

Presentation by

**Dr Laura
Fogg-Rogers**

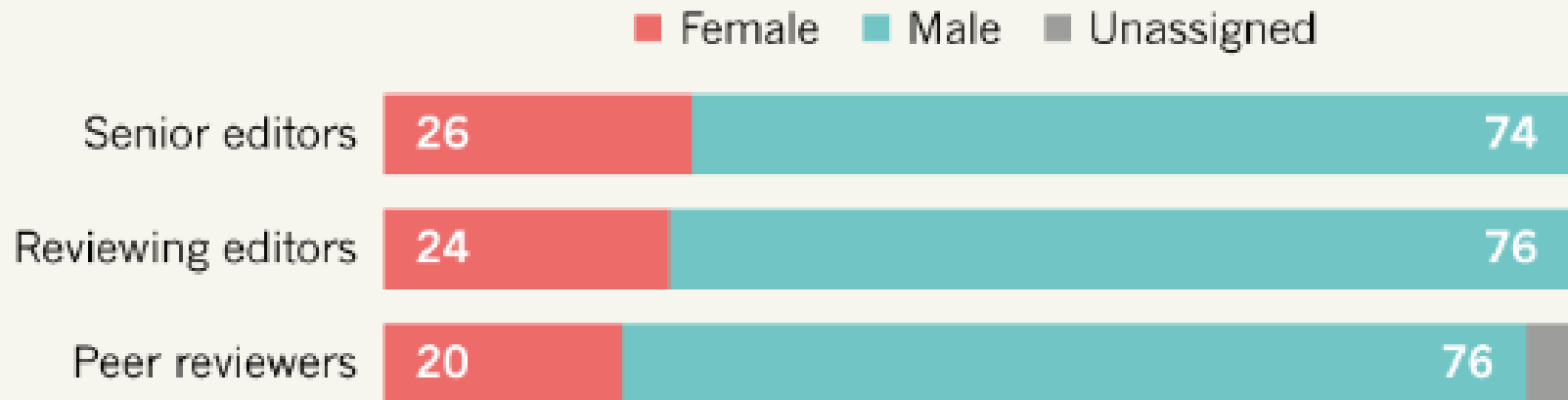
Catch 22

Improving female researcher
