

Australian Law Reform Commission
PO Box 12953, George Street Post Shop
Queensland 4003; Australia.
impartiality@alrc.gov.au

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Submission to the Australian Law Reform Commission Review of Judicial Impartiality

Dr Daniel Ghezelbash

Associate Professor, Macquarie Law School
Research Lead, AI and Law, AI-enabled
Processes Research Centre
Special Counsel, National Justice Project

Saul Wodak

Associate Advisor, Behavioural Insights Team

Dr Ravi Dutta-Powell

Senior Advisor, Behavioural Insights Team

Dr Robert Ross

Research Fellow, Department of Psychology,
Macquarie University

Dr Rory Gallagher

Managing Director, Australia and Asia Pacific,
Behavioural Insights Team

Thank you for the opportunity to make a submission to the inquiry. This is a joint submission from law and psychology academics from Macquarie University and the Behavioural Insights Team. The Behavioural Insights Team is a social purpose organisation that generates and applies behavioural insights to inform policy and improve public services.

Our submission focuses on consultation Question 21 relating to implicit bias, and Question 25 relating to data collection.

The background paper 'J16 Cognitive and Social Biases in Judicial Decision-Making' prepared by the ALRC discusses the potential role of implicit social biases in influencing judicial decision-making. It helpfully summarises the latest research of the potential impact that implicit biases can have on judicial decision-making. Decades of robust empirical research in cognitive decision making demonstrates the likely impact of implicit social bias in decision making.¹ This has been shown to impact how people make decisions both in the real world and in highly controlled laboratory settings.²

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¹ Daniel Kahneman, *Thinking, Fast and Slow* (Macmillan, 2011); Amos Tversky and Daniel Kahneman, 'Judgment under Uncertainty: Heuristics and Biases' (1974) 185(3) *Science* 1124, 1124-31; Jonathan Baron, *Thinking and Deciding* (Cambridge University Press, 4th ed, 2007).

² Gustavo Saposnik Donald Redelmeier, Christian C Ruff and Philippe N Tobler 'Cognitive Biases Associated with Medical Decisions: A Systemic Review (2016) 16(1) *BMC Medical Informatics and Decision Making* 1, 1-14.

There is increasing community concern that social biases might also impact the decision making of highly influential decision makers, including judges. As documented in the background paper, implicit bias in judicial decision-making may have profound negative impacts, including concerns around the rule of law, access to justice and community confidence.³

Ability of judges to self-correct

The background paper proposes that judges are equipped to overcome, or ‘compensate for’, the influence of unconscious bias due to the nature of their role and their training.⁴ This may be true to some extent. However, judges may not be as self-aware as we would like. For instance, Kang et al drew on a study by Rachlinski et al that found 97% of judges believed they were in the top quartile in ‘avoid[ing] racial prejudice in decision-making’ relative to other judges.⁵ Showing judges trends in their decision-making and the influences of implicit biases may assist judges to recognise they may not be adequately avoiding racial and other social prejudices. This is important as believing we are objective places us at risk of ‘behaving in ways that belie our self-conception’.⁶

The background paper refers to a number of experimental studies which purportedly demonstrate resilience of judges to unconscious bias.⁷ We encourage the commission to approach these studies with a degree of scepticism. By design, they test judges’ decision making in simulated environments with unknown external validity. Simulation studies can be valuable, however, research has shown the validity of their findings can have limited real world applicability.⁸ Because judges in these studies are aware that their decisions are being scrutinised, the experiment can introduce its own form of bias known as participant bias⁹ and social desirability bias.¹⁰ Moreover, older research in particular should be treated with caution given the well documented replicability crisis in psychology research

³ Australian Law Reform Commission (‘ALRC’), *Judicial Impartiality: Cognitive and Social Biases in Judicial Decision-Making* (Background Paper JI6, April 2021) 8-9 (‘Background Paper’).

⁴ Jeffrey J Rachlinski et al, ‘Does Unconscious Racial Bias Affect Trial Judges’ (2009) 84(3) *Notre Dame Law Review* 1195, 1195, 1210, 1221; Brian Barry, *How Judges Judge: Empirical Insights into Judicial Decision-Making* (Routledge, 2021) 174; ALRC, Background Paper, 12-3.

⁵ Jerry Kang et al, ‘Implicit Bias in the Courtroom’ (2012) 59(5) *UCLA Law Review* 1124, 1172.

