

Behavioural Approaches to Increasing Workforce Diversity

August 2016



Premier & Cabinet
Behavioural Insights Unit

Overview

The recruitment process relies on human decisions. Evidence from the behavioural sciences show that the way we make decisions can be biased in a number of ways. This document summarises some of the key ways our decision making may be affected by unconscious biases in attracting, selecting and promoting employees. It also suggests some interventions that could help to overcome these biases.

The purpose of this document, prepared by the Behavioural Insights Unit (BIU) at the New South Wales (NSW) Department of Premier and Cabinet, is to provide a high-level overview of some of the literature and key biases in this area. It is not an exhaustive summary and focuses only on behavioural interventions, not structural changes or policies such as flexible working arrangements, return-to-work options, cadetships and targeted positions.

This document draws on leading international work to date on the issue, including *A head for hiring: The behavioural science of recruitment and selection*,¹ prepared by Chartered Institute of Personnel and Development and the UK-based Behavioural Insights Team.

Background

Driving diversity in the NSW public sector is a key priority of the NSW Government. The NSW Government has committed to:

- doubling the number of Aboriginal and Torres Strait Islander peoples in senior leadership roles
- increasing the proportion of women in senior leadership roles to 50% in the government sector in the next 10 years.²

The NSW Government also has strategies to increase the participation of mature workers³ and people with a disability⁴ in the public sector.

The recruitment process

There are a number of stages within the recruitment process that can impact the diversity of a workforce. Biases can impact the way we make decisions at each of these stages.

At the **attraction** stage, decisions that recruiters make about outreach activities and job advertisements can affect the diversity of applicants. During the **selection** stage, biases can affect the way we evaluate candidates. Finally, at the **promotion** stage, the merits we value in employees can limit who we consider leadership material.

Like a pipeline, problems at the start will have flow-on effects throughout the process.



Applying behavioural insights to attraction, selection and promotion

The following biases (in alphabetical order) are some of the most common affecting recruitment processes across the attraction, selection and promotion stages.

Affinity bias/ingroup bias

The tendency to like people who are similar to us (or those who form part of the 'in group') or remind us of someone we like.⁵

Key Stages: Selection, Promotion

Applied Example

When making decisions about the suitability of a candidate applying for a position or an employee applying for a promotion, managers tend to prefer people who are more similar to them or who they already know and like. This can lead to a workforce with less diversity, including less diversity of skills and/or experience.

Availability heuristic

When trying to decide the likelihood of certain events, we are heavily influenced by how easily we can bring the event to mind. Events that are recent, emotionally charged, and/or unusual are the easiest to bring to mind.⁶

Key Stages: Selection, Promotion

Applied Example

When making a hiring decision, or creating a job advertisement, recruiters and managers may be heavily influenced by information that comes more easily to mind. For example, managers might recall a recent time when an employee performed poorly, despite other examples of excellent performance, and in turn, view them as not suitable for a promotion. Similarly, when selecting a candidate, recruitment managers might give more weight to performance on the most recent assessment task (usually the interview) over all the other assessments completed by the candidate.

Confirmation bias

Confirmation bias is the tendency to search for, focus on, or remember information in a way that confirms our own preconceptions.⁷

Key Stages: Attraction, Selection, Promotion

Applied Example

Research suggests that interviewers can take as little as four minutes to decide whether or not they want to hire the candidate. Information not consistent with the first impression can be overlooked, which is why it is important to use structured interviews (more details below). Similarly, candidates with the preconception that they do not 'fit in' to a workplace may subconsciously search for information that confirms their preconceptions, which could affect their decision to apply.

Endowment effect

We tend to value objects or resources that we own more than we value equivalent objects that we do not own.⁸

Key Stages: Selection, Promotion

Applied Example

Managers and recruiters may unduly value the skills and characteristics of their current staff. This may blind them to the equal benefits of other skills and characteristics of people not currently working in their organisation. Combined with stereotyping (see below), this can limit the perception of who is considered a suitable candidate for a role and/or leadership material, which can affect who is hired and promoted.