representation in peer review
and publishing

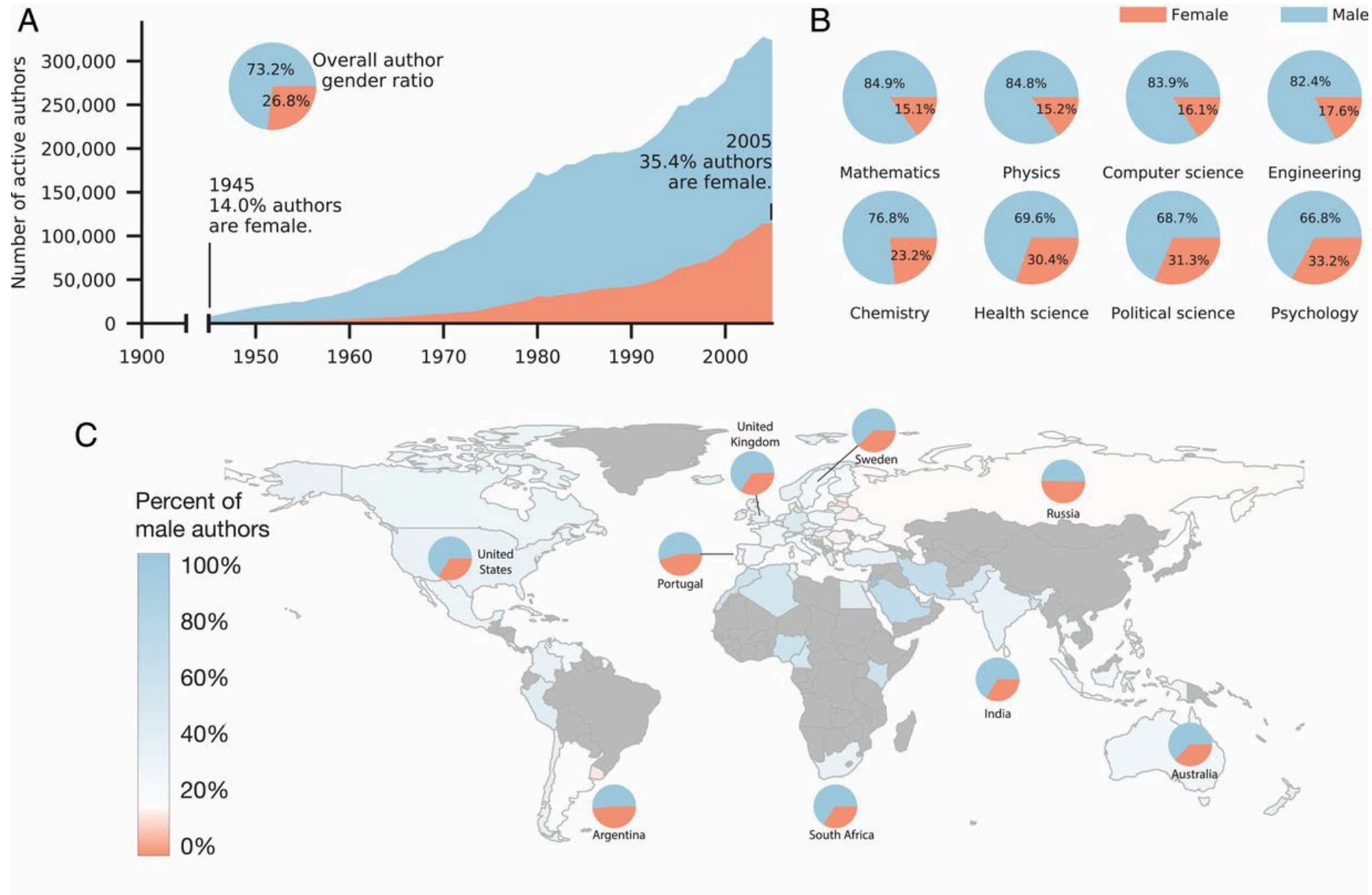
24/02/2020
Research to
Reader
Conference

