

Diversity in Cyber:

Are we the best we can be?

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Acknowledgement of Country

RMIT University acknowledges the people of the Woi wurrung and Boon wurrung language groups of the eastern Kulin Nation on whose unceded lands we conduct the business of the University.

RMIT University respectfully acknowledges their Ancestors and Elders, past and present.

RMIT also acknowledges the Traditional Custodians and their Ancestors of the lands and waters across Australia where we conduct our business.

Is Australia's cyber security workforce the best it can be?

Challenges for the sector

- Rising importance of security sector for Australian economy and wider society
- Skills shortages and increasing complexity of skill needs
- Under-representation of women
- Gains of diversity are being forgone – innovation, creative problem-solving, understanding people



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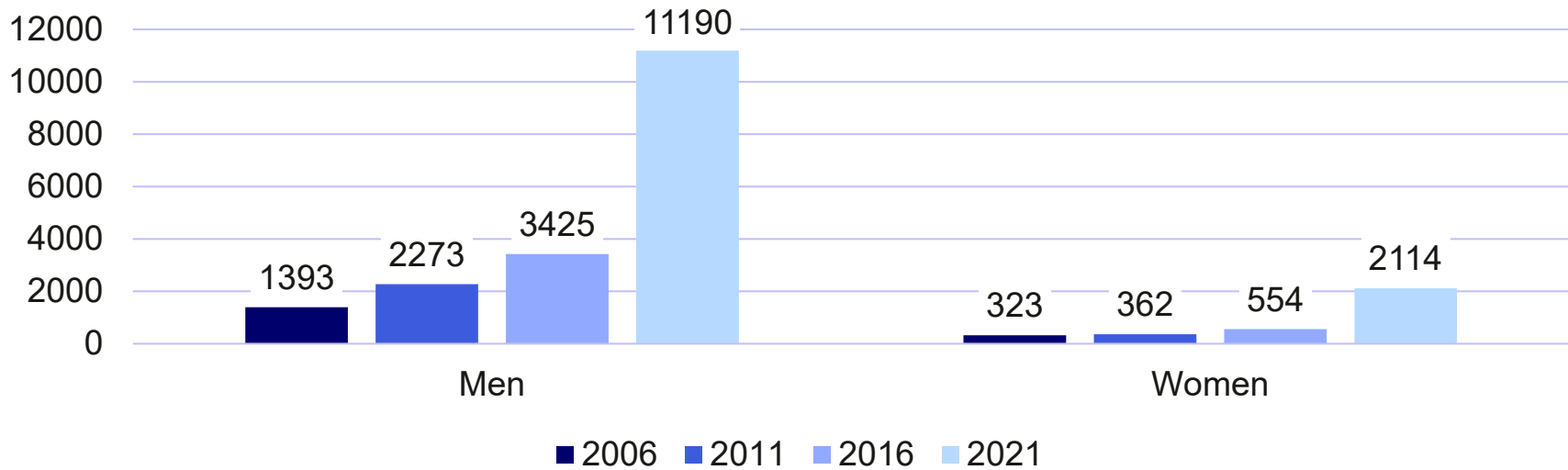
But solutions are not clear-cut

- Gender gaps in workforce outcomes can be interpreted a signal of biases and barriers
- Gender equality involves more than simply “encouraging girls to study IT”
- Importance of workforce culture that is genuinely inclusive and embraces diversity as a strength
- Understanding resistance to change – Why might people in the sector not want to change and expand in diversity?



ICT Security Specialists in Australia have been soaring in number...