Groupthink

‘Groupthink’ occurs in groups when members of the group favour harmony and conformity over dissent and deliberation. Individuals may suppress their own opinions so as not to upset the perceived group consensus.^{9,10}

Key Stages: Selection, Promotion

Applied Example

Recruitment decisions in the public sector are usually made by more than one person, often with the intent to reduce the effect of individual preference on the hiring decision. If members within a group suppress their opinions to avoid upsetting others within the group, the effect of individual preference is not reduced. Groupthink is particularly strong when there are power differentials (for example, a senior executive and a junior employee) within the members of the panel or group, and candidates are discussed before the interview or assessments are complete.

Halo effect

The ‘halo effect’ describes the tendency for a person’s positive or negative traits to “spill over” from one personality area to another when we are evaluating them.¹¹

Key Stages: Selection, Promotion

Applied Example

When recruiting a new candidate or promoting an established employee, performance on previous work or assessments may transfer to other areas of the recruitment process. For example, an interviewer might notice that a candidate attended a prestigious university, leading them to view the candidate in a positive light. Even if the candidate’s performance on the interview is not as good as that of another candidate, the interviewer might perceive it as being the same or better (especially when combined with confirmation bias).

Representativeness heuristic

When confronted with a new experience and the need to make a judgment or decision about that situation, we automatically rely on past experiences and mental representations seemingly similar to this new situation in an effort to guide our judgments and decisions.¹²

Key Stages: Attraction, Selection, Promotion

Applied Example

When deciding whether to apply for a position, candidates are likely to be influenced by their own mental representations of the skills, abilities and physical characteristics of the ‘ideal candidate’. If the candidate perceives that they are similar to their representation of the ideal candidate, they may be more likely to apply. If they differ, they may be less likely to apply. For example, a qualified female candidate may subconsciously feel she is not suited to a role in a finance company because in her interactions with the company, she has only seen men in the role for which she is considering applying.

Managers and recruiters can unconsciously rely on similar situations in the past to make decisions about the present. For example, they might have had a terrible boss from a particular agency in the past which could unconsciously impact their appraisal of a candidate from the same agency applying for a senior position. Similarly, if leaders share similar demographic characteristics (for example, race or gender), these characteristics can become representative of what a leader ‘looks like’. This can dissuade applicants from applying for positions and lead recruiters to be unconsciously biased against applicants who do not fit the characteristic representation.

Status quo bias

We tend to stick to our current course of action and will often avoid making a decision entirely. Diverting from the status quo seems riskier than sticking to the current situation.¹³

Key Stages: Attraction, Selection, Promotion

Applied Example

Changing recruitment processes, such as job advertisements or interview styles, might be met with resistance because people tend to prefer things to stay the same. Recruiters and managers might unconsciously favour candidates who have similar characteristics to the person who previously occupied the position; this would lead to little change in workplace diversity. As diversity becomes the norm, status quo bias will help to keep a diverse workplace.

Stereotype threat

When people from stereotyped groups are primed to think about that identity, they tend to perform in accordance with the stereotype.¹⁴

Key Stages: Selection, Promotion

Applied Example

A candidate primed to think about their identity as part of a negatively stereotyped group (for example, women in science or mathematics) prior to completing a task in the recruitment process (such as a work assessment or interview) might perform worse than if they had not been primed. Priming the identity of a group could be as simple as asking candidates to complete a standard demographic questionnaire – for example, asking candidates to disclose their gender or race.

