Australia’s cyber security sector: Where are the women?

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Today's presentation

1) Who are we?
2) What are our aims?
3) What is the problem?
4) Why should the Cyber Security sector care about gender equality and inclusion?
5) What are the solutions?

1. Who are we?

This research project is being conducted by RMIT University Centre for Cyber Security Research and Innovation in partnership with the Australian Women in Security Network (AWSN) and the Australian Signals Directorate.

This project is being carried out as an independent academic analysis and is not linked to any commercial interest.
The research team is comprised of Dr Leonora Risse, Dr Maria Beamond, Dr. Joanne Hall, Dr. Lena Wang, Dr. Banya Barua, Professor Matt Warren, and Mr Laki Kondylas.

Dr. Leonora Risse
Leonora is an economist who specialises in gender equality in the workforce. Leonora is a Research Fellow with the Women's Leadership Institute Australia and spent time in residence as Harvard University as a Research Fellow with the Women and Public Policy Program in the Harvard Kennedy School of Government.

Dr. Maria Beamond
Maria's research interests is on human resources management and talent management. By analysing how large organisations manage their talent, Maria focuses on corporate social responsibility, corporate strategies, emerging technologies, organisational culture, and women talent management. Maria has more than 18 years' experience working with private and government organisations.

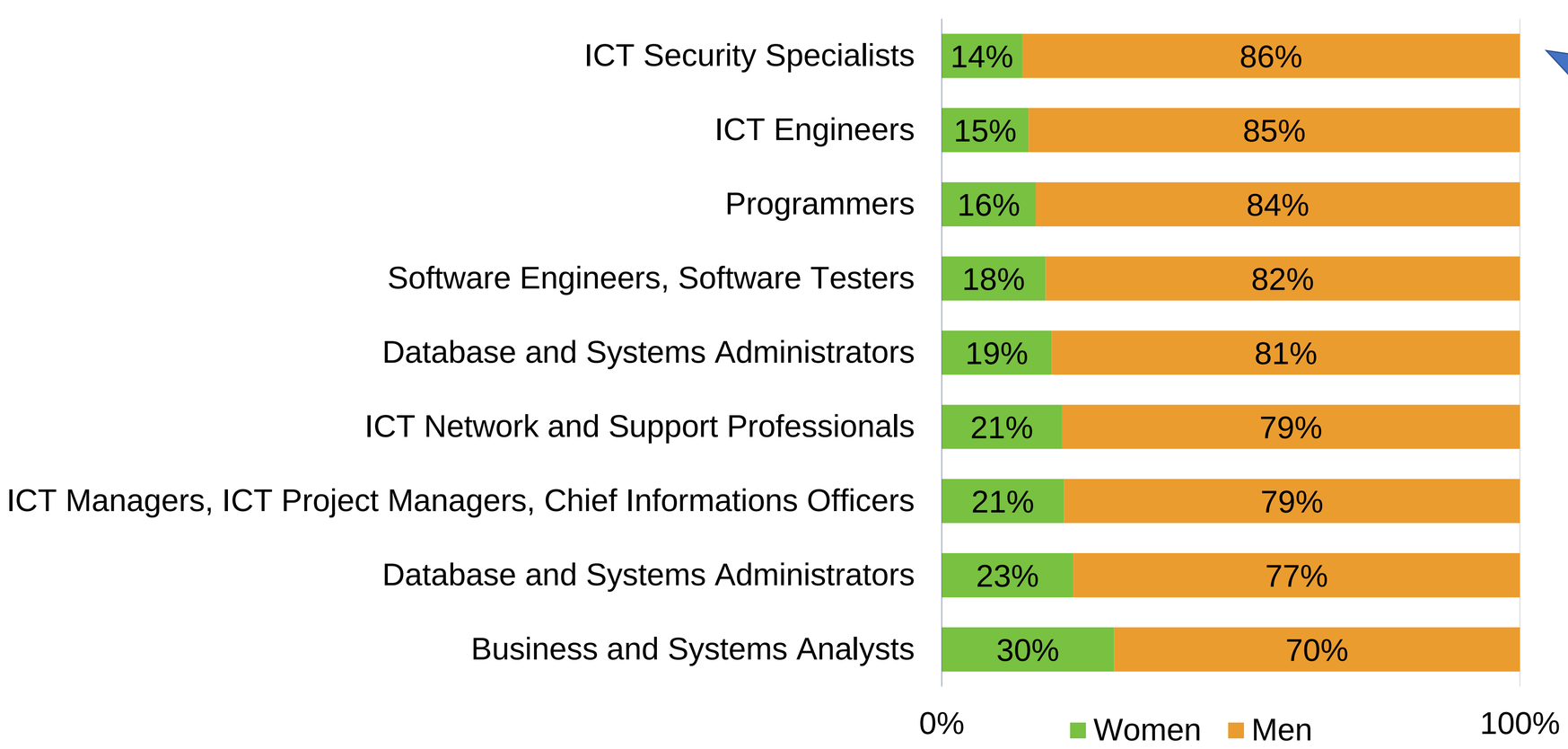
2. What are our aims?