PEER-REVIEW PATTERNS

In an analysis of thousands of submissions to the journal *eLife*, only one-fifth of peer reviewers, and about one-quarter of editors, were women.



The analysis also found that all-female reviewing panels accepted more manuscripts with female last authors than did all-male panels.



Women in Core STEM Occupations



Core STEM subjects



Core STEM subjects - Female students

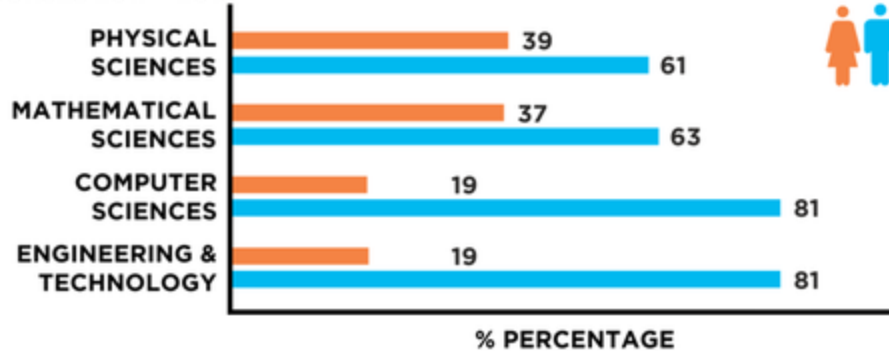
2017/18

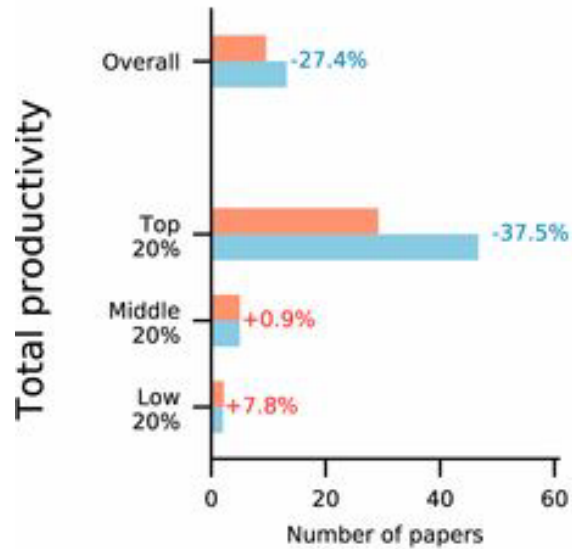
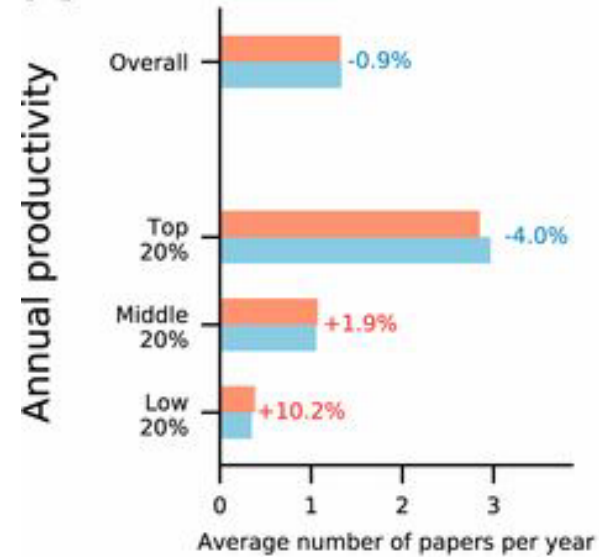
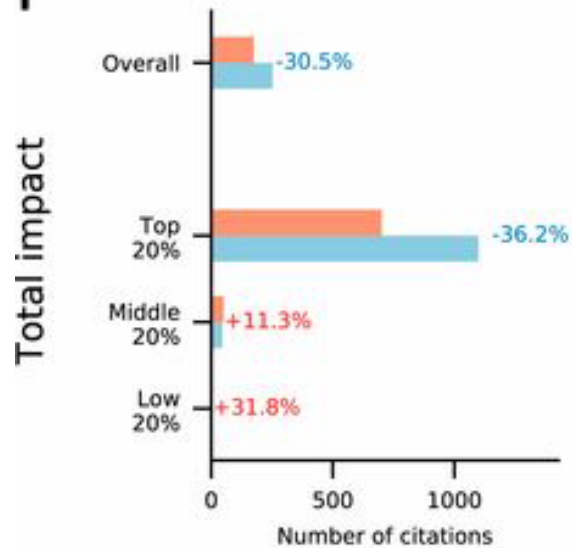
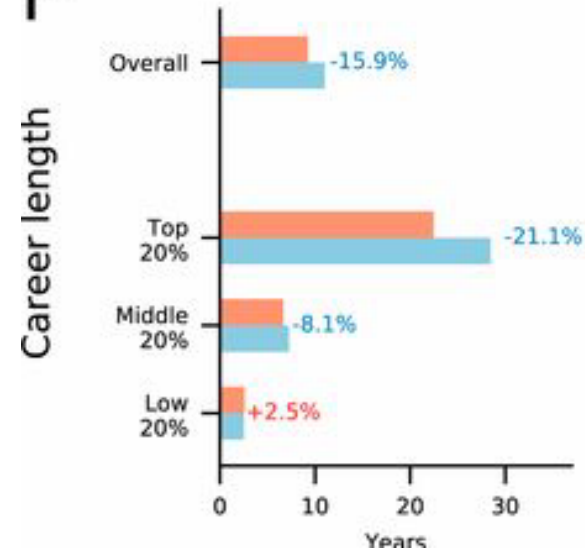
Number of female students - 112,720 - 35%

