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INSTITUTE

# Using Neuroscience to Improve Inclusive Workplace Culture for Disability in the Australian Public Service

- Understand how biases affect people with disabilities in the workplace
- Create a psychologically safe work environment for people with disabilities
- Instill a sense of inclusion and belonging in people with disabilities





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## Executive Summary



Employees with disabilities are an underrepresented segment of the workforce in the Australian Public Service Commission (APS). To create a more representative and inclusive culture, the APS, as well as some individual states, have set targets for increasing the number of employees with disabilities. Reaching that target would attract and support individuals with disabilities in the workplace, leading to more humane and fair policies for the communities they represent. A science-based approach to diversity and inclusion initiatives can be useful in creating a public-sector culture in which individuals with disabilities feel valued and included. Government agencies will benefit from a thorough understanding of the science-based underpinnings of bias, speaking up, and equity that inform and shape organisational decisions and culture.

## In the Spotlight

The Commission  
has set an  
employment  
target of  
**7%** ● ● ● ●  
for people with  
disabilities in its  
workforce by  
**2025.**

### Inclusion of Employees with Disabilities

The APS defines employees with disabilities as persons who “have a limitation, restriction or impairment, which has lasted, or is likely to last, for at least six months and restricts everyday activities”.<sup>1</sup> In 2018, over 4.4 million people—that’s 1 in 5 people—in Australia had some form of disability,<sup>2</sup> and of those, 2.1 million were of working age (15–64 years).<sup>3</sup> However, according to the Australian Bureau of Statistics, only 53.4% of people with disabilities were in the labour force that same year, compared to 84.1% of people without disabilities.<sup>4</sup>

The socio-economic disadvantage of employees with disabilities has been highlighted by the Organisation for Economic Co-operation and Development (OECD). The OECD’s report on sickness and disability in the workplace states that people with disabilities in English-speaking countries are in a particularly weak income position, with Australia having one of the lowest employment ratios.<sup>5</sup> The same underrepresentation of employees with disabilities can be seen at APS. The proportion of APS employees with disabilities has actually declined over the last 30 years, from 6.8% in 1986 (at its highest point) to 4.0% in 2020.<sup>6</sup>

However, this trend is most likely to reverse in the future, as the APS is now committed to being an employer of choice for all the people it represents. The Commission has set an employment target of 7% for people with disabilities in its workforce by 2025,<sup>7</sup> which translates to 10,500 employees.

1 Australian Public Service Commission. (2019, September 09). *Definition of disability*. <https://www.apsc.gov.au/working-aps/diversity-and-inclusion/disability/definition-disability>

2 Australian Network on Disability. (2021). *Disability Statistics*. <https://www.and.org.au/pages/disability-statistics.html#:~:text=Over%204.4%20million%20people%20in,with%20disability%20increases%20with%20age>

3 Australian Bureau of Statistics. (2019, October 24). *Disability, Ageing and Carers, Australia: Summary of Findings*. <https://www.abs.gov.au/statistics/health/disability/disability-ageing-and-carers-australia-summary-findings/latest-release>

4 Australian Bureau of Statistics. (2020, July 24). *Disability and the labour force*. <https://www.abs.gov.au/articles/disability-and-labour-force>

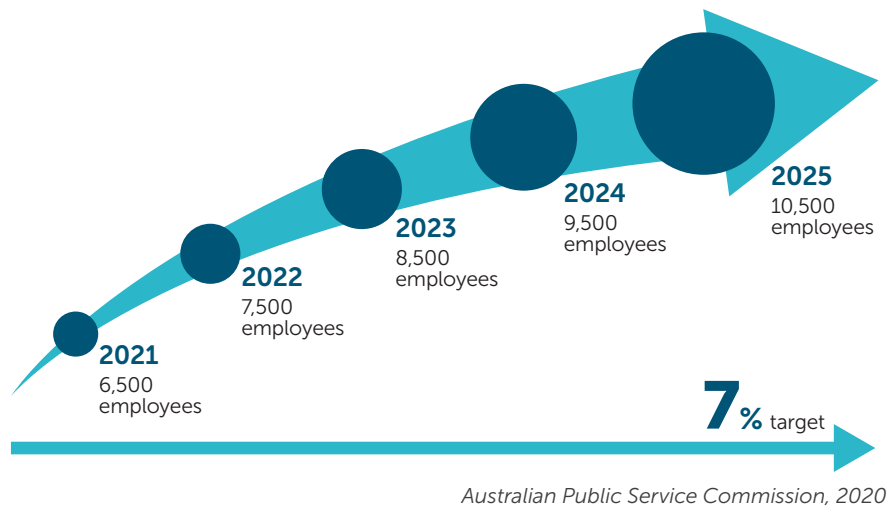
5 Organisation for Economic Co-operation and Development. (2010). *Sickness, disability and work: Breaking the barriers*. <https://doi.org/10.1787/9789264088856-en>

