

These slides are to be accompanied by a spoken narrative during briefings

A **bias** is a tendency, inclination,
or prejudice toward or against something
or someone.*



European Research Council
Established by the European Commission



* <https://www.psychologytoday.com/intl/basics/bias>

Implicit or unconscious bias

We categorise people and assign **positive or negative value** to those categories (*Tajfel & Turner, 1979*).

Biases become **fixed in our thought processes** and are accessed **automatically and unconsciously** (*Bodenhausen and McCrae, 1998*).

Biases develop from and are sustained through our **culture** and our **experiences**.



Bias is human

Everyone is biased and tends to have a **bias blind spot**.

We see biases much better in others than in ourselves
(*Pronin et al., 2002*).

Biases are most easily triggered under **cognitive or emotional load, tiredness or hunger**.



Some types of biases

- ✓ **Affinity bias**
- ✓ **Attribution bias**
- ✓ **Confirmation bias**
- ✓ **Conformity bias**
- ✓ **Halo and horns effects**

Affinity bias

Inclination to prefer people that are similar to oneself or have something in common with oneself or someone one likes.



Attribution bias

A self-serving tendency to attribute **one's successes** to one's intelligence and personality,
but **one's failures** to situational and external factors,
or **other's successes** to situational and external factors.



Confirmation bias

Once one has an opinion, one seeks out information to confirm the opinion and **unconsciously ignores evidence to the contrary.**



Conformity bias

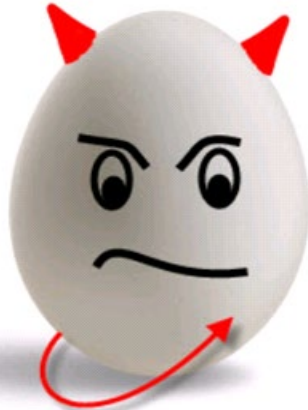
Caused by **peer group pressure.**

An individual who feels most of the group leaning towards or away from a certain position may tend to **go along with what the group thinks rather than voice their own opinion.**



Halo and horns effects

If one **likes one characteristic** of an individual, one may have a **more positive view of their other characteristics.**



If one **does not like one characteristic** of an individual, one may have a **more negative view of their other characteristics.**

Some examples of bias in evaluations

- ✓ **Gender**
- ✓ **Expertise and ‘airtime’**
- ✓ **Authors’ names**
- ✓ **Names and ethnicity**



Gender bias in evaluations

Independence

“The **role and independence** of women in strong research teams was more often questioned and in a way that did not apply to men to the same extent.”

Collaboration and private relationships

“**Private relationships with co-applicants** named in the application were more often taken up for discussion **when a woman applied for a grant**, compared with when a man did.”

Descriptions

“**For men** put forward to receive funding, recurrent descriptions were ‘**well-known**’, ‘**respected**’, and ‘**established**’ (...). Instead, **for women** terms like ‘**good**’/‘**strong**’/‘**solid track record**’ and ‘**high novelty**’ were more frequent.”

Expertise and “airtime”

When a panel member is recognised as the expert, 62% of the time their opinion will be followed by the group (*Baumann and Bonner, 2004*).

When the group does not recognise the expert, they **listen to the most extroverted person.**



Authors' names

Evidence of bias in peer review:

Recommendation to reject	
Prominent researcher	23%
Anonymised	48%
Little-known author	65%

Huber, J. et al., 2022, <https://www.nature.com/articles/d41586-022-03256-9>

Name and ethnicity

Evidence of over 12,000 job applications for leadership positions in Australia, with **identical resumes** for applicants with English or non-English names:

Origin of name	Positive response
English	26.8%
Non-English	11.3%

Adamovic, M. and Leibbrandt, A., 2023, <https://doi.org/10.1016/j.leaqua.2022.101655>



Panel meeting: reduce bias triggers

1. Know your own unconscious biases; test yourself*
2. Base your evaluations on clear criteria and be accountable for your opinions
3. Build in challenge and non-conformism (e.g., a ‘Devil’s Advocate’)
4. Pay attention to your “airtime” and fair distribution among panel members
5. Make sure everyone has the opportunity to contribute