35/100

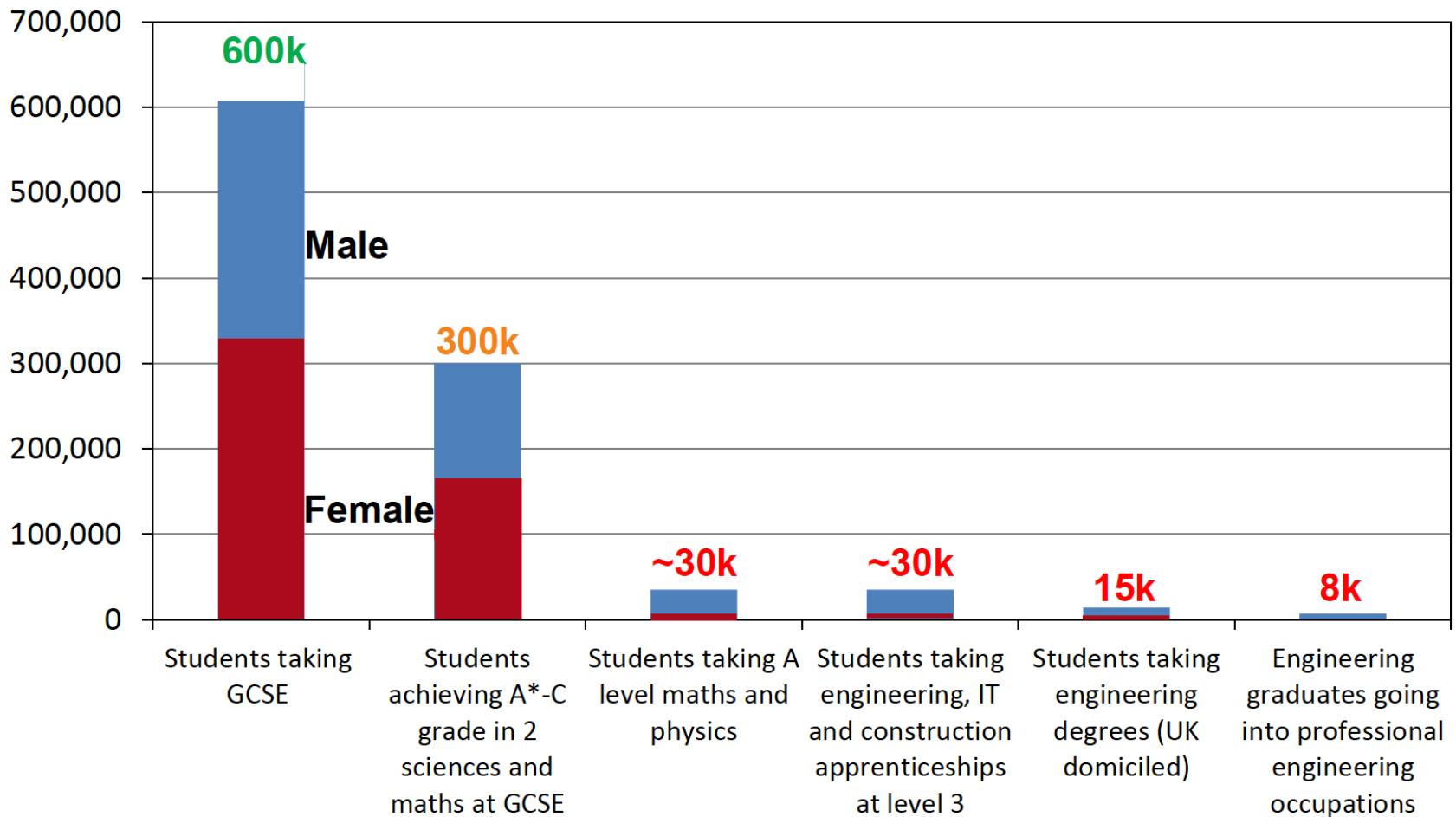


COURSES 2017 - 2018



A**K****T****P**

'The Leaky Pipeline'



Diversity matters

Reasons why we should care about who does Science, Technology, Engineering and Mathematics (STEM):

- 1) Utilitarian (sheer numbers)
- 2) Equity (making the workplace environment welcoming)
- 3) Democratic (widening which problems are studied/solved)

Fogg-Rogers, L. (2017)
Does being human influence
science and technology?
*Journal of Science
Communication*
https://jcom.sissa.it/archive/16/04/JCOM_1604_2017_C01/JCOM_1604_2017_C04