⁶ Ibid; Nicola Bellé, Paola Cantarelli and Paolo Belardinelli, ‘Prospect Theory Goes Public: Experimental Evidence on Cognitive Biases in Public Policy and Management Decisions’ (2018) 78(6) *Public Administration Review* 828, 828-40.

⁷ See, eg, Jeffrey J Rachlinski et al, ‘Does Unconscious Racial Bias Affect Trial Judges’ (2009) 84(3) *Notre Dame Law Review* 1195; Brian Barry, *How Judges Judge: Empirical Insights into Judicial Decision-Making* (Routledge, 2021).

⁸ Gregory Mitchell, ‘Revisiting Truth or Triviality: The External Validity of Research in the Psychological Laboratory’ (2012) 7(2) *Perspectives on Psychological Science* 109, 109-117.

⁹ Caridad F Brito, Jeffrey R Stowell and William E Addison, ‘Demonstrating Experimenter and Participant Bias’ in Jeffrey R Stowell and William E Addison (eds) *Activities for Teaching Statistics and Research Methods: A Guide for Psychology Instructors* (American Psychological Association, 2017) 94.

¹⁰ Anton J Nederhof, ‘Methods of Coping with Social Desirability Bias: A Review (1985) 15(3) *European Journal of Social Psychology* 263, 263-80.

that has shown that the findings of many studies cannot be reproduced and are thus likely to be incorrect.¹¹

There are other concerns with this research that the commission should be aware of. Evidence drawn from research using the IAT, as the background paper makes clear, should be viewed critically. There is substantial controversy about how to interpret the results of IAT scores, including concerns over whether IAT scores capture implicit bias in a meaningful way,¹² and the extent to which racial or ethnic discrimination can be predicted from the results of IAT measures.¹³

Implicit bias, by its very nature, acts on unconscious cognitive processes. These are universal to how humans make decision. To think that judges possess immunity, or that judges possess the ability to correct for this is naïve. Daniel Kahneman, Nobel Prize winning pioneering researcher in the role of bias in decision making, states that ‘there are many biases, and I certainly do not claim to be immune from them. I suffer from all of them’.¹⁴

Despite controversy surrounding the measurement of implicit bias, it is uncontroversial in the psychological sciences that humans have a disposition to form stereotypes against members of unfamiliar or distinct social groups, and that much of our cognition occurs at sub-conscious levels. While the science surrounding the measurement of implicit bias is contested, there remains a strong rationale and evidence of its impacts on the world to support its existence.¹⁵

Overcoming bias is challenging – but there is evidence that some approaches work

Overcoming implicit bias is very challenging. A number of interventions have been shown to be largely ineffective, including implicit bias training,¹⁶ or pre-informing people of the existence of an unconscious bias before asking them to complete a task measuring discrimination.¹⁷ For example,

¹¹ Leif Nelson, Joseph Simmons, and Uri Simonsohn, ‘Psychology’s Renaissance’ (2018) 69 *Annual Review of Psychology* 511.

¹² Edouard Machery, ‘Anomalies in implicit attitudes research’ (2021) *WIREs Cognitive Science* (advance); Brian A Nosek, Anthony G Greenwald and Mahzarin R Banaji, ‘Understanding and Using the Implicit Association Test: II. Method Variables and Construct Validity’ (2005) 31(2) *Personality and Social Psychology Bulletin* 166, 166–80; B Azar ‘IAT: Fad or Fabulous?’ (2008) 39(7) *Monitor in Psychology* 44.

¹³ Frederick L Oswald et al, ‘Predicting Ethnic and Racial Discrimination: A Meta-Analysis of IAT Criterion Studies’ (2013) 105(2) *Journal of Personality and Social Psychology* 171.

¹⁴ Social Science Bits, ‘Daniel Kahneman on Bias’, *Social Science Space* (Web Page) <<https://www.socialsciencespace.com/2013/01/daniel-kahneman-on-bias/>>.

¹⁵ M Brownstein, A Madva & B Gawronski, ‘What do implicit measures measure?’ (2019) 10(5) *Wiley Interdisciplinary Reviews: Cognitive Science*, e1501.

¹⁶ Edouard Machery, ‘Anomalies in implicit attitudes research’ (2021) *WIREs Cognitive Science* (advance); Elizabeth Paluck et al, ‘Prejudice reduction: Progress and challenges’ (2021) 72 *Annual Review of Psychology* 533; Frank Dobbin, Alexandra Kalev and Erin Kelly, ‘Diversity Management in Corporate America’ (2007) 6(4) *Contexts* 21, 21-7.