Number of people employed as ICT Security Specialist, Australia, 2006 to 2021

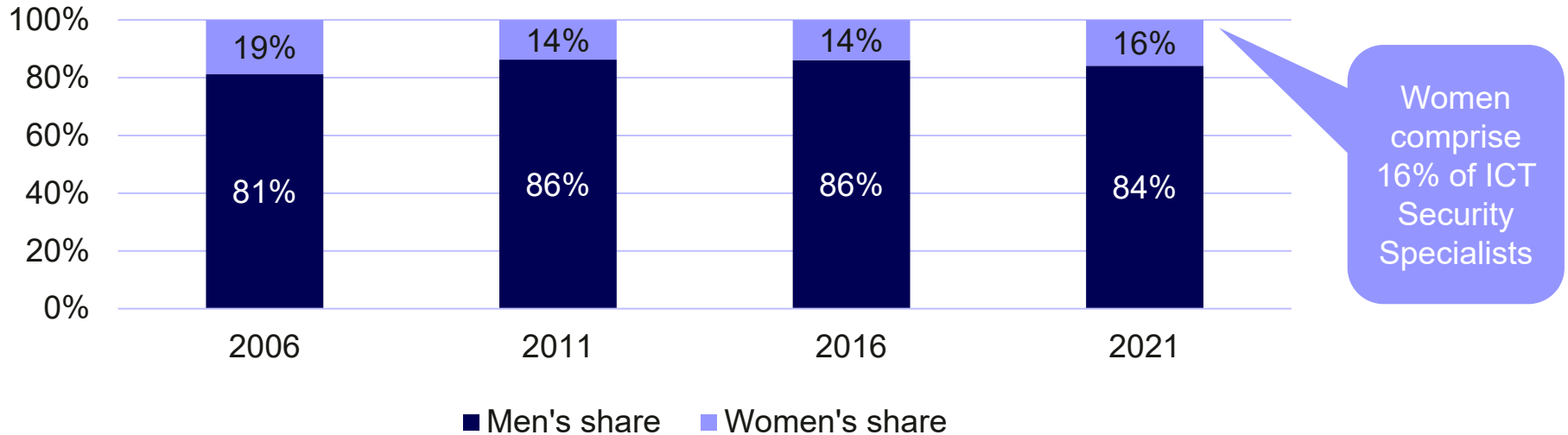


Source: ABS, Census of Population and Housing, TableBuilder, 2006 to 2021



... but women's share has not

Gender composition of people employed as ICT Security Specialist, Australia, 2006 to 2021