Diversity matters



Diversity matters

± 16.0% Head
22.1%
higher risk than males

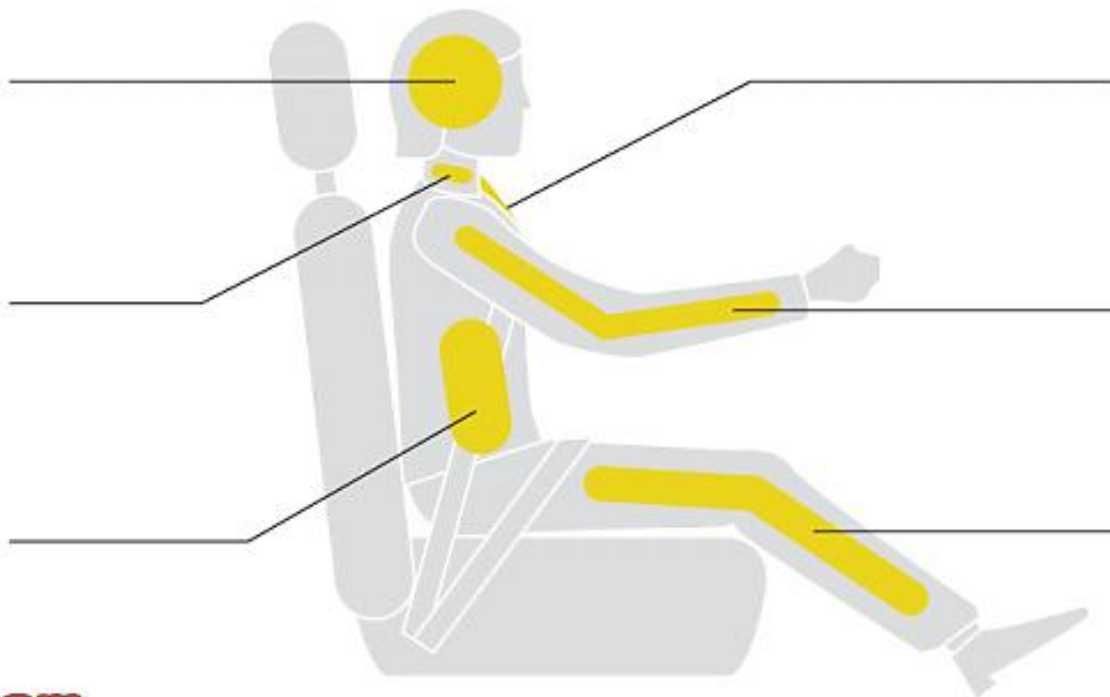
± 34.0% Neck
44.7%
higher risk than males

± 28.4% Abdomen
38.5%
higher risk than males

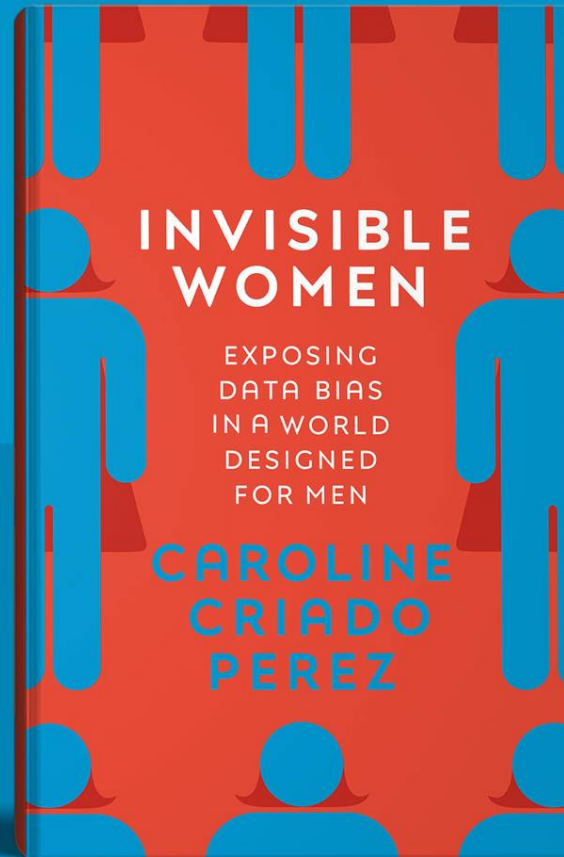
Chest ± 13.6%
26.4%
higher risk than males