- Raising awareness
- Sharing new findings and empowering you with new knowledge
- Learning from your insights and experiences

3. What is the problem?

- **Where are the women?**
  - Women are under-represented in security sector, especially cyber and information security
  - Data is lacking and numbers are sketchy
  - Designing solutions require an accurate understanding of the root causes of gender imbalances
  - Effective implementation of solutions requires understanding of resistance to equality initiatives

Gender composition of Information Security occupations

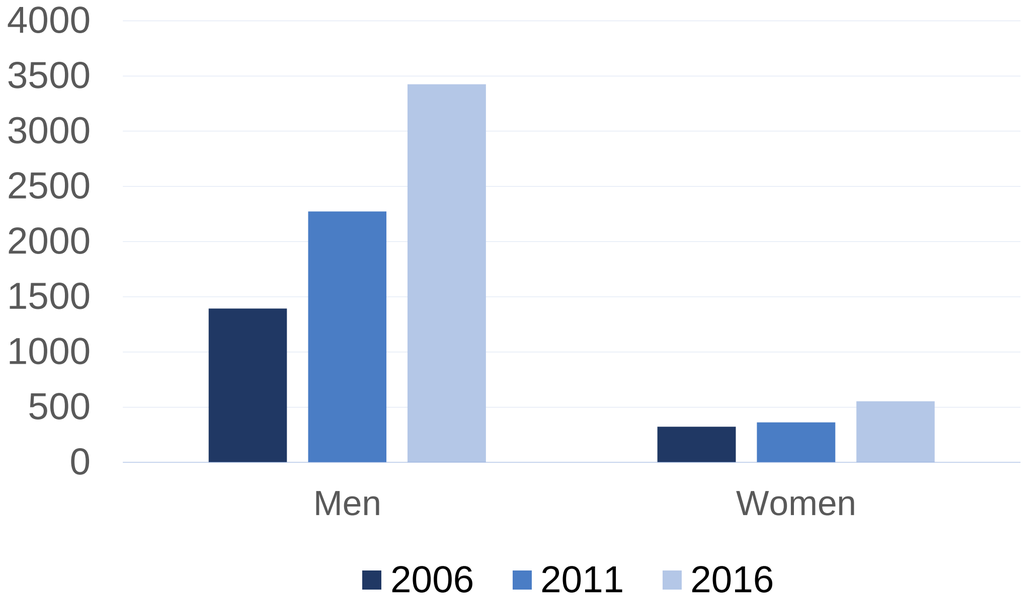


Women comprise only 14% of ICT Security Specialists

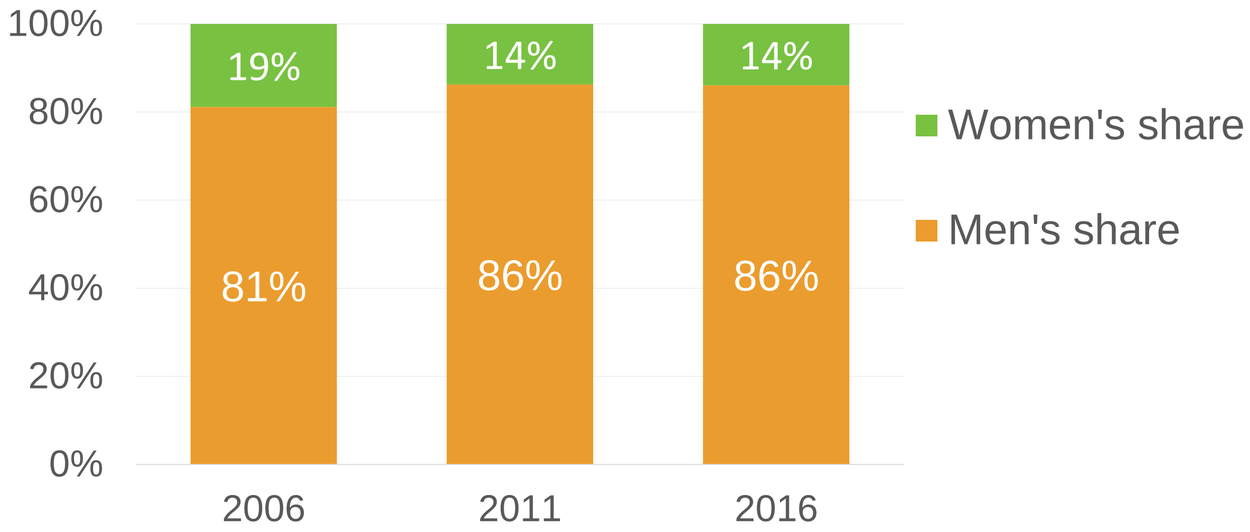
Source: Authors' calculations using ABS Census of Population and Housing 2016. Occupations based on ANZSCO codes.

The number of ICT Security Specialists has grown over time … but women's share has not

Employment of ICT Security Specialists, Australia



Gender shares of ICT Security Specialists, Australia



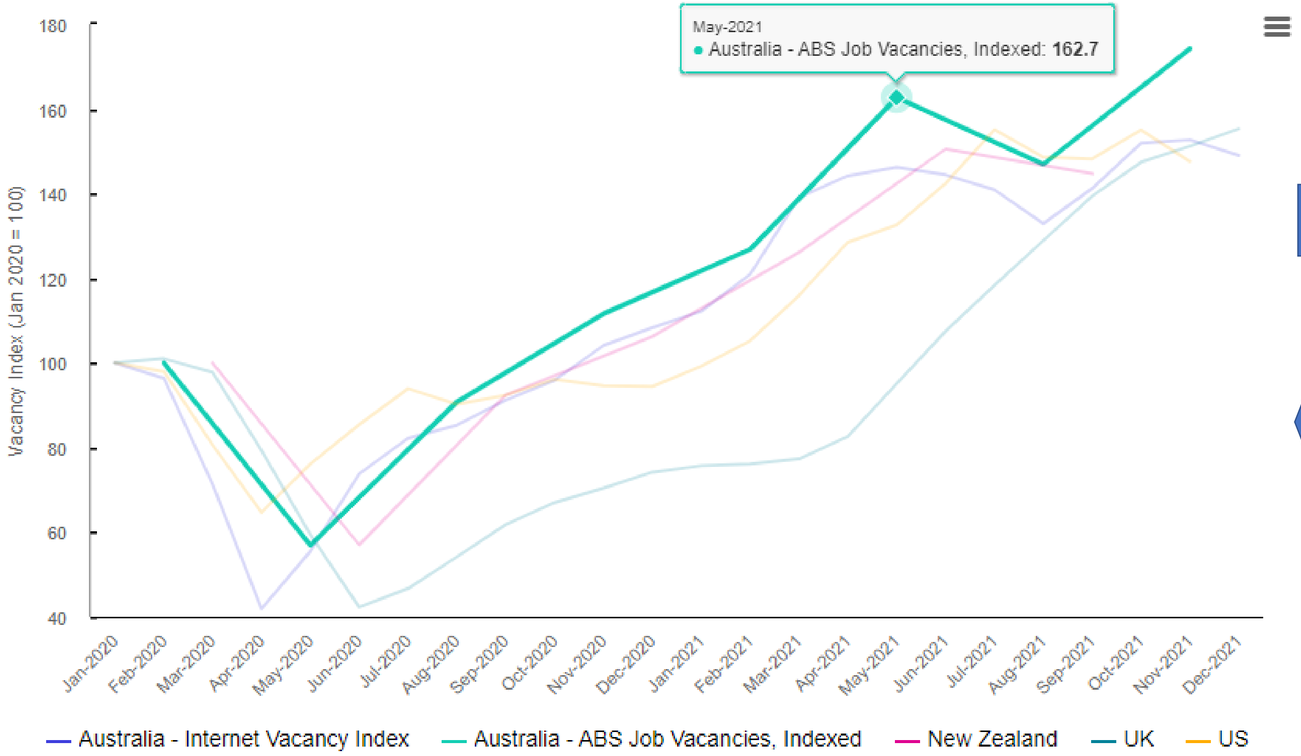
Source: Authors' calculations using ABS Census of Population and Housing 2006, 2011, 2016. Occupations based on ANZSCO codes.