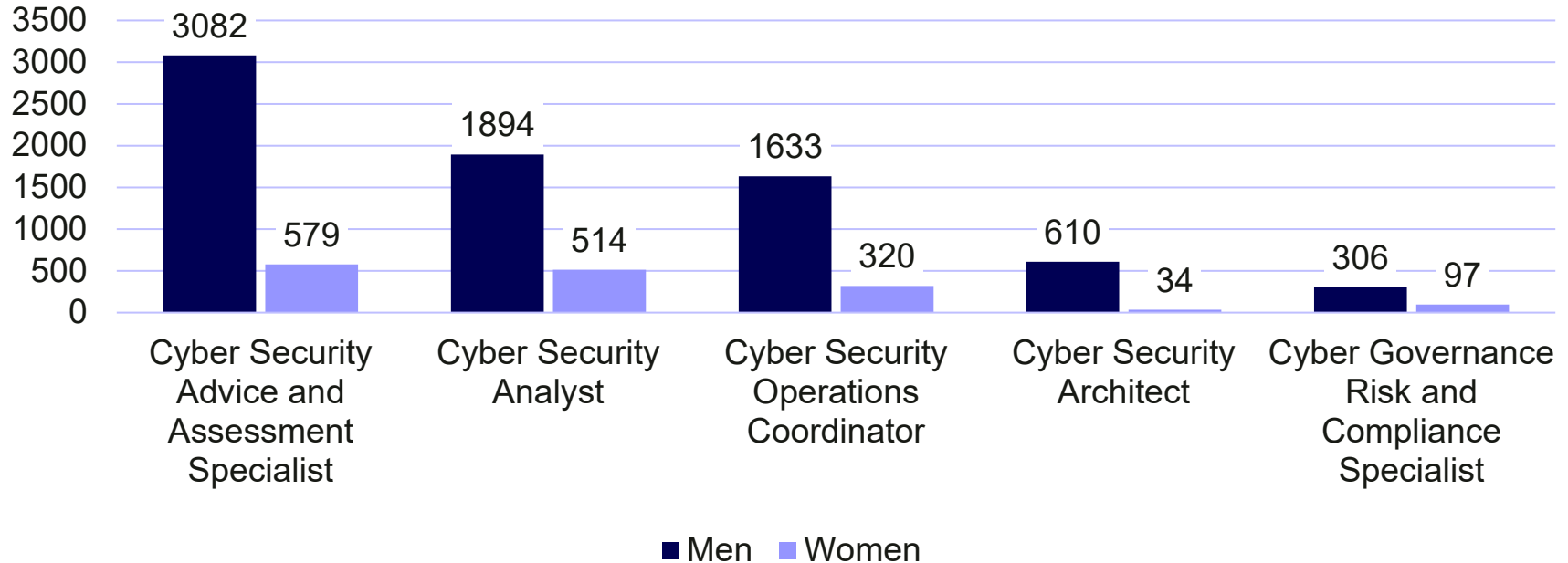


Source: ABS, Census of Population and Housing, TableBuilder, 2006 to 2021



Cyber is now an official occupational category

Number of people employed in Cyber occupations, Australia, 2021



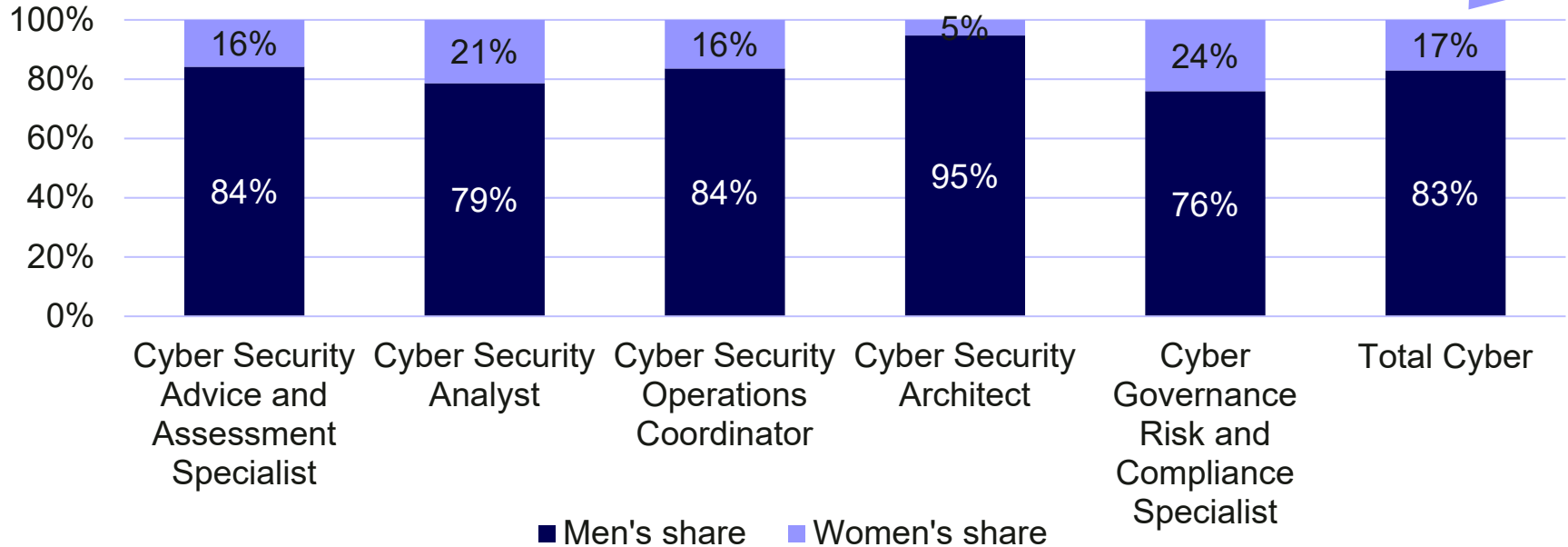
Source: ABS, Census of Population and Housing, TableBuilder, 2021



... but men comprise the majority of cyber jobs too

Number of people employed in Cyber occupations, Australia, 2021

Women comprise 17% of Cyber occupations overall



Source: ABS, Census of Population and Housing, TableBuilder, 2006 to 2021



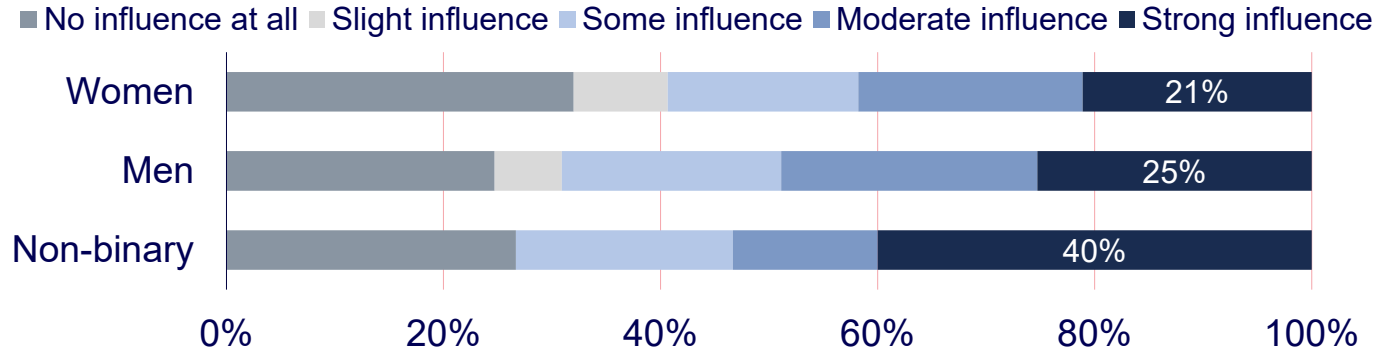
Understanding people's experiences in the sector