6 Australian Public Service Commission. (2020, December 03). *Australian Public Service Disability Employment Strategy 2020–25*. <https://www.apsc.gov.au/publication/australian-public-service-disability-employment-strategy-2020-25>

7 Australian Public Service Commission. (2020, December 03). *Australian Public Service Disability Employment Strategy 2020–25*. <https://www.apsc.gov.au/publication/australian-public-service-disability-employment-strategy-2020-25>



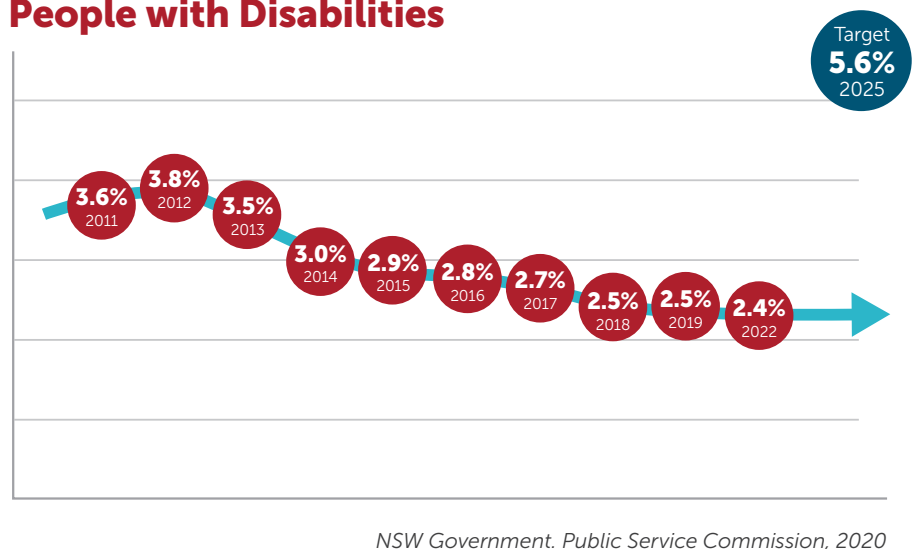
## Disability Employment Target at APS



Similarly, some states have set individual goals to ensure fair representation of people with disabilities in the workforce. For example, the Premier of New South Wales has made increasing diversity in the workforce a priority. In 2020, employees with disabilities made up only 2.4% of the state's workforce, which reflects the larger nationwide trend of declining representation of people with disabilities.<sup>8</sup> The state now aims for employees with disabilities to make up 5.6% of the total workforce in the NSW government by 2025.<sup>9</sup>

At NLI, we believe only effective initiatives will bring in—and keep—more people with disabilities across various government agencies in Australia.

## People with Disabilities



<sup>8</sup> New South Wales Government. Public Service Commission. (2020). *State of the NSW Public Sector Report 2020*. [https://www.psc.nsw.gov.au/sites/default/files/2021-03/15481\\_NSW%20PSC\\_State%20of%20the%20NSW%20Public%20Sector%20Report%202020%20accessible%20v5.pdf](https://www.psc.nsw.gov.au/sites/default/files/2021-03/15481_NSW%20PSC_State%20of%20the%20NSW%20Public%20Sector%20Report%202020%20accessible%20v5.pdf)

<sup>9</sup> Public Service Commission. (2021). *Disability employment*. NSW Government. <https://www.psc.nsw.gov.au/culture-and-inclusion/disability-employment>

# Creating an Inclusive Culture



There are  
estimated to  
be over  
**150** ● ● ●  
cognitive  
biases that  
influence our  
decision-making  
processes.

## What the Science Says

To implement initiatives that can help create an inclusive culture, government agencies will need a thorough understanding of topics such as cognitive bias, speaking up, and equity. In this report, we will discuss these three topics in detail and explain how a better science-based understanding of them can guide such initiatives.