* <https://implicit.harvard.edu/implicit/takeatest.html>



References

- Adamovic M., Leibbrandt A. (2023), Is there a glass ceiling for ethnic minorities to enter leadership positions? Evidence from a field experiment with over 12,000 job applications, *The Leadership Quarterly*, Volume 34, Issue 2, 2023, 101655, ISSN 1048-9843, <https://doi.org/10.1016/j.leaqua.2022.101655>
- Ahlqvist V. Andersson J, Hahn Berg C, Kolm CL, Söderqvist L & Tumpane J (2013). Observations on gender equality in a selection of the Swedish Research Council's evaluation panels. Stockholm: Swedish Research Council.
- Ahlqvist V. Andersson J, Söderqvist L & Tumpane J (2015). A gender neutral process? A qualitative study of the evaluation of research grant applications 2014. Stockholm: Swedish Research Council.
- Banaji M & Greenwald A (2013). *Blindspot: Hidden biases of good people*. New York: Delacorte Press.
- Baumann and Bonner (2004) The effects of variability and expectations on utilization of member expertise and group performance, *Organizational Behaviour and Human Decision Making* Vol 93, issue 2, March 2004 P.89-101
- Bisson, L.F., Kass, P.H., Paw U, K., Grindstaff, L. (2022). Assessing Institutionalized Bias. In: Bisson, L.F., Grindstaff, L., Brazil-Cruz, L., Barbu, S.J. (eds) *Uprooting Bias in the Academy*. Springer, Cham. https://doi.org/10.1007/978-3-030-85668-7_4
- Bodenhausen, G. V., & Macrae, C. N. (1998). Stereotype activation and inhibition. In R. S. Wyer, Jr. (Ed.), *Stereotype activation and inhibition* Lawrence Erlbaum Associates Publishers. (pp. 1–52).
- Bol T, de Vaan M, van de Rijt A. The Matthew effect in science funding. *Proc Natl Acad Sci U S A*. 2018 May 8;115(19):4887-4890. doi: 10.1073/pnas.1719557115. Epub 2018 Apr 23. PMID: 29686094; PMCID: PMC5948972
- Bottger (1984). Expertise and air time as bases of actual and perceived influence in problem-solving groups. *Journal of Applied Psychology*, 69(2), 214-221.
- Correll SJ, Alexard S & Paik I (2007). Getting a job: Is there a motherhood penalty? *Am J Social* 112:1297-1339.
- Duguid, Michelle & Thomas-Hunt, Melissa. (2014). *Condoning Stereotyping? How Awareness of Stereotyping Prevalence Impacts Expression of Stereotypes*. *The Journal of applied psychology*. 100. 10.1037/a0037908.

Huber, J. et al. (2022) Preprint at SSRN <https://doi.org/10.2139/ssrn.4190976>

Isaac C, Lee B & Carnes M (2009). Interventions that affect gender bias in hiring: a systematic review. *Acad Med* 84:1440-1446.

Jones P & Cornish T (2009). Thinking Fast & Slow: unconscious bias @ERCEA, Shire Professional Chartered Psychologists, training scientific officers. ERCEA Covent garden, Place Charles Rogier 16, Brussels

Moss-Racusin CA, Dovidio JF, Brescoll VL, Graham MJ & Handelsman J (2012). Science Faculty's subtle gender biases favor male students. *Proc Natl Acad Sci USA* 109:16474-16479.

Pronin, E., Lin, D. Y., & Ross, L. (2002). The bias blind spot: Perceptions of bias in self versus others. *Personality and Social Psychology Bulletin*, 28(3), 369–381. <https://doi.org/10.1177/0146167202286008>

Reuben E, Sapienza P & Zingales L (2014). How stereotypes impair women's careers in science. *Proc Natl Acad Sci USA* 111:4403-4408.

Schmader T, Whitehead J & Wysocki VH (2007). A linguistic comparison of letters of recommendation for male and female chemistry and biochemistry job applicants. *Sex Roles* 57:509-514.

Steinpreis RE, Anders KA & 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* 41:409-528.

Taffe, MA, Gilpin NW (2021) Equity, Diversity and Inclusion: Racial inequity in grant funding from the US National Institutes of Health *eLife* 10:e65697. <https://doi.org/10.7554/eLife.65697>

Tajfel, H., & Turner, J. C. (1979). An integrative theory of inter-group conflict. In W. G. Austin & S. Worchel (Eds.), *The social psychology of inter-group relations* (pp. 33–47). Monterey, CA: Brooks/Cole

Trix F & Psenka C (2003). Exploring the color of glass: Letters of recommendation for female and male medical faculty. *Discourse Soc* 14:191-220.

Video developed by the Catalan Research Centres Institute (CERCA) on unconscious bias in recruitment processes: **Tackling gender bias in research institutes**

Van Nunspeet, F., Ellemers, N., & Derks, B. (2015). Reducing implicit bias: How moral motivation can inhibit people's 'automatic' prejudiced associations. *Translational Issues in Psychological Science*, 1, 382-391.