RMIT's survey of security sector

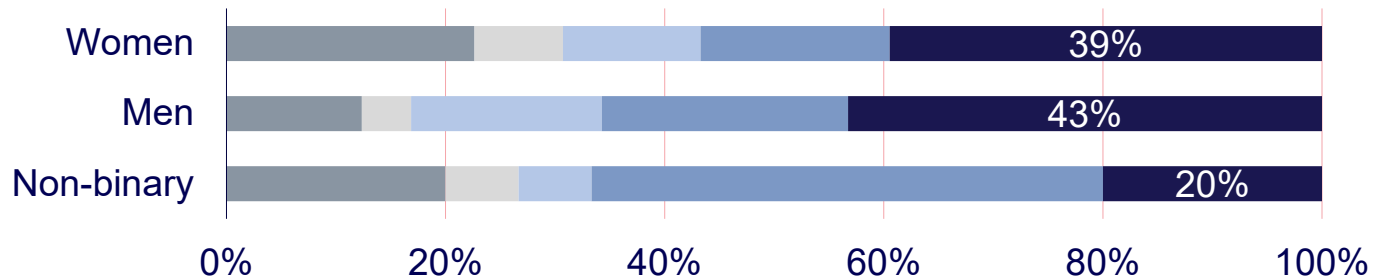
- Survey of people currently or formerly working in the security sector in Australia
- Collected 664 responses during August and September 2022
- 456 of responses were people working in cyber security
- Respondents identified as: 450 women; 178 men; 15 gender non-binary/gender-diverse/gender-fluid
- Provides insights into their motivating factors, experiences, barriers and challenges working in the sector

Gender differences in motivations to pursue a career in the security industry

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

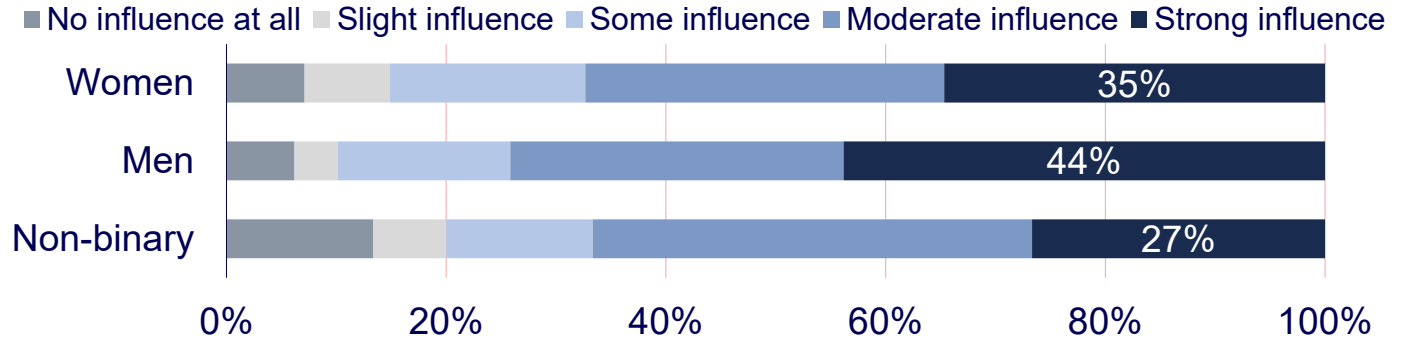


“I enjoyed the fields of study that relate to the security industry”