### 1) Understanding the Impact of Cognitive Bias

Cognitive biases are “mental shortcuts” we use automatically, without conscious intent or awareness, to process the world around us and make decisions. Our brain relies on these shortcuts to access stored knowledge or skills as we encounter various situations, which saves us energy and enables us to act swiftly. Evolutionarily, this was crucial when we were hunter-gatherers because we needed to make quick decisions with limited information in order to avoid danger and survive.

However, there is a tradeoff. The quick decisions we make based on our cognitive biases can be suboptimal or erroneous, even. This can happen either because we didn’t allocate enough time or effort to think critically, or because we ignored important, pertinent information. In the workplace, these factors can often impede attracting and hiring diverse talent, as our cognitive biases may impact how we perceive and make decisions about others who are very different from us. Indeed, studies have suggested that people without disabilities harbour biases against people with disabilities of which they aren’t consciously aware,<sup>10</sup> which subtly influences the way they treat people with disabilities.

While we’d like to guard against our cognitive biases to ensure an inclusive workforce, the sheer number of these biases makes it rather impractical to attempt to mitigate all of them. There are estimated to be over 150 cognitive biases that influence our decision-making processes, which take place largely without our conscious awareness.

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10 Wilson, M. C., & Scior, K. (2014). Attitudes towards individuals with disabilities as measured by the Implicit Association Test: A literature review. *Research in developmental disabilities*, 35(2), 294–321. <https://doi.org/10.1016/j.ridd.2013.11.003>

## People with disabilities may be negatively impacted by intergroup bias.



The NeuroLeadership Institute's SEEDS Model® of bias<sup>11</sup> offers a practical solution to this problem. The SEEDS Model® categorises those 150-plus biases into five domains that can help us easily label and mitigate them:

- **Similarity:** "I feel more comfortable with people like me."
- **Expedience:** "If it feels right, it must be true."
- **Experience:** "My perceptions are accurate."
- **Distance:** "Closer is better than far."
- **Safety:** "Bad is stronger than good."

For example, we are susceptible to the negative aspects of similarity bias when we consider people with disabilities to be different from us. Similarly, we may be prone to expedience bias when we don't take time to actively consider and understand how one's disabilities impact their abilities. Cumulatively, these biases could result in people with disabilities getting fewer job opportunities.

### Intergroup Bias

One bias that affects people with disabilities at work is the intergroup bias. Intergroup bias, a type of similarity bias, refers to the tendency for us to favour members of our own group compared to members of other groups. This bias is incredibly strong and is rooted in our evolutionary history. Studies on primates have shown that they are strongly influenced by intergroup bias, as it shapes how others are perceived in a social group (e.g., a friend or foe).<sup>12</sup> In humans, intergroup bias manifests itself in more complex ways because we can determine group inclusion based on factors beyond those merely biological ones.<sup>13</sup>

People with disabilities may be negatively impacted by intergroup bias. Research shows that social categorisation, which produces in-groups and out-groups, can lead to prejudice and discrimination against minority groups, including those with disabilities.<sup>14</sup> Attributing certain traits or characteristics to people with disabilities as a whole becomes possible when they are deemed as an out-group (i.e., people with disabilities

11 Lieberman, M. D., Rock, D., Halvorson, H. G., & Cox, C. (2015). Breaking bias updated: The SEEDS Model. *NeuroLeadership Journal*, 6, 4-18.

12 Smuts, B. B., Cheney, D. L., Seyfarth, R. M., Wrangham, R. W., & Struhsaker, T. T. (Eds.). (1987). *Primate societies*. University of Chicago Press.