Arm ± 20.6%
58.2%
higher risk than males

Leg ± 16.3%
79.7%
higher risk than males



Diversity matters

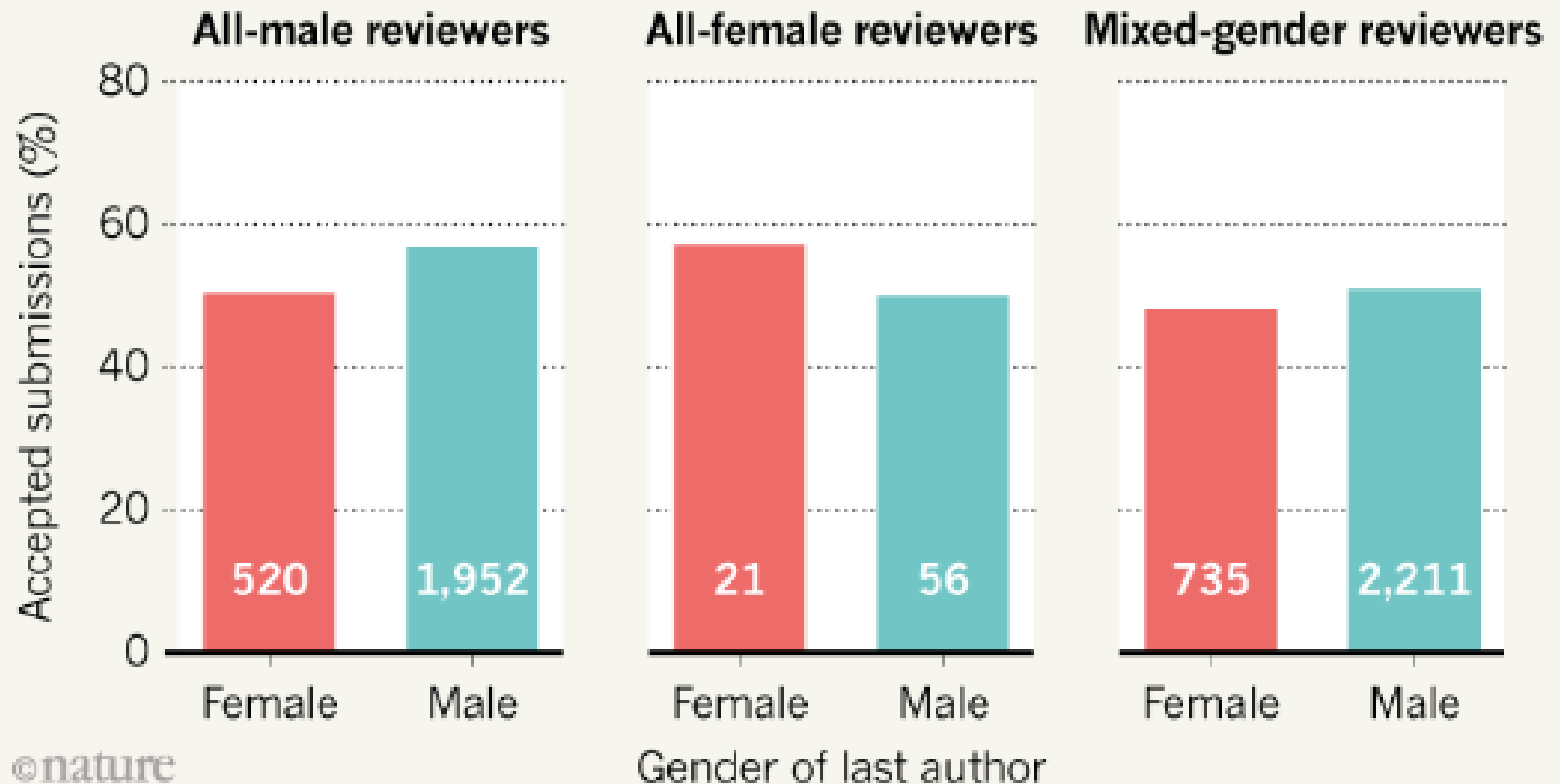


Why are there fewer women publishing in academia?



However...

The analysis also found that all-female reviewing panels accepted more manuscripts with female last authors than did all-male panels.



How blind auditions help orchestras to eliminate gender bias

To get more women into their ranks, many orchestras use blind auditions where musicians perform behind a screen. Could we replicate this in business?

Curt Rice

Mon 14 Oct 2013 12.00 BST



923 1



▲ The number of female musicians in orchestras has increased since blind auditions became commonplace
Photograph: Lebrecht Music And Arts Photo Li/Alamy

Bias cannot be avoided, we just can't help ourselves. Research shows that we apply different standards when we compare men and women. While explicit discrimination certainly exists, perhaps the more arduous task is to eliminate our implicit biases – the ones we don't even realize we have.