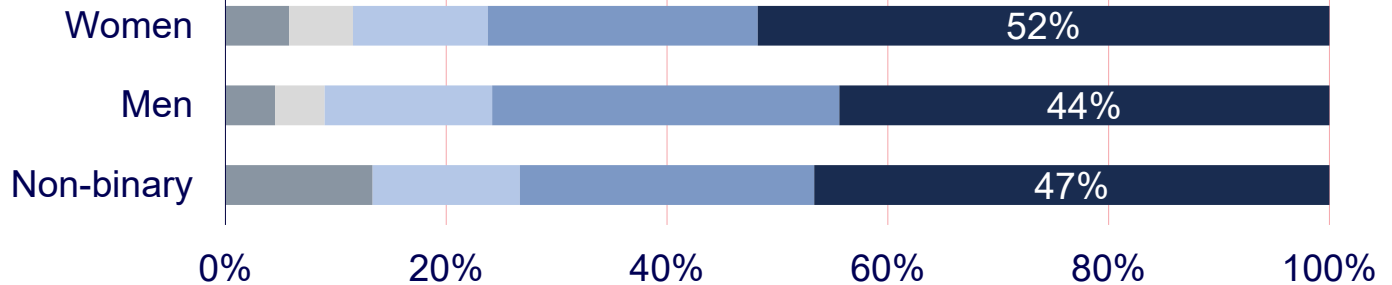


Gender differences in motivations to pursue a career in the security industry

“The sector offers me the opportunity to use my skills”

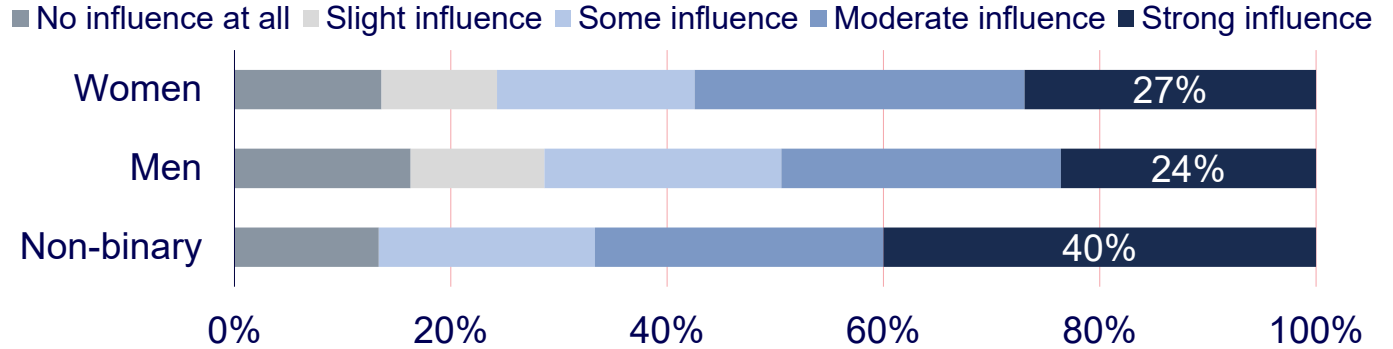


“I am motivated to make a difference to society”

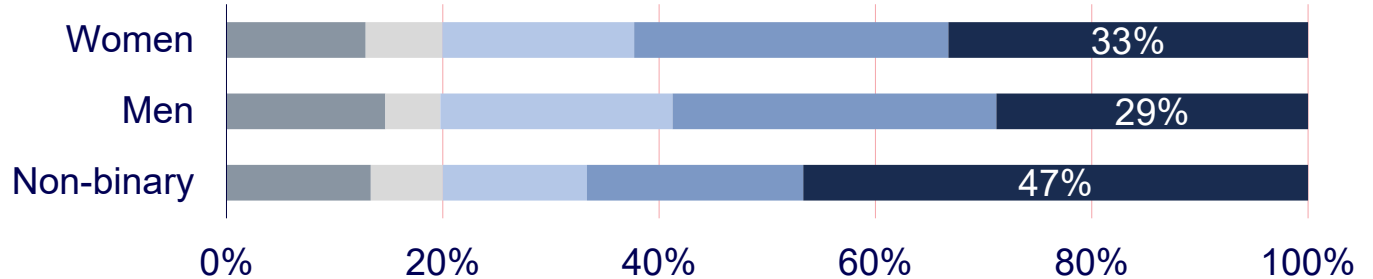


Gender differences in motivations to pursue a career in the security industry

“I considered **earning prospects** in the industry”