13 Mahajan, N., Martinez, M. A., Gutierrez, N. L., Diesendruck, G., Banaji, M. R., & Santos, L. R. (2011). The evolution of intergroup bias: perceptions and attitudes in rhesus macaques. *Journal of personality and social psychology*, 100(3), 387-405. <https://doi.org/10.1037/a0022459>

14 Oakes, P. J., Turner, J. C., & Haslam, S. A. (1991). Perceiving people as group members: The role of fit in the salience of social categorizations. *British Journal of Social Psychology*, 30(2), 125-144. <https://doi.org/10.1111/j.2044-8309.1991.tb00930.x>



belong to a different group from people without disabilities).<sup>15, 16</sup> Indeed, studies have shown that people with disabilities have been stereotyped as dependent, incompetent, lacking control, and sick and burdensome, to name just a few descriptors.<sup>17, 18</sup>

At NLI, we believe that there is more than one opportunity for bias to influence hiring decisions. A hiring decision goes through three unique stages: reviewing resumes, interviewing, and choosing a candidate. Each of these is susceptible to bias in distinct ways. Research suggests that each stage requires distinct bias mitigation strategies.<sup>19</sup>

*Example:* The Crime and Corruption Commission found that 200 men who applied for the Queensland Police Force were discriminated against between July 2016 and the end of 2017. The recruitment process favoured women in order to meet the 50% recruitment quota, even though some of the female candidates failed the physical or psychological requirements.<sup>20</sup>

*Example:* The University of Melbourne ran a two-year pilot program to mitigate hiring biases at workplaces in the Victorian State Government. The researchers found that simple strategies like de-identifying CVs and changing the language in job postings can have a huge impact on the hiring process:

- The number of applicants with disabilities for positions at the Transport Accident Commission doubled when diversity-friendly language was added in the job advertisement.
- Women went from being 33% less likely to be hired than men to 8% more likely after CVs were de-identified at the Victorian Department of Treasury and Finance.
- The chances of candidates from lower socio-economic areas getting a job offer increased by 9.4% when CVs were de-identified at the Victorian Department of Premier and Cabinet.<sup>21</sup>

15 Spencer-Rodgers, J. (2001). Consensual and individual stereotypic beliefs about international students among American host nationals. *International Journal of Intercultural Relations*, 25(6), 639-657. [https://doi.org/10.1016/S0147-1767\(01\)00029-3](https://doi.org/10.1016/S0147-1767(01)00029-3)

16 Zhang, Y. B., & Giles, H. (2018). Communication accommodation theory. In Y. Y. Kim (Ed.), *The International Encyclopedia of Intercultural Communication*, 95-108. <https://doi.org/10.1002/9781118783665.ieicc0156>

17 Blockmans, I. G. (2015). Not wishing to be the white rhino in the crowd: Disability disclosure at university. *Journal of Language and Social Psychology*, 34(2), 158-180. <https://doi.org/10.1177/0261927X14548071>

18 Ryan, E. B., Bajorek, S., Beaman, A., & Anas, A. P. (2005). I just want you to know that 'them' is me: Intergroup perspectives on communication and disability. *Intergroup communication: Multiple perspectives*, 117-137.

19 Sip, K., Van Bavel, J., West, T. V., Davis, J., Rock, D., Grant, H. (2017). Select better: How managers can reduce bias in hiring. *NeuroLeadership Journal*, 7.

20 Kyriacou, K. & Killoran M. (2021, 13 May). Men sent to the back of thin blue line. *Courier Mail*, 6.

21 Department of Premier and Cabinet Victoria and The Centre for Ethical Leadership, University of Melbourne. (2018). *Recruit Smarter. Report of Findings*.





**Psychological safety is broadly defined as a climate in which people feel comfortable voicing ideas and concerns without fear of retribution.**



## 2) Enabling Psychological Safety

While mitigating biases can pave the way for bringing more people with disabilities into public services, it doesn't address all the challenges they may face at work. For example, employees with disabilities may not feel safe voicing their problems and concerns. Indeed, the majority of the individuals who fit the current federal definition of having a disability are keeping that status a secret.<sup>22</sup> Creating a psychologically safe environment where everyone is encouraged to voice their problems and concerns may be a key to mitigating these challenges.

Psychological safety is broadly defined as a climate in which people feel comfortable voicing ideas and concerns without fear of retribution.<sup>23</sup> In a team with high psychological safety, teammates feel safe taking risks around one another. They feel confident that no one on the team will embarrass or punish anyone else for admitting a mistake, asking a question, or offering a new idea.

Because being psychologically safe gives us the freedom to be our authentic selves at work,<sup>24</sup> fostering a psychologically safe environment may be one way of increasing the likelihood that employees with disabilities disclose their status at work.

