Unconscious bias
Dr. Pete Jones
Introduction to unconscious Bias (UB)

- What is unconscious bias?
- How UB affects us, our decisions and the career decisions of girls in Maths and Science
- UB Triggers
  - Stereotype threat
  - How might UB and ST be affecting our practice?

What to do about it
What is unconscious bias?

“Unconscious biases are the result of our limited cognitive capacity; we implicitly and automatically both group and categorise people to avoid having to conduct completely new assessments for every new person.”

“Unconscious biases are our unintentional people preferences, formed by our socialisation and experiences, including exposure to the media. We unconsciously assign positive and negative value to the categories we use.”
A bat and ball cost £1.10

The bat costs one pound more than the ball.

How much does the ball cost?
The brain uses **categories** to sort and store information to make life manageable.

- The brain is a **formidable pattern** matching machine.

- What the brain fires together, it wires together, forming **emotional associations**.

- Emotion **interferes** with bias control and makes you vulnerable to your biases becoming behaviour.
The Gender-Career Association
The Gender-Science Association
The Gender-Maths Association

- 75% of men have a strong Women-Home Male-Work association
- 80% of women have a strong Women-Home Male-Work association
- Women with the Prince Charming-Romantic Partner association are less likely to seek positions of power
- Male-Science association predicts SAT scores
- Women with strong Male-Science association less likely to major in science
- Gender-science association predicts science majors better than explicit gender-science stereotypes and SAT scores
- Internationally, the stronger the gender-science association the greater the boy/girl differences in performance at Year 8 in maths and science
Explicit vs Implicit Social Bias

(Abrams & Houston 2006) Jones, P 2005 Implicitly 3000
Affinity bias

Affinity (like me) bias: leads us to favour people who are like us.

Commonness leads to Comfort leads to Competence
The Talent Pipeline

- Feedback

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<td>Challenge</td>
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Diagram showing a bell curve with labeled sections for Feedback and Challenge.

Neutral game

“Natural athletic ability”

“The more able the employee or candidate, the bigger the effect.”

“Strategic sports decision making”
Multiple layers (Shih et al.)

- "Neutral": 49%
- "Female": 43%
- "Asian": 54%
Controlling bias: The Moral Muscle

Replenishment
- Humour
- Sugar
- Simplicity
- Rest
- Cranial stimulation
- Drugs

Depletion
- Emotional load
- Bias suppression
- Multiple decisions
- Behavioural demands
- Marriage
- Drugs
A new hope?
Devine, Forscher, Austin, & Cox, 2012

External Motivations
(desire to hide prejudice)

<table>
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<tr>
<th>Low</th>
<th>High</th>
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<td>Don’t care; Unmotivated 25%</td>
<td>Contextually Motivated 7%</td>
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<td>Multi-Context Motivated 34%</td>
<td>Feel guilty/conflict and primarily internally motivated 34%</td>
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Moral Case

Awareness
implicitly

Motivation
(Plant and Devine, 1998)

Implementation
(Devine et al. 2012)
Countering Stereotype Threat

- Reframing the task or assessment
- De-emphasising the threat
- Encouraging self-affirmation
- Emphasising high standards with assurances about capability
- Providing competent role models both at assessment and at work
- Emphasising an incremental view of ability or intelligence
Top 10 UB tips

1. Recognise bias simply as a bad thinking habit and don’t beat yourself up
2. Watch for triggers
3. Get tested
4. Extend your networks
5. Attend, Pause, Accept, Consider, Act (APACA)
6. Don’t unintentionally reinforce biases
7. Use exemplars and positive role models
8. Have the right ammunition ready
9. Have contact, even if you just imagine it
10. Review documentation and processes
Making a Change

Attitude
How do I feel about it?

Organisational Norms
How will others judge me?

Behavioural Controls
How easy is it?

Intention

Behaviour
When........

..........I Will

Inspiring others
Questions for you

1. What role does UB/ST play in how STEM teachers treat pupils?
2. How does UB/ST impact decisions on the choice of course and university?
3. How do those decisions affect representation?
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