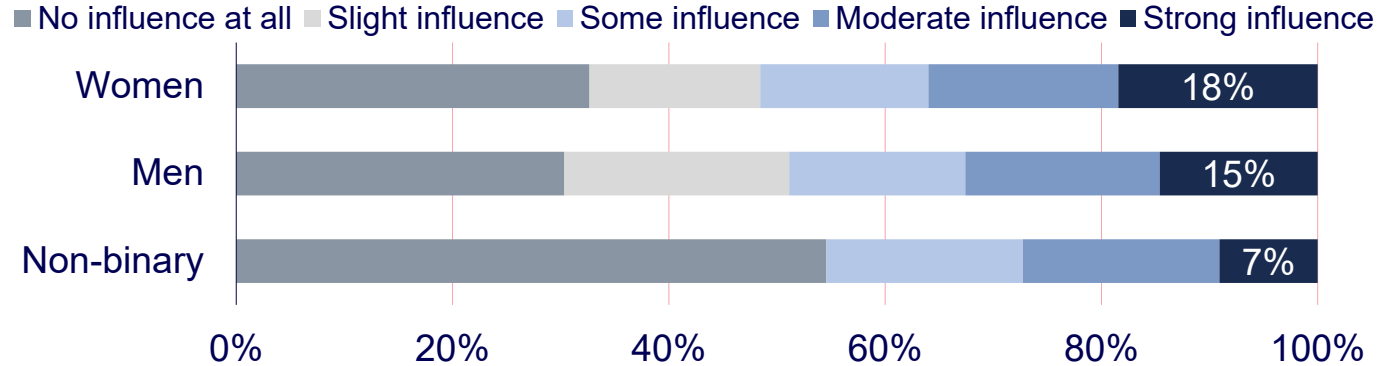


“I considered **job security and employment prospects** in the industry”

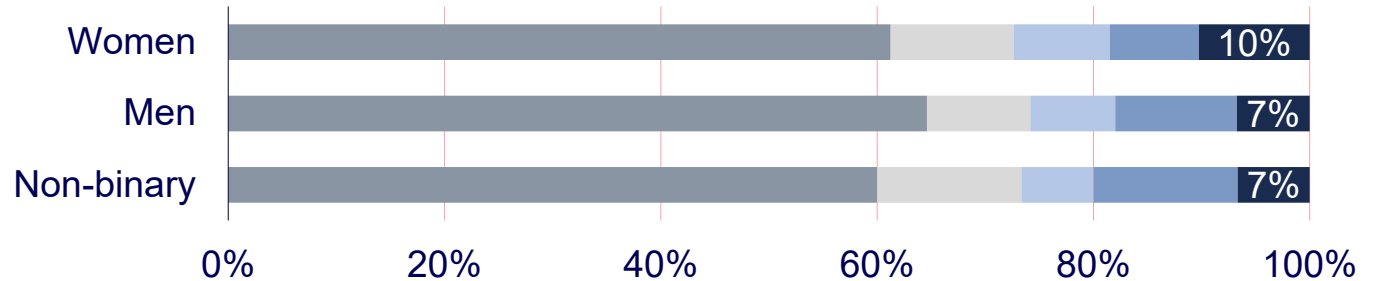


Gender differences in motivations to pursue a career in the security industry

“I was inspired by **role models and mentors** who work in the security industry”

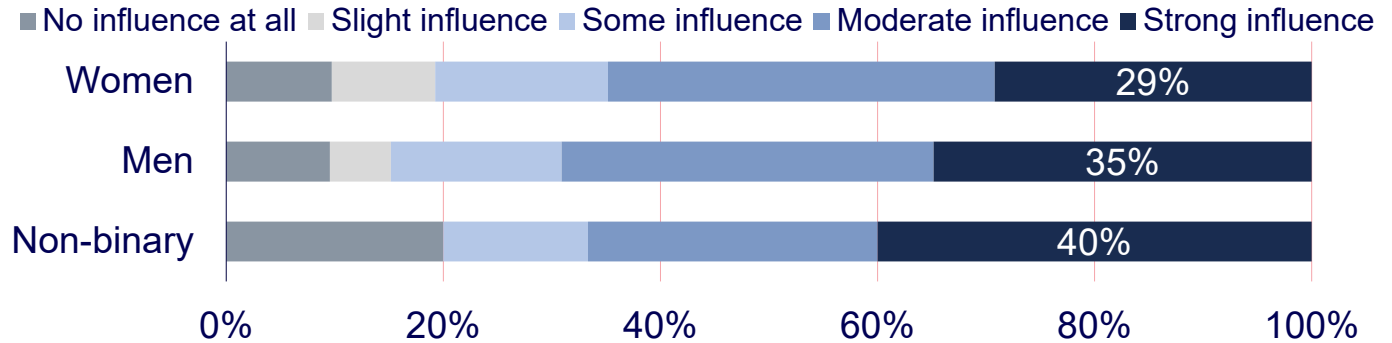


“I have **friends or family** who work in the security industry”