Understanding unconscious bias

17 November 2015



The image is a YouTube video player thumbnail. At the top left is a red circular logo with the text 'THE ROYAL SOCIETY'. To its right, the text 'Understanding unconscious bias' is displayed. In the top right corner, there are icons for 'Watch later' and 'Share'. The main title 'UNCONSCIOUS BIAS' is written in large, bold, black capital letters. Below the title, a black play button icon is centered. On the right side, there is a black silhouette of a person's head in profile, facing left, with a large, open mouth showing sharp teeth, resembling a shark. On the left side, a fan of playing cards with red and white patterns is shown. At the bottom left, the text 'THE ROYAL SOCIETY' is written in a serif font.

<https://royalsociety.org/topics-policy/publications/2015/unconscious-bias/>

Equality



The assumption is that **everyone benefits from the same supports**. This is equal treatment.

Equity



Everyone gets the supports they need (this is the concept of "affirmative action"), thus producing equity.

Justice



All 3 can see the game without supports or accommodations because **the cause(s) of the inequity was addressed**. The systemic barrier has been removed.

Catch 22



How can we generate a solution which is not inherent in the problem?



Advance HE's Athena SWAN Charter covers women (and men where appropriate) in:

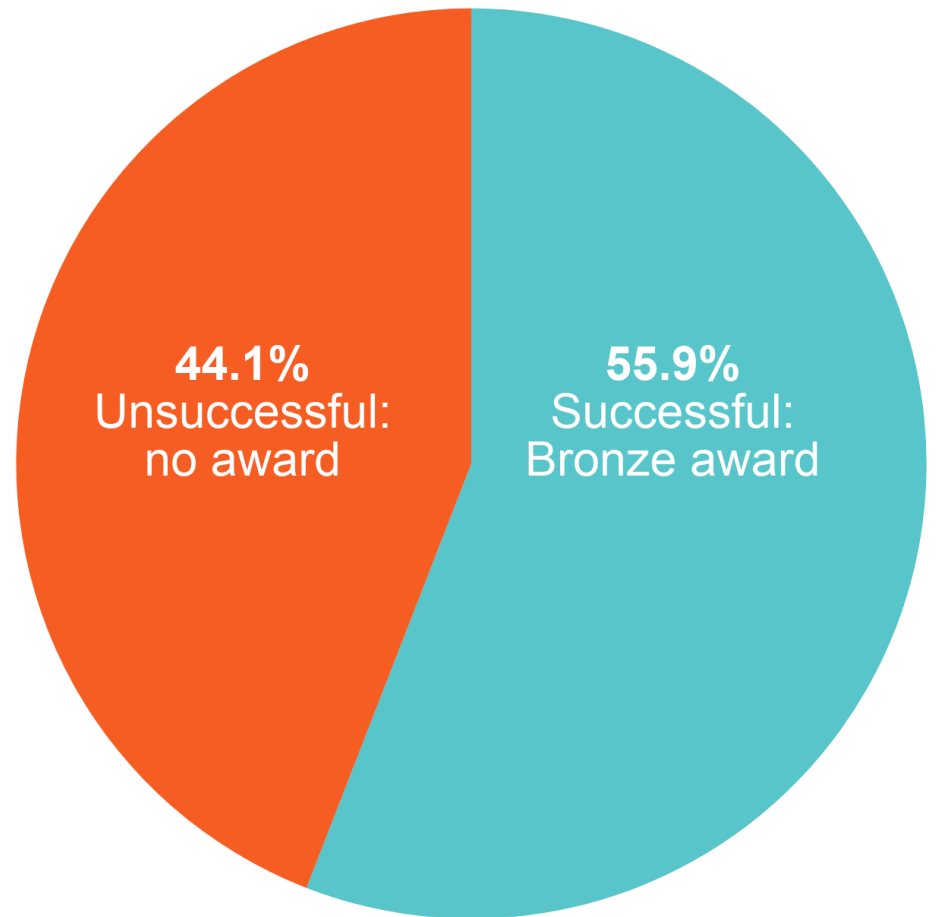
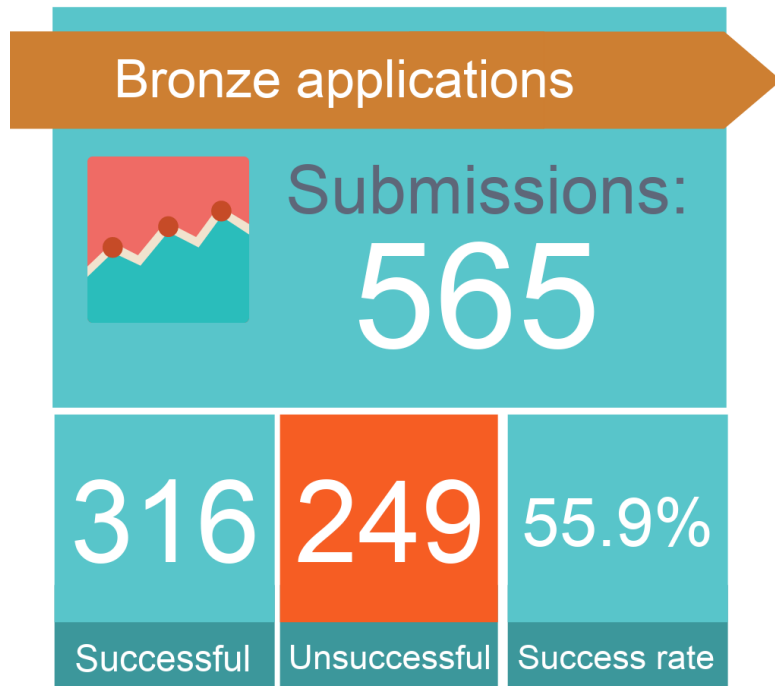
- academic roles in STEMM and AHSSBL
- professional and support staff
- trans staff and students

