Creating Inclusive Workplaces: Seeing and Blocking Bias

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Inclusive workplaces

Harness all of the talent in our diverse society and create environments where all individuals can fully thrive.
Creating a culture of constant improvement

1. Today’s focus
2. Build the case for change
3. Increase knowledge
4. Identify action
5. Foster change
6. Leverage small wins

Bias is an error in decision making.
Decision making errors

- Availability bias
- Negativity bias
- Anchoring bias
- Leniency bias

*(Kahneman, 2011)*

Stereotypes are the content of bias

Stereotypes are generalized beliefs about a particular group or class of people.
Stereotypes function as “cognitive shortcuts.”

Commonly held stereotypes that lead to bias

<table>
<thead>
<tr>
<th>Stereotype: STEM Achievers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived as academically successful, esp. in STEM</td>
</tr>
<tr>
<td>(Wong et al., 1998).</td>
</tr>
<tr>
<td>Impact: Asian Americans are seen as competent at technical tasks but not leadership tasks</td>
</tr>
<tr>
<td>(Sy et al., 2010).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stereotype: Lazy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived as lazy, having poor personal hygiene, lacking self-discipline, and emotionally unstable</td>
</tr>
<tr>
<td>(Puhl &amp; Brownell 2001).</td>
</tr>
<tr>
<td>Impact: Applicants who were perceived to be obese are less likely to be hired than applicants who are not perceived to be obese.</td>
</tr>
<tr>
<td>(Klassen, Jasper, and Harris, 1993).</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Stereotype: Leader</th>
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</thead>
<tbody>
<tr>
<td>More likely to be perceived as having more leadership qualities</td>
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<tr>
<td>(Murray and Schmidt, 2011; Blaker et al., 2011).</td>
</tr>
<tr>
<td>Impact: Tall people make more money than short people: $800 per inch more across occupations</td>
</tr>
<tr>
<td>(Judge and Cable, 2004).</td>
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</table>
Bias in STEM comes from stereotypes

Draw-A-Scientist Test: Percent of Students Who Drew A Male Scientist
(N=1504)

- 58% in K-2nd grade (n=235)
- 73% in 3-5th grade (n=649)
- 75% in 6-8th grade (n=620)

(Barman, 1999)

- Sample of 550 Teachers (McDuffie, 2001)
  - Male (84%)
  - White (nearly all)
  - Middle Aged (73%)
  - Glasses (50%)
  - Unconventional hear styles (36%)
  - No other people in the drawings
Underrepresentation of women in the US

- Approximately 4.5% of the Fortune 500 CEOs are women.
- Women hold 14% of executive officer positions.
- Women hold 18% of elected congressional offices.
- Women hold 17.2% of research university presidencies.
- Women of color are more underrepresented.

Women in Science
Representation of women in Science (NSF)

<table>
<thead>
<tr>
<th>Field</th>
<th>Doctorates</th>
<th>Full Professors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology</td>
<td>47%</td>
<td>23%</td>
</tr>
<tr>
<td>Computer Science</td>
<td>21%</td>
<td>12%</td>
</tr>
<tr>
<td>Math</td>
<td>28%</td>
<td>17%</td>
</tr>
<tr>
<td>Physics</td>
<td>20%</td>
<td>13%</td>
</tr>
<tr>
<td>Engineering</td>
<td>23%</td>
<td>8%</td>
</tr>
</tbody>
</table>
Bias: Cognitive Function

- Categorization by sex (and race)
- Expectations about the individual
- Bias in how we process information
- Evaluations, opportunities, influence
50% women
No bias condition

250 Women
250 Men

Martell, Lane & Emrich 1996

35% women
1% bias condition

250 Women
250 Men

Martell, Lane & Emrich 1996
How do we block bias?

“Recognize that we didn’t create this, but we can fix it.”

Megan Smith

CTO, United States of America
Bias 2.0: Organizational Function

We can debug processes and block bias.
Stereotypes affect the *standard* we use to evaluate the performance of individuals.

Brian Miller  
79%

Karen Miller  
49%

Extra Scrutiny

“I would need to see evidence that she had gotten these grants and publications on her own.”

“It would be impossible to make such a judgment without teaching evaluations.”


Stereotypes affect the criteria we use to evaluate the performance of individuals.
More education

More experience

Uhlmann & Cohen 2005
More experience

More education

Uhlmann & Cohen 2005

Thomas Meyer
Seniority: 3rd Year Law Associate
Alma Mater: NYU
Race/Ethnicity: Caucasian

Thomas Meyer
Seniority: 3rd Year Law Associate
Alma Mater: NYU
Race/Ethnicity: African American

Reeves 2014
Thomas Meyer  
Seniority: 3rd Year Law Associate  
Alma Mater: NYU  
Race/Ethnicity: Caucasian

Score: 4.1 out of 5  
“generally good writer but needs to work on...”  
“has potential”  
“good analytical skills”

Thomas Meyer  
Seniority: 3rd Year Law Associate  
Alma Mater: NYU  
Race/Ethnicity: African American

Score: 3.2 out of 5  
“needs lots of work”  
“can’t believe he went to NYU”  
“average at best”

3x more edits/comments  
2x more likely to find mistakes

Reeves 2014
Evaluations in Science

Nationwide sample of biology, chemistry, and physics professors evaluated application materials of an undergraduate science student (female or male) for a lab manager position.