4. Why should the cybersecurity sector care about gender equality?

- **Rising importance of security sector**
- **Skills shortages**
- **Gains of diversity are being forgone**
  - innovation, creative problem-solving, understanding people
- **Gender gaps in workforce outcomes are a signal of biases and barriers**

Skill shortages and labour market tightness: a global perspective

Job vacancies in Australia, New Zealand, United Kingdom and United States, 2020 to 2021



Source: Australia Government, National Skill Commission, March 2022

Great Resignation - Australia

1. 40% of workers are planning to look for a new job in the next 6 months
2. 48% of workers are planning to look for a new job in the next 12 months
3. 55% of managers and senior executives are intending to change roles within the next 12 months
4. 66% of those aged 18-24 were planning on changing roles within the year
5. 77% of those aged 55+ have no plans to move roles
6. Victorians were 14% more likely to want to change role within the year
7. 42% of Australian workers said that they are considering or would consider a job overseas
8. 28% of workers would like their next role to be in a different industry
9. 42% of workers would like their next role to be in a similar industry but a different company
10. 29% of workers would like their next role to be a promotion/lateral move
11. 77% of those not looking to change are happy where they are
12. 20% of those not looking to change believe it would be risky due to COVID

Source: Employment Hero's Employee Movement and Retention Reports 2020-2022

Skill shortages and labour market tightness:

solve Australia's skill shortage by unlocking women's economic participation

"Halving the workforce participation gap between men and women would represent an additional 500,000 full-time skilled workers with post school qualifications.

✓ **Job vacancies hit a record 423,500 in February 2022"**

"Engaging women in paid work at the same rate as men could unlock an additional one million full-time skilled workers in Australia.

✓ **The National Skills Commission estimates the need for 1.2 million additional workers across the economy by 2026"**

Sources: Chief Executive Women, and Impact Economics and Policy, 2022

5. What are the solutions?

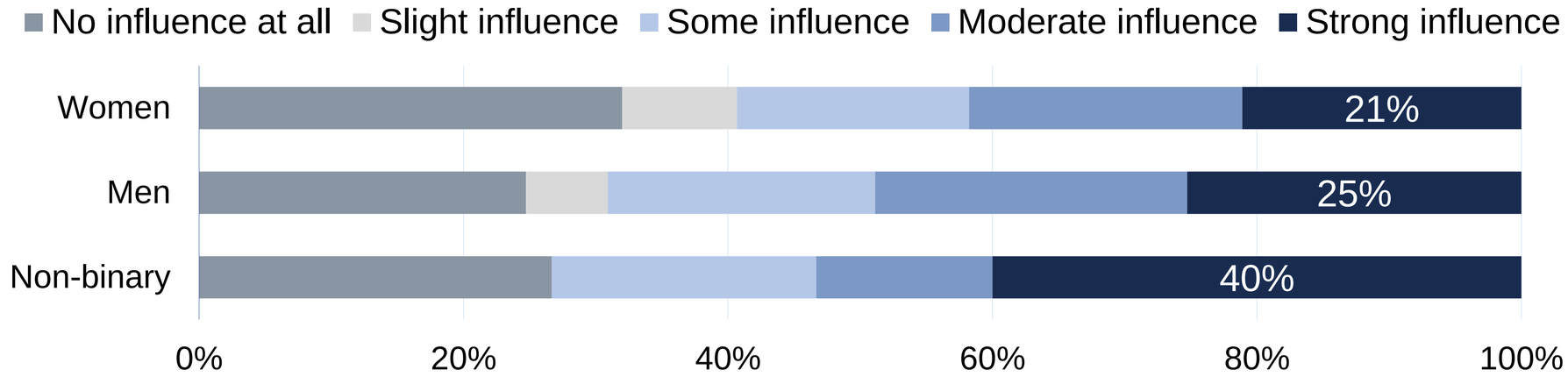
- **Insights from existing knowledge on gender inequality and inclusion in the workplace**
- **Investment in new research**
  - ✓ Properly diagnosing the root cause of the problem
  - ✓ Filling the data gaps
  - ✓ Identifying what is distinctive about the security sector
- **Understanding resistance to diversity and equality initiatives**