Stereotyping

Stereotyping occurs when we unconsciously (or consciously) expect a member of a group to have certain characteristics without having actual information about that individual.¹⁵

Key Stages: Attraction, Selection, Promotion

Applied Example

When deciding to apply for a job, a candidate might subconsciously undervalue their skills because they belong to a negatively stereotyped group. For example, a qualified mature candidate might not apply for an administration position with a technology start-up company because they might feel subconsciously that they do not fit in, or will not be able to keep up. Similarly, recruiters might unconsciously stereotype a mature candidate as not being as proficient in computer coding as a younger prospective employee, whereas a candidate who matches the stereotype for a particular role might be unduly benefited (e.g. a young woman applying for a nursing role over an older, male candidate).

Addressing bias: possible behavioural interventions

This section sets out a number of evidence-based interventions that may contribute to increasing diversity.

Experience in behavioural insights shows that people are sensitive to small changes in the way things are framed. To ensure that interventions are effective, BIU recommends that where there is a lack of empirical evidence or consensus on the effectiveness of the intervention, the approach should be trialled before rolling it out more broadly – ideally using a rigorous methodology such as a randomised controlled trial.

Potential intervention	Rationale/Background	Biases targeted	Stage of the recruitment process targeted
In job advertisements, limit criteria to only those that are genuinely essential for the role	Research has shown that there are trends in the way specific groups respond to job advertisements. For example, women tend to apply when they meet 100 per cent of the required capabilities on a job advertisement, while men are likely to apply when they meet only 60 per cent of those qualifications. ¹⁶	Stereotype threat	Attraction
Word job advertisements carefully, especially in roles where samples of the population are historically underrepresented (e.g. women in fire emergency services or men in nursing)	Subtle differences to the wording of job advertisements can change the applicant pool. For example, one study showed that when a job advertisement included stereotypically masculine words, women were less attracted to these jobs compared with when the same job advertisement was constructed to include stereotypically 'feminine' words. ¹⁷	Status quo bias	Attraction
Use personal messages to encourage applicants from target groups	Personalised messages (e.g. using names, referencing local places) have been shown to increase the likelihood of people taking action in response to a message. ¹⁸ This may be more likely when the person is part of a minority or stereotyped group.	Status quo bias	Attraction
Different outreach options for attracting people to jobs	Stereotyping and the affinity, representativeness and confirmation biases can affect applicants, resulting in them being dissuaded from applying because they do not see a place for them in the organisation. Outreach options (e.g. personalised messages) may increase the diversity within the applicant pool. For example, eye-catching postcards advertised to target groups have been shown to increase the number and quality of applicants. ¹⁹	Stereotyping Affinity bias Availability heuristic	Attraction

Potential intervention	Rationale/Background	Biases targeted	Stage of the recruitment process targeted
Make the experience for users in the application process as easy as possible. For example, improve access for applicants with a disability	The status quo bias can prevent people applying for a job. Structural barriers (e.g. accessibility of a website for all users) as well as behavioural barriers (e.g. being short on time, resources) disproportionately affects lower income and other disadvantaged groups. ²⁰ The NSW NDIS website is an example of best practice. http://ndis.nsw.gov.au	Status quo bias	Attraction
Use structured interviews in which questions are carefully formulated prior to the interview and not deviated from	Although research has shown that interviews often tend to be poor predictors of a candidate's job performance, structured interviews can reduce interviewer's bias. ^{21,22} When interviewers use an unstructured format and ask questions that come to mind during the interview, they are likely to fall victim to confirmation bias – only asking questions that seek to confirm the interviewer's initial impressions about the candidate.	Confirmation bias Stereotyping	Selection
Reduce the weight placed on interview performance to determine a candidate's suitability	Interviews require a number of subjective decisions that are relatively easily influenced by unconscious biases. Interviews are likely to remain a key part of the recruitment process, but better hiring decisions could be made if the weight given to them were reduced relative to more objective measures of future job performance (such as job and ability assessments). ²³	Stereotyping Affinity bias Availability heuristic Halo effect	Selection
Guide managers to assess more than one CV at a time and, if possible, evaluate each section of an application separately	Joint evaluation of candidates (looking at more than one CV at a time, side by side) has been shown to decrease gender biases. ²⁴ Evaluation of CVs should arguably be conducted in sections (e.g. education considered separately from the evaluation of work history) so that positive/negative effects from a section do not spill over into the evaluation of the next section. For example, an applicant who attended Harvard University but has no relevant work history may be viewed with a favourable bias. If CVs are evaluated in sections, the same applicant might receive full marks for educational background but zero for work history.	Stereotyping Affinity bias Representativeness bias Halo effect	Selection