1. Both male and female faculty participants rated the female student as less competent and less hireable, and offered the female student a lower salary and less mentoring.

Language of Scientific Competence

300 letters of recommendation for medical science faculty:
Recommendation letters for women were more likely to:
- Be shorter
- Include references to personal life
- Lack alignment to the job description
- Emphasize teaching over research
- Include doubt raisers
- Describe women in nurturing language “e.g. works well with others” rather than “accomplished”
- Use grindstone adjectives, e.g. “hardworking”
- Use less standout adjectives such as “outstanding”, “excellent”
- Less use of the word “research” (62% for male candidates, 35% for female candidates)

(Trix, F. & Psenka, C. 2003)
Team Dynamics

In a group of 8, 3 people speak 67% of the time.

Airtime is perceived as influence – the loudest voice is seen as the most influential even if it did not contribute the most.

Women are less likely to have influence in team meetings and are more likely to have their ideas overlooked.

• Men interrupt women significantly more than they interrupt other men. Women are more often a target of interruptions than men.

Women faculty bear a disproportionate share of service burden

from Misra et al, 2012
How can we overcome these effects?

Effective solutions require breaking the tendency to use stereotypes as cognitive shortcuts.
Power of Introductions

Advocacy and Sponsorship to create conditions for performance

Rudman 1998

More Competent

Less likeable

More Competent
The Double Bind

- Women who are seen as competent suffer a likability penalty.

- A woman who is successful in a stereotypically male job is seen as less likable, less attractive, less happy, and less socially desirable.

- Successful female managers are seen as more deceitful, pushy, selfish, and abrasive than successful male managers.

Yoder and Schleicher, 1996; Heilman, et al., 2004

The Double Bind for African American Leaders

- Black men incur a penalty for behaving assertively
- Black leaders often have to use “disarming mechanisms” to reduce backlash.

(Livingston and Pearce, 2009)
Double Bind in science

“I have found that it is much more accepted for a male to be aggressive... Many professors that will even kick the doors and everything, and nobody seems to care about that. I can guarantee if a female does it, they will feel that she’s crazy.”
– Latina Engineer

“I don’t raise my voice. Because if I were as assertive as some Caucasian colleagues that are male, I would be called a mad Black woman.” – African American microbiologist

Williams et al. 2014

Advocacy and Sponsorship

“No one leans in more than the Clayman Institute. I have had the privilege and honor of working with Shelley and Lori. I believe strongly in leaders. I’ve never met better leaders. They believe in gender equality. They understand how you take academic research and make it apply. And they will stop at nothing to change this world. And it is an honor and a privilege to be able to partner with you.”

Sheryl Sandberg
Organizational solutions

Arm the choir. Educating about the effects of stereotypes gives well-intentioned men and women the tools to avoid bias.
Organizational solutions

Establish clear criteria before making evaluations.

More experience
More education

Organizational solutions

Hold decision makers and ourselves accountable for decisions.

• Be prepared to explain your decisions and judgments to others.

Correll 2004
Organizational solutions

Be transparent.

• Track numerical progress. Organizations manage what they measure.
• Helps avoid the “paradox of meritocracy.”

Castilla & Benard 2010

The paradox of meritocracy

If we do not question meritocracy, we open the door to bias.

Castilla & Benard, 2013
Toolkit

1. Define criteria before evaluations
   • Scientific results (define)
   • Define other criteria (e.g. leadership)
   • Articulate weight

2. Outline process before review
   • Insist on consistent application of criteria
   • Define process
   • Notice when higher or different standards are used to evaluate the performance of certain individuals
   • Block criticisms of communication style

3. Review assignments and service work on your team
   • Legacy vs. “new” projects
   • Office housework
   • Develop career plans toward the right assignments
## Toolkit

1. Vouch for the competence of underrepresented employees
2. Focus on accomplishments in reviews.
3. Block undue criticism of women’s (and men’s) communication styles.
4. Pay attention to team dynamics: whose voice gets heard?

## Team Dynamics

1. Establish groundrules
2. Solicit input
3. Ask Framing questions
4. Interrupt Interruptions
5. Master effective introductions
Conclusion

• Stereotypes negatively affect individuals in multiple ways and cumulate over careers.
• These effects can be reduced or eliminated if we break the tendency to use stereotypes as shortcuts.
• Removing bias is good for individuals and good for organizations.