The initiation of unconscious bias training at research institutes

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Unconscious bias
cultural environment

background

personal experience

familiar/unfamiliar

almost instantaneous decision
We all use categories (or stereotypes)—of people, places, things—to make sense of the world around us. "Our ability to categorise and evaluate is an important part of human intelligence. Without it, we couldn't survive." (M.R. Banaji)
Decisions that need rational thinking are often wrong.
If 5 machines need 5 minutes to produce 5 things, how much time do 100 machines need to produce 100 things?
Harvard Implicit Bias Test (Project Implicit)

https://implicit.harvard.edu/implicit/education.html
Gender - Career. This IAT often reveals a relative link between family and females and between career and males.

Native American ('Native - White American' IAT). This IAT requires the ability to recognize White and Native American faces in either classic or modern dress, and the names of places that are either American or Foreign in origin.

Weight ('Fat - Thin' IAT). This IAT requires the ability to distinguish faces of people who are obese and people who are thin. It often reveals an automatic preference for thin people relative to fat people.

Race ('Black - White' IAT). This IAT requires the ability to distinguish faces of European and African origin. It indicates that most Americans have an automatic preference for white over black.

Religion ('Religions' IAT). This IAT requires some familiarity with religious terms from various world religions.

Presidents ('Presidential Popularity' IAT). This IAT requires the ability to recognize photos of Donald Trump and one or more previous presidents.

Weapons ('Weapons - Harmless Objects' IAT). This IAT requires the ability to recognize White and Black faces, and images of weapons or harmless objects.

Skin-tone ('Light Skin - Dark Skin' IAT). This IAT requires the ability to recognize light and dark-skinned faces. It often reveals an automatic preference for light-skin relative to dark-skin.

Gender - Science. This IAT often reveals a relative link between liberal arts and females and between science and males.
Press "E" for Male
or
Family

Press "R" for Female
or
Career

Children

If you make a mistake, a red X will appear. Press the other key to continue.
Types of biases
Attribution bias

Success is attributed to...

...personality

『He is capable』

...external circumstances

『She has a good team』
Example: In evaluation processes, the same background is interpreted differently

<table>
<thead>
<tr>
<th>Interpretation for woman</th>
<th>Interpretation for man</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Applicant is expert in one field”</td>
<td>She is limited.</td>
</tr>
<tr>
<td>“Applicant has experience in various fields”</td>
<td>She is shallow.</td>
</tr>
<tr>
<td>“Applicant is successful”</td>
<td>She is ambitious.</td>
</tr>
<tr>
<td>“Applicant publishes a lot with others”</td>
<td>She is dependent.</td>
</tr>
</tbody>
</table>

From presentation by Anna Wahl (KHT Stockholm), SNSF conference 2016, Pern Kandola, 2014
Confirmation bias

WHAT THE FACTS SAY

OVERVALUED

WHAT CONFIRMS YOUR BELIEFS

UNDERVALUED

FOOLISH
Where do we see gender bias in Academia?
Classroom, lab, field:

Perception/Evaluation

Grades

Treatment
Assessment procedures:

From: 'Implicit bias in academia', LERU (League of European Research Universities), 2018
Other examples
Recommendations

- Raise awareness/question stereotypes
- Change culture by university leadership
- De-bias wording in job advertisements
- Briefing selection committees
- Transparent selection processes (same criteria)
- Slow down decision making
- External evaluators
- Bias observers

E.g. from: 'Implicit bias in academia', LERU (League of European Research Universities), 2018
Include administrative staff in bias training
30 minutes talk about unconscious bias at the yearly meeting before every selection process
Not just in Academia...
Bias is built into our daily lives
What are the symptoms of a heart attack?
Cultural bias
Cultural bias

“phenomenon of interpreting and judging phenomena by standards inherent to one's own culture”
Cultural differences

different attitude towards time, space, others

different nonverbal communication
Unconscious bias training
Members: 160
Women: 31%
90% Astrophysicists
10% Geophysicists
Introduction of unconscious bias

Talk by T. Brage, a Physicist showing proof of unconscious bias.