Potential intervention	Rationale/Background	Biases targeted	Stage of the recruitment process targeted
Remove all demographic details from CVs and applications	Research shows that recruiters respond differently to the same application when the names are changed; for example, stereotypically male names are called back more often than stereotypically female names. ²⁵ Similarly, stereotypically 'western' names (e.g. Emily or Greg) receive more call-backs. ^{26,27} Anonymising CVs and applications may reduce unconscious bias and improve the prospects of negatively stereotyped groups. ²⁸	Stereotyping Affinity bias Representativeness bias	Selection
Final hiring decisions should be made by someone who has not been involved in any stage of the assessment	Panel members can be persuaded by information not relevant to job performance. For example, the affinity bias can make us like candidates who share similar characteristics to us. Limiting the information that informs the hiring information to performance on each of the assessments may reduce unconscious biases. Therefore, it could reduce bias if the person making the final decision were to be provided with the objective evidence of performance and make their own decision as to the selected candidate, rather than have them simply endorse a recommendation.	Affinity bias Stereotyping Groupthink	Selection
Try to hold interviews in conditions as similar as possible	Subtle differences to the environment where an interview takes place can change how a candidate is perceived. For example, in a lab study, when assessors held a warm cup, they were significantly more likely to rate the candidate as 'warm and friendly'. ²⁹ Care should be taken to ensure that conditions are as similar as possible for all candidates as far as possible (e.g. using the same interview room, set up in the same way at similar times of day, or conducting phone interviews for all candidates if some are unable to be present in person).	Unconscious bias	Selection

Potential intervention	Rationale/Background	Biases targeted	Stage of the recruitment process targeted
Evaluate each part of assessments to identify any assessments that may disadvantage certain candidates	Some types of assessments can unintentionally benefit some applicants over others. It is important to evaluate how predictive each part of the assessment is of future performance and whether some assessments privilege certain groups of applicants.	Confirmation bias Stereotype threat	Selection Promotion
Limit references to demographic characteristics before assessment	Asking candidates to identify as a negatively stereotyped group can cause the candidate to perform worse on the assessment than they otherwise would have. ³⁰ Therefore, it may be useful to consider asking demographic questions after an application has been lodged, or even until after the final stage.	Stereotype threat	Selection Promotion
Unconscious (anti-) bias training	Recently, training designed to reduce unconscious bias in the workplace has become popular. Some randomised controlled trials have shown positive results to self-reported bias for gender-related anti-bias training. ³¹ This research suggests that using established behavioural change techniques (such as increasing self-efficacy and using commitment devices), coupled with structural change can reduce unconscious gender bias. However, other research has shown unconscious resistance ³² and backfire effects ³³ to this type of training.	Unconscious bias	Selection Promotion
Increase the visibility of senior leaders from under-represented groups in marketing materials and job advertisements, and more generally	Exposure to individuals who break stereotypical moulds seems to reduce unconscious bias. For example, women exposed to female leaders in social contexts are less likely to express automatic stereotypical beliefs about women. ³⁴	Stereotyping	Promotion

