The Double Bind of Gender Bias

Tinu Cornish CPsychol
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- Unconscious Bias in higher education

- Review of the effectiveness of unconscious bias training
  - www.sea-changeconsultancy.com

- https://www.amazon.co.uk/Psychology-Ethnicity-Organisations-Tinu-Cornish/dp/1137330139

www.sea-changeconsultancy.com
Bias – how good people end up discriminating.

- **Bias** – inclination for or against a person or group, in a way considered to be unfair. Can be positive or negative; conscious, structural or unconscious.

- **Unconscious Bias** – associating stereotypes or attitudes towards categories of people without conscious awareness. (Banaji & Greenwald, 1995; Kahneman, 2011; Greenwald & Krieger, 2006).

- **Structural Bias** – biases in institutions, practices, cultures and other societal norms, which can reinforce ways of perpetuating inequity.

Psychological explanation for Bias

- Our brains use two ‘thinking’ systems that operate simultaneously* (Kahneman, 2011)
- We evolved to instantly categorize people into in-group and out-group (Tajfel & Turner, 1979)
- Categories are also formed through association
- Biases are wired within the brain. (Bodenhausen and McCrae, 1998)
- Positive people preferences account for much discrimination
Gender Career Poll – Implicit Association Test

Did you more closely associate women with
1. The home?
2. A career?
3. Neutral?
4. I didn’t do the activity?
5. I ‘gamed’ the system to get the ‘right’ result?

What are the implications of people being biased against their own group?

75% of men have a strong Women-Home/Male-Work association

80% of women have a strong Women-Home/Male-Work association

(Banaji & Greenwald, 1995)
The fact is that tough women are regarded as trouble whereas tough men are regarded as promotion material.

You are a hard woman

That was scary but I get the message

Leader Characteristics
Decisive
Strategic
Assertive
Visionary
Well organised

Female Characteristics
Warm
Helpful
Friendly
Kind
Sympathetic

Male Characteristics
Aggressive
Ambitious
Dominant
Self-confident
Forceful

Taking Care

Taking Charge

https://hbr.org/2013/04/for-women-leaders-likability-a
Successful or friendly

In 2003, Harvard Business School ran an experiment to test perceptions of men and women in the workplace. They chose the case study of Heidi Roizen, a real-life entrepreneur. The case described how Heidi was successful thanks to her outgoing personality and networking abilities. The same story was read by 2 groups of students with one difference: one group was working on Heidi, for the other, her name was changed to Howard.

- When asked for their thoughts, both groups of participants found Heidi and Howard equally competent, which made sense as their accomplishments were identical.

- Nevertheless, Howard came across as the more appealing colleague, with people wanting to work with him, whilst Heidi was seen as "selfish" and "not the person you would like to work for".

- The same data with a single difference (gender) created very different impressions, indicating that people are penalised if they do not conform to the social roles/ expectations assigned to them by the society.

- [http://www.hbs.edu/faculty/Pages/item.aspx?num=26880](http://www.hbs.edu/faculty/Pages/item.aspx?num=26880)
Academics in STEM departments

- Moss-Racusin et al. (2012) had staff in science faculties in US colleges rate the application of a Post Doc applicant for a position as a laboratory manager. The same application was used 127 times and randomly assigned either a female (64 times) or male (63 times) name.
  - Both male and female hirers rated the ‘male’ applicant more highly than the ‘female’ applicant.


Gender bias by Physics teachers

- A study performed in several German-speaking countries indicates that physics teachers give better grades to male students than female students — even when their answers are identical.
- In Switzerland and Austria, secondary school teachers of both genders gave lower grades to female students.
- In Germany, female teachers displayed the same bias.
- Surprisingly, male German teachers were an exception to the pattern, grading students equivalently regardless of gender.


Gender Bias against Physics Lecturers

- This study examines physics students’ evaluations of identical, video-recorded lectures performed by female and male actors playing the role of professors.
- Evaluations by male students show statistically significant overall biases with male professors rated more positively than female professors.
- Female students evaluated female professors’ interpersonal/communicative skills more positively than male professors.
- Female students evaluated female professors’ scientific knowledge and skills less positively than that of male professors just as male students did.
Gender bias in citations

Example Astro physics

1. 50,000 articles that were published in 5 major astronomy journals between 1950 and 2015.
2. % of papers with a female first author rose from less than 5% in the 1960s to about 25% in 2015.
3. But since 1985, astronomy publications with a male first author have received about 6% more citations than those led by a woman — a figure that Caplar and his co-authors suspected could reflect a hidden gender bias.

The San Francisco Declaration on Research Assessment (DORA)

‘Do not use journal-based metrics, such as Journal Impact Factors, as a surrogate measure of the quality of individual research articles, to assess an individual scientist’s contributions, or in hiring, promotion, or funding decisions.’
The Matthew Effect in Science Funding

- Scientists who have previously been successful are more likely to succeed again.
- All review scores and funding decisions of grant proposals submitted by recent PhDs in a €2 billion granting program.
- Analyses of review scores reveal that early funding success introduces a growing rift, with winners just above the funding threshold accumulating more than twice as much research funding during the following eight years as nonwinners just below it.
- Found no evidence that winners’ improved funding chances in subsequent competitions are due to achievements enabled by the preceding grant,
- Early funding itself is an asset for acquiring later funding.
- Funding gap is partly created by applicants, who, after failing to win one grant, apply for another grant less often.