¹⁷ Carol T Kulik, Elissa L Perry and Anne C Bourhis, ‘Ironic Evaluation Processes: Effects of Thought Suppression on Evaluations of Older Job Applicants’ (2000) 21(6) *Journal of Organizational Behavior* 689, 689-711.

a study of 829 companies over 31 years showed that bias training had no positive effects in the average workplace.¹⁸

One approach that does show promise is introducing interventions which encourage individuals to scrutinise their decision making, thus exposing the more automatic system 1 thinking to the scrutiny of the more analytic and deliberative system 2 thinking. As mentioned in the background paper,¹⁹ system 1 thinking is not adept for decisions requiring conscious deliberation. If a person is distracted, rushed or tired, or if system 1 and system 2 thinking is in conflict, people tend to rely on system 1 thinking and invoke biases.²⁰ By encouraging judges to use system 2 thinking, decision making is less likely to be affected by implicit biases.

One approach shown to be effective in helping people overcome implicit social biases involves collecting statistical data on the outcomes of decision making. In the judicial context, this would involve collecting data breaking down the different outcomes before individual judges for groups potentially likely to be targets of implicit bias. These groups may include Aboriginal and Torres Strait Islanders, culturally and linguistically diverse people, women or gender diverse people, and people of lower socio economic backgrounds.

Interpreting the statistical data

An argument presented in the background paper is that any differences in judicial outcomes for different demographic groups may simply reflect broader institutional and societal disadvantage for these groups, resulting in different contextual factors which contribute to poorer outcomes.

The purpose of collecting and publishing data on judges' decision making is not to draw attention to these aggregate differences, but to highlight differences BETWEEN judges in how they make decisions which impact these groups. Any such differences do not necessarily imply that implicit bias is at play. The variation at play could be explained by different factual circumstances of each case. However, this argument is to some degree countered by the docket system, and the random allocation of cases to judges. Therefore, collecting average outcomes for each judge over time has the potential to uncover systemic bias in decision making. We are by no means implying that average outcomes should be uniform between judges, but that large discrepancies over time should open up a wider dialogue about what factors could be contributing to this.

This statistical data can be used as part of interventions where the data is used internally, as well as externally.

¹⁸ Frank Dobbin, Alexandra Kalev and Erin Kelly, 'Diversity Management in Corporate America' (2007) 6(4) *Contexts* 21, 21-7.

¹⁹ New South Wales Law Reform Commission, *Judicial Impartiality: Cognitive and Social Biases in Judicial Decision-Making* (Background Paper J16, April 2021) 6.

²⁰ Ibid.

Internal use of data

In terms of the internal use of such data, Irwin and Real drew on several papers to argue post-decision auditing may be a useful approach to reduce judicial bias.²¹ They identify three ways data may be used:

- A. A diverse group of auditors could be employed to review judicial decisions and look for signs of implicit biases' influencing the decisions they review
- B. Introduce a peer-review process where decisions are evaluated for impartiality and feedback is provided
- C. Provide judges with statistical data and a breakdown of past decisions to allow judges to assess trends and influences of implicit biases.

We propose that approaches B and C provide the greatest potential for combating judicial bias.

The mechanism via which approach C may counter bias is through the provision of feedback on the consequents of behaviour. There is robust evidence that shows providing individuals with feedback on the outcomes of their behaviour is an effective catalyst for behaviour change.²² There are two potential limitations to this approach. Firstly, providing private feedback requires the individual to be self-motivated to address their own biases. Secondly, it opens up the opportunity for individuals engage in cognitive dissonance, a process by which individuals selectively interpret events to support their pre-existing beliefs or attitudes. Research has found that providing feedback on behaviour can result in such motivated self-deception.²³

Approach B would combine the provision of feedback with an accountability mechanism. The peer review process provides the opportunity for judges to account for the outcomes of their decision making to other respected individuals within their profession. There is empirical evidence from the behavioural sciences, that providing feedback on the consequences of behaviour and asking

²¹ John F Irwin and Daniel L Real, 'Unconscious Influences on Judicial Decision-Making: The Illusion of Objectivity' (2010) 42(1) *McGeorge Law Review* 1, 9.

²² Noah Ivers et al 'Audit and Feedback: Effects on Professional Practice and Healthcare Outcomes' (2012) *Cochrane Database of Systematic Reviews*.