References

1. Chartered Institute of Personnel and Development & Behavioural Insights Team (2015). *A head for hiring: the behavioural science of recruitment and selection*. Available at www.cipd.co.uk/binaries/a-head-for-hiring_2015-behavioural-science-of-recruitment-and-selection.pdf [Accessed 2 February 2016].
2. NSW Government (2015), *Making it Happen: NSW State Priorities*. Available at www.nsw.gov.au/making-it-happen [Accessed 15 April 2016].
3. Public Service Commission (2015) Equity and Diversity: Mature Workers. Retrieved from <http://www.psc.nsw.gov.au/workplace-culture---diversity/equity---diversity/mature-workers> [Accessed 15 April 2016].
4. Public Service Commission (2015) Equity and Diversity: Disability Employment. Retrieved from <http://www.psc.nsw.gov.au/workplace-culture---diversity/equity---diversity/disability> [Accessed 15 April 2016].
5. Taylor, D. M., & Doria, J. R. (1981). Self-serving and group-serving bias in attribution. *Journal of Social Psychology*, 113 (2), 201–211.
6. Tversky, A. & Kahneman, D. (1973) Availability: a heuristic for judging frequency and probability. *Cognitive Psychology*, 5 (2), 207-232.
7. Nickerson, R.S. (1998) Confirmation bias: a ubiquitous phenomenon in many guises. *Review of General Psychology*, 2 (2), 175-220.
8. Morewedge, C. K., & Gliblin, C. E. (2015). Explanations of the endowment effect: an integrative review. *Trends in Cognitive Sciences*, 19 (6), 339-348.
9. Janis, I. L. (1971). Groupthink, *Psychology Today*, 5 (6), 43–46.
10. Turner, M. E.; Pratkanis, A. R. (1998). Twenty-five years of groupthink theory and research: lessons from the evaluation of a theory. *Organizational Behavior and Human Decision Processes*, 73, 105-115.
11. Nisbett, R.E. & Wilson, T.D. (1977). The halo effect: evidence for unconscious alteration of judgments. *Journal of Personality and Social Psychology*, 35 (4), 250-256.
12. Kahneman, D., & Tversky, A. (1972). Subjective probability: A judgment of representativeness. *Cognitive Psychology*, 3 (3), 430-454. Available at <http://datacolada.org/wp-content/uploads/2014/08/Kahneman-Tversky-1972.pdf> [Accessed 02 February 2016].
13. Samuelson, W. & Zeckhauser W. (1988). Status quo bias in decision making. *Journal of Risk and Uncertainty*, 1 (1), 7-59.
14. Steele, C.M. & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African Americans. *Journal of Personality and Social Psychology*, 69 (5), 797-811.
15. Banaji, M. R. (2002). *The Social Psychology of Stereotypes*. In Smelser, N.; Baltes, P. *International Encyclopedia of the Social and Behavioral Sciences*. New York: Pergamon. p. 15100–15104.
16. Mohr, T.S. (2014). Why women don't apply for jobs unless they're 100% qualified. *Harvard Business Review*. Available at <https://hbr.org/2014/08/why-women-dont-apply-for-jobs-unless-theyre-100-qualified> [Accessed 02 February 2016].
17. Gaucher, D., Friesen, J. & Kay, A.C. (2011). Evidence that gendered wording in job advertisements exists and sustains gender inequality. *Journal of Personality and Social Psychology*, 101 (1),109–128.
18. Sanders, M., & Kirkman, E. (2014). *I've booked you a place. Good luck: a field experiment applying behavioural science to improve attendance at high-impact recruitment events* [online]. Working Paper No 14/334. Bristol: University of Bristol. Centre for Market and Public Organisation. Available at www.bristol.ac.uk/media-library/sites/cmipo/documents/WebVersion.pdf [Accessed 02 February 2016].