Thijs Bol, Mathijs de Vaan, and Arnout van de Rijt
PNAS May 8, 2018 115 (19) 4887-4890; https://doi.org/10.1073/pnas.1719557115
Majority group advantages

1. Grammar or private school
2. Elite Universities
3. Quality work experience and internships
4. Resources; financial, accommodation; IT
5. Sponsor/mentor
6. Influential network
7. Insider knowledge
8. Privileged access to grant funding
9. PhD students
10. Ex officio roles/committees
11. Positive stereotypes about group
12. Less likely to experience bullying and harassment
13. Think leader/ think male bias
14. Skills
15. Knowledge

Minority group advantages

1. Skills
2. Knowledge
3. Cultural capital
4. Resilience

Possible Minority group disadvantages (UK)

1. Less access to prestigious schools
2. Less access to Russell group universities
3. Less access to resources
4. Negative stereotypes
5. Confirmation Bias
6. Mistakes seen as defining of abilities
7. Out grouped
8. Microaggressions
9. Less likely to be sponsored and mentored
10. More likely to experience bullying and harassment
11. Less role models
Tactics for increasing representation and progression

1. **Disrupt the system:**
Reduce the extent to which the system rewards privilege and advantages the careers of some and not others

   e.g. Formal sponsor schemes
   [https://www.ucl.ac.uk/equality-diversity-inclusion/equality-areas/race-equality/inclusive-advocacy](https://www.ucl.ac.uk/equality-diversity-inclusion/equality-areas/race-equality/inclusive-advocacy)

2. **Prevent discrimination**
Manage and mitigate the impact of bias and stereotypes

   [https://www.ucl.ac.uk/equality-diversity-inclusion/equality-areas/race-equality/fair-recruitment-specialist-initiative](https://www.ucl.ac.uk/equality-diversity-inclusion/equality-areas/race-equality/fair-recruitment-specialist-initiative)

3. **Rewarding diversity:**
Increase the recognition of cultural capital,
[https://www.liverpool.ac.uk/open-research/responsible-metrics/responsible-metrics-at-liverpool/](https://www.liverpool.ac.uk/open-research/responsible-metrics/responsible-metrics-at-liverpool/)

4. **Positive action:**
Use resources to open up opportunities for minorities

   e.g. Funded internships and apprentices
   [https://www.10000blackinterns.com/about](https://www.10000blackinterns.com/about)
Managing and Mitigating Bias
Committees with implicit biases promote fewer women when they do not believe gender bias exists

- Committees with strong implicit gender biases promoted fewer women at year 2 (when committees were not reminded of the study) relative to year 1 (when the study was announced) if those committees did not explicitly believe that external barriers hold women back.

- When committees believed that women face structural barriers, implicit biases did not predict selecting more men over women. This finding highlights the importance of educating evaluative committees about gender biases.

Equity Change Methodology

Data collection
Quantitative and qualitative data

Data analysis
Identifying issues and challenges

Identify reasons for issues
Stakeholder feedback; literature review

Intervention identification
Literature review; best practice; stakeholder consultation

Action planning
Strategic plan for implementing SMART actions

Evaluation
Outcome, impact and process evaluation

https://www.advance-he.ac.uk/charters/rec-athena-swan-initiatives
Do you have a problem?

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<th>% of total</th>
<th>BME</th>
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<td>796</td>
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<td>100</td>
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<td>Offered</td>
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<td>149</td>
<td>94.9</td>
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Note:
14% of city population is BME
7% of rural population is BME
Data: Leaky pipelines and glass ceilings

[Graph showing percentages of different roles and genders]
## REF Output example 1

### Outputs 'In the Cut'

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### Staff Outputs Profile

#### Gender

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#### ECR

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### Seniority

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</tbody>
</table>

### Outputs Profile by Gender

- Female: [Graph showing distribution]
- Male: [Graph showing distribution]

### Outputs Profile by Seniority

- Grade F: [Graph showing distribution]
- Grade G: [Graph showing distribution]
- Grade H: [Graph showing distribution]
- Prof: [Graph showing distribution]
Implementing change: Kotter’s 8 step change model
(https://www.kotterinternational.com/8-steps-process-for-leading-change/)
2. Form a powerful coalition

- Likely to be more than one group.
  - Strategic group – e.g. REC SAT. You need senior leaders and heads of services who may not know anything about race equality
  - Grassroots groups – e.g. staff network. How do you ensure they are empowered, supported and given a credible voice
  - Project-specific groups, e.g. decolonising the curriculum – looking at specific issues
    - Academic experts
    - Individual allies

- What will make these groups a success

- How much resource do they require, how much of your time can/should you spare?
What diversity initiatives are effective?

‘the most effective programs engage people in working for diversity, increase their contact with women and minorities, and tap into their desire to look good to others.

Example of a comprehensive approach

Smith et al (2015): “randomly assigning hiring committees to a programme
- Practical tactics to source and attract female candidates
- Specific unconscious bias input
- Confidential discussion with relocation mentor

- Hiring committees who got the intervention were 6.3 times more likely to offer a position to a woman than committees that got no intervention.
- When women got offers from committees that were part of the programme women were 5.8 times more likely to accept
What can you do to manage and mitigate unconscious bias?

- **ACCEPT** – The need to use objective evidence
- **AWARENESS** – Become curious and mindful
- **ASSOCIATE** – Create and use counter stereotypical examples, and perspectives
- **ACT** – Opposite to bias – micro positives, connect with warmth and individuate
- **APPLY** – Structure, Repetition and practice
- **ACCOUNTABILITY** – What gets measured gets done
Questions?