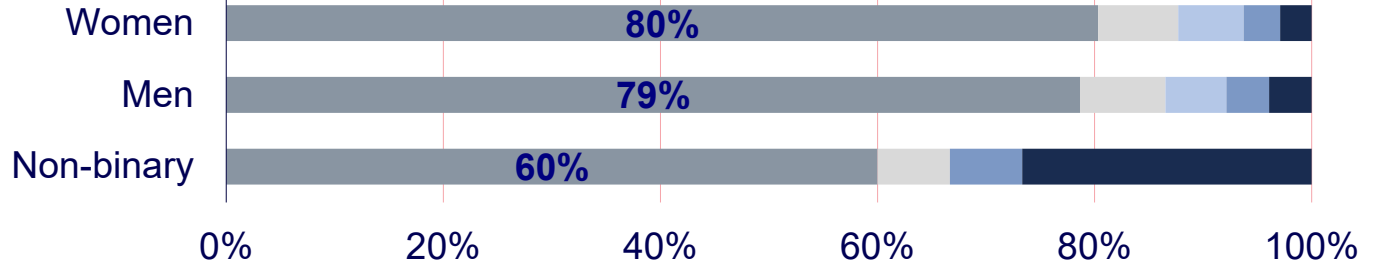


Gender differences in motivations to pursue a career in the security industry

“The industry offers opportunities that are suited to my **work preferences**”