19. Cromheecke, S., Hoye, G. & Lievens, F. (2013). Changing things up in recruitment: effects of a 'strange' recruitment medium on applicant pool quantity and quality. *Journal of Occupational and Organizational Psychology*, 86 (3). 410-416.
20. Mullainathan, S., & Shafir, E. (2013). *Scarcity: Why having too little means so much*.
21. Macan, T. (2009). The employment interview: a review of current studies and directions for future research. *Human Resource Management Review*, 19, (3), 203-218.
22. Judge, T.A., Higgins, C.A., & Cable, D.M. (2000). The employment interview: a review of recent research and recommendations for future research, *Human Resource Management Review*, 10 (4), 383-406.
23. Schmidt, F.L., & Hunter, J.E. (1998). The validity and utility of selection methods in personnel psychology: practical and theoretical implications of 85 years of research findings. *Psychological Bulletin*, 124 (2), 262-274.
24. Bohnet, I., Van Geen, A. & Bazerman, M.H. (2012). *When performance trumps gender bias: joint versus separate evaluation* [online]. Working Paper No 12-083. Boston, MA: Harvard Business School. Available at www.hbs.edu/faculty/Publication%20Files/12-083.pdf [Accessed 02 February 2016].
25. Steinpreis, R.E., Anders, K.A., & 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), 509-528. Available at: <http://advance.cornell.edu/documents/ImpactofGender.pdf> [Accessed 02 February 2016].
26. Bertrand, M. & Mullainathan, S. (2003). *Are Emily and Greg more employable than Lakisha and Jamal? A field experiment on labor market discrimination* [online]. NBER Working Paper No 9873. Cambridge, MA: National Bureau of Economic Research. Available at www.nber.org/papers/w9873.pdf [Accessed 02 February 2016].
27. Oreopoulos, P. (2009). *Why do skilled immigrants struggle in the labor market? A field experiment with six thousand resumes* [online]. NBER Working Paper No 15036. Cambridge, MA: National Bureau of Economic Research. Available at www.nber.org/papers/w15036.pdf [Accessed 02 February 2016].
28. Behaghel, L., Crépon, B., & Le Barbanchon, T. (2011). *Do anonymous resumes make the battlefield more even? Evidence from a randomized field experiment*. Working Paper. Paris: CREST. Available at www.sole-jole.org/12101.pdf [Accessed 02 February 2016].
29. Williams, L.E. & Bargh, J.A. (2008). Experiencing physical warmth promotes interpersonal warmth. *Science*, 322 (5901), 606-607.
30. Shih, M., Pittinsky, T.L. & Ambady, N. (1999). Stereotype susceptibility: identity salience and shifts in quantitative performance. *Psychological Science*, 10 (1), 80-83.
31. Carnes, M., Devine, P.G., & Baier Manwell, L. (2015). The effect of an intervention to break the gender bias habit for faculty at one institution: a cluster randomized, controlled trial. *Academic Medicine*, 90 (2), 221-230.
32. Kawakami, K., Dovidio, J.F., & Van Kamp, S. (2005). Kicking the habit: effects of nonstereotypic association training and correction processes on hiring decisions. *Journal of Experimental Social Psychology*, 41 (1), 68-75.
33. Duguid, M.M., & Thomas-Hunt, M.C. (2015). Condoning stereotyping? How awareness of stereotyping prevalence impacts expression of stereotypes. *Journal of Applied Psychology*, 100 (2), 343-359.
34. Dasgupta, N. and Asgari, S. (2004). Seeing is believing: exposure to counterstereotypic women leaders and its effect on the malleability of automatic gender stereotyping. *Journal of Experimental Social Psychology*, 40 (5), 642-658.

ISBN 978-0-7313-5415-3

Copyright Notice



© State of New South Wales (Department of Premier and Cabinet) 2016.

For current information go to www.dpc.nsw.gov.au/copyright_and_disclaimer.

This work (apart from any State arms, symbols or trademarks or third party material) is licensed under the Creative Commons Attribution 4.0 licence.

See <http://creativecommons.org/licenses/by/4.0/> for details.

SC000537_0816

Visit: bi.dpc.nsw.gov.au

Email: behaviouralinsights@dpc.nsw.gov.au