Survey insights

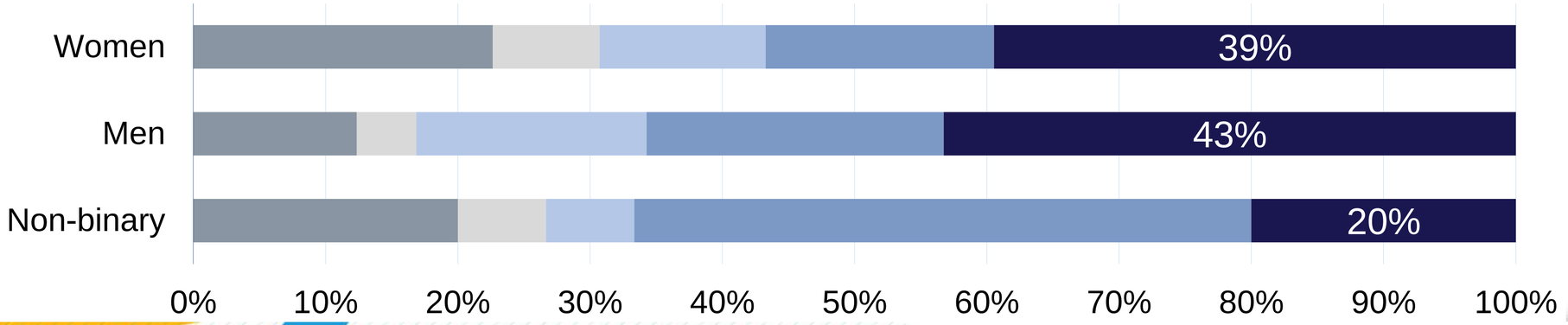
- Survey of people currently or formerly working in the security sector in Australia
- Collected around 650 responses during August-September 2022
- Provides insights into their motivating factors, experiences, barriers and challenges working in the sector

Factors influencing your decision to pursue a career in security industry

"I performed well in fields of study that relate to the security industry"



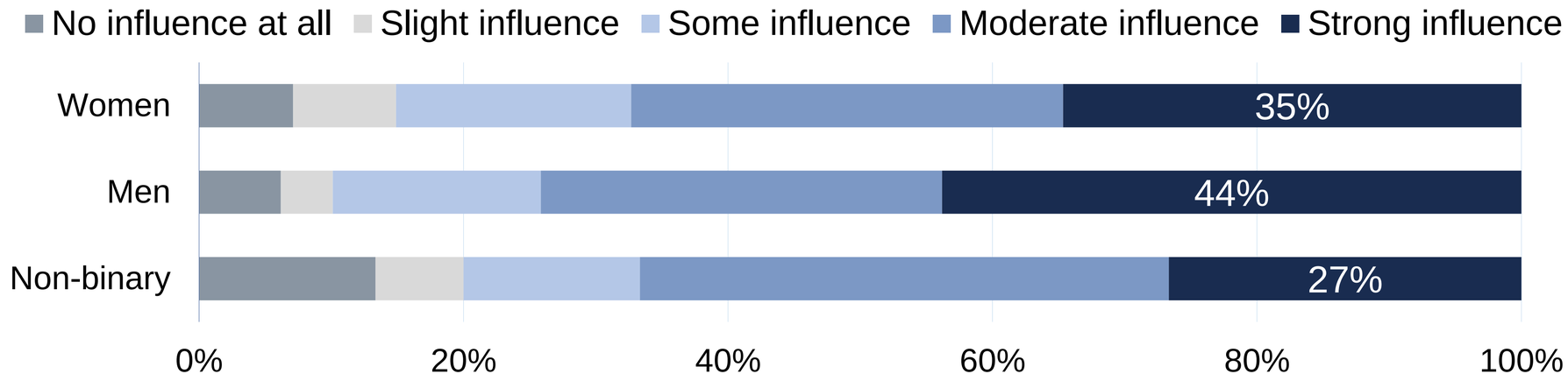
"I enjoyed the fields of study that relate to the security industry"