A psychologically safe environment becomes especially important when it comes to integrating new employees into the existing organisational culture. As the level of tolerance towards employees' opinions can vary greatly among organisations, new employees come in with little understanding of when to speak up in their new environment. Both interpersonal and collective dynamics play a key role during this integration period, as individuals learn the unstated rules about what is safe to discuss and what is best kept quiet.<sup>25</sup> To ensure that newly hired employees with disabilities remain in the workforce, it is important to empower them to speak without fear of penalty or retribution.

Studies indicate that this can increase overall organisational efficiency. For example, a study showed that companies that encouraged the authentic self-expression of new employees during the onboarding process did better in customer satisfaction surveys.<sup>26</sup>

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22 Jain-Link, P. & Kennedy, J.T. (2019, June 03). Why people hide their disabilities at work. *Harvard Business Review*. <https://hbr.org/2019/06/why-people-hide-their-disabilities-at-work>

23 Edmondson, A. (2018). *The fearless organization: Creating psychological safety in the workplace for learning, innovation, and growth*. Hoboken, NJ: John Wiley & Sons, Inc.

24 Edmondson, A. (1999). Psychological safety and learning behavior in work teams. *Administrative Science Quarterly*, 44(2), 350–383. <https://doi.org/10.2307/2666999>

25 Van Maanen, J., & Schein, E. H. (1979). Toward a theory of organizational socialization. *Research in Organizational Behavior*, 1, 209–264.

26 Cable, D, Gino, F, Bradley, & S. (2013). Reinventing Employee Onboarding. *MIT Sloan Management Review*, 54(3):23-28.



## *How can leaders create a psychologically safe environment for employees to speak up?*

Over time, teams develop a collective understanding of when it's appropriate, safe, and effective to speak up. These shared beliefs influence whether individuals speak up or stay silent.<sup>27 28</sup> To empower employees to speak up and to create a psychologically safe environment, leaders can:

- Solicit input, consult, and practice non-defensive listening to signal receptivity.
- Communicate rationales for action, or inaction, in response to employee voicing.
- Acknowledge and build from the voices of those who speak up.
- Foster a caring climate that encourages cooperation and prosocial behaviour.
- Define effective meeting protocols like:
  - Speaking last to allow others to voice their opinions first.
  - Including reflection time before important discussions.
  - Using a method called parallel processing for ideation.
- Create systems for more sensitive employee concerns:
  - Empowering leaders at all levels to proactively ask for and act on input.
  - Encouraging anonymous submissions.

*Example: Improving psychological safety to speak up is a driving factor in improving culture in Parliament House. The budget for FY21-22 allocated AUD\$3 million over two years to 'clean up toxic workplace culture'.<sup>29</sup>*

Along with providing a psychologically safe environment that allows employees to speak up and be their authentic selves, a fair and equitable workplace may ensure that people with disabilities remain engaged in their work and committed to their organisations.

27 Frazier, M. L., & Fainshmidt, S. (2012). Voice climate, work outcomes, and the mediating role of psychological empowerment: A multilevel examination. *Group & Organization Management*, 37(6), 691–715. <https://doi.org/10.1177/1059601112463960>

28 Morrison, E. W. (2011). Employee voice behavior: Integration and directions for future research. *ANNALS*, 5, 373–412. <https://doi.org/10.5465/19416520.2011.574506>

29 Ferguson, R. (2021, May 12). Funding to clean up 'toxic culture'. *The Australian*, 12.

**In an equitable environment, everyone has access to the resources they need to perform and succeed.**



### 3) Equity for Lasting Inclusion

Despite the billions of dollars that have been allocated to diversity and inclusion efforts, a lack of representation in organisations persists. This is partly because those efforts often fail to instill a sense of belonging and inclusion in their employees, and when people don't feel included or that they belong, they leave. Diversity, thus, becomes a revolving door without inclusion or belonging. Employees may fail to develop a sense of inclusion and belonging when they experience an unfair work environment. This is because humans have negative responses to unfair situations they perceive as inequitable.<sup>30</sup> Researchers have found that when we receive fair offers, we feel rewarded due to the activation of reward circuitry in the brain. By contrast, when we perceive an offer to be unfair, we tend to experience a reaction similar to physical disgust.<sup>31</sup>



## *What is the difference between equality and equity?*

When there is equity in the workplace, employees feel that they are valued and respected and have equal access to opportunities. While equality assumes that everyone has had access to the same advantages and opportunities, equity acknowledges that individuals have had varying access to resources and opportunities. Equity enables organizations to distribute resources and opportunities according to the needs of their workforce allowing everyone to be successful at what they do. For example, if some employees are vision-impaired, the employer can provide the necessary tools for them to do their jobs successfully. If someone is hearing-impaired or movement-impaired, they would need different tools to execute their work successfully. Thus, in an equitable environment, everyone has access to the resources they need to perform and succeed.

