- Avoid use of global judgments
Search Committee Composition

- Include people who are committed to diversity and excellence.
- Include women and minorities.
Study of Racial Diversity in Jury Deliberations:

Compared with all-white juries, diverse juries deliberating about an African American defendant:

- Took longer to discuss the case
- Mentioned more facts
- Made fewer inaccurate statements
- Left fewer inaccurate statements uncorrected
- Discussed more race-related issues

Jury deliberations are analogous to search deliberations.

Focus on Multiple Specific Criteria during Evaluation

- Avoid “global” evaluations

- Specify evaluations of scholarly productivity, research funding, teaching ability, ability to be a conscientious departmental/university member, fit with the department’s priorities.

- Weigh judgments that reflect examination of all materials and direct contact with the candidate.

Bauer and Baltes, 2002, Sex Roles 9/10, 465.
Candidate Evaluation Tool

Please indicate which of the following are true for you (check all that apply):

- [ ] Read candidate's CV
- [ ] Read candidate's scholarship
- [ ] Read candidate's letters of recommendation
- [ ] Attended candidate's job talk
- [ ] Met with candidate
- [ ] Attended lunch or dinner with candidate
- [ ] Other (please explain):

<table>
<thead>
<tr>
<th></th>
<th>excellent</th>
<th>good</th>
<th>neutral</th>
<th>fair</th>
<th>poor</th>
<th>unable to judge</th>
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<tbody>
<tr>
<td>Potential for (Evidence of) scholarly impact</td>
<td></td>
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<tr>
<td>Potential for (Evidence of) research productivity</td>
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<td></td>
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<tr>
<td>Potential for (Evidence of) research funding</td>
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<tr>
<td>Potential for (Evidence of) collaboration</td>
<td></td>
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<tr>
<td>Fit with department's priorities</td>
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<tr>
<td>Ability to make positive contribution to department’s climate</td>
<td></td>
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<tr>
<td>Potential (Demonstrated ability) to attract and supervise graduate students</td>
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<tr>
<td>Potential (Demonstrated ability) to teach and supervise undergraduates</td>
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<tr>
<td>Potential (Demonstrated ability) to be a conscientious university community member</td>
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</tbody>
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http://www.umich.edu/%7Eadvproj/CandidateEvaluationTool.doc
Remember the People You Consult also have Schemas

- Letters of recommendation (inside and outside)
- Phone calls for suggestions of candidates
- Comments from colleagues and supervisors
Letters of Recommendation for Successful Medical School Faculty Applicants

Differences

Letters for men:
- Longer
- More references to:
  - CV
  - Publications
  - Patients
  - Colleagues

Letters for women:
- Shorter
- More references to personal life
- More “doubt raisers” (hedges, faint praise, and irrelevancies)
  - “It’s amazing how much she’s accomplished.”
  - “It appears her health is stable.”
  - “She is close to my wife.”

Good Practices Become Policies Promoting Good Practices

Create formal policies

- Mandate and monitor attendance at STRIDE Faculty Recruitment Workshops
- Monitor composition of Ph.D. pools, applicant pools and interview pools
- Review/approve search advertisements (open?)
- Review/approve composition of search committees
Policies that Matter Go Beyond Recruitment

• Annual reviews
  o How is information collected?
  o Who reviews/discusses it?
  o According to what procedures?
• Promotion reviews
• Other evaluative contexts
Build in Accountability

• Create and broaden awareness
• Cultivate practices that mitigate bias
• Monitor both processes and outcomes
• Create policies that support fair evaluation processes
• Build in accountability for outcomes
  o Link rewards to outcomes
  o Link evaluation of leaders to outcomes
Addressing Unconscious Bias Takes Work

• Payoff?
  – Inclusion of students and faculty *is* based on past effort and evidence of accomplishment
  – Rewards (grades, achievements, tenure, promotion, leadership) *are* based on same things
  – Achieve our collective vision of what university should be
  – Avoid disappointment!