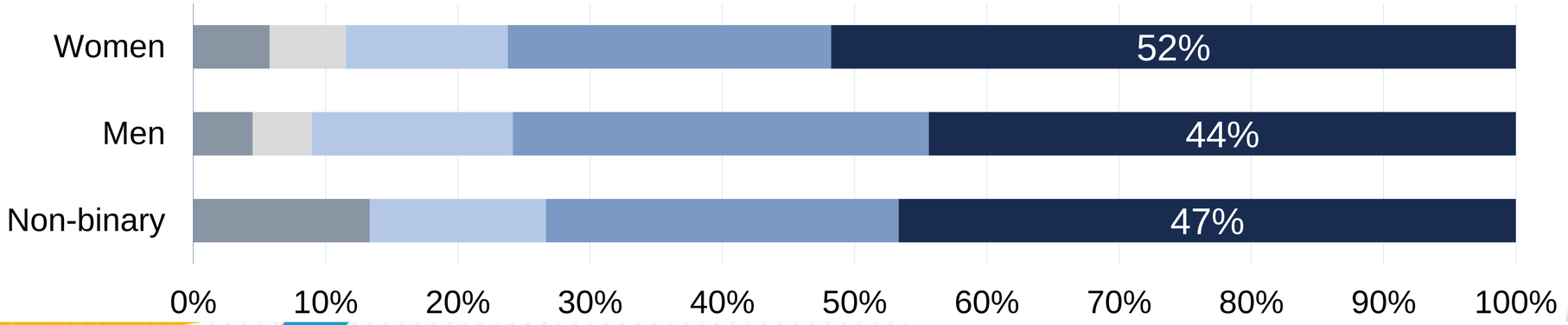
Source: RMIT and AWSN (2022) Gender Dimensions of Australia's Security Sector

Factors influencing your decision to pursue a career in security industry

"The sector offers me the opportunity to use my skills"



"I am motivated to make a difference to society"



Source: RMIT and AWSN (2022) Gender Dimensions of Australia's Security Sector

Reasons for leaving previous job or studies

“Characteristics of my previous organisation prompted me to look elsewhere”

10% of respondents

“Characteristics of my previous leader or manager prompted me to look elsewhere”

8% of respondents

“Role at organisation was toxic and was being bullied”

Anonymous survey participant

“Toxic work environment”

Anonymous survey participant

Source: RMIT and AWSN (2022) Gender Dimensions of Australia’s Security Sector

Perceptions of gender equality policies point to further challenges

“While there are workplace policies/initiatives, it is unclear if they are being enforced or if anything is being done after saying that these initiatives have been started.”

Anonymous survey participant

“We focus on equality without quotas, as quotas create inequality. Our anti-discrimination and pay equality policies are our focus on equality.”

Anonymous survey participant

“Women compete against a much smaller applicant group. Women in IT have a much easier time getting started, as the agency informally suggests to hire women. Usually 10 to 1 male applicants to female.

Unfortunately in areas dominated by women, there are no measures to hire more men. There are also no initiatives to hire more women as garbage people, which is significantly under represented.”

Anonymous survey participant

Source: RMIT and AWSN (2022) Gender Dimensions of Australia’s Security Sector

Thankyou

This research been a collaborative project with:

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Australian Women in Security Network

Australian Signals Directorate, Australian Government

The views and findings presented are solely those of the contributing authors and not attributable to their organisations.