In relation to their:

- representation
- progression of students into academia
- journey through career milestones
- working environment for all staff



Submissions and success rates for Athena SWAN Bronze awards



Examples of structural barriers in peer review

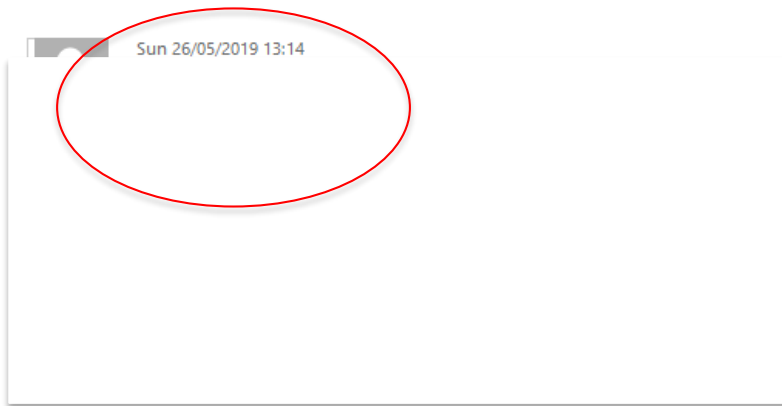
Sun 22/12/2019 21:07

Dear Laura and Laura

Here are the proofs of your article that will be included in the (very late-running) December issue of [redacted] in the second batch of articles arising from the

There are only a few minor queries for you. I would be very grateful if you could reply by tomorrow, Tuesday 24 December. Apologies for the short notice.

Examples of structural barriers in peer review



Expires Never

Thank you for your submission to International Journal of Educational Psychology, "Engineers' perceived self-efficacy for education outreach".
The reviewers' comments are included at the bottom of this email.

The reviewers have recommended the article be approved for publication pending minor revisions. Could you please review the comments below and incorporate the necessary changes? When making do so in of the article with track changes.

Once you have introduced all the suggestions and have a reviewed version of your paper, please send it again through the online system journal. If changes are made properly, your article will be included in the 2019 issue of IJEP.

Please, submit a revised version of your manuscript no later than June the 2nd, 2019.

Please do not hesitate to contact us for further queries,

- No awareness of holidays
- Short lead-times
- Expectations of paid responsibilities – with no pay!
- No allowance for part-time hours or weekends 😊

Tackling structural barriers in peer review

- Unpaid work
- Short time-scales
- Lack of training
- Unclear guidelines
- Unclear progression opportunities

Tackling structural barriers in peer review

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Tackled by...?

- Audit of male/female contributions
- Peer review remittance
- Longer time-scales, or agreed by negotiation
- Training in peer review for researchers
- Guidelines on reviewing