²³ Michael Auer & Mark Griffiths, 'Cognitive dissonance, personalized feedback, and online gambling behavior: An exploratory study using objective tracking data and subjective self-report (2008) 16(3) *International journal of mental health and addiction*, 631-641; Johnny Jermias, 'Cognitive dissonance and resistance to change: The influence of commitment confirmation and feedback on judgment usefulness of accounting systems' (2001) 26(2) *Accounting, Organizations and Society*, 141-160.

individuals to account for their behaviour to others are effective in countering bias against minority or disadvantaged groups.²⁴

Interventions along the lines of those envisaged by example B and C would be most effective when deployed together. Judges would self-review the data, but would also have periodic peer review where feedback would be provided (for example by the Chief Judge/Justice), and then be invited to explain any statistical variation that potentially points to bias.

Public use of data

We propose that an even more powerful intervention is the publishing of outcomes data in publicly available forums. Approaches used to counter gender and racial inequality in labour markets show this can be effective. For instance, a field study conducted on a large private company, found that introducing accountability and transparency into the company's performance-reward system eliminated the disparity in pay increases between similarly performing women, ethnic minorities and US-born men.²⁵ Accountability and transparency interventions have also been effective in other domains. For instance, publishing information on the rate at which different mobile handsets are stolen encouraged manufacturers to develop more secure handsets.²⁶ Additionally, requiring restaurants to display health inspection ratings lowers the rates of foodborne illnesses.²⁷

We believe publicly publishing data is even better equipped to promote fair judicial decision making than only internal use of the data. It also has the potential to positively promote community trust in the judicial system.

Collecting the data

In terms of the process for data collection, there are a number different options. One would be for judges themselves to complete a short checklist after handing down their decision. While we acknowledge the already very high workload of judges, this in and of itself may introduce a bias-correcting mechanism.²⁸ Other options include manual coding by court registry staff, or by an external research organisation or body. It may also be possible to develop a technological tool based

²⁴ Thomas Ford et al, 'The role of accountability in suppressing managers' pre interview bias against African-American sales job applicants' (2004) 24(2) *Journal of Personal Selling & Sales Management*, 113-124.

²⁵ Emilio J Castilla, 'Accounting for the Gap: A Firm Study Manipulating Organizational Accountability and Transparency in Pay Decisions' (2015) 26(2) *Organization Science* 311, 311-33.

²⁶ Simon Ruda, Ed Bradon and David Halpern, 'Stop Thief! How Data Can Help Prevent Mobile Phone Theft', *Civil Service Quarterly* (Blog Post, 15 October 2014) <<https://quarterly.blog.gov.uk/2014/10/15/stop-thief-how-data-can-help-prevent-mobile-phone-theft/>>.

²⁷ Melanie J Firestone and Craig W Hedberg, 'Restaurant Inspection Letter Grades and Salmonella Infections, New York, New York, USA' (2018) 24(12) *Emerging Infectious Diseases* 2164, 2164-8.

²⁸ Daniel Kahneman et al, 'Noise' *Harvard Bus Rev* (2016) 38-46; J Treadwell, S Lucas, & A Tso, 'Surgical checklists: a systematic review of impacts and implementation' (2014) 23(4) *BMJ Quality & Safety*, 299-318.

on natural language processing and AI, that could automatically collect the data based on published decisions.²⁹

The effectiveness of the various interventions we suggest could be demonstrated through running a preliminarily small scale study. The study could focus on a specific area of law in a specific jurisdiction, targeting implicit bias against one well defined group. This could for example focus on criminal law and custodial sentencing for Aboriginal and Torres Strait Islanders in a specific state.

Conclusion

We welcome the commission's focus on exploring new data collection methods and new and innovative ways of using such data to address the influence of implicit social bias in judicial decision-making. Implementing the interventions we suggest in this submission would place Australia at the cutting edge of innovation when it comes to addressing this issue, which as the background paper shows, permeates judicial decision making around the world. This would result in improvements in the quality of decision making and fairer outcomes for members of communities which have been negatively impacted by implicit social biases. Moreover, increased transparency, particularly through publicly published data, would significantly increase public confidence in the judicial system.

²⁹ Such an approach was used to code the decision-making patterns of individual judges in refugee matters in the Federal Circuit Court: see Daniel Ghezelbash & Kevin Dorostkar, Refugee Decisions Database; preliminary data featured in [‘Who watches over our judges’](#), *ABC's Background Briefing*, 8 Sept 2019.