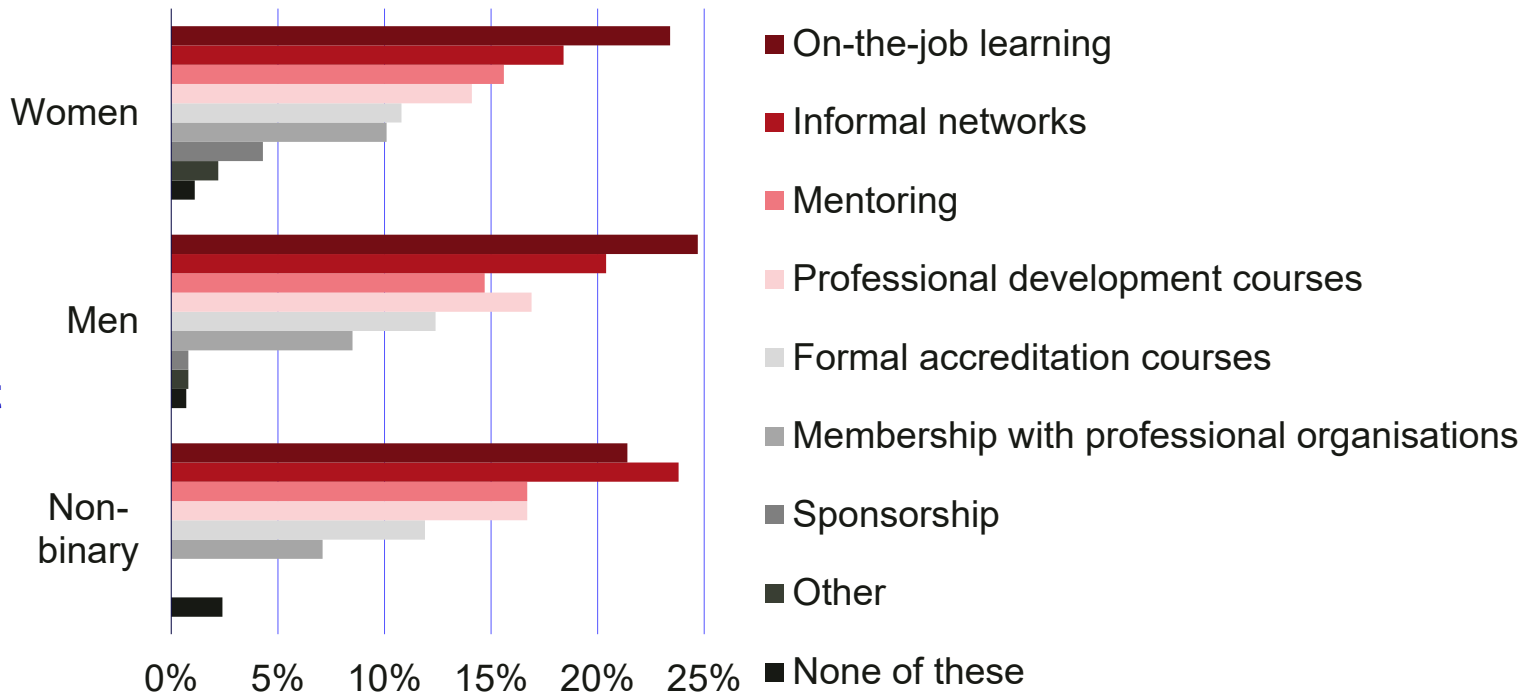


“I could **not find other employment options** elsewhere”



Gender differences in career advancement in the sector

“What specific professional activities had aided your career advancement in the security industry?”



Reasons for leaving previous job in the security sector

“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

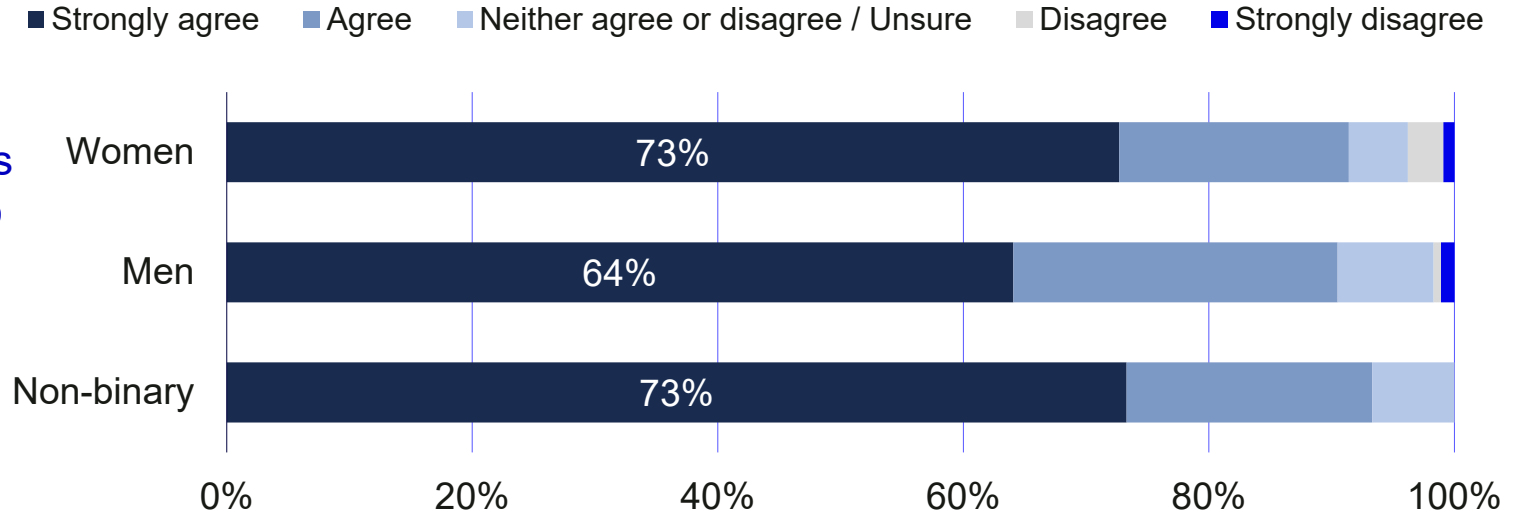
“Toxic work environment”

Anonymous survey participant



Gender differences in support for equality initiatives

“Additional support to advance women’s careers and programs to promote gender equality are beneficial for the security sector overall”



Perspectives differ on gender equality policies

“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



What comes next...?

- Look out for RMIT's upcoming Report on Gender Equality in the Cyber Security
- Our approach focuses on:
 - underlying reasons for women's under-representation
 - 'what works' to improve gender representation, inclusion and influence – and what doesn't
 - evidence-based approaches and evaluations
 - importance of de-biasing systems and cultures
 - understanding resistance to change
 - how greater diversity benefits all

Thank you

This project is a partnership between:



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