Newsletter with articles including EO

Discussions at diversity lunches

Internal articles to raise more awareness
What doesn´t work in our group

Speaker not tailored to group needs
Judging and accusing
Too theoretical
Lecturing
Effects of bias training

Allies

Large awareness
Sensitivity increased
Insecurity (what is OK?)
Denial (‘we are objective’)
“It is evolutionary necessary”
Lessons learned

Repetition needed
Tailored to audience
Speaker respected in the field
Ask for input! Get people on board!
Include administration
Survey at the NCCR

Very short email
Very short survey
1/3 of the group responded
Hot topic
Survey asks for advice: 'in your experience,…‘
A father and his son are involved in a horrific car crash and the man died at the scene. But when the child arrived at the hospital and was rushed into the operating theatre, the surgeon pulled away and said: “I can’t operate on this boy, he’s my son”.
Bias is also based on stereotypes
Always commercial

WHAT DOES IT MEAN TO DO SOMETHING
“LIKE A GIRL”?
run like a girl
fight like a girl
throw like a girl
run like a girl
fight like a girl
throw like a girl
Generating Stereotypes

23. What arrangement of mirrors would produce the multiple images of Ann Margaret shown in Fig. 35.51?

From presentation 'What does gender have to do with Physics?' (T. Brage)
Pictures of women

Taken from presentation 'What does gender have to do with Physics?' (T. Brage)
Pictures of men

From presentation 'What does gender have to do with Physics?' (T. Brage)
Stereotyping starts early: Gendered marketing

‘100 things that a boy must know’: how to fix a bike, how to make magic ink, how to whistle.

‘100 things that a girl must know’: 100 tips around beauty, crafting and recipes….how to remove chewing gum from your hair, how to make your own bathing salts.
We can all be role models
Scenario #1:
Male doctoral student is introduced to international colleagues at conferences, while female doctoral student is not.
Scenario #2:
Recommendation letter: Are there differences? Is there bias? What are indicators of bias?
Example: Avoiding gender bias in reference writing

Avoiding gender bias in reference writing

Got a great student? Planning to write a super letter of reference? Don’t fall into these common traps based on unconscious gender bias.

Mention research & publications
Letters of reference for men are 4x more likely to mention publications and twice as likely to have multiple references to research. Make sure you put these critical accomplishments in every letter!

Don’t stop now!
On average, letters for men are 16% longer than letters for women and letters for women are 2.5x as likely to make a minimal assurance (‘she can do the job’) rather than a ringing endorsement (‘she is the best for the job’).

Keep it professional
Letters of reference for women are 7x more likely to mention personal life - something that is almost always irrelevant for the application. Also make sure you use formal titles and surnames for both men and women.

Stay away from stereotypes
Although they describe positive traits, adjectives like ‘caring’, ‘compassionate’, and ‘helpful’ are used more frequently in letters for women and can evoke gender stereotypes which can hurt a candidate. And be careful not to invoke these stereotypes directly (‘she is not emotional’).

From: Commission on the status of women, University of Arizona
Emphasize accomplishments, not effort

Letters for reference for men are more likely to emphasize accomplishments (‘his research’, ‘his skills’, or ‘his career’) while letters for women are 50% more likely to include ‘grindstones’ adjectives that describe effort. ‘Hard-working’ associates with effort, but not ability.

We all share bias

It is important to remember that unconscious gender bias isn’t a male problem. Research shows that women are just as susceptible to these common pitfalls as men. This is a problem for all of us - let’s solve it together!

Adjectives to avoid: caring, compassionate, hard-working, conscientious, dependable, diligent, dedicated, tactful, interpersonal, warm, helpful

Adjectives to include: successful, excellent, accomplished, outstanding, skilled, knowledgeable, insightful, resourceful, confident, ambitious, independent, intellectual

Be careful raising doubt

We all want to write honest letters, but negative or irrelevant comments, such as ‘challenging personality’ or ‘I have confidence that she will become better than average’ are twice as common in letters for female applicants. Don’t add doubt unless it is strictly necessary!

Follow us at: www.facebook.com/uacsw
For an electronic copy of this graphic, see: www.csw.arizona.edu/LORbias

From: Commission on the status of women, University of Arizona
Scenario #3: During a meeting, the woman’s voice or idea is ignored, later the male colleague’s same idea is supported. What can she do?
Discussion: group work

• Have you experienced bias towards yourself?
• Have you caught yourself being biased or stereotyping?
• During your career, do you think unconscious bias helped or hindered you?
• Are there stereotypes about the country you live in?