

Unconscious Bias

Unconscious bias refers to the assumptions and conclusions we jump to without thinking.¹

An example might be assuming that an older person walking with a child is their grandparent. These biases do not indicate hostility towards certain groups; they reflect how the individual has been socialized.

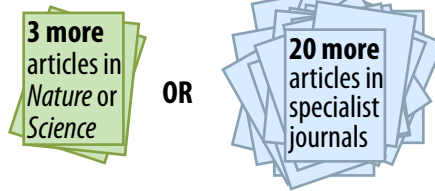
Several studies demonstrate the impact unconscious bias can have on the hiring process, particularly for women.

These biases may not be intentional but their impact is severe. The effects of unconscious bias will not be overcome by maintaining our current efforts to recruit and retain more women.²

To reduce unconscious bias in hiring, committees and individuals need to be educated about its existence and effects in academia and industry.

Online tools such as the Harvard Implicit Association Test can help identify an individual's unconscious biases. Sharing research and becoming aware of your organisation's hiring tendencies can also help reduce unconscious discrimination.

To be seen as equally "**competent**" by reviewers, female researchers need to publish:



than male applicants when applying for a medical fellowship.⁵

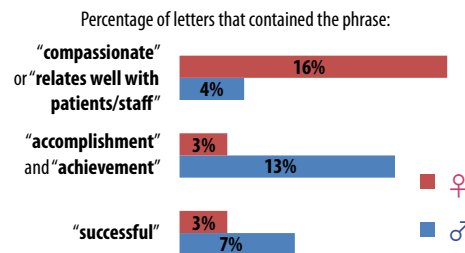
"We would have to see her job talk"



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

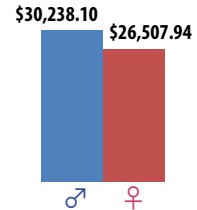
Psychology professors reviewing identical CVs were **4x** more likely to write **cautionary comments** for female applicants.⁴

Reference letters for female medical faculty were **shorter**, more **vague**, and placed **less emphasis on research** than those for males.⁶

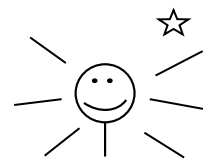


The average letter length for women was **227** words, compared to **253** words for men.⁶

US science professors were asked to evaluate a CV for a **lab manager**.²



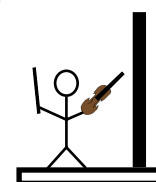
The male candidate was offered a **higher salary**...



... and was rated more "**competent**" and "**hireable**."



The catch? Other than the names at the top, the CVs were **identical**.²



Women are **50%** more likely to advance in an orchestra audition if they **can't be seen**.³



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Westcoast Women in Engineering,
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References

1. Network Exchange. (2012). *Unconscious bias*. Retrieved July 11, 2013, from <http://www.centralexchange.org/Repository/5/Document/NX%20Exchange%20Unconscious%20Bias%2009%2025%2012%20v4.pdf>
2. Moss-Racusin, C. et al. (2012). Science faculty's subtle gender biases favor male students. *Proceedings of the National Academy of Sciences of the United States of America*, 109(41), 16474-16479.
3. Goldin, C. & Rouse, C. (2000). Orchestrating impartiality: The impact of "blind" auditions on female musicians. *The American Economic Review*, 90(4), 715-741.
4. Steinpreis, R., Andres, K. & Ritzke, D. (1999). The impact of gender on the review of the curricula vitae of job applicants and tenure candidates: A national empirical study. *Sex Roles*, 41(7/8), 509-528.
5. Wennerås, C. & Wold, A. (1997). Nepotism and sexism in peer-review. *Nature*, 387, 341-343.
6. Trix, F. & Psenka, C. (2003). Exploring the color of glass: Letters of recommendation for female and male medical faculty. *Discourse & Society*, 14(2), 191-220.

Recommended Readings

1. Coorice, A. (2009). Unconscious bias in faculty and leadership recruitment: A literature review. *Association of American Medical Colleges Analysis in Brief*, 9(2).
2. Harvard Implicit Association Test: <https://implicit.harvard.edu/>
3. Bertrand, M. & Mullainathan, S. (2003). Are Emily and Greg more employable than Lakisha and Jamal? A field experiment on labor market discrimination. *The American Economic Review*, 94(4), 991-1013.
4. Fine, E. & Handelsman, J. (2006). *Reviewing applicants: Research on bias and assumptions*. Women in Science & Engineering Leadership Institute (WISELI) University of Wisconsin-Madison. Retrieved from: http://wiseli.engr.wisc.edu/docs/BiasBrochure_3rdEd.pdf
More resources can be found at: <http://wiseli.engr.wisc.edu/>

About WWEST

Westcoast Women in Engineering, Science & Technology (WWEST) is the operating name for the NSERC Chair for Women in Science and Engineering (CWSE), BC and Yukon Region. Our mission is to advance engineering and science as welcoming careers that serve our world through holistic understanding and creative, appropriate and sustainable solutions. WWEST works locally and, in conjunction with the other CWSE Chairs, nationally on policy, research, advocacy, facilitation, and pilot programs that support women in science and engineering.

About the Chairholder

The Chair is held by Dr. Elizabeth Croft, P.Eng., FEC, FASME. Dr. Croft is the Associate Dean, Education and Professional Development in the Faculty of Applied Science, and a Professor of Mechanical Engineering at the University of British Columbia. She is also the Director of the Collaborative Advanced Robotics and Intelligent Systems (CARIS) Laboratory. Her research investigates how robotic systems can behave, and be perceived to behave, in a safe, predictable, and helpful manner. She is the lead investigator of "Engendering Engineering Success," a 3-year interdisciplinary research project that aims to take an evidence-based approach to increasing the retention of women in engineering by understanding and changing aspects of workplace culture that place women at a disadvantage.

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Contributing Sponsors: Ms. Catherine Roome, Mr. Stanley Cowdell, Division for the Advancement of Women in Engineering and Geoscience, Nemetz (S/A) & Associates Ltd., and Glotman Simpson Consulting Engineers.

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