Furthermore, people develop a sense of belonging in an equitable environment, which benefits their employers. For example, when people have a sense of belonging to their organisations:

- Their job performance increases.
- They are less likely to leave their jobs.
- They are less likely to take sick days.<sup>32</sup>

30 Decety, J., & Yoder, K. J. (2017). The emerging social neuroscience of justice motivation. *Trends in cognitive sciences*, 21(1), 6-14. <https://doi.org/10.1016/j.tics.2016.10.008>

31 Tabibnia, G., Satpute, A. B., & Lieberman, M. D. (2008). The sunny side of fairness: Preference for fairness activates reward circuitry (and disregarding unfairness activates self-control circuitry). *Psychological Science*, 19(4), 339-347. <https://doi.org/10.1111/j.1467-9280.2008.02091.x>

32 Carr, E., Reece, A., Rosen Kellerman, G. & Robichaux, A. (December 16, 2019). The value of belonging at work. *Harvard Business Review*. <https://hbr.org/2019/12/the-value-of-belonging-at-work>

## Allyship fosters belonging, relatedness, connection, and community.

### Examples:

- The Queensland Government has appointed an equity and diversity officer who will review complaints from employees against their employers related to fairness, discrimination, and harassment.<sup>33</sup>
- To ensure that the needs of employees with disabilities are met, New South Wales Government encourages these employees to speak with their managers or HR teams about their needs. These discussions should enable people with disabilities to perform to the best of their abilities, as well as help them develop a sense of belonging and increase their engagement and motivation to improve their performance.<sup>34</sup>
- People managers will be held accountable for recruiting and promoting more people with disabilities at the Victorian Department of Premier & Cabinet.<sup>35</sup>

## Allyship

Allyship, a skillset, can help us increase equity, inclusion, and belonging in organisations. Allyship is defined as being aware of and using one's advantaged position to actively support and include people in less advantaged positions. Allyship fosters belonging, relatedness, connection, and community.<sup>36</sup> Crucially, allyship addresses unequal and unjust situations, and at its core, works towards achieving equity.



33 Jessica M. (2021, May 4). Review may sharpen IR watchdog's teeth. *Courier Mail*, 2

34 New South Wales, Public Service Commission. (n.d). *Workplace adjustments*. <https://www.psc.nsw.gov.au/culture-and-inclusion/disability-employment/making-the-workplace-accessible/workplace-adjustments>

35 Victorian Government. (n.d). *DPC's Disability Action Plan*. <https://www.vic.gov.au/dpcs-disability-action-plan#approach>

36 Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117(3), 497–529. <https://doi.org/10.1037/0033-2909.117.3.497>



**As improving inclusion for employees with disabilities benefits everyone, it is vital that the potential government initiatives get things right.**



*A more diverse APS workforce will help produce programs, policies, and services that meet communities' diverse needs.*

## Science-Based Policies for an Inclusive Workforce

People with disabilities bring their unique perspectives and expertise to the workplace. Acknowledging and harnessing those traits can benefit their employers. Hence, an APS workforce that better reflects the diversity of the Australian community will help produce programs, policies, and services that meet the community's diverse needs. Moreover, increasing numbers of people with disabilities in the workforce will bring this historically disadvantaged group tangible socio-economic benefits. The APS acknowledges that having a workforce that reflects the diversity of the Australian community will be a better use of tax dollars.<sup>37</sup> As improving inclusion for employees with disabilities benefits everyone, it is vital that potential government initiatives get things right. This can happen if such initiatives are backed by science.

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<sup>37</sup> Australian Public Service Commission. (2020, December 03). *Australian Public Service Disability Employment Strategy 2020-25*. <https://www.apsc.gov.au/publication/australian-public-service-disability-employment-strategy-2020-25>

# How NLI Can Help



The NeuroLeadership Institute combines brain science, industry research, and practitioner expertise to develop solutions that employees can apply immediately to their work.

Through consulting and scalable learning, we effect behaviour change in a matter of months.

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